Diamond-like amorphous carbon

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Citation Report

#	Article	IF	Citations
1	Nanoporosity in plasma deposited amorphous carbon films investigated by small-angle X-ray scattering. Diamond and Related Materials, 2002, 11, 1946-1951.	1.8	11
2	Nanoindentation and AFM studies of PECVD DLC and reactively sputtered Ti containing carbon films. Bulletin of Materials Science, 2003, 26, 585-591.	0.8	19
3	Electrochemical properties of diamond-like carbon electrodes prepared by the pulsed laser deposition method. Journal of Solid State Electrochemistry, 2003, 7, 421-434.	1.2	7
4	Haemocompatibility of hydrogenated amorphous carbon (a-C:H) films synthesized by plasma immersion ion implantation-deposition. Nuclear Instruments & Methods in Physics Research B, 2003, 206, 721-725.	0.6	22
5	Correlations between substrate bias, microstructure and surface morphology of tetrahedral amorphous carbon films. Vacuum, 2003, 72, 285-290.	1.6	23
6	Studies of pulsed high-current arcs used to prepare carbon films. Thin Solid Films, 2003, 433, 50-56.	0.8	4
7	Mechanical properties and platelet adhesion behavior of diamond-like carbon films synthesized by pulsed vacuum arc plasma deposition. Surface Science, 2003, 531, 177-184.	0.8	65
8	Carbon-containing Tiâ€“C:H and Crâ€“C:H PVD hard coatings. Vacuum, 2003, 71, 261-265.	1.6	16
9	Direct ion beam deposited carbon films and clusters. Vacuum, 2003, 72, 193-198.	1.6	7
10	Pulsed laser deposition of diamond-like carbon coatings for industrial tribological applications. Surface and Coatings Technology, 2003, 174-175, 402-407.	2.2	37
11	Investigations of the coefficient of static friction diamond-like carbon films. Surface and Coatings Technology, 2003, 174-175, 421-426.	2.2	8
12	Mechanical properties and thermomechanical stability of diamond-like carbon films synthesized by pulsed vacuum arc plasma deposition. Surface and Coatings Technology, 2003, 173, 67-73.	2.2	17
13	Requirements of ultrathin carbon coatings for magnetic storage technology. Tribology International, 2003, 36, 405-415.	3.0	104
14	Temperature dependence of interface barrier height change asÂimplicated by field emission studies of aligned-multiwall carbonÂnanotubes. Physics Letters, Section A: General, Atomic and Solid State Physics, 2003, 309, 114-120.	0.9	17
15	Optical gap in carbon nitride films. Thin Solid Films, 2003, 433, 119-125.	0.8	66
16	Thickness of diamond-like carbon coatings quantified with Raman spectroscopy. Thin Solid Films, 2003, 440, 138-144.	0.8	55
17	Fine structure at the X-ray absorption Ï€* and Ïƒ* bands of amorphous carbon. Diamond and Related Materials, 2003, 12, 110-115.	1.8	27
18	Comparative study of metal/amorphous-carbon multilayer structures produced by magnetron sputtering. Diamond and Related Materials, 2003, 12, 1008-1012.	1.8	21

#	Article	IF	Citations
19	Dynamic MC simulation for a-C:H deposition in methane plasma based on subplantation model. Diamond and Related Materials, 2003, 12, 927-930.	1.8	26
20	Electronic structure of pulsed laser deposited carbon thin films monitored by photoluminescence. Diamond and Related Materials, 2003, 12, 911-916.	1.8	1
21	Friction and wear at nanometer scale: a comparative study of hard carbon films. Diamond and Related Materials, 2003, 12, 2195-2202.	1.8	20
22	In situ measurement of stresses in diamond-like carbon films. Diamond and Related Materials, 2003, 12, 2119-2127.	1.8	10
23	ECR deposition of hydrogenated diamond-like amorphous carbon films using acetyleneâ€“oxygen plasmas. Diamond and Related Materials, 2003, 12, 983-987.	1.8	10
24	Adhesion and quality test for tetrahedral amorphous carbon coating process. Diamond and Related Materials, 2003, 12, 2115-2118.	1.8	22
25	Paramagnetic defects in hydrogenated amorphous carbon powders. Journal of Physics Condensed Matter, 2003, 15, 7463-7468.	0.7	8
26	A review of modified DLC coatings for biological applications. Diamond and Related Materials, 2003, 12, 583-589.	1.8	593
27	Optical and electronic properties of amorphous carbon materials. Diamond and Related Materials, 2003, 12, 141-150.	1.8	73
28	Dynamic Roughening of Tetrahedral Amorphous Carbon. Physical Review Letters, 2003, 91, 226104.	2.9	94
29	The Effects of Film Structure and Surface Hydrogen on the Properties of Amorphous Carbon Films. Journal of Physical Chemistry B, 2003, 107, 11082-11090.	1.2	118
30	Structural and mechanical properties of diamond-like carbon films deposited by direct current magnetron sputtering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2003, 21, 851-859.	0.9	20
31	Preparation and characterization of hydrogenated diamond-like carbon films in a dual DC-RF plasma system. Journal Physics D: Applied Physics, 2003, 36, 3183-3190.	1.3	42
32	Properties of carbon films and their biocompatibility using in-vitro tests. Diamond and Related Materials, 2003, 12, 931-937.	1.8	90
33	Density of electronic states in amorphous carbons. Diamond and Related Materials, 2003, 12, 891-899.	1.8	37
34	Growth of hydrogenated amorphous carbon films in pulsed d.c. methane discharges. Diamond and Related Materials, 2003, 12, 98-104.	1.8	49
35	Energetics and stability of nanostructured amorphous carbon. Physical Review B, 2003, 67, .	1.1	35
36	Improving the properties of diamond-like carbon. Diamond and Related Materials, 2003, 12, 79-84.	1.8	70

#	Article	IF	Citations
37	Effect of isotopic substitution on IR and ESR properties of mass selected ion beam deposited ta-C films. Diamond and Related Materials, 2003, 12, 900-904.	1.8	7
38	Electrochemical behavior of the Tiâ€“6Alâ€“4V alloy coated with a-C:H films. Diamond and Related Materials, 2003, 12, 2136-2146.	1.8	23
39	An overview on tailored tribological and biological behavior of diamond-like carbon. Diamond and Related Materials, 2003, 12, 171-177.	1.8	113
40	Advanced Coatings for Structural Materials. , 2003, , 1-12.		0
41	Field emission from tetrahedral amorphous carbon films grown using a trigger less pulsed cathodic arc process. , 0, , .		0
42	Growth of large patterned arrays of neurons using plasma methods. Plasma Physics and Controlled Fusion, 2003, 45, 547-554.	0.9	14
43	Hypersonic shock waves and hybridization ofa-C:H thin films. Journal of Applied Physics, 2003, 93, 5911-5919.	1.1	4
44	The effect of the surface layer of tetrahedral amorphous carbon films on their tribological and electron emission properties investigated by atomic force microscopy. Applied Physics Letters, 2003, 82, 3898-3900.	1.5	33
45	Structural, electrical, and optical properties of diamondlike carbon films deposited by dc magnetron sputtering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2003, 21, L23-L27.	0.9	10
46	Particle-beam experiment to study heterogeneous surface reactions relevant to plasma-assisted thin film growth and etching. Review of Scientific Instruments, 2003, 74, 5123-5136.	0.6	24
47	Sonoplasma generated by a combination of ultrasonic waves and microwave irradiation. Applied Physics Letters, 2003, 83, 4503-4505.	1.5	75
48	Effects of ion implantation on electron centers in hydrogenated amorphous carbon films. Journal of Applied Physics, 2003, 93, 5905-5910.	1.1	7
49	Room-temperature low-voltage electroluminescence in amorphous carbon nitride thin films. Applied Physics Letters, 2003, 82, 4017-4019.	1.5	37
50	Field emission from amorphous-carbon nanotips on copper. Journal of Applied Physics, 2003, 94, 6796-6799.	1.1	28
51	The Thermal Annealing Effect On The Residual Stress And Interface Adhesion In The Compressive Stressed DLC Film.. Materials Research Society Symposia Proceedings, 2003, 795, 182.	0.1	3
52	DETONATION OF MOLECULAR PRECURSORS AS A TOOL FOR THE ASSEMBLY OF NANO-SIZED MATERIALS. Modern Physics Letters B, 2003, 17, 1477-1493.	1.0	12
53	Nanocomposite Hard Coatings for Wear Protection. MRS Bulletin, 2003, 28, 180-183.	1.7	166
54	Kinetic models for thermal decompositions of amorphous carbon and carbon nitride thin films. Journal of Physics Condensed Matter, 2003, 15, 8081-8093.	0.7	1

#	Article	IF	Citations
55	Preparation of Elastic DLC Film on Rubber by T-shape Filtered Arc Deposition. IEEJ Transactions on Fundamentals and Materials, 2003, 123, 738-743.	0.2	8
56	Structure and Thermal Stability of the Chemical Bondings of Diamond-Like Carbon (DLC) Films Prepared by RF Magnetron Sputtering. Hyomen Kagaku, 2003, 24, 411-416.	0.0	6
57	Carbon microstructure fabrication by laser-induced chemical vapor deposition. , 2004, , .		0
58	Polymer Treatment by Plasma Immersion Ion Implantation of Nitrogen for Formation of Diamond-Like Carbon Film. Japanese Journal of Applied Physics, 2004, 43, 6399-6404.	0.8	6
59	Postgrowth Irradiation of Hydrogenated Amorphous Carbon thin Films by Low-Energy Ion Beam. Japanese Journal of Applied Physics, 2004, 43, 1577-1580.	0.8	11
60	Measurement of Temperature in Sonoplasma. Japanese Journal of Applied Physics, 2004, 43, 2833-2837.	0.8	49
61	Electrodeposition of Diamond-like Carbon Films on Silicon Substrates UsingN,N-Dimethylformamid. Japanese Journal of Applied Physics, 2004, 43, L1133-L1136.	0.8	1
62	Intrinsic mechanical properties of diamond-like carbon thin films deposited by filtered cathodic vacuum arc. Journal of Applied Physics, 2004, 95, 3509-3515.	1.1	23
63	Formation of silicon-on-diamond by direct bonding of plasma-synthesized diamond-like carbon to silicon. Applied Physics Letters, 2004, 85, 2532-2534.	1.5	16
64	Nanostructural and mechanical properties of nanocomposite nc-TiC/a-C:H films deposited by reactive unbalanced magnetron sputtering. Journal of Applied Physics, 2004, 95, 4327-4334.	1.1	84
65	Electron cyclotron resonance deposition, structure, and properties of oxygen incorporated hydrogenated diamondlike amorphous carbon films. Journal of Applied Physics, 2004, 96, 5456-5461.	1.1	16
66	Reactions of ultrathin hard amorphous carbon (a-C) films under microbeam laser processing. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2004, 22, 2239-2245.	0.9	2
67	Raman Spectroscopy for Carbon Based Amorphous Thin Films. Materials Research Society Symposia Proceedings, 2004, 851, 181.	0.1	1
68	X-Ray Studies of Near-Frictionless Carbon Films.. Materials Research Society Symposia Proceedings, 2004, 843, 271.	0.1	3
69	Effect of Substrate Bias on Structure and Properties of W incorporated Diamond-like Carbon Films. Materials Research Society Symposia Proceedings, 2004, 821, 7.	0.1	0
70	Surface Electromechanical Coupling on DLC Film with Conductive Atomic Force Microscope. Plasma Science and Technology, 2004, 6, 2342-2345.	0.7	0
71	Electron transport in W-containing amorphous carbonâ€“silicon diamond-like nanocomposites. Journal of Physics Condensed Matter, 2004, 16, 8447-8458.	0.7	17
72	Detection of carbon nitride by resonant Raman spectroscopy. Diamond and Related Materials, 2004, 13, 1558-1560.	1.8	10

#	Article	IF	Citations
73	Deposition of ta-C:N:H as Function of Experimental Parameters. Surface Engineering, 2004, 20, 17-24.	1.1	5
74	An intermediate hybridization in diamond: edge-shared tetrahedra. Thin Solid Films, 2004, 447-448, 163-168.	0.8	2
75	Deposition of tetrahedral diamond-like carbon thin films by femtosecond laser ablation for applications of hip joints. Thin Solid Films, 2004, 453-454, 531-536.	0.8	22
76	Spectroscopic ellipsometry investigation of amorphous carbon films with different sp3 content: relation with protein adsorption. Thin Solid Films, 2004, 455-456, 530-534.	0.8	37
77	Visible and infrared ellipsometry applied to the study of metal-containing diamond-like carbon coatings. Thin Solid Films, 2004, 455-456, 370-375.	0.8	7
78	Hard three-dimensional sp2 carbon-bonded phase formed by ion beam irradiation of fullerene, a-C and polymeric a-C:H films. Nuclear Instruments & Methods in Physics Research B, 2004, 218, 61-67.	0.6	4
79	Effects of substrate temperature on bonding structure and mechanical properties of amorphous carbon films. Thin Solid Films, 2004, 447-448, 174-180.	0.8	22
80	DLC based coatings prepared by reactive d.c. magnetron sputtering. Thin Solid Films, 2004, 447-448, 142-147.	0.8	125
81	Friction and Thermal Effects of Engineering Plastics Sliding Against Steel and DLN-Coated Counterfaces. Tribology Letters, 2004, 17, 269-288.	1.2	14
82	Disorder and Urbach energy in hydrogenated amorphous carbon: A phenomenological model. Applied Physics Letters, 2004, 85, 730-732.	1.5	62
83	Transmission electron microscopy and electron energy loss spectroscopy analysis of ultrathin amorphous carbon films. Journal of Materials Research, 2004, 19, 2131-2136.	1.2	19
84	Raman spectroscopy of amorphous, nanostructured, diamondâ€“like carbon, and nanodiamond. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2004, 362, 2477-2512.	1.6	2,129
85	Characterization of hydrogenated diamond-like carbon films electrochemically deposited on a silicon substrate. Journal Physics D: Applied Physics, 2004, 37, 2416-2424.	1.3	76
86	Disorder, clustering, and localization effects in amorphous carbon. Physical Review B, 2004, 70, .	1.1	82
87	Preparation and characterization of DLC films by twinned ECR microwave plasma enhanced CVD for microelectromechanical systems (MEMS) applications. Journal Wuhan University of Technology, Materials Science Edition, 2004, 19, 44-47.	0.4	8
88	Structural and electrical properties of amorphous carbon-sulfur composite films. Bulletin of Materials Science, 2004, 27, 289-294.	0.8	14
89	Superlow Friction of Diamond-Like Carbon Films: A Relation to Viscoplastic Properties. Tribology Letters, 2004, 17, 709-714.	1.2	70
90	Bonding configurations in amorphous carbon and nitrogenated carbon films synthesised by femtosecond laser deposition. Applied Physics A: Materials Science and Processing, 2004, 79, 1009-1014.	1.1	13

#	Article	IF	Citations
91	Chemistry and microstructure of PLD (Ti,Al)CxN1-x coatings deposited at room temperature. Applied Physics A: Materials Science and Processing, 2004, 79, 1469-1471.	1.1	16
92	Nano-structured oriented carbon films grown by PLD and CVD methods. Applied Physics A: Materials Science and Processing, 2004, 79, 2063-2068.	1.1	30
93	The coefficient of static friction of silicon containing diamond-like carbon films. Surface and Coatings Technology, 2004, 177-178, 552-557.	2.2	2
94	XPS and XAES studies of as grown and nitrogen incorporated tetrahedral amorphous carbon films deposited by pulsed unfiltered cathodic vacuum arc process. Applied Surface Science, 2004, 221, 392-401.	3.1	25
95	Arrays of Heterojunctions of Ag Nanowires and Amorphous Carbon Nanotubes. Advanced Materials, 2004, 16, 1512-1515.	11.1	45
96	Einfluss der Temperatur auf das tribologische Verhalten von DLC-Schichten. Materialwissenschaft Und Werkstofftechnik, 2004, 35, 936-941.	0.5	2
97	Combining Brillouin spectroscopy and laser-SAW technique for elastic property characterization of thick DLC films. Ultrasonics, 2004, 43, 87-93.	2.1	15
98	Electrical properties of diamond-like carbon films grown using ECR plasma decomposition of methane. Vacuum, 2004, 74, 93-97.	1.6	4
99	Physicalâ€“chemical hybrid deposition of DLC film on rubber by T-shape filtered-arc-deposition. Vacuum, 2004, 73, 611-617.	1.6	46
100	Some electrical properties of diamond-like carbon thin films. Vacuum, 2004, 74, 325-330.	1.6	19
101	A tribological study of tetrahedral amorphous carbon films prepared by filtered cathodic vacuum arc technique. Vacuum, 2004, 75, 231-236.	1.6	18
102	How to restore superlow friction of DLC: the healing effect of hydrogen gas. Tribology International, 2004, 37, 869-877.	3.0	100
103	An overview on the tribological behavior of diamond-like carbon in technical and medical applications. Tribology International, 2004, 37, 991-1003.	3.0	363
104	Tribological behavior of plasma-enhanced CVD a-C:H films. Part I: effect of processing parameters. Tribology International, 2004, 37, 1019-1029.	3.0	21
105	Mechanical properties evaluation of fluor-doped diamond-like carbon coatings by nanoindentation. Thin Solid Films, 2004, 446, 85-90.	0.8	27
106	Fabrication of diamond-like carbon film on rubber by T-shape filtered-arc-deposition under the influence of various ambient gases. Thin Solid Films, 2004, 457, 143-150.	0.8	35
107	Nanocrystalline diamond-like carbon coatings produced on the Si3N4â€“TiC composites intended for the edges of cutting tools. Thin Solid Films, 2004, 459, 224-227.	0.8	22
108	Comparative studies of the feed gas composition effects on the characteristics of DLC films deposited by magnetron sputtering. Thin Solid Films, 2004, 459, 282-285.	0.8	12

#	Article	IF	Citations
109	Effect of nitrogen content on mechanical properties and tribological behaviors of hydrogenated amorphous carbon films prepared by ion beam assisted chemical vapor deposition. Thin Solid Films, 2004, 466, 137-150.	0.8	20
110	Effect of target self-bias voltage on the mechanical properties of diamond-like carbon films deposited by RF magnetron sputtering. Thin Solid Films, 2004, 468, 149-154.	0.8	42
111	Room temperature pulsed laser deposited (Ti,Al)CxN1â^'x coatingsâ€"chemical, structural, mechanical and tribological properties. Thin Solid Films, 2004, 468, 125-133.	0.8	51
112	The effect of hydrogen dilution on the field emission from hydrogenated amorphous carbon films. Solid State Communications, 2004, 129, 497-500.	0.9	7
113	Structure and properties of annealed amorphous hydrogenated carbon (a-C:H) films for biomedical applications. Surface and Coatings Technology, 2004, 177-178, 747-751.	2.2	32
114	Preparation of metal (W, Mo, Nb, Ti) containing a-C:H films by reactive magnetron sputtering. Surface and Coatings Technology, 2004, 177-178, 409-414.	2.2	67
115	Historical developments and new trends in tribological and solid lubricant coatings. Surface and Coatings Technology, 2004, 180-181, 76-84.	2.2	434
116	Mechanical properties of PECVD hydrogenated amorphous carbon coatings via nanoindentation and nanoscratching techniques. Surface and Coatings Technology, 2004, 180-181, 259-264.	2.2	33
117	Thermally induced delamination of amorphous hydrogenated carbon coatings monitored by positron beam analysis. Surface and Coatings Technology, 2004, 180-181, 207-212.	2.2	1
118	Plasma deposition of hydrogenated diamond-like carbon films from CH4-Ar mixtures. Surface and Coatings Technology, 2004, 180-181, 222-226.	2.2	29
119	Characterization by electron spin resonance of defects in a-C:H thin films. Correlation between structural evolutions and optical properties. Surface and Coatings Technology, 2004, 180-181, 227-233.	2.2	5
120	Effects of non-depositing energetic species during the growth of boron nitride and amorphous carbon thin films by sputter deposition. Surface and Coatings Technology, 2004, 180-181, 387-391.	2.2	2
121	Diamond-like carbon for magnetic storage disks. Surface and Coatings Technology, 2004, 180-181, 190-206.	2.2	218
122	Bacterial repellence from polyethylene terephthalate surface modified by acetylene plasma immersion ion implantationâ€"deposition. Surface and Coatings Technology, 2004, 186, 299-304.	2.2	96
123	Structural effect of nitrogen plasma-based ion implantation on ultra-high molecular weight polyethylene. Surface and Coatings Technology, 2004, 186, 287-290.	2.2	53
124	Surface modification of polyethylene terephthalate by plasma immersion ion implantation. Surface and Coatings Technology, 2004, 186, 295-298.	2.2	33
125	Hard Siâ€"Nâ€"C coatings produced by pulsed glow discharge deposition. Surface and Coatings Technology, 2004, 186, 108-111.	2.2	28
126	Effects of negative low substrate bias voltage on the structure and properties of fluorinated amorphous carbon films synthesized by plasma immersion ion implantation and deposition. Surface and Coatings Technology, 2004, 186, 131-135.	2.2	15

#	Article	IF	Citations
127	Towards the deposition of tetrahedral diamond-like carbon films on hip joints by femtosecond pulsed laser ablation. Surface and Coatings Technology, 2004, 188-189, 728-734.	2.2	16
128	Characterization of DLC coatings deposited by rf magnetron sputtering. Journal of Materials Processing Technology, 2004, 153-154, 804-810.	3.1	57
129	The effect of applied dc bias voltage on the properties of a-C:H films prepared in a dual dcâ€“rf plasma system. Applied Surface Science, 2004, 227, 364-372.	3.1	49
130	Structural, mechanical and hydrophobic properties of fluorine-doped diamond-like carbon films synthesized by plasma immersion ion implantation and deposition (PIIIâ€“D). Applied Surface Science, 2004, 230, 172-178.	3.1	56
131	Spatially resolved valence band study of nanostructured carbon films containing transition metal nanocrystals. Carbon, 2004, 42, 923-929.	5.4	4
132	The study of bonding composition of CNx film by thermal degradation method. Carbon, 2004, 42, 537-545.	5.4	22
133	Mechanical properties of ion beam deposited carbon films. Carbon, 2004, 42, 1085-1088.	5.4	14
134	Nanoindentation studies of multilayer amorphous carbon films. Carbon, 2004, 42, 1133-1136.	5.4	61
135	Correlated high resolution transmission electron microscopy and X-ray photoelectron spectroscopy studies of structured CNx (0<x<0.25) thin solid films. Carbon, 2004, 42, 2729-2734.	5.4	83
136	Effect of deposition voltage on the microstructure of electrochemically deposited hydrogenated amorphous carbon films. Carbon, 2004, 42, 3103-3108.	5.4	39
137	Femtosecond laser ablation of diamond-like carbon films. Applied Surface Science, 2004, 222, 226-233.	3.1	60
138	Enhancement of electron field emission stability by nitrogen-doped diamond-like carbon film coating. Semiconductor Science and Technology, 2004, 19, 923-929.	1.0	10
139	Cathode erosion and carbon-nanotubed droplet in t-shape filtered arc deposition with various carbon cathodes. , 2004, , .		0
140	Field emission properties of diamond-like carbon films annealled at differen temperatures. , 0, , .		0
141	Direct Analysis of Oxidizing Agents in Aqueous Solution with Attenuated Total Reflectance Mid-Infrared Spectroscopy and Diamond-like Carbon Protected Waveguides. Analytical Chemistry, 2004, 76, 384-391.	3.2	41
142	Space charge limited conduction and electron paramagnetic resonance studies of as grown and nitrogen incorporated tetrahedral amorphous carbon films deposited by pulsed unfiltered cathodic vacuum arc process. Diamond and Related Materials, 2004, 13, 513-520.	1.8	17
143	Raman scattering, AFM and nanoindentation characterisation of diamond films obtained by hot filament CVD. Diamond and Related Materials, 2004, 13, 266-269.	1.8	33
144	Effect of N doping on properties of diamond-like carbon thin films produced by RF capacitively coupled chemical vapor deposition from different precursors. Diamond and Related Materials, 2004, 13, 1993-1996.	1.8	12

#	Article	IF	Citations
145	Large area deposition of hydrogenated amorphous carbon films for optical storage disks. Diamond and Related Materials, 2004, 13, 1505-1510.	1.8	16
146	Physical and tribological properties of hard amorphous DLC films deposited on different substrates. Diamond and Related Materials, 2004, 13, 1511-1515.	1.8	19
147	A single growth quality indicator for film property tailoring. Diamond and Related Materials, 2004, 13, 1391-1397.	1.8	2
148	A new interpretation of the Urbach energy in amorphous carbon films. Diamond and Related Materials, 2004, 13, 1402-1407.	1.8	8
149	Incorporation of sulfur into hydrogenated amorphous carbon films. Diamond and Related Materials, 2004, 13, 1377-1384.	1.8	11
150	Chemical and thermal stability of carbyne-like structures in cluster-assembled carbon films. Physical Review B, 2004, 69, .	1.1	150
151	Surface kinetics and subplantation phenomena affecting the texture, morphology, stress, and growth evolution of titanium nitride films. Journal of Applied Physics, 2004, 96, 6234-6246.	1.1	125
152	Low reflectance of diamond-like carbon/porous silicon double layer antireflection coating for silicon solar cells. Journal Physics D: Applied Physics, 2004, 37, L25-L28.	1.3	58
153	Laser Raman and X-ray photoelectron spectroscopy of phosphorus containing diamond-like carbon films grown by pulsed laser ablation methods. Diamond and Related Materials, 2004, 13, 1442-1448.	1.8	49
154	Molecular dynamics simulations for the growth of diamond-like carbon films from low kinetic energy species. Diamond and Related Materials, 2004, 13, 1873-1881.	1.8	56
155	Physical trends in amorphous carbon: A tight-binding molecular-dynamics study. Physical Review B, 2004, 70, .	1.1	48
156	Hard and sp2-rich amorphous carbon structure formed by ion beam irradiation of fullerene, a-C and polymeric a-C:H films. Diamond and Related Materials, 2004, 13, 1791-1801.	1.8	83
157	Synthesis of tin-incorporated nanocomposite diamond like carbon films by plasma enhanced chemical vapor deposition and their characterization. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2004, 22, 2709.	1.6	10
158	Structural and mechanical properties of a-C:H thin films grown by RF-PECVD. Diamond and Related Materials, 2004, 13, 1618-1624.	1.8	41
159	Bonding in amorphous carbon nitride. Diamond and Related Materials, 2004, 13, 1521-1531.	1.8	130
160	Structural, mechanical and tribological behavior of fullerene-like and amorphous carbon nitride coatings. Diamond and Related Materials, 2004, 13, 1882-1888.	1.8	76
161	Synthesis of DLC Films by Electrolysis of Dimethyl Sulfoxide. Electrochemical and Solid-State Letters, 2004, 7, D19.	2.2	7
162	PECVD of hydrogenated diamond-like carbon films from CH4â€“Ar mixtures: growth chemistry and material characteristics. Diamond and Related Materials, 2004, 13, 1361-1365.	1.8	17

#	Article	IF	Citations
163	Analysis of Corrosion Processes at the Surface of Diamond-Like Carbon Protected Zinc Selenide Waveguides. Langmuir, 2004, 20, 8634-8640.	1.6	33
164	Influence of the gas atmosphere on the microstructure and mechanical properties of diamond-like carbon films by arc ion plating. Materials Letters, 2004, 58, 3271-3275.	1.3	16
165	Strong field charge transport in MIS structures based on low-K carbon films. Journal of Non-Crystalline Solids, 2004, 338-340, 326-330.	1.5	3
166	The change of photoluminescence characteristics of amorphous carbon films due to hydrogen dilution. Journal of Non-Crystalline Solids, 2004, 338-340, 481-485.	1.5	12
167	Characterization of DLC films obtained at room temperature by pulsed-dc PECVD. Diamond and Related Materials, 2004, 13, 1494-1499.	1.8	50
168	Surface properties of ultra-thin tetrahedral amorphous carbon films for magnetic storage technology. Diamond and Related Materials, 2004, 13, 1416-1421.	1.8	72
169	Hydrogen content estimation of hydrogenated amorphous carbon by visible Raman spectroscopy. Journal of Applied Physics, 2004, 96, 6348-6352.	1.1	81
170	Amorphous carbon nitride thin films as buffer layer in organic LEDs. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, S229-S235.	0.8	4
171	Some aspects of tribological behaviour at the micro-scale â€“ with particular reference to MEMS and MMAs. Tribology and Interface Engineering Series, 2005, 48, 77-87.	0.0	0
172	Ultraviolet photoproduction of ISM dust. Astronomy and Astrophysics, 2005, 432, 895-908.	2.1	110
173	Laser processing of diamond-like carbonâ€“metal composites. Applied Surface Science, 2005, 245, 420-430.	3.1	48
174	Field emission properties of diamond-like carbon films annealed at different temperatures. Applied Surface Science, 2005, 251, 236-241.	3.1	25
175	Molecular dynamics simulation of the impact behaviour of various hydrocarbon species on DLC. Nuclear Instruments & Methods in Physics Research B, 2005, 228, 315-318.	0.6	25
176	The growth of nano-scale diamond tips on diamond/Si. Journal of Crystal Growth, 2005, 283, 367-372.	0.7	4
177	Effects of low-temperature coating process on mechanical behaviors of ADI. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 398, 282-290.	2.6	19
178	Nanostructured diamondlike carbon thin films for medical applications. Materials Science and Engineering C, 2005, 25, 405-416.	3.8	53
179	Novel cold cathode materials and applications. Materials Science and Engineering Reports, 2005, 48, 47-189.	14.8	525
180	Characterization of as grown and nitrogen incorporated tetrahedral amorphous carbon films deposited by pulsed unfiltered cathodic vacuum arc process. Thin Solid Films, 2005, 472, 180-188.	0.8	24

#	Article	IF	Citations
181	Cryogenic deposition of carbon nitride thin solid films by reactive magnetron sputtering; suppression of the chemical desorption processes. Thin Solid Films, 2005, 478, 34-41.	0.8	16
182	Structure, stability, and stress properties of amorphous and nanostructured carbon films. Thin Solid Films, 2005, 482, 56-62.	0.8	12
183	Achieving superlow friction with hydrogenated amorphous carbon: some key requirements. Thin Solid Films, 2005, 482, 99-108.	0.8	159
184	The structure of amorphous carbon nitride films using a combined study of NEXAFS, XPS and Raman spectroscopies. Thin Solid Films, 2005, 482, 145-150.	0.8	69
185	Electronic and optical properties of a-C from tight-binding molecular dynamics simulations. Thin Solid Films, 2005, 482, 151-155.	0.8	51
186	PECVD a-C:H films for STW resonant devices. Thin Solid Films, 2005, 482, 264-269.	0.8	6
187	Effect of substrate bias voltage and substrate on the structural properties of amorphous carbon films deposited by unbalanced magnetron sputtering. Thin Solid Films, 2005, 482, 45-49.	0.8	27
188	Nickel-incorporated amorphous carbon film deposited by femtosecond pulsed laser ablation. Thin Solid Films, 2005, 482, 287-292.	0.8	50
189	Effects of energetic species during the growth of nitrogenated amorphous carbon thin films on their nanomechanical properties. Thin Solid Films, 2005, 482, 177-182.	0.8	4
190	Nanomechanical properties of silicon-, oxygen- and nitrogen-containing a-C:H films prepared by RF plasma beam CVD. Thin Solid Films, 2005, 482, 188-191.	0.8	13
191	Dual FCVAâ€“PECVD deposition for DLC films. Thin Solid Films, 2005, 482, 197-200.	0.8	9
192	Surface characterisation of nano-structured carbon films deposited by Nd:YAG pulsed laser deposition. Thin Solid Films, 2005, 482, 305-310.	0.8	15
193	Structural and electrical properties of nitrogen-doped Crâ€“C:H films synthesized by a cathodic-arc activated deposition process. Thin Solid Films, 2005, 485, 1-7.	0.8	9
194	Investigation of DLC synthesized by plasma immersion ion implantation and deposition. Surface and Coatings Technology, 2005, 193, 206-212.	2.2	42
195	Hard Siâ€“Nâ€“C films with a tunable band gap produced by pulsed glow discharge deposition. Surface and Coatings Technology, 2005, 199, 38-42.	2.2	23
196	Nanostructured TiC/a-C coatings for low friction and wear resistant applications. Surface and Coatings Technology, 2005, 198, 44-50.	2.2	114
197	Properties of DLC thin films produced by RF PEâˆ’CVD from pyrrole monomer. Surface and Coatings Technology, 2005, 200, 1106-1109.	2.2	17
198	Deposition of CrN coatings by PVD methods for mechanical application. Surface and Coatings Technology, 2005, 200, 141-145.	2.2	61

#	Article	IF	Citations
199	Determination of the sp3 C content of a-C films through EELS analysis in the TEM. Surface and Coatings Technology, 2005, 200, 739-743.	2.2	29
200	Nano-scale, multi-functional coatings in the material system Bâ€“Câ€“Nâ€“H. Surface and Coatings Technology, 2005, 200, 7-13.	2.2	11
201	Structureâ€“property relations in Crâ€“C/a-C:H coatings deposited by reactive magnetron sputtering. Surface and Coatings Technology, 2005, 200, 1147-1150.	2.2	59
202	Friction properties of ta-C and a-C:H coatings under high vacuum. Surface and Coatings Technology, 2005, 200, 1976-1981.	2.2	26
203	Effect of test atmosphere on the tribological behaviour of the non-hydrogenated diamond-like carbon coatings against 319 aluminum alloy and tungsten carbide. Surface and Coatings Technology, 2005, 200, 1783-1791.	2.2	51
204	Different carbon based thin films and their microtribological behaviour in MEMS applications. Surface and Coatings Technology, 2005, 200, 1777-1782.	2.2	23
205	An electron spectroscopy study of a-C:H films produced by PACVD in a CH4â€“CO2 gas mixture. Surface Science, 2005, 586, 96-108.	0.8	9
206	Ion irradiation of sp rich amorphous carbon thin films: A vibrational spectroscopy investigation. Carbon, 2005, 43, 3025-3028.	5.4	23
207	Threshold ionization mass spectrometry study of hydrogenated amorphous carbon films growth precursors. Chemical Physics Letters, 2005, 402, 37-42.	1.2	31
208	ZnO nanowire and amorphous diamond nanocomposites and field emission enhancement. Chemical Physics Letters, 2005, 403, 248-251.	1.2	54
209	Friction behaviors of hydrogenated diamond-like carbon film in different environment sliding against steel ball. Applied Surface Science, 2005, 249, 257-265.	3.1	60
210	Mechanical and tribological characterization of tetrahedral diamond-like carbon deposited by femtosecond pulsed laser deposition on pre-treated orthopaedic biomaterials. Applied Surface Science, 2005, 247, 225-231.	3.1	39
211	Antimicrobial Properties of Diamond-like Carbon-Silver-Platinum Nanocomposite Thin Films. Journal of Materials Engineering and Performance, 2005, 14, 435-440.	1.2	33
212	Young's modulus, Poisson's ratio and failure properties of tetrahedral amorphous diamond-like carbon for MEMS devices. Journal of Micromechanics and Microengineering, 2005, 15, 728-735.	1.5	105
213	Detailed TIMS Study of Ar/C2H2Expanding Thermal Plasma:Â Identification of a-C:H Film Growth Precursors. Journal of Physical Chemistry A, 2005, 109, 10153-10167.	1.1	25
214	Vacuum tribological behavior of the non-hydrogenated diamond-like carbon coatings against aluminum: Effect of running-in in ambient air. Wear, 2005, 259, 795-799.	1.5	40
215	Electronic structure and photoluminescence study of silicon doped diamond like carbon (Si:DLC) thin films. Materials Research Bulletin, 2005, 40, 1757-1764.	2.7	18
216	Transformation fromn-Diamond to sp3-Banding Carbon. Chinese Journal of Chemistry, 2005, 23, 1027-1029.	2.6	0

#	Article	IF	Citations
217	Flame-retardant effect of polyaniline coating deposited on cellulose fibers. Journal of Applied Polymer Science, 2005, 98, 2347-2354.	1.3	63
218	Effect of nitrogen surface doping on the work function and field emission of hydrogenated amorphous carbon films. Applied Physics A: Materials Science and Processing, 2005, 80, 123-126.	1.1	10
219	Optical properties of high-density amorphous carbon films grown by nanosecond and femtosecond pulsed laser ablation. Applied Physics A: Materials Science and Processing, 2005, 81, 471-476.	1.1	32
220	Characterization of focused electron beam induced carbon deposits from organic precursors. Microelectronic Engineering, 2005, 78-79, 300-306.	1.1	54
221	Hydroxyapatiteâ€“diamondlike carbon nanocomposite films. Materials Science and Engineering C, 2005, 25, 398-404.	3.8	13
222	Growth of carbon nanotubes by open-air laser-induced chemical vapor deposition. Carbon, 2005, 43, 437-446.	5.4	61
223	Surface modification of diamond-like carbon films with perfluorooctyl functionalities and their surface properties. Surface Science, 2005, 580, 101-106.	0.8	32
224	Haemocompatibility studies on carbon-based thin films by ellipsometry. Thin Solid Films, 2005, 482, 126-132.	0.8	52
225	Time-resolved electrical measurements of a pulsed-dc methane discharge used in diamond-like carbon films production. Thin Solid Films, 2005, 482, 172-176.	0.8	24
226	Silicon-incorporated diamond-like coatings for Si3N4 mechanical seals. Thin Solid Films, 2005, 482, 221-225.	0.8	17
227	Evolution under annealing and nitrogen implantation of the mechanical properties of amorphous carbon films. Thin Solid Films, 2005, 482, 318-323.	0.8	1
228	Raman scattering of ultra-high molecular weight polyethylene treated by plasma-based ion implantation. Thin Solid Films, 2005, 482, 211-215.	0.8	23
229	Surface and interface properties of amorphous carbon layers on rigid and flexible substrates. Thin Solid Films, 2005, 482, 9-18.	0.8	11
230	Optical properties of fluorinated carbon films prepared by inductively coupled plasmas. Thin Solid Films, 2005, 489, 164-168.	0.8	1
231	Ultralow-k silicon containing fluorocarbon films prepared by plasma-enhanced chemical vapor deposition. Journal of Electronic Materials, 2005, 34, 1193-1205.	1.0	9
232	Mechanical properties and tribological behavior of ZrO2 thin films deposited on sulfonated self-assembled monolayer of 3-mercaptopropyl trimethoxysilane. Tribology Letters, 2005, 18, 429-436.	1.2	14
233	Tribochemical effects on the friction and wear behaviors of diamond-like carbon film under high relative humidity condition. Tribology Letters, 2005, 19, 231-238.	1.2	49
234	Electrical Conduction Mechanisms of Nitrogenated Amorphous Carbon Films Deposited by High-Density Plasma Chemical Vapor Deposition. Plasma Processes and Polymers, 2005, 2, 454-457.	1.6	0

#	Article	IF	Citations
235	Deposition of Hydrocarbon Films by Means of Helium-Ethylene Fed Glow Dielectric Barrier Discharges. Plasma Processes and Polymers, 2005, 2, 688-694.	1.6	40
236	Deposition of High Density Amorphous Carbon Films by Electron Beam Excited Plasma PVD. Journal of the Japan Society for Precision Engineering Contributed Papers, 2005, 71, 1021-1025.	0.0	0
237	Correlation between the sp2-phase nanostructure and the physical properties of unhydrogenated carbon nitride. Journal of Applied Physics, 2005, 98, 044310.	1.1	108
238	An analysis of the nanotribological behaviour of Ti-containing hard carbon film. Surface Engineering, 2005, 21, 257-264.	1.1	6
239	Hydroxyapatite/diamondlike Carbon Nanocomposites: A Novel Surface Modification to Extend Orthopaedic Prosthesis Lifetimes. Journal of Materials Research, 2005, 20, 2288-2295.	1.2	2
240	Influence of Film Thickness on Intrinsic Growth Stress and Raman Evaluation of Tetrahedral Amorphous Carbon Films. Materials Science Forum, 2005, 475-479, 3627-3630.	0.3	0
241	Diamond-Like Carbon Formed by Plasma Immersion Ion Implantation and Deposition Technique on 304 Stainless Steel. Solid State Phenomena, 2005, 107, 129-132.	0.3	1
242	Effect of relative humidity on the tribological properties of hydrogenated diamond-like carbon films in a nitrogen environment. Journal Physics D: Applied Physics, 2005, 38, 62-69.	1.3	29
243	Ti-Containing Amorphous Carbon Nanocomposite Coatings Prepared by Means of Eight-Target Arc-Assisted Middle Frequency Magnetron Sputtering. Japanese Journal of Applied Physics, 2005, 44, L1022-L1025.	0.8	5
244	Effect of boron doping on the electron-field-emission properties of nanodiamond films. Journal of Applied Physics, 2005, 97, 054310.	1.1	40
245	Amorphous carbon film growth on Si: Correlation between stress and generation of defects into the substrate. Applied Physics Letters, 2005, 86, 221906.	1.5	9
246	Quantification of the H content in diamondlike carbon and polymeric thin films by reflection electron energy loss spectroscopy. Applied Physics Letters, 2005, 87, 084101.	1.5	55
247	Microstructure dependence of low-temperature elastic properties in amorphous diamondlike carbon films. Physical Review B, 2005, 71, .	1.1	6
248	Ultrathick, low-stress nanostructured diamond films. Applied Physics Letters, 2005, 86, 221914.	1.5	15
249	Threshold ionization mass spectrometry of reactive species in remote Arâˆ•C2H2 expanding thermal plasma. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2005, 23, 1400-1412.	0.9	46
250	Liquid-crystal alignment on a-C:H films by nitrogen plasma beam scanning. Journal of Applied Physics, 2005, 98, 083518.	1.1	34
251	The Ultrasmoothness of Diamond-like Carbon Surfaces. Science, 2005, 309, 1545-1548.	6.0	286
252	Influence of Deposition Parameters on the Composition and Structure of Reactively Sputtered Nanocomposite TaC/a-C:H Thin Films. Journal of Materials Research, 2005, 20, 2583-2596.	1.2	19

#	Article	IF	Citations
253	A Study on the Tribological Properties of DLC Films Deposited with Different Reaction Gases. Materials Research Society Symposia Proceedings, 2005, 903, 1.	0.1	1
254	Depth Profiling of Mechanical Properties on the Nanoscale of Single-Layer and Stepwise Graded DLC Films by Nanoindentation and AFM. Materials Research Society Symposia Proceedings, 2005, 880, 1.	0.1	0
255	Field Emission from Hydrogenated Amorphous Carbon Nanotips Grown on Cuâ•Tiâ•Si(100). Journal of the Electrochemical Society, 2005, 152, C366.	1.3	8
256	Fabrication of patterned domains with graphitic clusters in amorphous carbon using a combination of ion implantation and electron irradiation techniques. Materials Research Society Symposia Proceedings, 2005, 908, 1.	0.1	1
257	Development of triode type RF plasma enhanced CVD equipment for low temperature growth of carbon nanotube. Diamond and Related Materials, 2005, 14, 1848-1851.	1.8	9
258	Correlation of optical absorption and density of paramagnetic centers in a-C:H films. Diamond and Related Materials, 2005, 14, 1108-1111.	1.8	6
259	Relation between physical structure and electrical properties of diamond-like carbon thin films. Diamond and Related Materials, 2005, 14, 23-34.	1.8	72
260	Raman spectroscopy of hydrogenated amorphous carbons. Physical Review B, 2005, 72, .	1.1	1,037
261	Production of amorphous carbon by plasma immersion ion implantation of polymers. Diamond and Related Materials, 2005, 14, 1577-1582.	1.8	23
262	Semi-empirical derivation of the physical approximants to a-CN:H film deposition. Diamond and Related Materials, 2005, 14, 1331-1341.	1.8	1
263	Protective diamond-like carbon coatings for future optical storage disks. Diamond and Related Materials, 2005, 14, 994-999.	1.8	93
264	Chemical modification of DLC films with perfluorooctyl functionality. Diamond and Related Materials, 2005, 14, 1019-1022.	1.8	10
265	Carbon film deposition on polyethylene terephtalate by pulsed-plasma technology. Diamond and Related Materials, 2005, 14, 1023-1030.	1.8	4
266	Electrical and optical properties of CH4/H2 RF plasmas for diamond-like thin film deposition. Diamond and Related Materials, 2005, 14, 292-295.	1.8	8
267	Effects of acetylene addition on mechanical and dielectric properties of amorphous carbon films. Diamond and Related Materials, 2005, 14, 1815-1819.	1.8	4
268	Characterization of the mechanical properties of diamond-like carbon films. Diamond and Related Materials, 2005, 14, 1270-1276.	1.8	21
269	Boron doped amorphous carbon thin films grown by r.f. PECVD under different partial pressure. Diamond and Related Materials, 2005, 14, 1799-1804.	1.8	44
270	Preparation and characterization of plasma deposited para-xylene a-C:H films with low dielectric constant. Diamond and Related Materials, 2005, 14, 1005-1009.	1.8	6

#	Article	IF	Citations
271	Surface and interface morphology and structure of amorphous carbon thin and multilayer films. Diamond and Related Materials, 2005, 14, 1241-1254.	1.8	44
272	Growth and characterisation of polymeric amorphous carbon and carbon nitride films from propane. Diamond and Related Materials, 2005, 14, 928-933.	1.8	22
273	Effects of pulse duration in laser processing of diamond-like carbon films. Diamond and Related Materials, 2005, 14, 1368-1376.	1.8	59
274	The effect of negative bias pulse on the bonding configurations and properties of DLC films prepared by PBII with acetylene. Diamond and Related Materials, 2005, 14, 42-47.	1.8	20
275	Amorphous carbon films PACVD in CH4â€“CO2 under pulsed and continuous substrate bias conditions. Diamond and Related Materials, 2005, 14, 1031-1035.	1.8	8
276	Water-repellency and surface free energy of a-C:H films prepared by heat-treatment of polymer precursor. Diamond and Related Materials, 2005, 14, 1342-1347.	1.8	36
277	Orientation tendency of PLD carbon films as a function of substrate temperature: A NEXAFS study. Diamond and Related Materials, 2005, 14, 959-964.	1.8	23
278	NEXAFS study and electrical properties of nitrogen-incorporated tetrahedral amorphous carbon films. Diamond and Related Materials, 2005, 14, 1057-1061.	1.8	43
279	Field screening by amorphous carbon thin films. , 0, , .		0
280	Novel silicon-on-insulator structures for reduced self-heating effects. IEEE Circuits and Systems Magazine, 2005, 5, 18-29.	2.6	11
281	Simultaneous preparation of amorphous solid carbon films, and their cluster building blocks. Journal of Non-Crystalline Solids, 2005, 351, 981-986.	1.5	8
282	Structure evolution of fluorinated diamond-like carbon films prepared at varying source gas flow ratios. Journal of Non-Crystalline Solids, 2005, 351, 2462-2467.	1.5	15
283	Infrared spectra of amorphous carbon based materials. Diamond and Related Materials, 2005, 14, 1262-1269.	1.8	43
284	The smoothness of tetrahedral amorphous carbon. Diamond and Related Materials, 2005, 14, 913-920.	1.8	37
285	Evolution ofsp2networks with substrate temperature in amorphous carbon films: Experiment and theory. Physical Review B, 2005, 72, .	1.1	61
286	AES and core level photoemission in the study of a-C and a-C:H. Diamond and Related Materials, 2005, 14, 1232-1240.	1.8	25
287	Vibrational Spectra of Carbonaceous Materials: A SEIRA Spectroscopy versus FTIR and Raman. Fullerenes Nanotubes and Carbon Nanostructures, 2005, 13, 393-400.	1.0	17
288	Bonding in hydrogenated diamond-like carbon by Raman spectroscopy. Diamond and Related Materials, 2005, 14, 1098-1102.	1.8	353

#	Article	IF	Citations
289	Ab initio resonant Raman spectra of diamond-like carbons. Diamond and Related Materials, 2005, 14, 1078-1083.	1.8	49
290	Field emission property improvement of ZnO nanowires coated with amorphous carbon and carbon nitride films. Nanotechnology, 2005, 16, 985-989.	1.3	92
291	Influences of bias voltage on properties of TiAl-doped DLC coatings synthesized by cathodic arc evaporation. Diamond and Related Materials, 2005, 14, 2127-2132.	1.8	37
292	Spectroscopic analysis of a-C and a-CNx films prepared by ultrafast high repetition rate pulsed laser deposition. Journal of Applied Physics, 2005, 97, 073522.	1.1	57
293	Tribological properties of partly polished diamond coatings. Diamond and Related Materials, 2005, 14, 2118-2121.	1.8	24
294	Pulsed laser deposition of functionally gradient diamondlike carbonâ€“metal nanocomposites. Diamond and Related Materials, 2005, 14, 1319-1330.	1.8	89
295	Nanostructured carbon-metal composite films. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2005, 23, 1041.	1.6	21
296	Spectroscopic study of carbon nitride nanoparticles synthesised by laser pyrolysis. Diamond and Related Materials, 2005, 14, 1120-1125.	1.8	6
297	Oxygen transmission of transparent diamond-like carbon films. Diamond and Related Materials, 2005, 14, 1112-1115.	1.8	39
298	Thermal stability of metal-doped diamond-like carbon fabricated by dual plasma deposition. Diamond and Related Materials, 2005, 14, 1489-1493.	1.8	46
299	Mechanism of sp3 bond formation in the growth of diamond-like carbon. Diamond and Related Materials, 2005, 14, 942-948.	1.8	61
300	Detailed modeling of hydrocarbon nanoparticle nucleation in acetylene discharges. Physical Review E, 2006, 73, 026405.	0.8	125
301	Roughness evolution during growth of hydrogenated tetrahedral amorphous carbon. Diamond and Related Materials, 2006, 15, 898-903.	1.8	27
302	Humidity dependence on the friction and wear behavior of diamond-like carbon film in air and nitrogen environments. Diamond and Related Materials, 2006, 15, 1585-1592.	1.8	48
303	Type of precursor and synthesis of silicon oxycarbide (SiOxCyH) thin films with a surfatron microwave oxygen/argon plasma. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 988-994.	0.9	12
304	Dry sliding behaviour of non-hydrogenated DLC coatings against Al, Cu and Ti in ambient air and argon. Diamond and Related Materials, 2006, 15, 939-943.	1.8	42
305	Combined FIB technique with acoustic microscopy to detect steelâ€“DLC interface defects. Diamond and Related Materials, 2006, 15, 1405-1411.	1.8	5
306	Morphology, optical properties and single-electron spectrum of â€˜detector-qualityâ€™ polycrystalline diamond layers, prepared by MW CVD. Diamond and Related Materials, 2006, 15, 410-416.	1.8	5

#	Article	IF	Citations
307	Cryogenic graphitization of submicrometer grains embedded in nanostructured tetrahedral amorphous carbon films. Journal of Applied Physics, 2006, 100, 084319.	1.1	14
308	Thermodynamic conditions of ta-C formation at implantation of noble-gas ions in carbon. Diamond and Related Materials, 2006, 15, 365-370.	1.8	20
309	Effect of diamond-like carbon (DLC) on the properties of the NiTi alloys. Diamond and Related Materials, 2006, 15, 1720-1726.	1.8	51
310	Electrically conductive properties of tungsten-containing diamond-like carbon films. Diamond and Related Materials, 2006, 15, 1902-1905.	1.8	29
311	Reaction mechanisms of low-kinetic energy hydrocarbon radicals on typical hydrogenated amorphous carbon (a-C:H) sites: A molecular dynamics study. Diamond and Related Materials, 2006, 15, 1663-1676.	1.8	18
312	Development of X-Shape Filtered Arc Deposition (X-FAD) Apparatus and DLC/Cr Film Preparation. , 2006, , .		1
313	The biocompatibility of diamond-like carbon nano films. , 2006, , .		5
314	Mechanical properties of pyrolysed wood: a nanoindentation study. Philosophical Magazine, 2006, 86, 1373-1386.	0.7	82
315	Effect of hydrogen on the growth of thin hydrogenated amorphous carbon films from thermal energy radicals. Applied Physics Letters, 2006, 88, 141922.	1.5	34
316	Review of Cathodic Arc Deposition for Preparing Droplet-Free Thin Films. , 2006, , .		1
317	Influence of internal energy and impact angle on the sticking behaviour of reactive radicals in thin a-C:H film growth: a molecular dynamics study. Physical Chemistry Chemical Physics, 2006, 8, 2066.	1.3	9
318	Raman spectroscopy of pressure-induced amorphous boron carbide. Applied Physics Letters, 2006, 88, 131905.	1.5	117
319	Nucleation and growth of amorphous carbon film on tungsten-implanted stainless steel substrates. Diamond and Related Materials, 2006, 15, 1580-1584.	1.8	9
320	Friction-induced physical and chemical interactions among diamond-like carbon film, steel ball and water and/or oxygen molecules. Diamond and Related Materials, 2006, 15, 1228-1234.	1.8	44
321	Plasma 2D modeling and diagnostics of DLC deposition on PET. Diamond and Related Materials, 2006, 15, 904-907.	1.8	7
322	Osteoblasts attachment on amorphous carbon films. Diamond and Related Materials, 2006, 15, 1300-1309.	1.8	14
323	Nanotribological study of PECVD DLC and reactively sputtered Ti containing carbon films. Diamond and Related Materials, 2006, 15, 1743-1752.	1.8	27
324	Diamond-like carbon thin films prepared by ECR argon plasma assisted pulsed laser deposition. Diamond and Related Materials, 2006, 15, 1235-1241.	1.8	10

#	Article	IF	Citations
325	Hydrogenated amorphous carbon film coating of PET bottles for gas diffusion barriers. Diamond and Related Materials, 2006, 15, 921-927.	1.8	93
326	Annealing effects on the mechanical properties of near-frictionless carbon thin films. Diamond and Related Materials, 2006, 15, 2051-2054.	1.8	13
327	Surface atomic properties of tetrahedral amorphous carbon. Diamond and Related Materials, 2006, 15, 936-938.	1.8	20
328	Rearrangements of sp2/sp3 hybridized bonding with phosphorus incorporation in pulsed laser deposited semiconducting carbon films by X-ray photoelectron spectroscopic analysis. Diamond and Related Materials, 2006, 15, 1795-1798.	1.8	10
329	Effects of positively and negatively pulsed voltages on the microstructure of DLC films prepared by bipolar-type plasma based ion implantation. Diamond and Related Materials, 2006, 15, 884-887.	1.8	36
330	Hard a-C/DLC coatings on Si3N4â€“bioglass composites. Diamond and Related Materials, 2006, 15, 944-947.	1.8	4
331	Structural and mechanical properties of facing-target sputtered amorphous CNx films. Diamond and Related Materials, 2006, 15, 1732-1737.	1.8	23
332	The observation of sp2 fraction disorder using dual wavelength Raman spectroscopy in a-C:H films fabricated using an open inductively coupled plasma reactor. Diamond and Related Materials, 2006, 15, 977-981.	1.8	12
333	DLCâ€“ceramic multilayers for automotive applications. Diamond and Related Materials, 2006, 15, 2055-2060.	1.8	49
334	Improvement of adhesion strength of amorphous carbon films on tungsten ion implanted 321 stainless steel substrate. Diamond and Related Materials, 2006, 15, 952-957.	1.8	17
335	Alternating-Current White Thin-Film Light-Emitting Diodes Based on Hydrogenated Amorphous Carbon Layer. IEEE Photonics Technology Letters, 2006, 18, 2341-2343.	1.3	2
336	The mechanical properties of freestanding near-frictionless carbon films relevant to MEMS. Journal of Micromechanics and Microengineering, 2006, 16, 1374-1381.	1.5	15
337	A study of hard diamond-like carbon films in mid-frequency dual-magnetron sputtering. Diamond and Related Materials, 2006, 15, 1223-1227.	1.8	25
338	Insights into the Fracture Mechanisms and Strength of Amorphous and Nanocomposite Carbon. Physical Review Letters, 2006, 96, 185503.	2.9	73
339	Structural analysis of Si-containing diamond-like carbon. Diamond and Related Materials, 2006, 15, 1004-1010.	1.8	61
340	Behavior of Disordered Boron Carbide under Stress. Physical Review Letters, 2006, 97, 035502.	2.9	139
341	Microwave plasma in hydrocarbon liquids. Applied Physics Letters, 2006, 88, 211503.	1.5	69
342	Covalent Photochemical Functionalization of Amorphous Carbon Thin Films for Integrated Real-Time Biosensing. Langmuir, 2006, 22, 9598-9605.	1.6	96

#	Article	IF	Citations
343	Characterization of Thick Amorphous Carbon Films Formed by Pulse Bias Filtered Cathodic Vacuum Arc. Japanese Journal of Applied Physics, 2006, 45, 7854-7859.	0.8	2
344	Hard Amorphous Hydrogenated Carbon Films and Alloys. , 0, , 217-238.		0
345	Photoelectron Spectroscopy Characterization of Diamond-like Carbon Films. Applied Spectroscopy, 2006, 60, 936-940.	1.2	5
346	Some properties of amorphous carbon films deposited on the grounded electrode of a RF-PECVD reactor from Arâ€“CH4 mixtures. Journal of Non-Crystalline Solids, 2006, 352, 1307-1309.	1.5	2
347	Size of spatial confinement at luminescence centers determined from resonant excitation bands of a-C:H photoluminescence. Journal of Non-Crystalline Solids, 2006, 352, 1340-1343.	1.5	19
348	Nature and evolution of ESR active centers in ta-C:H. Journal of Non-Crystalline Solids, 2006, 352, 1319-1322.	1.5	2
349	Thickness dependence of the structure of a-C:H thin films prepared by rf-CVD evidenced by Raman spectroscopy. Journal of Non-Crystalline Solids, 2006, 352, 1348-1351.	1.5	10
350	UV and blue light emission from SiC nanoclusters in annealed amorphous SiC alloys. Journal of Non-Crystalline Solids, 2006, 352, 1398-1401.	1.5	17
351	Optical properties of microcrystalline 3Câ€“SiC:H films measured by resonant photothermal bending spectroscopy. Journal of Non-Crystalline Solids, 2006, 352, 1196-1199.	1.5	9
352	Correlation Between Local Structure and Film Properties inÂAmorphous Carbon Materials. , 0, , 95-105.		3
353	Si-DLC Films using a Plasma Based Ion Implantation Technique with Positive-Negative High Voltage Pulses (II)-Effect of Positive Pulse Heights for Thermal Resistance, Friction and Wear-. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2006, 53, 641-646.	0.1	1
354	DLCã®çœŸç©ºä¸è¶…ä½Žæ‘©æ“¦ç¾¤è±¡. Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan, 2006, 57, 701-704.		0
355	Si-DLC Films Using a Plasma Based Ion Implantation Technique with Positive-Negative High Voltage Pulses (I)-Effect of Si Content for Thermal Resistance, Friction and Wear-. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2006, 53, 635-640.	0.1	2
356	Effects of Nanoscale Clustering in Amorphous Carbon. , 0, , 137-152.		1
357	Hydrogen-free carbon thin films prepared by unbalanced magnetron sputtering. , 2006, , .		0
358	Strong spectral dependence of light absorption by organic carbon particles formed by propane combustion. Atmospheric Chemistry and Physics, 2006, 6, 2981-2990.	1.9	143
359	Development of X-Shape Filtered Arc Deposition Apparatus for Thick ta-C Film Coating. IEEJ Transactions on Fundamentals and Materials, 2006, 126, 757-762.	0.2	6
360	‹title›Effect of technique parameters on characteristics of hydrogen-free DLC films deposited by surface wave-sustained plasma‹/title›. , 2006, , .		0

#	Article	IF	Citations
361	<title>Optical properties of the undoped and SiO<formula><inf><roman>x</roman></inf></formula> doped DLC films</title>. , 2006, , .		4
362	The Role of Hydrogen in the Electronic Structure of Amorphous Carbon: An Electron Spectroscopy Study. , 0, , 447-463.		1
363	Aid of Scaling Laws in the Achievement of a Well-Controlled Film Deposition Process. , 0, , 1-21.		63
364	Measuring the energy of the graphite Ï€ + Ïƒ plasmon peak. Surface and Interface Analysis, 2006, 38, 595-598.	0.8	24
365	Orientation of graphitic planes during annealing of â€œdip depositedâ€•amorphous carbon film: A carbon K-edge X-ray absorption near-edge study. Carbon, 2006, 44, 1982-1985.	5.4	18
366	Measuring the thickness of ultra-thin diamond-like carbon films. Carbon, 2006, 44, 2617-2624.	5.4	27
367	A reconsideration of the relationship between the crystallite size La of carbons determined by X-ray diffraction and Raman spectroscopy. Carbon, 2006, 44, 3239-3246.	5.4	452
368	Laser micromachining of sputtered DLC films. Applied Surface Science, 2006, 252, 4914-4918.	3.1	16
369	The electronic structure of carbon films deposited in rf argonâ€“hydrogen plasma. Journal of Electron Spectroscopy and Related Phenomena, 2006, 150, 40-46.	0.8	13
370	Surface characteristics and electrochemical corrosion behavior of NiTi coated with diamond-like carbon. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 438-440, 639-642.	2.6	8
371	Effects of target bias voltage on the electrical conductivity of DLC films deposited by PBII/D with a bipolar pulse. Nuclear Instruments & Methods in Physics Research B, 2006, 242, 346-348.	0.6	22
372	Studies of the composition, mechanical and electrical properties of N-doped carbon films prepared by DC-MFCAD. Nuclear Instruments & Methods in Physics Research B, 2006, 242, 324-327.	0.6	2
373	In vitro platelet adhesion and activation of polyethylene terephthalate modified by acetylene plasma immersion ion implantation and deposition. Nuclear Instruments & Methods in Physics Research B, 2006, 242, 12-14.	0.6	16
374	Room-temperature deposition of diamond-like carbon field emitter on flexible substrates. Nuclear Instruments & Methods in Physics Research B, 2006, 243, 75-78.	0.6	11
375	Femtosecond pulsed laser deposition of diamond-like carbon films: The effect of double laser pulses. Applied Surface Science, 2006, 252, 4667-4671.	3.1	23
376	Infrared spectroscopic study of thermal annealing effects of hydrocarbon species on a Si surface exposed to methane plasma. Applied Surface Science, 2006, 252, 8589-8592.	3.1	13
377	Formation of diamond-like carbon (DLC) film on the NiTi alloys via plasma immersion ion implantation and deposition (PIIID) for improving corrosion resistance. Applied Surface Science, 2006, 253, 2050-2055.	3.1	30
378	Structural and conductivity changes during the pyrolysis of polyaniline base. Polymer Degradation and Stability, 2006, 91, 114-121.	2.7	124

#	Article	IF	Citations
379	Characterisation of carbon dust produced in sputtering discharges and in the Tore Supra tokamak. Journal of Nuclear Materials, 2006, 353, 80-88.	1.3	24
380	Structure and morphology of diamond-like carbon coated on nylon 66/poly(phenylene ether) alloy. Journal of Molecular Structure, 2006, 788, 238-245.	1.8	7
381	PVD coatings for sheet metal forming processesâ€"a tribological evaluation. Surface and Coatings Technology, 2006, 200, 4654-4663.	2.2	52
382	Elevated temperature tribological behavior of non-hydrogenated diamond-like carbon coatings against 319 aluminum alloy. Surface and Coatings Technology, 2006, 200, 3996-4005.	2.2	65
383	Influence of deposition pressure on the structure and properties of fluorinated diamond-like carbon films prepared by RF reactive magnetron sputtering. Surface and Coatings Technology, 2006, 200, 3682-3686.	2.2	28
384	The corrosion behavior and hemocompatibility of TiNi alloys coated with DLC by plasma based ion implantation. Surface and Coatings Technology, 2006, 200, 4543-4548.	2.2	34
385	Adhesion improvement of cubic boron nitride films by in situ annealing. Surface and Coatings Technology, 2006, 200, 4737-4740.	2.2	5
386	Multi-wavelength Raman investigation of sputtered a-C film nanostructure. Surface and Coatings Technology, 2006, 200, 5427-5434.	2.2	6
387	Structural and electrical properties of Cr doped a-C:H films synthesized by a cathodic-arc activated deposition process. Surface and Coatings Technology, 2006, 200, 3170-3174.	2.2	16
388	Structure and optical property of the a-C:N films synthesized by filtered cathode vacuum arc. Surface and Coatings Technology, 2006, 200, 3175-3178.	2.2	7
389	Characteristics of duplex surface coatings on austempered ductile iron substrates. Surface and Coatings Technology, 2006, 200, 5725-5732.	2.2	27
390	Properties and deposition processes of a-C: H films from CH4/Ar dielectric barrier discharge plasmas. Surface and Coatings Technology, 2006, 200, 5819-5822.	2.2	15
391	Characterization and properties of Ti-containing amorphous carbon nanocomposite coatings prepared by middle frequency magnetron sputtering. Surface and Coatings Technology, 2006, 200, 5812-5818.	2.2	21
392	DLC cold welding prevention films on a Ti6Al4V alloy for space applications. Surface and Coatings Technology, 2006, 200, 2587-2593.	2.2	30
393	Structural and optical characterization of fluorinated hydrogenated silicon carbide films deposited by pulsed glow discharge. Surface and Coatings Technology, 2006, 200, 6079-6082.	2.2	2
394	Near-surface mechanical properties and surface morphology of hydrogenated amorphous carbon thin films. Surface and Coatings Technology, 2006, 200, 6400-6404.	2.2	7
395	Composition, structure and nanomechanical properties of Câ€"Siâ€"N thin films deposited by ion implantation assisted plasma beam CVD. Surface and Coatings Technology, 2006, 200, 6420-6424.	2.2	10
396	Synthesis of the silicon and silicon oxide doped a-C:H films from hexamethyldisiloxane vapor by DC ion beam. Surface and Coatings Technology, 2006, 200, 6240-6244.	2.2	33

#	Article	IF	Citations
397	Plasma properties of a new surface-wave-sustained plasma source under the conditions of depositing DLC films. Surface and Coatings Technology, 2006, 201, 408-412.	2.2	7
398	Influence of deposition parameters on the structure and mechanical properties of nanocomposite coatings. Surface and Coatings Technology, 2006, 201, 590-598.	2.2	67
399	Influence of different interlayers and bias voltage on the properties of a-C:H and a-C:H:Me coatings prepared by reactive d.c. magnetron sputtering. Surface and Coatings Technology, 2006, 201, 1576-1582.	2.2	40
400	The effect of H2/C2H2 ratio on the structure and tribological properties of carbon thin films prepared by PBII. Surface and Coatings Technology, 2006, 201, 2871-2877.	2.2	8
401	Tribological behavior of diamond-like-carbon (DLC) coatings against aluminum alloys at elevated temperatures. Surface and Coatings Technology, 2006, 201, 3229-3234.	2.2	90
402	Friction behaviour of diamond-like carbon films with varying mechanical properties. Surface and Coatings Technology, 2006, 201, 4348-4351.	2.2	21
403	Sliding wear of non-hydrogenated diamond-like carbon coatings against magnesium. Surface and Coatings Technology, 2006, 201, 4352-4356.	2.2	20
404	Atmospheric effects on the adhesion and friction between non-hydrogenated diamond-like carbon (DLC) coating and aluminum â€“ A first principles investigation. Surface Science, 2006, 600, 2955-2965.	0.8	155
405	Synthesis of DLC films by PECVD combined with hollow cathode sputtering. Vacuum, 2006, 80, 736-739.	1.6	6
406	Influence of duct bias on deposition rate of DLC film in T-shape filtered arc deposition. Vacuum, 2006, 80, 1266-1271.	1.6	20
407	Friction, wear and material transfer of sintered polyimides sliding against various steel and diamond-like carbon coated surfaces. Tribology International, 2006, 39, 575-589.	3.0	28
408	Effects of acetylene on property of plasma amorphous carbon films. Thin Solid Films, 2006, 498, 235-239.	0.8	13
409	Effect of H2 dilution on Cat-CVD a-SiC:H films. Thin Solid Films, 2006, 501, 173-176.	0.8	25
410	Magnetron plasma-enhanced chemical vapor deposition of diamond-like carbon thin films. Thin Solid Films, 2006, 506-507, 63-67.	0.8	7
411	The structures and properties of a-C:H films deposited at a wide range of relative hydrogen gas flow rate by RF sputtering. Thin Solid Films, 2006, 506-507, 92-95.	0.8	8
412	Fracture toughness, hardness and elastic modulus of hydrogenated amorphous carbon films deposited by chemical vapor deposition. Thin Solid Films, 2006, 496, 481-488.	0.8	38
413	Ultrasonic characterization of mechanical properties of Cr- and W-doped diamond-like carbon hard coatings. Thin Solid Films, 2006, 503, 250-258.	0.8	30
414	Ion beam synthesis of the diamond like carbon films for nanoimprint lithography applications. Thin Solid Films, 2006, 515, 636-639.	0.8	39

#	Article	IF	Citations
415	Reflectance and photoluminescence spectra of as grown and hydrogen and nitrogen incorporated tetrahedral amorphous carbon films deposited using an S bend filtered cathodic vacuum arc process. Thin Solid Films, 2006, 515, 1597-1606.	0.8	21
416	Metal-doped diamond-like carbon films synthesized by filter-arc deposition. Thin Solid Films, 2006, 515, 1053-1057.	0.8	27
417	Nanoindentation-induced deformation behaviour of diamond-like carbon coatings on silicon substrates. Thin Solid Films, 2006, 515, 1000-1004.	0.8	21
418	Quantifying clustering in disordered carbon thin films. Thin Solid Films, 2006, 515, 996-999.	0.8	6
419	Reciprocating sliding behaviour of self-mated amorphous diamond-like carbon coatings on Si3N4 ceramics under tribological stress. Thin Solid Films, 2006, 515, 2192-2196.	0.8	1
420	Characterization of magnetron co-sputtered W-doped C-based films. Thin Solid Films, 2006, 515, 1063-1068.	0.8	16
421	Influence of deposition conditions on the antireflection properties of diamond-like carbon films for Si-based solar cells. Technical Physics, 2006, 51, 654-658.	0.2	9
422	Simulating temperature effects in the growth of tetrahedral amorphous carbon: The importance of infrequent events. Applied Physics Letters, 2006, 89, 131924.	1.5	35
423	Tribology of diamond-like carbon films: recent progress and future prospects. Journal Physics D: Applied Physics, 2006, 39, R311-R327.	1.3	1,003
425	Raman light scattering in hydrogenated metal-carbon composite films. Journal of Applied Spectroscopy, 2006, 73, 388-393.	0.3	12
426	Influence of negative voltage on the structure and properties of DLC films deposited on NiTi alloys by PBII. Journal of Materials Science, 2006, 41, 4179-4183.	1.7	5
427	Disorder and localization in bandtail hopping transport: experiments and concepts. Journal of Materials Science: Materials in Electronics, 2006, 17, 413-426.	1.1	21
428	Electronic properties and applications of cluster-assembled carbon films. Journal of Materials Science: Materials in Electronics, 2006, 17, 427-441.	1.1	29
429	Tribology of microsystems. Microsystem Technologies, 2006, 12, 680-684.	1.2	1
430	Influence of film thickness on laser ablation of hydrogenated amorphous carbon films. Applied Physics A: Materials Science and Processing, 2006, 83, 89-94.	1.1	15
432	Plasma-assisted pulsed laser deposition of carbon films: Effect of oxygen plasma on amorphous carbon film etching. Thin Solid Films, 2006, 506-507, 96-100.	0.8	4
433	Correlation between a-C:H film properties and Ar/CH4 dielectric barrier discharge. Thin Solid Films, 2006, 506-507, 145-149.	0.8	3
434	Annealing effect on the structure, mechanical and tribological properties of hydrogenated diamond-like carbon films. Thin Solid Films, 2006, 515, 2153-2160.	0.8	123

#	Article	IF	Citations
435	Effect of amorphous Si layer on the reaction of carbon and silicon in the C/Si multilayer by high vacuum annealing. Thin Solid Films, 2006, 515, 1985-1991.	0.8	18
436	Control over the wettability of amorphous carbon films in a large range from hydrophilicity to super-hydrophobicity. Applied Surface Science, 2006, 253, 2690-2694.	3.1	86
437	The use of functionally gradient materials in medicine. Jom, 2006, 58, 52-56.	0.9	15
438	Hard-hydrogenated tetrahedral amorphous carbon films by distributed electron cyclotron resonance plasma. International Journal of Refractory Metals and Hard Materials, 2006, 24, 39-48.	1.7	14
439	Immobilized carbon nanofibers as industrial catalyst for ODH reactions. Journal of Catalysis, 2006, 244, 126-129.	3.1	67
440	Determination of Density of States in Amorphous Carbon. IEEE Transactions on Electron Devices, 2006, 53, 1775-1781.	1.6	4
441	A comparative Raman study of thermal stability of amorphous diamond films deposited with different substrate bias. Scripta Materialia, 2006, 55, 1167-1170.	2.6	11
442	Characterization of amorphous and nanocrystalline carbon films. Materials Chemistry and Physics, 2006, 96, 253-277.	2.0	967
443	Optical properties and electrical transport in intercalated amorphous carbon. Materials Research Bulletin, 2006, 41, 2000-2006.	2.7	11
444	Effect of N2/Ar gas flow ratio on the deposition of TiN/Ti coatings on NiTi shape memory alloy by PIIID. Materials Letters, 2006, 60, 2243-2247.	1.3	17
445	Hemocompatibility of low-friction boronâ€“carbonâ€“nitrogen containing coatings. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2006, 77B, 179-187.	1.6	24
446	Human microvascular endothelial cellular interaction with atomic N-doped DLC compared with Si-doped DLC thin films. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2006, 78B, 222-229.	1.6	23
447	Tensile Strengths of Metal-Containing Joints Fabricated by Focused Electron Beam Induced Deposition. Advanced Engineering Materials, 2006, 8, 155-157.	1.6	19
448	The effect of hydrogen on the electronic and bonding properties of amorphous carbon. Journal of Physics Condensed Matter, 2006, 18, 10803-10815.	0.7	16
449	Arrays of one-dimensional metal/silicon and metal/carbon nanotube heterojunctions. Nanotechnology, 2006, 17, S262-S270.	1.3	34
450	Field emission from a composite structure consisting of vertically aligned single-walled carbon nanotubes and carbon nanocones. Nanotechnology, 2006, 17, 5930-5934.	1.3	25
451	Formation of Nanoparticles by Control of Electron Temperature in Hollow-Typed Magnetron Radio Frequency CH4/H2Plasma. Japanese Journal of Applied Physics, 2006, 45, 8071-8074.	0.8	6
452	Raman Spectroscopy of CVD Carbon Thin Films Excited by Near-Infrared Light. , 0, , 423-445.		4

#	Article	IF	Citations
453	Formation of conducting nanochannels in diamond-like carbon films. Semiconductor Science and Technology, 2006, 21, 1326-1330.	1.0	21
454	Study on the field-emission characteristics of a-C:H films. Journal of Vacuum Science & Technology B, 2006, 24, 1052.	1.3	2
455	Si nanowires sheathed with thin diamondlike carbon films. Journal of Vacuum Science & Technology B, 2006, 24, 1702.	1.3	1
456	Pulsed laser deposition of hydroxyapatite-diamondlike carbon multilayer films and their adhesion aspects. Journal of Adhesion Science and Technology, 2006, 20, 221-231.	1.4	11
457	Indentation fracture of a-C:H thin films from chemical vapour deposition. Philosophical Magazine, 2006, 86, 5397-5406.	0.7	8
458	Friction Mechanisms and Fundamental Aspects in Solid Lubricant Coatings. , 2006, , 573-593.		5
459	Laser processing of diamondlike carbon thin films for medical prostheses. International Materials Reviews, 2006, 51, 127-143.	9.4	16
460	The Influence of Chemical Alloying on the High Temperature Wear Resistance of H-Free DLC Coatings. Advanced Materials Research, 2006, 15-17, 1026-1031.	0.3	0
461	Carbon Nanotubes Grown on Cuâˆ•Tiâˆ•Si(100) Assisted by Amorphous Carbon Nanotips in a Plasma-Enhanced CVD Process. Journal of the Electrochemical Society, 2006, 153, C747.	1.3	3
462	‹title›Plasma properties of a new-type surface wave-sustained plasma source under the conditions of depositing DLC films‹/title›. , 2006, , .		0
463	Electron Microscopy Characterization of Nanostructured Coatings. Nanostructure Science and Technology, 2006, , 143-215.	0.1	0
464	Preparation and tribological properties of DLC/Ti film by pulsed laser arc deposition. Chinese Physics B, 2006, 15, 2697-2705.	1.3	18
465	Structure of sputtered nanocomposite CrC[sub x]âˆ•a-C:H thin films. Journal of Vacuum Science & Technology B, 2006, 24, 1837.	1.3	48
466	Comparing the Young's Modulus of Near-Frictionless Carbon Films Obtained From Different Methods. Materials Research Society Symposia Proceedings, 2006, 956, 1.	0.1	0
467	Magnetic Rare Earth (Gd) Implanted Tetrahedral Amorphous Carbon (ta-C). Materials Research Society Symposia Proceedings, 2006, 941, 1.	0.1	2
468	Effect of low-pressure plasma discharge conditions on the thickness and roughness of ultrathin films of amorphous carbon. Journal of Applied Physics, 2006, 100, 063307.	1.1	10
469	Residual stress minimum in nanocrystalline diamond films. Applied Physics Letters, 2006, 89, 093109.	1.5	22
470	Density determination of focused-electron-beam-induced deposits with simple cantilever-based method. Applied Physics Letters, 2006, 88, 031906.	1.5	35

#	Article	IF	Citations
471	Raman Spectroscopy and Nano Hardness Investigation of Carbon Overcoats Used in Hard Disks and Sliders. , 2006, , .		0
472	Reactive pulsed laser deposition of hydrogenated carbon thin films: The effect of hydrogen pressure. Journal of Applied Physics, 2006, 100, 043501.	1.1	17
473	Real-time reflectometry-controlled focused-electron-beam-induced deposition of transparent materials. Journal of Vacuum Science & Technology B, 2006, 24, 587.	1.3	11
474	Reactive magnetron sputtering deposition and columnar growth of ncâ€TiCâ•aâ€C:H nanocomposite coatings. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 1441-1447.	0.9	14
475	Future trends in surface coatings for protection against wear. , 2006, , 392-413.		0
476	DLC Film Fabrication on the Inner Surface of a Cylinder by Carbon Ion Implantation. IEEE Transactions on Plasma Science, 2006, 34, 1116-1120.	0.6	6
477	Probabilistic analysis of tetrahedral carbon hybridization in amorphous carbon films. Applied Physics Letters, 2006, 88, 221908.	1.5	9
478	Tuning of the metal-insulator transition in iodine incorporated amorphous carbon. Journal of Applied Physics, 2006, 99, 096107.	1.1	7
479	Production and characterization of thin a-C:(H) films for gas permeation barrier functionality against He, CO2, N2, O2and H2O. Journal of Physics Condensed Matter, 2006, 18, 5945-5959.	0.7	3
480	Bonding in amorphous carbon-nitrogen alloys: A first principles study. Physical Review B, 2006, 73, .	1.1	18
481	Mobility edge in hydrogenated amorphous carbon. Applied Physics Letters, 2006, 88, 172114.	1.5	12
482	Unraveling the deposition mechanism in a-C:H thin-film growth: A molecular-dynamics study for the reaction behavior of C3 and C3H radicals with a-C:H surfaces. Journal of Applied Physics, 2006, 99, 014902.	1.1	24
483	STRUCTURAL AND ELECTRONIC PROPERTIES OF c-BN(110) SURFACE AND SURFACE POINT DEFECTS. International Journal of Modern Physics C, 2006, 17, 795-803.	0.8	6
484	Mechanical property development in reactively sputtered tantalum carbide/amorphous hydrocarbon thin films. Journal of Materials Research, 2006, 21, 1500-1511.	1.2	6
485	Densification of thin a-Câ€‰:â€‰H films grown from low-kinetic energy hydrocarbon radicals under the influence of H and C particle fluxes: a molecular dynamics study. Journal Physics D: Applied Physics, 2006, 39, 1948-1953.	1.3	3
486	Biological applications of functionalized carbon nanoparticles. , 2006, , 265-276.		1
487	Tribology and MEMS. Journal Physics D: Applied Physics, 2006, 39, R201-R214.	1.3	158
488	Field Emission from a Carbon Nanofiber/Carbon Nanocone Composite Structure Fabricated by a Two-Step Growth Process. Journal of the Electrochemical Society, 2006, 153, H15.	1.3	8

#	Article	IF	Citations
489	EFFECT OF GAS PRESSURE ON THE BORON-DOPED HYDROGENATED AMORPHOUS CARBON THIN FILMS GROWN BY RADIO FREQUENCY PLASMA-ENHANCED CHEMICAL VAPOR DEPOSITION. Surface Review and Letters, 2006, 13, 7-12.	0.5	6
490	SUPERHYDROPHOBIC SURFACES PREPARED BY PLASMA FLUORINATION OF LOTUS-LEAF-LIKE AMORPHOUS CARBON FILMS. Surface Review and Letters, 2006, 13, 117-122.	0.5	17
491	The importance of rare events in thin film deposition: a molecular dynamics study of tetrahedral amorphous carbon. Molecular Simulation, 2006, 32, 1271-1277.	0.9	8
492	Photoresponse Characteristics of Nitrogen Doped Carbon /P-Silicon Photovoltaic Cell. , 2006, , .		4
493	Nanoindentation and nanofriction on DLC films. Philosophical Magazine, 2006, 86, 5465-5476.	0.7	21
494	EFFECT OF FILTER COIL CURRENT ON PROPERTIES OF nc-TiC/a-C:H NANOCOMPOSITE FILM PREPARED BY DUAL PLASMA TECHNIQUE. Surface Review and Letters, 2007, 14, 1143-1148.	0.5	2
495	The preparation and mechanical properties of Al-containing a-Câ€‰:â€‰H thin films. Journal Physics D: Applied Physics, 2007, 40, 6748-6753.	1.3	44
496	Influence of acetylene to argon flow rate ratios on structure and properties of hydrogenated amorphous carbon films produced on steel substrates by plasma immersion ion implantation and deposition. Journal of Materials Research, 2007, 22, 982-988.	1.2	1
497	NANOCOMPOSITE nc-TiC/a-C:H FILMS FABRICATED BY DUAL PLASMA TECHNIQUE. Surface Review and Letters, 2007, 14, 891-897.	0.5	1
498	Short Repetitive Pulses of 50-75 kV Applied to Plasma Immersion Implantation of Aerospace Materials. , 2007, , .		0
499	Diamond like carbon coatings for tribology: production techniques, characterisation methods and applications. International Materials Reviews, 2007, 52, 153-174.	9.4	171
500	Elastic properties of aâ€C:N:H films. Journal of Applied Physics, 2007, 101, 013501.	1.1	43
501	Qualitative analysis of a diamondlike carbon film by angle-resolved x-ray photoelectron spectroscopy. Journal of Applied Physics, 2007, 101, 103542.	1.1	41
502	Tribological and mechanical properties of DLC film obtained on metal surface by an enhanced and low-cost pulsed-DC discharge. International Journal of Surface Science and Engineering, 2007, 1, 417.	0.4	14
503	Investigation on the electrical properties and inhomogeneous distribution of ZnO:Al thin films prepared by dc magnetron sputtering at low deposition temperature. Journal of Applied Physics, 2007, 101, 014910.	1.1	44
504	The effect of fluorine doping and temperature on the field emission from diamond-like carbon films. Journal of Physics Condensed Matter, 2007, 19, 346233.	0.7	6
505	Elementary Analysis of Diamond-Like Carbon Film Formed by Focused-Ion-Beam Chemical Vapor Deposition. Japanese Journal of Applied Physics, 2007, 46, 8003-8004.	0.8	23
506	Raman Analysis oftrans-Polyacetylene Chains in Hydrogenated Amorphous Carbon Films. Japanese Journal of Applied Physics, 2007, 46, 756-760.	0.8	13

#	Article	IF	Citations
507	Nanogranular Au films deposited on carbon covered Si substrates for enhanced optical reflectivity and Raman scattering. Nanotechnology, 2007, 18, 145702.	1.3	14
508	A New Empirical Model for Estimation of sp 3 Fraction in Diamond-Like Carbon Films. Chinese Physics Letters, 2007, 24, 2122-2124.	1.3	8
509	Electron emission degradation of nano-structured sp 2 -bonded amorphous carbon films. Chinese Physics B, 2007, 16, 843-847.	1.3	5
510	The tribological properties of nanometre carbon films prepared by plasma-based ion implantation at various implanting voltages. Journal Physics D: Applied Physics, 2007, 40, 534-540.	1.3	4
511	Optimized pulsed laser deposition by wavelength and static electric field control: The case of tetrahedral amorphous carbon films. Journal of Applied Physics, 2007, 101, 124903.	1.1	28
512	Reduction of the residual compressive stress of tetrahedral amorphous carbon film by Ar background gas during the filtered vacuum arc process. Journal of Applied Physics, 2007, 101, 023504.	1.1	25
513	Stress-induced anisotropy of graphitelike amorphous carbon. Journal of Applied Physics, 2007, 101, 053522.	1.1	5
514	Electrical conductivity of cluster-assembled carbon/titania nanocomposite films irradiated by highly focused vacuum ultraviolet photon beams. Journal of Applied Physics, 2007, 101, 064314.	1.1	3
515	Effect of hydrogen treatment on the field emission of amorphous carbon film. Journal of Applied Physics, 2007, 101, 084315.	1.1	21
516	Deposition of ultraviolet photoconductive films of amorphous hydrogenated carbon. Journal of Applied Physics, 2007, 101, 103703.	1.1	2
517	Superlow Friction of a-C:H Films: Tribochemical and Rheological Effects. , 2007, , 273-294.		3
518	Superlubricity in Diamondlike Carbon Films. , 2007, , 253-271.		19
519	Electrical conduction in undoped ultrananocrystalline diamond thin films and its dependence on chemical composition and crystalline structure. Journal of Applied Physics, 2007, 102, 113706.	1.1	33
520	Mechanism of enhanced adhesion between hydrogenated amorphous carbon films and tungsten preimplanted steel substrates. Journal of Applied Physics, 2007, 101, 053520.	1.1	3
521	Clustering in a highly hydrogenated diamondlike carbon determined using fluctuation electron microscopy and phenomenological atomistic simulations. Physical Review B, 2007, 76, .	1.1	10
522	Structural order in near-frictionless hydrogenated diamondlike carbon films probed at three length scales via transmission electron microscopy. Physical Review B, 2007, 75, .	1.1	44
523	Structure of amorphous carbon from near-edge and extended x-ray absorption spectroscopy. Physical Review B, 2007, 76, .	1.1	37
524	The C1s core line in irradiated graphite. Journal of Applied Physics, 2007, 102, 043504.	1.1	24

#	Article	IF	Citations
525	Development of X-Shaped Filtered-Arc-Deposition (X-FAD) Apparatus and DLC/Cr Film Preparation. IEEE Transactions on Plasma Science, 2007, 35, 1014-1019.	0.6	9
526	Studying Effects of Bias Voltage on Properties, Wettability and Platelet Adhered Behavior of DLC Films Prepared By DC-MFCVAD. Key Engineering Materials, 2007, 353-358, 2203-2206.	0.4	0
527	DLC Film Coating on a Lithium Metal as an Anode of Lithium Secondary Batteries. Solid State Phenomena, 2007, 124-126, 919-922.	0.3	3
528	Gravity-Assisted Chemical Vapor Deposition of Vertically Aligned Single-Walled Carbon Nanotubes. Journal of the Electrochemical Society, 2007, 154, K15.	1.3	0
529	Substrate Effect on the Diamond-Like Carbon Films Synthesized by RF Plasma Enhanced Chemical Vapor Deposition. Materials Science Forum, 2007, 539-543, 3574-3579.	0.3	1
530	Low-Temperature Deposition of Amorphous Carbon Films for Surface Passivation of Carbon-Doped Silicon Oxide. Advanced Materials Research, 2007, 26-28, 645-648.	0.3	1
531	Thin Film Carbon Layers with Continously Changing Bonding Properties. Materials Science Forum, 2007, 537-538, 207-214.	0.3	0
532	Experimental Study on the Surface Modification and Materials Removal of Ultra Thin DLC Films. Key Engineering Materials, 2007, 339, 211-216.	0.4	0
533	Enhancement of sp3-bonding in high-bias-voltage grown diamond-like carbon thin films studied by x-ray absorption and photoemission spectroscopy. Journal of Physics Condensed Matter, 2007, 19, 176204.	0.7	3
534	Tribological properties of diamond-like carbon films deposited by pulsed laser arc deposition. Chinese Physics B, 2007, 16, 3790-3797.	1.3	15
535	Reaction mechanisms and thin a-C:H film growth from low energy hydrocarbon radicals. Journal of Physics: Conference Series, 2007, 86, 012020.	0.3	19
536	Structure, optical and electrical properties of facing-target sputtered amorphous CNx films at low N2 partial pressures. Journal Physics D: Applied Physics, 2007, 40, 1801-1806.	1.3	3
537	Hydrocarbon and Fluorocarbon Thin Film Deposition in Atmospheric Pressure Glow Dielectric Barrier Discharges. , 0, , 353-369.		1
538	Artificial introduction of defects into vertically aligned multiwalled carbon nanotube ensembles: Application to electrochemical sensors. Journal of Applied Physics, 2007, 102, .	1.1	46
539	Optical limiting phenomena of carbon nanoparticles prepared by laser ablation in liquids. Journal of Physics: Conference Series, 2007, 59, 289-292.	0.3	15
540	Industrial Applications of Pulsed Power Technology. IEEE Transactions on Dielectrics and Electrical Insulation, 2007, 14, 1051-1064.	1.8	303
541	Disorder and optical properties of amorphous carbon. Diamond and Related Materials, 2007, 16, 1788-1792.	1.8	27
542	Different substrate materials effect on structure of ta-C films by Raman spectroscopy for magnetic recording sliders. Journal of Non-Crystalline Solids, 2007, 353, 2545-2549.	1.5	11

#	Article	IF	Citations
543	Comparing internal stress in diamond-like carbon films with different structure. Thin Solid Films, 2007, 515, 6899-6903.	0.8	103
544	Diamond and diamond-like carbon MEMS. Journal of Micromechanics and Microengineering, 2007, 17, S147-S163.	1.5	173
545	Influence of Cumulenic Chains on the Vibrational and Electronic Properties ofspâ^'sp2Amorphous Carbon. Physical Review Letters, 2007, 98, 216103.	2.9	117
546	Comparative study of mechanical properties of a-C:H films produced on tungsten pre-implanted stainless steel substrate by plasma immersion ion implantation and deposition. Diamond and Related Materials, 2007, 16, 1304-1311.	1.8	5
547	Microstructure, magnetotransport, and magnetic properties of Gd-doped amorphous carbon. Physical Review B, 2007, 75, .	1.1	11
548	Evaluation of the tribological properties of DLC for engine applications. Journal Physics D: Applied Physics, 2007, 40, 5427-5437.	1.3	45
549	Soft X-ray absorption and emission characterization of nanodiamond prepared by explosive detonation. Diamond and Related Materials, 2007, 16, 350-352.	1.8	14
550	Influence of the filling gas on plasma focus assisted diamondlike carbon coating at room temperature. Journal of Applied Physics, 2007, 101, 063307.	1.1	11
551	Field emission from carbon nanosheets on pyramidal Si(100). Nanotechnology, 2007, 18, 185706.	1.3	26
552	Synthesis of diamond at sub 300ÂÂ°C substrate temperature. Diamond and Related Materials, 2007, 16, 1950-1957.	1.8	31
553	Beyond Î²-C3N4â€"Fullerene-like carbon nitride: A promising coating material. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2007, 25, 633-644.	0.9	52
554	Capacitively coupled radio-frequency hydrogen discharges: The role of kinetics. Journal of Applied Physics, 2007, 102, 063305.	1.1	47
555	Mechanical properties of alternating high-low sp3 content thick non-hydrogenated diamond-like amorphous carbon films. Diamond and Related Materials, 2007, 16, 1882-1886.	1.8	24
556	Deposition of hard amorphous hydrogenated carbon films by radiofrequency parallel-plate hollow-cathode plasmas. Diamond and Related Materials, 2007, 16, 616-622.	1.8	12
557	27.12 MHz plasma generation in supercritical carbon dioxide. Journal of Applied Physics, 2007, 101, 093303.	1.1	25
558	Substrate bias effect on structure of tetrahedral amorphous carbon films by Raman spectroscopy. Diamond and Related Materials, 2007, 16, 1746-1751.	1.8	35
559	Deposition of hydrogenated amorphous carbon films with enhanced sp3-C bonding on nanocrystalline palladium interlayer. Diamond and Related Materials, 2007, 16, 517-525.	1.8	16
560	Physical properties of ultrafast deposited micro- and nanothickness amorphous hydrogenated carbon films for medical devices and prostheses. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2007, 221, 161-172.	1.0	7

#	Article	IF	Citations
561	Nonlinear effects in collision cascades and high energy shock waves during ta-C:H growth. Journal of Applied Physics, 2007, 102, 013301.	1.1	5
562	Self-excited void instability in dusty plasmas: plasma and dust cloud dynamics during the heartbeat instability. New Journal of Physics, 2007, 9, 268-268.	1.2	63
563	Tetrahedral and Trigonal Carbon Atom Hybridization in Thin Amorphous Carbon Films Synthesized by Radio-Frequency Sputtering. Journal of Physical Chemistry C, 2007, 111, 9891-9896.	1.5	24
564	Temperature sensibility of amorphous diamond films prepared by filtered arc. Diamond and Related Materials, 2007, 16, 558-561.	1.8	3
565	The Role of Hydrogen Atmosphere on the Tribological Behavior of Non-Hydrogenated DLC Coatings against Aluminum. Tribology Transactions, 2007, 50, 178-186.	1.1	32
566	Three-dimensional carbon nanowall structures. Applied Physics Letters, 2007, 90, 123107.	1.5	92
567	Vertical alignment of liquid crystal through ion beam exposure on oxygen-doped SiC films deposited at room temperature. Applied Physics Letters, 2007, 91, 103513.	1.5	22
568	Liquid crystal pretilt angle control using adjustable wetting properties of alignment layers. Applied Physics Letters, 2007, 90, 253505.	1.5	37
569	Evolution mechanism of nanocrystalline tungsten-carbon and effects on tungsten implanted amorphous hydrogenated carbon. Journal of Applied Physics, 2007, 102, 113517.	1.1	5
570	High permittivity from defective carbon-coated Cu nanocapsules. Nanotechnology, 2007, 18, 275701.	1.3	63
571	Field emission from diamond nanotips treated with nitrogen plasma immersion ion implantation. Nanotechnology, 2007, 18, 455706.	1.3	22
572	Properties of amorphous carbon nitride prepared by RF reactive sputtering. Philosophical Magazine, 2007, 87, 5079-5088.	0.7	2
573	Effects of energetic ion particles on friction of diamond-like carbon. Applied Physics Letters, 2007, 91, 051918.	1.5	11
574	Carbon Hollow Nanospheres from Chlorination of Ferrocene. Chemistry of Materials, 2007, 19, 2304-2309.	3.2	64
575	Structure and Electrochemical Properties of Carbon Films Prepared by a Electron Cyclotron Resonance Sputtering Method. Analytical Chemistry, 2007, 79, 98-105.	3.2	93
576	On a dielectric approach to understand Electron Energy Loss Spectra from carbon materials. Diamond and Related Materials, 2007, 16, 1316-1320.	1.8	6
577	Development of new PVC materials. Characterization and feasibility of diamond coatings on model PVC materials. Diamond and Related Materials, 2007, 16, 630-636.	1.8	4
578	Frequency scaling of ac hopping transport in amorphous carbon nitride. Diamond and Related Materials, 2007, 16, 1799-1805.	1.8	9

#	Article	IF	Citations
579	Surface and temperature effect on fibrinogen adsorption to amorphous hydrogenated carbon thin films. Diamond and Related Materials, 2007, 16, 1868-1874.	1.8	10
580	Haemocompatibility of carbon based thin films. Diamond and Related Materials, 2007, 16, 1847-1857.	1.8	45
581	Corrosion protection of DLC coatings on magnesium alloy. Diamond and Related Materials, 2007, 16, 1361-1364.	1.8	80
582	Preparation and characterization of La2O3 doped diamond-like carbon nanofilms (I): Structure analysis. Diamond and Related Materials, 2007, 16, 1905-1911.	1.8	26
583	Surface modifications in amorphous carbon films exposed to nitrogen plasma. Diamond and Related Materials, 2007, 16, 1282-1285.	1.8	4
584	Fast deposition of diamond-like hydrogenated carbon films. Diamond and Related Materials, 2007, 16, 623-629.	1.8	17
585	Diamond-Like Carbon Coatings on Ureteral Stentsâ€"A New Strategy for Decreasing the Formation of Crystalline Bacterial Biofilms?. Journal of Urology, 2007, 177, 1923-1927.	0.2	97
586	Surface roughness evolution and growth mechanism of carbon films from hyperthermal species. Diamond and Related Materials, 2007, 16, 1771-1776.	1.8	40
587	Determination of the hydrogen content in diamond-like carbon and polymeric thin films by reflection electron energy loss spectroscopy. Diamond and Related Materials, 2007, 16, 107-111.	1.8	37
588	Microfabrication issues in constructing freestanding membranes of near-frictionless carbon and diamond-like films. Diamond and Related Materials, 2007, 16, 342-349.	1.8	6
589	Deposition of diamond-like carbon films on aluminium substrates by RF-PECVD technique: Influence of process parameters. Diamond and Related Materials, 2007, 16, 90-97.	1.8	40
590	Density-functional theory study of the microstructure, electronic structure, and optical properties of amorphous carbon. Physical Review B, 2007, 75, .	1.1	33
591	Raman Analysis of Diamond-Like Carbon Films Deposited onto Corrosion Resistant Alloys Used for Coronary Stent Fabrication. Materials Science Forum, 2007, 537-538, 277-284.	0.3	4
592	Comparative experimental analysis of the a-C:H deposition processes using CH4 and C2H2 as precursors. Journal of Applied Physics, 2007, 102, 053304.	1.1	77
593	Diamond like carbon films deposited from graphite target by asymmetric bipolar pulsed-DC magnetron sputtering. Diamond and Related Materials, 2007, 16, 1286-1290.	1.8	28
594	Clustering of aromatic rings in near-frictionless hydrogenated amorphous carbon films probed using multiwavelength Raman spectroscopy. Applied Physics Letters, 2007, 91, .	1.5	39
595	Growth and properties of hydrogen-free DLC films deposited by surface-wave-sustained plasma. Diamond and Related Materials, 2007, 16, 161-166.	1.8	17
596	The mechanical and biocompatibility properties of DLC-Si films prepared by pulsed DC plasma activated chemical vapor deposition. Diamond and Related Materials, 2007, 16, 1616-1622.	1.8	126

#	Article	IF	Citations
597	Review of Cathodic Arc Deposition for Preparing Droplet-Free Thin Films. IEEE Transactions on Plasma Science, 2007, 35, 992-999.	0.6	83
598	Photochemical Grafting of n-Alkenes onto Carbon Surfaces:â€‰ the Role of Photoelectron Ejection. Journal of the American Chemical Society, 2007, 129, 13554-13565.	6.6	74
599	Dispersion relations and optical properties of amorphous carbons. Diamond and Related Materials, 2007, 16, 1813-1822.	1.8	35
600	Nanobuckling and x-ray photoelectron spectra of carbyne-rich tetrahedral carbon films deposited by femtosecond laser ablation at cryogenic temperatures. Journal of Applied Physics, 2007, 102, 074311.	1.1	24
601	Behavior of human umbilical vein endothelial cells on micro-patterned amorphous hydrogenated carbon films produced by plasma immersion ion implantation & deposition and plasma etching. Diamond and Related Materials, 2007, 16, 550-557.	1.8	12
602	DLCè†œã«æ–¬ã‚Šã“ã‚€. Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan, 2007, 58, 562-566.	0.1	3
603	Title is missing!. Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan, 2007, 58, 572-577.	0.1	0
604	ç¡¬è³ªDLCè¢«è¦†å·¥å…·ã®é–‹ç™º. Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan, 2007, 58, 589-592.	0.1	2
605	Monitoring Hydrotreating Catalysts Synthesis and Deactivation using Raman Spectrometry. Oil and Gas Science and Technology, 2007, 62, 91-99.	1.4	14
606	Flame retardancy afforded by polyaniline deposited on wood. Journal of Applied Polymer Science, 2007, 103, 24-30.	1.3	44
607	Molecular Dynamics Simulations of the Growth of Thin Aâ€C:H Films Under Additional Ion Bombardment: Influence of the Growth Species and the Ar⁺ Ion Kinetic Energy. Chemical Vapor Deposition, 2007, 13, 312-318.	1.4	19
608	Influence of Phosphorus Doping Level and Acid Pretreatment on the Voltammetric Behavior of Phosphorus Incorporated Tetrahedral Amorphous Carbon Film Electrodes. Electroanalysis, 2007, 19, 1773-1778.	1.5	14
609	Fabrication and performance of optoelectronic devices with metal/diamond-like carbon Schottky contact. Solid-State Electronics, 2007, 51, 423-427.	0.8	9
610	Enhancement of surface properties of biomaterials using plasma-based technologies. Surface and Coatings Technology, 2007, 201, 8076-8082.	2.2	67
611	Plasma surface treatment of artificial orthopedic and cardiovascular biomaterials. Surface and Coatings Technology, 2007, 201, 5601-5606.	2.2	61
612	Superexcellent infrared protective coatings: Amorphous diamond films deposited by filtered cathodic vacuum arc technology. Surface and Coatings Technology, 2007, 201, 5323-5325.	2.2	9
613	Mechanical and corrosion study of diamond-like carbon coating on NiTi alloys. Surface and Coatings Technology, 2007, 201, 5121-5123.	2.2	11
614	Micro-scratch test of DLC films on Si substrates prepared by bipolar-type plasma based ion implantation. Surface and Coatings Technology, 2007, 201, 8334-8338.	2.2	18

#	Article	IF	Citations
615	Hydrogen-free carbon thin films prepared by new type surface-wave-sustained plasma (SWP). Surface and Coatings Technology, 2007, 201, 6631-6634.	2.2	2
616	Raman spectroscopy study of DLC films prepared by RF plasma and filtered cathodic arc. Surface and Coatings Technology, 2007, 201, 6734-6736.	2.2	49
617	Mechanical properties and Raman characterization of amorphous diamond films as a function of film thickness. Surface and Coatings Technology, 2007, 201, 6667-6669.	2.2	13
618	Substrate tilting effect on structure of tetrahedral amorphous carbon films by Raman spectroscopy. Surface and Coatings Technology, 2007, 201, 7235-7240.	2.2	16
619	A comparison of DLC film properties obtained by r.f. PACVD, IBAD, and enhanced pulsed-DC PACVD. Surface and Coatings Technology, 2007, 202, 549-554.	2.2	44
620	Residual stress and hardness behaviors of the two-layer C/Si films. Surface and Coatings Technology, 2007, 202, 1149-1153.	2.2	19
621	Characterization of DLC thin film and evaluation of machining forces using coated inserts in turning of Alâ€“Si alloys. Surface and Coatings Technology, 2007, 202, 1029-1033.	2.2	39
622	Evolution of ELNES spectra as a function of experimental settings for any uniaxial specimen: A fully relativistic study. Ultramicroscopy, 2007, 107, 81-94.	0.8	9
623	Synthesis of carbon coatings employing a plasma torch from an argonâ€“acetylene gas mixture at reduced pressure. Vacuum, 2007, 81, 1220-1223.	1.6	8
624	Study of optical properties of diamond-like carbon/porous silicon antireflective coating layers for multicrystalline silicon solar cell applications. Vacuum, 2007, 81, 1472-1475.	1.6	11
625	Improved crystallization characteristics of ZnO thin film grown onto a-C:H film used as a buffer layer. Thin Solid Films, 2007, 515, 4988-4991.	0.8	0
626	Hydrophobic properties of the ion beam deposited DLC films containing SiOx. Thin Solid Films, 2007, 515, 7615-7618.	0.8	34
627	Photoelectron spectroscopy and secondary ion mass spectrometry characterization of diamond-like carbon films. Thin Solid Films, 2007, 515, 5386-5390.	0.8	5
628	Effects of applied substrate bias during reactive sputter deposition of nanocomposite tantalum carbide/amorphous hydrocarbon thin films. Thin Solid Films, 2007, 515, 5403-5410.	0.8	9
629	Thermal stability of nanocomposite CrC/a-C:H thin films. Thin Solid Films, 2007, 515, 5411-5417.	0.8	44
630	Mechanical and physical properties of C and Câ€“Cr sputter coatings measured at the nano-scale. Thin Solid Films, 2007, 515, 7820-7828.	0.8	26
631	Liquid crystal alignment on the a-C:H films by Ar plasma ion immersion. Thin Solid Films, 2007, 515, 8000-8004.	0.8	2
632	The effect of sp2 fraction and bonding disorder on micro-mechanical and electronic properties of a-C:H films. Thin Solid Films, 2007, 515, 7855-7860.	0.8	23

#	Article	IF	Citations
633	Comparative studies on influence of acetylene to argon flow rate ratios on nano-scratch behavior of a-C:H films produced on steel substrates by plasma immersion ion implantation and deposition. Thin Solid Films, 2007, 516, 252-256.	0.8	6
634	Electrical conduction mechanism in laser deposited amorphous carbon. Thin Solid Films, 2007, 516, 257-261.	0.8	19
635	Characterization of diamond-like carbon coatings prepared by pulsed bias cathodic vacuum arc deposition. Thin Solid Films, 2007, 516, 243-247.	0.8	30
636	Structure and mechanical properties of Ag-incorporated DLC films prepared by a hybrid ion beam deposition system. Thin Solid Films, 2007, 516, 248-251.	0.8	103
637	The effect of applied negative bias voltage on the structure of Ti-doped a-C:H films deposited by FCVA. Applied Surface Science, 2007, 253, 3722-3726.	3.1	69
638	Ripple surface generated on hydrogenated amorphous carbon nitride films. Applied Surface Science, 2007, 253, 4099-4102.	3.1	1
639	Phase transformation of graphite irradiated by high-intensity pulsed ion beams. Applied Surface Science, 2007, 253, 5425-5430.	3.1	11
640	Low-macroscopic field emission from silicon-incorporated diamond-like carbon film synthesized by dc PECVD. Applied Surface Science, 2007, 253, 5480-5484.	3.1	35
641	Intrinsic mechanical properties of ultra-thin amorphous carbon layers. Applied Surface Science, 2007, 253, 6165-6175.	3.1	37
642	Pulsed laser deposition of amorphous carbon/silver nanocomposites. Applied Surface Science, 2007, 253, 8155-8159.	3.1	32
643	Diamond-like carbon films prepared by reactive pulsed laser deposition in hydrogen and methane ambient. Applied Surface Science, 2007, 253, 8220-8225.	3.1	12
644	Study of porous carbon thin films produced by pulsed laser deposition. Applied Surface Science, 2007, 253, 7964-7968.	3.1	7
645	Atomistic simulations of interfacial sliding in amorphous carbon nanocomposites. Composites Science and Technology, 2007, 67, 1302-1310.	3.8	8
646	Plasmon features in electron energy loss spectra from carbon materials. Carbon, 2007, 45, 1410-1418.	5.4	51
647	Flame synthesis of superhydrophobic amorphous carbon surfaces. Carbon, 2007, 45, 1702-1706.	5.4	48
648	Characteristics of carbon coatings on optical fibers prepared by plasma enhanced chemical vapor deposition using different argon/methane ratios. Carbon, 2007, 45, 2004-2010.	5.4	24
649	Kinetics of ultrafine coating of SiO2 nanoparticles, suspended in non-thermal CH4/C2H6 plasma. Experimental Thermal and Fluid Science, 2007, 31, 1005-1019.	1.5	3
650	Haemocompatibility of amorphous hydrogenated carbon thin films, optical properties and adsorption mechanisms of blood plasma proteins. New Biotechnology, 2007, 24, 107-112.	2.7	43

#	Article	IF	Citations
651	DLC coatings: Effects of physical and chemical properties on biological response. Biomaterials, 2007, 28, 1620-1628.	5.7	152
652	Mo-containing tetrahedral amorphous carbon deposited by dual filtered cathodic vacuum arc with selective pulsed bias voltage. Nuclear Instruments & Methods in Physics Research B, 2007, 259, 867-870.	0.6	28
653	A novel method for the synthesis of Au nanoparticles incorporated amorphous hydrogenated carbon films. Electrochemistry Communications, 2007, 9, 1053-1056.	2.3	35
654	The influence of nitrogen and fluorine on the dielectric constant of hydrogenated amorphous carbon (a-C:H) films. Microelectronics Journal, 2007, 38, 915-918.	1.1	17
655	Corrosion behavior of NiTi alloys coated with diamond-like carbon (DLC) fabricated by plasma immersion ion implantation and deposition. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 452-453, 518-523.	2.6	23
656	Tribological properties of duplex MAO/DLC coatings on magnesium alloy using combined microarc oxidation and filtered cathodic arc deposition. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 454-455, 164-169.	2.6	58
657	Laser ablation time-of-flight mass spectrometry (LA-TOF-MS) of â€œnitrogen doped diamond-like carbon (DLN) nano-layersâ€• Journal of Physics and Chemistry of Solids, 2007, 68, 701-706.	1.9	6
658	Diamond-like carbon for data and beer storage. Materials Today, 2007, 10, 44-53.	8.3	222
659	Nanotribology of carbon-based materials. Nano Today, 2007, 2, 12-21.	6.2	83
660	Chemical vapour infiltration of nano-structured carbon in porous silicon. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 2049-2053.	0.8	6
661	Influence of a dielectric coating on field electron emission from micro-point electron sources. Surface and Interface Analysis, 2007, 39, 102-110.	0.8	10
662	Field penetration into amorphous-carbon films: consequences for field-induced electron emission. Surface and Interface Analysis, 2007, 39, 139-145.	0.8	20
663	Hydrogen-Containing Amorphous Carbon Layers as Optical Materials in the Near-IR Spectral Range. Plasma Processes and Polymers, 2007, 4, S76-S82.	1.6	4
664	Tribological Performance of Reactively Sputtered a-C:H Coatings in Ambient air and Aqueous Environment. Plasma Processes and Polymers, 2007, 4, S205-S209.	1.6	1
665	Mechanical and Tribological Properties of Cr-DLC Coatings Deposited by ARC-MAG-RF PACVD Hybrid Method. Plasma Processes and Polymers, 2007, 4, S225-S230.	1.6	11
666	Tribological Performance of DLC/WC Coatings at Elevated Temperatures. Plasma Processes and Polymers, 2007, 4, S237-S240.	1.6	6
667	Laser Deposited and Annealed ta-C Films on Different Types of Steel Substrates. Plasma Processes and Polymers, 2007, 4, S250-S253.	1.6	2
668	Thermal Stability of PIII Deposited Hard-Coatings with Compositions Between Diamond-Like Carbon and Amorphous Silicon-Carbonitride. Plasma Processes and Polymers, 2007, 4, S254-S258.	1.6	8

#	Article	IF	Citations
669	Structure and Properties of Cr-Containing Hydrogenated Amorphous Carbon Films Synthesized by Filtered Cathodic Vacuum Arc System. Plasma Processes and Polymers, 2007, 4, S269-S272.	1.6	4
670	Nanosized Diamond Deposition via Plasma Medium. Plasma Processes and Polymers, 2007, 4, S273-S277.	1.6	2
671	Super-Hard Carbon Layers Produced on the Al2O3/Al2O3+x%SiC (whiskers) Ceramic Cutting Edges. Plasma Processes and Polymers, 2007, 4, S278-S281.	1.6	1
672	Amorphous Carbon Coatings Inhibit Crystalline Biofilm Formation on Urological Implants. Plasma Processes and Polymers, 2007, 4, S386-S391.	1.6	27
673	Plasma Treated and a-C:H Coated PET Performance in Inhibiting Bacterial Adhesion. Plasma Processes and Polymers, 2007, 4, S1046-S1051.	1.6	17
674	Controllable synthesis of carbon microcoils/nanocoils by catalysts supported on ceramics using catalyzed chemical vapor deposition process. Materials Research Bulletin, 2007, 42, 465-473.	2.7	29
675	Effect of annealing on the composition, structure and mechanical properties of carbon nitride films deposited by middle-frequency magnetron sputtering. Materials Letters, 2007, 61, 3443-3445.	1.3	12
676	Effects of mass density on the microhardness and modulus of tetrahedral amorphous carbon films. Materials Letters, 2007, 61, 4647-4650.	1.3	13
677	Study of anti-coking property of SiO2/S composite coatings deposited by atmospheric pressure chemical vapor deposition. Materials Letters, 2007, 61, 5087-5090.	1.3	29
678	Stress evolution of tetrahedral amorphous carbon upon boron incorporation. Scripta Materialia, 2007, 57, 141-144.	2.6	14
679	Electron transport in amorphous metal-carbon nanocomposite films. Moscow University Physics Bulletin (English Translation of Vestnik Moskovskogo Universiteta, Fizika), 2007, 62, 229-232.	0.1	1
680	Studies of the diamond formation processes in glow â†' spark discharge. Journal of Superhard Materials, 2007, 29, 86-92.	0.5	0
681	Determining the mass density of a hydrocarbon matrix in thin-film nanocomposites by ion-beam techniques. Technical Physics Letters, 2007, 33, 919-922.	0.2	0
682	Synthesis of carbon nitride films by double-pulse laser ablation. Moscow University Chemistry Bulletin, 2007, 62, 112-115.	0.2	2
683	The piezoresistive effect in diamond-like carbon films. Journal of Micromechanics and Microengineering, 2007, 17, S77-S82.	1.5	23
684	Microstructure and microwave absorption properties of carbon-coated iron nanocapsules. Journal Physics D: Applied Physics, 2007, 40, 5383-5387.	1.3	318
685	C 1s photoemission investigation of substrate bias and annealing temperature influencing the microstructure of amorphous diamond films. Applied Physics A: Materials Science and Processing, 2007, 89, 497-501.	1.1	2
686	One-step deposition of diamond-like carbon films containing self-assembled metallic nanoparticles, by femtosecond pulsed laser ablation. Applied Physics A: Materials Science and Processing, 2007, 90, 211-217.	1.1	9

#	Article	IF	Citations
687	Tribological Properties of Nanocomposite CrC x /a-C:H Thin Films. Tribology Letters, 2007, 27, 97-104.	1.2	20
688	Deposition of Si-DLC film and its microstructural, tribological and corrosion properties. Microsystem Technologies, 2007, 13, 1353-1358.	1.2	52
689	Thin film stress measurement by instrumented optical fibre displacement sensor. Applied Surface Science, 2007, 253, 4289-4294.	3.1	6
690	Raman spectroscopy of a-C:H:N films deposited using ECR-CVD with mixed gas. Applied Surface Science, 2007, 253, 6957-6962.	3.1	9
691	Opto-electrical properties of amorphous carbon thin film deposited from natural precursor camphor. Applied Surface Science, 2007, 253, 7004-7010.	3.1	43
692	Amorphous to crystalline phase transition in pulsed laser deposited silicon carbide. Applied Surface Science, 2007, 253, 7050-7059.	3.1	24
693	Preparation of hydrogenated amorphous carbon films from polymers by nano- and femtosecond pulsed laser deposition. Applied Surface Science, 2007, 253, 8235-8241.	3.1	9
694	Atomistic modeling of hydrocarbon systems using analytic bond-order potentials. Progress in Materials Science, 2007, 52, 230-254.	16.0	27
695	Deposition of in situ surface structured DLC-coatings. Surface and Coatings Technology, 2007, 202, 1267-1271.	2.2	9
696	Deposition of nano-crystalline graphite films by cathodic plasma electrolysis. Thin Solid Films, 2007, 515, 2926-2934.	0.8	75
697	Characterization and cytocompatibility of carbon layers prepared by photo-induced chemical vapor deposition. Thin Solid Films, 2007, 515, 6765-6772.	0.8	30
698	Plasma characterization of cross-beam pulsed-laser ablation used for carbon thin film deposition. Thin Solid Films, 2007, 516, 8-12.	0.8	5
699	DLC film properties obtained by a low cost and modified pulsed-DC discharge. Thin Solid Films, 2007, 516, 272-276.	0.8	41
700	Effect of substrate temperature on the properties of carbon-coated optical fibers prepared by plasma enhanced chemical vapor deposition. Thin Solid Films, 2007, 516, 114-118.	0.8	3
701	Optical properties of proteins and protein adsorption study. Microelectronic Engineering, 2007, 84, 479-485.	1.1	33
702	Radiation induced changes in amorphous hydrogenated DLC films. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2008, 152, 91-95.	1.7	16
703	Study of surface activation of PET by low energy (keV) Ni+ and N+ ion implantation. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 4749-4756.	0.6	37
704	Electrochemical corrosion behaviors of a-C:H and a-C:NX:H films. Applied Surface Science, 2008, 254, 3021-3025.	3.1	32

#	Article	IF	Citations
705	Functionalization of hydrogen-free diamond-like carbon films using open-air dielectric barrier discharge atmospheric plasma treatments. Applied Surface Science, 2008, 254, 5323-5328.	3.1	16
706	Hydrophobicity in DLC films prepared by electrodeposition technique. Applied Surface Science, 2008, 255, 1705-1711.	3.1	40
707	Study on wettabilities and platelet adhesion behavior of C:H and C:N:H films prepared by DC-MFCVA. Applied Surface Science, 2008, 255, 469-472.	3.1	4
708	Stress, mechanical and adhesion properties of multilayer tetrahedral amorphous carbon films. Applied Surface Science, 2008, 255, 607-609.	3.1	18
709	Optical characterization of hydrogen-free CeO2 doped DLC films deposited by unbalanced magnetron sputtering. Applied Surface Science, 2008, 255, 2655-2659.	3.1	7
710	Deuterated Diamond Like Carbon films (DDLC): Mechanical properties in relation with microstructure. Surface and Coatings Technology, 2008, 202, 2349-2353.	2.2	5
711	Duplex diamond-like carbon film fabricated on 2Cr13 martensite stainless steel using inner surface ion implantation and deposition. Surface and Coatings Technology, 2008, 202, 3391-3395.	2.2	11
712	Effects of radio frequency powers on the characteristics of a-C:N/p-Si photovoltaic solar cells prepared by plasma enhanced chemical vapor deposition. Surface and Coatings Technology, 2008, 202, 5364-5366.	2.2	7
713	The effects of deposition parameters on the structure and properties of titanium-containing DLC films synthesized by cathodic arc plasma evaporation. Surface and Coatings Technology, 2008, 202, 5350-5355.	2.2	56
714	Effect of carbon on TiAlCN coatings deposited by reactive magnetron sputtering. Surface and Coatings Technology, 2008, 203, 594-597.	2.2	59
715	Microstructure and physical properties of DLC films deposited by laser induced high current pulsed arc deposition. Thin Solid Films, 2008, 517, 1141-1145.	0.8	21
716	Development of diamond-like carbon-coated electrodes for corrosion sensor applications at high temperatures. Thin Solid Films, 2008, 517, 1120-1124.	0.8	12
717	Characterization of DC magnetron sputtered diamond-like carbon (DLC) nano coating. International Journal of Advanced Manufacturing Technology, 2008, 38, 705-717.	1.5	26
718	Subsurface defect of amorphous carbon film imaged by near field acoustic microscopy. Applied Physics A: Materials Science and Processing, 2008, 91, 261-265.	1.1	14
719	Stress, microstructure and mechanical properties of graded multilayer tetrahedral amorphous carbon films. Applied Physics A: Materials Science and Processing, 2008, 91, 529-533.	1.1	12
720	Synthesis of DLC films by PLD from liquid target and dependence of film properties on the synthesis conditions. Applied Physics A: Materials Science and Processing, 2008, 93, 745-749.	1.1	11
721	DLC coating of textile blood vessels using PLD. Applied Physics A: Materials Science and Processing, 2008, 93, 627-632.	1.1	27
722	Preparation and characterization of carbon nano-sheet powders. Petroleum Science, 2008, 5, 79-82.	2.4	0

#	Article	IF	Citations
723	Low-Friction Mechanisms Active for Carbon Containing Coatings: Ti-C-N as a Model System. BHM-Zeitschrift Fuer Rohstoffe Geotechnik Metallurgie Werkstoffe Maschinen-Und Anlagentechnik, 2008, 153, 263-267.	0.4	4
724	Surface chemical and nanomechanical alterations in plasma immersion ion implanted PET. Surface and Interface Analysis, 2008, 40, 664-667.	0.8	12
725	Effect of deposition pressure on the properties of DLC coatings deposited by bipolarâ€type PBII&D. Surface and Interface Analysis, 2008, 40, 806-809.	0.8	18
726	Effects of Ar/H/Nâ€ion bombardment on the surface free energy and friction behavior of the fullereneâ€like hydrogenated carbon (FLâ€C:H) film. Surface and Interface Analysis, 2008, 40, 1475-1480.	0.8	1
727	Spectroscopic ellipsometry of silicon-containing diamond-like carbon (DLC-Si) films. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1117-1120.	0.8	13
728	Real-time spectroscopic ellipsometry for protein adsorption study and pH effect. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1295-1299.	0.8	1
729	Optical phase diagram of amorphous carbon films determined by spectroscopic ellipsometry. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1223-1226.	0.8	3
730	Microstructure of diamondâ€like carbon films prepared using acetylene and toluene by bipolarâ€type plasma based ion implantation. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 973-976.	0.8	3
731	PI³D processing of DLC coatings for different applications. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 968-972.	0.8	0
732	Optical properties of diamondâ€like carbon films irradiated by Xâ€ray photons. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 3414-3416.	0.8	1
733	Blends of carbon blacks and multiwall carbon nanotubes as reinforcing fillers for hydrocarbon rubbers. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 1939-1951.	2.4	133
734	Chemistry of Plasmaâ€Polymerized Vinyltriethoxysilane Controlled by Deposition Conditions. Plasma Processes and Polymers, 2008, 5, 745-752.	1.6	15
735	Influence of Impinging Ion Energy on the Bonding and Mechanical Characteristics of DLC Films Deposited by Microwave ECR Plasma CVD. Plasma Processes and Polymers, 2008, 5, 853-860.	1.6	15
736	Silver nanocluster containing diamond like carbon. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 976-979.	0.8	8
737	Comparison of diamondâ€like carbon to diamond for applications. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 2233-2244.	0.8	91
738	The CVD of Nanodiamond Materials. Chemical Vapor Deposition, 2008, 14, 145-160.	1.4	314
739	Adhesion of staphylococcal and Cacoâ€2 cells on diamondâ€like carbon polymer hybrid coating. Journal of Biomedical Materials Research - Part A, 2008, 86A, 760-768.	2.1	34
740	Surface properties and blood compatibility of commercially available diamondâ€like carbon coatings for cardiovascular devices. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2009, 90B, 338-349.	1.6	40

#	Article	IF	Citations
741	Cyclic Voltammetric Behavior of Nitrogenâ€Doped Tetrahedral Amorphous Carbon Films Deposited by Filtered Cathodic Vacuum Arc. Electroanalysis, 2008, 20, 1851-1856.	1.5	38
742	Fabrication of Luminescent Nanoarchitectures by Electron Irradiation of Polystyrene. Advanced Materials, 2008, 20, 2094-2098.	11.1	38
743	Oriented TiO₂ Nanostructured Pillar Arrays: Synthesis and Characterization. Advanced Materials, 2008, 20, 3342-3348.	11.1	38
744	Mountâ€Etnaâ€Lavaâ€Supported Nanocarbons for Oxidative Dehydrogenation Reactions. Advanced Materials, 2008, 20, 3597-3600.	11.1	33
745	Albumin and fibrinogen adsorption on boron nitride and carbon-based thin films. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2008, 152, 12-15.	1.7	11
746	Carbon content influence on the optical constants of hydrogenated amorphous silicon carbon alloys. Optical Materials, 2008, 30, 1257-1267.	1.7	24
747	Synthesis of ZnOâ€“carbon composites and imprinted carbon by the pyrolysis of ZnCl2-catalyzed furfuryl alcohol polymers. Journal of Photochemistry and Photobiology A: Chemistry, 2008, 196, 143-153.	2.0	66
748	Modified Ï€-states in ion-irradiated carbon. Applied Surface Science, 2008, 254, 2790-2796.	3.1	6
749	Electrical and piezoresistive properties of ion beam deposited DLC films. Applied Surface Science, 2008, 254, 5252-5256.	3.1	24
750	Electrochemical, morphological and microstructural characterization of carbon film resistor electrodes for application in electrochemical sensors. Applied Surface Science, 2008, 254, 6380-6389.	3.1	14
751	Polymeric like carbon films prepared from liquid gas and the effect of nitrogen. Applied Surface Science, 2008, 254, 6441-6445.	3.1	2
752	Effect of substrate morphology on the roughness evolution of ultra thin DLC films. Applied Surface Science, 2008, 254, 6742-6748.	3.1	41
753	Tribological behavior of diamond-like carbon film with different tribo-pairs: A size effect study. Applied Surface Science, 2008, 254, 7022-7028.	3.1	13
754	Optical properties of La2O3 doped diamond-like carbon films. Applied Surface Science, 2008, 254, 7193-7197.	3.1	9
755	Field emission characteristics of nano-structured carbon films deposited on differently pretreated Mo films. Applied Surface Science, 2008, 255, 3257-3262.	3.1	8
756	Thermal radiative properties of a DLC coating. Cryogenics, 2008, 48, 455-457.	0.9	10
757	Reduction of bacterial adhesion on modified DLC coatings. Colloids and Surfaces B: Biointerfaces, 2008, 61, 182-187.	2.5	111
758	Formation and coalescence of linear chains in growth of nanostructured spâ€“sp2 amorphous carbon films. Chemical Physics Letters, 2008, 462, 104-108.	1.2	6

#	Article	IF	Citations
759	Raman spectroscopy studies of carbide derived carbons. Carbon, 2008, 46, 1942-1947.	5.4	160
760	Softening of ultra-nanocrystalline diamond at low grain sizes. Acta Materialia, 2008, 56, 5340-5344.	3.8	53
761	Osteoblast interaction with DLC-coated Si substrates. Acta Biomaterialia, 2008, 4, 1369-1381.	4.1	52
762	Ion beam energy effects on structure and properties of SiOx doped diamond-like carbon films. Surface and Coatings Technology, 2008, 202, 2328-2331.	2.2	9
763	Structural and optical properties of diamond like thin films deposited by asymmetric bipolar pulsed-DC reactive magnetron sputtering. Surface and Coatings Technology, 2008, 202, 2354-2357.	2.2	13
764	The effect of applied substrate negative bias voltage on the structure and properties of Al-containing a-C:H thin films. Surface and Coatings Technology, 2008, 202, 2684-2689.	2.2	34
765	Co-deposition process of RF-Sputtering and RF-PECVD of copper/carbon nanocomposite films. Surface and Coatings Technology, 2008, 202, 2731-2736.	2.2	41
766	Structure and properties of silver-containing a-C(H) films deposited by plasma immersion ion implantation. Surface and Coatings Technology, 2008, 202, 3675-3682.	2.2	87
767	Amorphous carbon coated stainless separator for PEFCs. Surface and Coatings Technology, 2008, 202, 4094-4101.	2.2	37
768	Effects of radio-frequency powers on the properties of carbon coatings on optical fibers prepared by plasma enhanced chemical vapor deposition. Surface and Coatings Technology, 2008, 202, 5360-5363.	2.2	9
769	Structure and tribology of biocompatible Tiâ€“C:H coatings. Surface and Coatings Technology, 2008, 202, 5790-5793.	2.2	36
770	Effect of bias voltage on Diamond-like carbon film deposited on PMMA substrate. Surface and Coatings Technology, 2008, 202, 5386-5389.	2.2	20
771	Synthesis of conductive Tiâ€“C:H films on the stainless steel plates by PECVD process. Surface and Coatings Technology, 2008, 202, 5390-5394.	2.2	12
772	On the hydrogen lubrication mechanism(s) of DLC films: An imaging TOF-SIMS study. Surface and Coatings Technology, 2008, 203, 750-755.	2.2	57
773	Surface modification of poly(tetrafluoroethylene) by saddle field fast atom beam source. Surface and Coatings Technology, 2008, 202, 6034-6037.	2.2	4
774	Mechanical properties of a-C:H/Si-containing a-C:H multilayered coatings grown by LF-PECVD. Surface and Coatings Technology, 2008, 203, 745-749.	2.2	23
775	HVOF-sprayed WC-Co as hard interlayer for DLC films. Surface and Coatings Technology, 2008, 203, 699-703.	2.2	26
776	Friction and wear maps of titanium alloy against a-C:H20% (DLC) film. Surface and Coatings Technology, 2008, 203, 741-744.	2.2	18

#	Article	IF	Citations
777	SiOx-doped DLC films: Charge transport, dielectric properties and structure. Vacuum, 2008, 82, 617-622.	1.6	9
778	Preparation of various DLC films by T-shaped filtered arc deposition and the effect of heat treatment on film properties. Vacuum, 2008, 83, 510-514.	1.6	56
779	Fabrication of high frequency ZnO thin film SAW devices on silicon substrate with a diamond-like carbon buffer layer using RF magnetron sputtering. Vacuum, 2008, 83, 675-678.	1.6	29
780	Influence of hydrogen on the mechanical properties and microstructure of DLC films synthesized by r.f.-PECVD. Vacuum, 2008, 83, 622-624.	1.6	19
781	The effects of plasma pre-treatment and post-treatment on diamond-like carbon films synthesized by RF plasma enhanced chemical vapor deposition. Vacuum, 2008, 83, 618-621.	1.6	11
782	Tribological investigation of coatings for artificial joints. Wear, 2008, 264, 958-966.	1.5	42
783	TOF-SIMS and XPS characterization of diamond-like carbon films after tests in inert and oxidizing environments. Wear, 2008, 265, 244-254.	1.5	57
784	Deuterium influence on optical gap of amorphous carbon diamond-like carbon (DLC) thin film. Thin Solid Films, 2008, 516, 1508-1511.	0.8	7
785	Hydrogen influence on the structure and properties of amorphous hydrogenated carbon films deposited by direct ion beam. Thin Solid Films, 2008, 516, 1683-1692.	0.8	28
786	The effect of the backscattered energetic atoms on the stress generation and the surface morphology of reactively sputtered vanadium nitride films. Thin Solid Films, 2008, 516, 4568-4573.	0.8	6
787	Evaluation of microstructures and mechanical properties of diamond like carbon films deposited by filtered cathodic arc plasma. Thin Solid Films, 2008, 516, 5440-5444.	0.8	27
788	Plasma enhanced chemical vapor deposition of a-C:H films in CH4â€“CO2 plasma: Gas composition and substrate biasing effects on the film structure and growth process. Thin Solid Films, 2008, 516, 3910-3918.	0.8	14
789	Adherent amorphous hydrogenated carbon films on metals deposited by plasma enhanced chemical vapor deposition. Thin Solid Films, 2008, 516, 4011-4017.	0.8	65
790	Effect of high substrate bias and hydrogen and nitrogen incorporation on filtered cathodic vacuum arc deposited tetrahedral amorphous carbon films. Thin Solid Films, 2008, 516, 2331-2340.	0.8	39
791	Interaction between hydrogen plasma and hydrogenated amorphous carbon film, investigated by infrared spectroscopy. Thin Solid Films, 2008, 516, 4379-4383.	0.8	17
792	Studies of ion irradiation effects in hydrogenated amorphous carbon thin films by X-ray absorption and photoemission spectroscopy. Thin Solid Films, 2008, 516, 3374-3377.	0.8	8
793	Plasma deposition and characterization of silicon oxide-containing diamond-like carbon films obtained from CH4:SiH4:O2 gas mixtures. Thin Solid Films, 2008, 516, 1890-1897.	0.8	26
794	Raman spectroscopic study of magnetron sputtered carbonâ€“nickel and carbon nitrideâ€“nickel composite films: The effect of nickel on the atomic structure of the C/CNx matrix. Thin Solid Films, 2008, 516, 7910-7915.	0.8	30

#	Article	IF	Citations
795	Modified DLC coatings prepared in a large-scale reactor by dual microwave/pulsed-DC plasma-activated chemical vapour deposition. Thin Solid Films, 2008, 517, 1125-1130.	0.8	23
796	New method to calibrate binding energy using Au nanocolloids in X-ray photoelectron analysis of diamondlike carbon films with different electrical resistivities. Applied Surface Science, 2008, 254, 2666-2670.	3.1	14
797	Field emission from awl-shaped diamond-like carbon by using filtered cathodic arc plasma technique on anodic aluminum oxide template. Physica B: Condensed Matter, 2008, 403, 195-199.	1.3	5
798	First-principles calculation of vibrational Raman spectra of tetrahedral amorphous carbon. Physica B: Condensed Matter, 2008, 403, 3559-3562.	1.3	5
799	A methodology to optimize the quantification of sp2 carbon fraction from K edge EELS spectra. Journal of Electron Spectroscopy and Related Phenomena, 2008, 164, 34-43.	0.8	44
800	AFM study of the thrombogenicity of carbon-based coatings for cardiovascular applications. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2008, 152, 16-21.	1.7	21
801	Hydrogen and nitrogen effects on optical and structural properties of amorphous carbon. Materials Science and Engineering C, 2008, 28, 795-798.	3.8	20
802	Modification of amorphous DLC films induced by MeV photon irradiation. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 2788-2792.	0.6	7
803	MeV-ion beam analysis of the interface between filtered cathodic arc-deposited a-carbon and single crystalline silicon. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 5175-5179.	0.6	2
804	Structural and mechanical properties of nc-TiC/a-C:H nanocomposite film prepared by dual plasma technique. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 488, 112-116.	2.6	12
805	Mechanical and thermal properties of SiO2/S composite coating prepared by APCVD. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 491, 147-153.	2.6	9
806	Optical absorption parameters of amorphous carbon films from Forouhiâ€“Bloomer and Taucâ€“Lorentz models: a comparative study. Journal of Physics Condensed Matter, 2008, 20, 015216.	0.7	59
807	Structural Analysis for the Stress Variation of ta-C film with Deposition Energy: A Molecular Dynamics Simulation. Metals and Materials International, 2008, 14, 347-352.	1.8	6
808	Antireflection properties of diamond-like carbon films on Cd1 âˆ' x Zn x Te (x âˆ¼ 0.04) single crystals. Technical Physics Letters, 2008, 34, 377-380.	0.2	8
809	Effect of internal stress on the surface morphology of hard nanoscale carbon coatings. Nanotechnologies in Russia, 2008, 3, 581-586.	0.7	0
810	Effect of temperature and counterface on the tribological performance of W-DLC on a steel substrate. Wear, 2008, 264, 518-525.	1.5	46
811	Micro and macroscale tribological behavior of epitaxial Ti3SiC2 thin films. Wear, 2008, 264, 914-919.	1.5	34
812	Tribological properties of DLC coatings and comparison with test results: Development of a database. Materials Characterization, 2008, 59, 151-161.	1.9	61

#	Article	IF	Citations
813	Raman characterization of boron doped tetrahedral amorphous carbon films. Materials Research Bulletin, 2008, 43, 453-462.	2.7	13
814	Relative fraction of sp3 bonding in boron incorporated amorphous carbon films determined by X-ray photoelectron spectroscopy. Materials Research Bulletin, 2008, 43, 1670-1678.	2.7	12
815	A shape memory microcage of TiNi/DLC films for biological applications. Journal of Micromechanics and Microengineering, 2008, 18, 035026.	1.5	29
816	Growth and structure of hydrogenated carbon films containing fullerene-like structure. Journal Physics D: Applied Physics, 2008, 41, 085401.	1.3	28
817	Synthesis of DLC films with different sp²/sp³ratios and their hydrophobic behaviour. Journal Physics D: Applied Physics, 2008, 41, 055309.	1.3	104
818	Nanoscale fracture of tetrahedral amorphous carbon by molecular dynamics: Flaw size insensitivity. Physical Review B, 2008, 77, .	1.1	15
819	Nanostructure and sp1/sp2 clustering in tetrahedral amorphous carbon thin films grown by femtosecond laser deposition. Journal of Laser Applications, 2008, 20, 37-42.	0.8	5
820	Film Deposition by Energetic Condensation. Springer Series on Atomic, Optical, and Plasma Physics, 2008, , 363-407.	0.1	8
821	Nanostructure and paramagnetic centres in diamond-like carbon: Effect of Ar dilution in PECVD process. Diamond and Related Materials, 2008, 17, 1629-1632.	1.8	18
822	Influence of RF PACVD process parameters of diamond-like carbon films on optical properties and nano-hardness of the films. Diamond and Related Materials, 2008, 17, 1655-1659.	1.8	38
823	Tribological performance of ultrathin diamond-like carbon films prepared by plasma-based ion implantation. Journal Physics D: Applied Physics, 2008, 41, 055305.	1.3	8
824	Synthesis of Body-Centered Cubic Carbon Nanocrystals. Crystal Growth and Design, 2008, 8, 581-586.	1.4	83
825	Influence of Substrates on Initial Growth of Diamond-Like Carbon Films. Applied Physics Express, 0, 1, 035002.	1.1	13
826	Simulation of nanodiamond and nanographite formation from molten carbon in the presence of hydrogen. Physical Review B, 2008, 78, .	1.1	9
827	Micro- and Nanocubes of Silicon with Zinc-Blende Structure. Chemistry of Materials, 2008, 20, 494-502.	3.2	30
828	Super-low friction and super-elastic hydrogenated carbon films originated from a unique fullerene-like nanostructure. Nanotechnology, 2008, 19, 225709.	1.3	82
829	Preparation of diamond like carbon thin films above room temperature and their properties. Diamond and Related Materials, 2008, 17, 680-683.	1.8	9
830	Space- and time-resolved diagnostics of microwave plasma process used for hydrogenated amorphous carbon film coating of PET bottles. Diamond and Related Materials, 2008, 17, 633-640.	1.8	3

#	Article	IF	Citations
831	Large-area uniform hydrogen-free diamond-like carbon films prepared by unbalanced magnetron sputtering for infrared anti-reflection coatings. Diamond and Related Materials, 2008, 17, 194-198.	1.8	16
832	Thick DLC films deposited by PECVD on the internal surface of cylindrical substrates. Diamond and Related Materials, 2008, 17, 1613-1621.	1.8	49
833	In situ surface oxide reduction with pulsed arc discharge for maximum adhesion of diamond-like carbon coatings. Diamond and Related Materials, 2008, 17, 2071-2074.	1.8	8
834	Microstructure and mechanical properties of Mo/DLC nanocomposite films. Diamond and Related Materials, 2008, 17, 1949-1954.	1.8	108
835	Fluorinated DLC deposited by pulsed-DC plasma for antisticking surface applications. Diamond and Related Materials, 2008, 17, 1728-1732.	1.8	22
836	Carboneous coatings by rolling with 10% slip under mixed/boundary lubrication and high initial Hertzian contact pressures. Diamond and Related Materials, 2008, 17, 1751-1754.	1.8	6
837	Polymeric semiconducting carbon from fullerene by pulsed laser ablation. Diamond and Related Materials, 2008, 17, 641-645.	1.8	3
838	Relationship between mechanical properties and coefficient of friction of sputtered a-C/Cu composite thin films. Diamond and Related Materials, 2008, 17, 1905-1911.	1.8	42
839	Ex-vivo investigations on the friction behavior of amorphous carbon coated ureteral stents. Diamond and Related Materials, 2008, 17, 1746-1750.	1.8	13
840	Micro- and nanomechanical properties of diamond film with various surface morphologies. Diamond and Related Materials, 2008, 17, 1998-2004.	1.8	26
841	Characteristics of sputtered amorphous carbon films prepared by a closed-field unbalanced magnetron sputtering method. Journal of Non-Crystalline Solids, 2008, 354, 5504-5508.	1.5	13
842	Electrical and mechanical properties of DLC coatings modified by plasma immersion ion implantation. Journal of Alloys and Compounds, 2008, 449, 379-383.	2.8	25
843	Green synthesis of highly stabilized nanocrystalline silver particles by a non-pathogenic and agriculturally important fungusT. asperellum. Nanotechnology, 2008, 19, 075103.	1.3	411
844	Microstructure and characterization of La2O3 and CeO2 doped diamond-like carbon nanofilms. Surface and Coatings Technology, 2008, 202, 5947-5952.	2.2	11
845	Redeposition of amorphous hydrogenated carbon films during thermal decomposition. Journal of Nuclear Materials, 2008, 376, 160-168.	1.3	67
846	Effects of pretreatment and post-annealing on the field emission property of diamond-like carbon grown on a titanium/silicon substrate. New Carbon Materials, 2008, 23, 209-215.	2.9	4
847	The role of a graphitic surface layer in electron-stimulated ordering in tetrahedral amorphous carbon films. New Carbon Materials, 2008, 23, 241-244.	2.9	6
848	Structural and mechanical properties of amorphous carbon films deposited by the dual plasma technique. International Journal of Minerals, Metallurgy, and Materials, 2008, 15, 622-626.	0.2	0

#	Article	IF	Citations
849	Comprehensive classification of DLC films formed by various methods using NEXAFS measurement. Diamond and Related Materials, 2008, 17, 1743-1745.	1.8	50
850	Tribological behaviour of Ti containing nanocomposite DLC films under milli-Newton load range. Diamond and Related Materials, 2008, 17, 2010-2018.	1.8	19
851	Amorphous hydrogenated carbon (a-C:H) film coating on an inner-wall of cylindrical textile materials by r.f. plasma CVD. Diamond and Related Materials, 2008, 17, 1702-1705.	1.8	5
852	Synthesis of nano-scale diamond tips on micro-size diamond powders/Ni/Al. Diamond and Related Materials, 2008, 17, 1821-1825.	1.8	2
853	Control over the sp2/sp3 ratio by tuning plasma parameters of the Thermoionic Vacuum Arc. Diamond and Related Materials, 2008, 17, 1625-1628.	1.8	28
854	A nanotribological study of thin amorphous C and Cr doped amorphous C coatings. Wear, 2008, 265, 1633-1641.	1.5	20
855	Energy efficiency improvements in dry drilling with optimised diamond-like carbon coatings. Diamond and Related Materials, 2008, 17, 1733-1737.	1.8	34
856	Evolution of compressive stress and electrical conductivity of tetrahedral amorphous carbon films with phosphorus incorporation. Diamond and Related Materials, 2008, 17, 1927-1932.	1.8	15
857	Surface properties of amorphous carbon films. Diamond and Related Materials, 2008, 17, 1689-1691.	1.8	8
858	Characteristic of silver doped DLC films on surface properties and protein adsorption. Diamond and Related Materials, 2008, 17, 252-257.	1.8	102
859	Accurate Raman spectroscopy of diamond-like carbon films deposited by an anode layer source. Diamond and Related Materials, 2008, 17, 1647-1651.	1.8	18
860	The running-in of amorphous hydrocarbon tribocoatings: a comparison between experiment and molecular dynamics simulations. International Journal of Materials Research, 2008, 99, 1136-1143.	0.1	28
861	Tribochemistry of tetrahedral hydrogen-free amorphous carbon coatings in the presence of OH-containing lubricants. Lubrication Science, 2008, 20, 137-149.	0.9	54
862	Tribological properties of graded diamond-like carbon films on Ti ion-implanted aluminum substrate. Diamond and Related Materials, 2008, 17, 1844-1849.	1.8	22
863	The effect of thermal and plastic mismatch on stress distribution in diamond like carbon film under different interlayer/substrate system. Diamond and Related Materials, 2008, 17, 1534-1540.	1.8	46
864	Investigations on electrical properties of a-C:H thin films deposited in a Microwave Multipolar Plasma reactor excited at Distributed Electron Cyclotron Resonance. Diamond and Related Materials, 2008, 17, 1710-1715.	1.8	8
865	Characterization of hydrogen-free diamond-like carbon film deposited on cyclic olefin copolymer. Diamond and Related Materials, 2008, 17, 822-825.	1.8	2
866	Electrochemical characterization of diamond like carbon thin films. Diamond and Related Materials, 2008, 17, 1871-1876.	1.8	20

#	Article	IF	Citations
867	The infrared characteristics investigation of carbon nitride films. Diamond and Related Materials, 2008, 17, 174-179.	1.8	8
868	Activation energy in metal-containing DLC films with various metals of various concentrations. Diamond and Related Materials, 2008, 17, 1669-1673.	1.8	19
869	Optical band gap of nitrogenated amorphous carbon thin films synthesized by microwave surface wave plasma CVD. Diamond and Related Materials, 2008, 17, 1666-1668.	1.8	27
870	Annealing effect on the chemical structure of diamondlike carbon. Journal of Applied Physics, 2008, 104, .	1.1	52
871	Comparison of photoresponse characteristics between nitrogen and phosphorous doped n-C/p-Si heterostructure. , 2008, , .		0
872	Nanostructured Diamond-Like Carbon on Digital Versatile Disc as a Matrix-Free Target for Laser Desorption/Ionization Mass Spectrometry. Analytical Chemistry, 2008, 80, 7467-7472.	3.2	66
873	Soft X-ray Absorption and Emission Spectroscopic Investigation of Carbon and Carbon:Transition Metal Composite Films. Journal of Physical Chemistry C, 2008, 112, 17161-17170.	1.5	21
874	Characterization of Solid Deposits Formed from Short Durations of Jet Fuel Degradation: Carbonaceous Solids. Industrial & Engineering Chemistry Research, 2008, 47, 9337-9350.	1.8	22
875	s p 3 -rich deposition conditions and growth mechanism of tetrahedral amorphous carbon films deposited using filtered arc. Journal of Applied Physics, 2008, 104, .	1.1	29
876	Diamond like Carbon Films: Growth and Characterization. NATO Science for Peace and Security Series B: Physics and Biophysics, 2008, , 225-240.	0.2	0
877	Surface Stability and Electronic Structure of Hydrogen and Fluorine Terminated Diamond Surfaces: a First Principles Investigation. Materials Research Society Symposia Proceedings, 2008, 1130, 63001.	0.1	0
878	Tribology of DLC Films Under Fretting Conditions. , 2008, , 362-382.		2
879	Diamond-like Carbon Film Coating for Tissue Engineering. Materials Research Society Symposia Proceedings, 2008, 1138, 1.	0.1	0
880	Some Applications of Cathodic Arc Coatings. Springer Series on Atomic, Optical, and Plasma Physics, 2008, , 429-490.	0.1	1
881	Formation of diamondlike nanocrystallites in amorphous carbon films synthesized by radio-frequency sputtering. Journal of Materials Research, 2008, 23, 700-703.	1.2	4
882	Tailoring the Electrochemical Behavior of Multiwalled Carbon Nanotubes Through Argon and Hydrogen Ion Irradiation. Electrochemical and Solid-State Letters, 2008, 11, K35.	2.2	9
883	Current developments in ionised physical vapour deposition by magnetron sputtering â€" state of the art â€" prospects for the future in terms of applications. Surface Engineering, 2008, 24, 319-321.	1.1	2
884	Dispersion force for materials relevant for micro- and nanodevices fabrication. Journal Physics D: Applied Physics, 2008, 41, 175405.	1.3	53

#	Article	IF	Citations
885	ON THE EFFECT OF COUNTERFACE MATERIALS ON TRIBO-BEHAVIOR OF STEEL WIRE SLIDING UNDER DRY CONTACT CONDITION. Surface Review and Letters, 2008, 15, 355-360.	0.5	0
886	Synergistic erosion process of hydrocarbon films: a molecular dynamics study. New Journal of Physics, 2008, 10, 023002.	1.2	24
887	New pathways for nanoparticle formation in acetylene dusty plasmas: a modelling investigation and comparison with experiments. Journal Physics D: Applied Physics, 2008, 41, 225201.	1.3	50
888	New horizon in the tribology of diamondlike carbon films. Surface Engineering, 2008, 24, 399-401.	1.1	15
889	The Influence of the Magnetic Field Arrangement on the Titanium Oxide Films Properties for Four Targets Closed-Filed Unbalance Magnetron Sputtering. Key Engineering Materials, 0, 373-374, 138-141.	0.4	0
890	Fluorinated diamondlike carbon templates for high resolution nanoimprint lithography. Journal of Vacuum Science & Technology B, 2008, 26, 2394-2398.	1.3	18
891	Unusual stress behaviour of La2O3- and CeO2-doped diamond-like carbon nanofilms. Philosophical Magazine Letters, 2008, 88, 567-574.	0.5	3
892	Field Emission Properties of Ball-Like Nano-Carbon Thin Films Deposited on Mo Films with Accidented Topography. Chinese Physics Letters, 2008, 25, 4154-4157.	1.3	2
893	Optical and electrical properties of the copper-carbon nanocomposites. , 2008, , .		1
894	Oxidation of Zr₂[Al(Si)]₄C₅ and Zr₃[Al(Si)]₄C₆ in air. Journal of Materials Research, 2008, 23, 3339-3346.	1.2	41
895	On the composition analysis of nc-TiC/a-Câ€‰:â€‰H nanocomposite coatings. Journal Physics D: Applied Physics, 2008, 41, 085402.	1.3	6
896	Mechanisms of dissociative excitation of BrCN in electron cyclotron resonance plasmas of Ar and He. Journal Physics D: Applied Physics, 2008, 41, 085201.	1.3	6
897	Durable diamond-like carbon templates for UV nanoimprint lithography. Nanotechnology, 2008, 19, 105302.	1.3	17
898	Field emission from as grown and nitrogen incorporated tetrahedral amorphous carbon/silicon heterojunctions grown using a pulsed filtered cathodic vacuum arc technique. Journal of Vacuum Science & Technology B, 2008, 26, 566-575.	1.3	12
899	Preparation and field emission property of nanodiamond-cluster-embedded diamondlike carbon film. Journal of Vacuum Science & Technology B, 2008, 26, 1321.	1.3	5
900	Plasma fluorination of carbon-based materials for imprint and molding lithographic applications. Applied Physics Letters, 2008, 93, 153105.	1.5	21
901	Chemical Structural Analysis of Diamondlike Carbon Films with Different Electrical Resistivities by X-ray Photoelectron Spectroscopy. Japanese Journal of Applied Physics, 2008, 47, 3376-3379.	0.8	39
902	Effects of Annealing on Material Characteristics of Diamond-Like Carbon Film Formed by Focused-Ion-Beam Chemical Vapor Deposition. Japanese Journal of Applied Physics, 2008, 47, 7464-7466.	0.8	16

#	Article	IF	Citations
903	Synthesis and Characterization of Zinc-Doped Amorphous Carbon Films by Plasma-Assisted Organometallic Chemical Vapor Deposition. Japanese Journal of Applied Physics, 2008, 47, 1694.	0.8	5
904	Tailoring the Matrix in Ultra-Nanocrystalline Diamond Films. Japanese Journal of Applied Physics, 2008, 47, 8208.	0.8	3
905	Thin-Film Deposition of Silicon-Incorporated Diamond-Like Carbon by Plasma-Enhanced Chemical Vapor Deposition Using Monomethylsilane as a Silicon Source. Japanese Journal of Applied Physics, 2008, 47, 8491-8497.	0.8	19
906	Tribological improvement of moving microparts by application of thin films and micropatterning. Journal of Physics Condensed Matter, 2008, 20, 354018.	0.7	12
907	DIAMOND-LIKE CARBON: A NEW MATERIAL BASE FOR NANO-ARCHITECTURES. Cosmos, 2008, 04, 203-234.	0.4	1
908	The annealing effect on the improvement of hermetically carbonâ€coated optical fibers prepared by plasma enhanced chemical vapor deposition method with methane and argon as precursor gases. Journal of the Chinese Institute of Engineers, Transactions of the Chinese Institute of Engineers,Series A/Chung-kuo Kung Ch'eng Hsuch K'an, 2008, 31, 253-259.	0.6	2
909	Raman and FTIR Spectroscopy Investigations of Carbon-Coated Li[sub x]FePO[sub 4] Materials. Journal of the Electrochemical Society, 2008, 155, A879.	1.3	48
910	Towards the use of diamond-like carbon solid lubricant coatings in vacuum and space environments. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2008, 222, 1015-1029.	1.0	46
911	Direct spectroscopic evidence of self-formed C60 inclusions in fullerenelike hydrogenated carbon films. Applied Physics Letters, 2008, 92, .	1.5	34
912	Nanoscale deformation in TiCâ•a-C multilayered nanocomposite coatings. Applied Physics Letters, 2008, 92, 241913.	1.5	9
913	The evolution of the structure and mechanical properties of fullerenelike hydrogenated amorphous carbon films upon annealing. Journal of Applied Physics, 2008, 104, .	1.1	13
914	The correlation between pentatomic and heptatomic carbon rings and stress of hydrogenated amorphous carbon films prepared by dc-pulse plasma chemical vapor deposition. Applied Physics Letters, 2008, 93, .	1.5	18
915	Optical pump-probe measurements of sound velocity and thermal conductivity of hydrogenated amorphous carbon films. Journal of Applied Physics, 2008, 104, 033508.	1.1	30
916	A hard graphitelike hydrogenated amorphous carbon grown at high deposition rate (>15nmâ•s). Applied Physics Letters, 2008, 92, 221502.	1.5	18
917	Electronic state modification in laser deposited amorphous carbon films by the inclusion of nitrogen. Journal of Applied Physics, 2008, 104, 063701.	1.1	14
918	Clustering in Amorphous Carbon Films Probed by the Charge Transport and Structural Studies. Fullerenes Nanotubes and Carbon Nanostructures, 2008, 16, 430-434.	1.0	2
919	Production of high-density capacitive plasma by the effects of multihollow cathode discharge and high-secondary-electron emission. Applied Physics Letters, 2008, 92, .	1.5	28
920	Optical properties of carbonaceous nanoparticles produced in sputtering discharges. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2008, 26, 1450-1454.	0.9	10

#	Article	IF	Citations
921	Mechanical properties of amorphous hydrogenated carbon films fabricated on polyethylene terephthalate foils by plasma immersion ion implantation and deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2008, 26, 438-443.	0.9	2
922	Comparative study of hydrogenated diamondlike carbon film and hard hydrogenated graphitelike carbon film. Journal of Applied Physics, 2008, 103, 123531.	1.1	29
923	Electrical properties of the diamond like carbon films irradiated with high energy photons. Journal of Physics: Conference Series, 2008, 100, 072036.	0.3	4
924	Chemical Changes of Evaporated a-C Films upon UV Ashing, Hydration, and Drying. Zeitschrift Fur Physikalische Chemie, 2008, 222, 81-101.	1.4	1
925	AFM/FFM study of micro/nano-tribological properties of Diamond-Like Carbon film. International Journal of Materials and Product Technology, 2008, 31, 365.	0.1	1
926	A Novel Corrosion Resistant Internal Coating Method Using Hollow Cathode PECVD Technology with Improved Hardness. , 2008, , .		0
927	Hybridized carbon nanocomposite thin films: Synthesis, structures and tribological properties. Tribology and Interface Engineering Series, 2008, 55, 283-303.	0.0	2
928	Impact of surface electric properties of carbon-based thin films on platelets activation for nano-medical and nano-sensing applications. International Journal of Nanomedicine, 2008, 3, 461.	3.3	17
929	Glass Difractive Optical Elements (DOEs) with complex modulation DLC thin film coated. Materials Research, 2008, 11, 341-345.	0.6	3
930	Estimation of DLC Wear Process by Micro Laser Raman Spectroscopy. Tribology Online, 2008, 3, 110-115.	0.2	3
931	ãƒ©ãƒžãƒ³å^†å…‰æ³•ã«ã‚ˆã‚‹DLCè†œä¸æ°´ç´æ¿ƒåº¦ã®å^†æž Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan, 2008, 5	0.1	1
932	Preparation of Super-DLC Film by Filtered Cathodic Arc Deposition. Journal of the Vacuum Society of Japan, 2008, 51, 20-25.	0.3	1
934	Fitting Function Effects on Peak Separation of Diamond-like Carbon Films' Raman Spectra. Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan, 2009, 60, 48-55.	0.1	4
935	Nanomembrane: A New MEMS/NEMS Building Block. , 0, , .		10
936	Microstructure and tribological properties of Ti-contained amorphous carbon film deposited by DC magnetron sputtering. Journal of Applied Physics, 2009, 106, .	1.1	29
937	On the dynamic roughening transition in nanocomposite film growth. Applied Physics Letters, 2009, 95, 223102.	1.5	16
938	Structure and properties of ZrN doped diamondlike carbon films prepared by pulsed bias arc ion plating. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2009, 27, 1360-1364.	0.9	4
939	Growth stress in tungsten carbide-diamond-like carbon coatings. Journal of Applied Physics, 2009, 105, 033502.	1.1	7

#	Article	IF	Citations
940	Bacterial attachment and removal properties of silicon- and nitrogen-doped diamond-like carbon coatings. Biofouling, 2009, 25, 377-385.	0.8	20
941	Contact damage of tetrahedral amorphous carbon thin films on silicon substrates. Journal of Materials Research, 2009, 24, 3286-3293.	1.2	2
942	Interfacial disorder and optoelectronic properties of diamond nanocrystals. Physical Review B, 2009, 80, .	1.1	4
943	Metal-insulator transition in Pt-C nanowires grown by focused-ion-beam-induced deposition. Physical Review B, 2009, 79, .	1.1	57
944	Determination and enhancement of the capacitance contributions in carbon nanotube based electrode systems. Applied Physics Letters, 2009, 95, 183108.	1.5	47
945	Simultaneous deposition of diamondlike carbon films on both surfaces of aluminum substrate by electrochemical technique. Journal of Applied Physics, 2009, 105, 066107.	1.1	7
946	Modeling of chemical processes in the low pressure capacitive radio frequency discharges in a mixture of Ar/C2H2. Journal of Applied Physics, 2009, 105, .	1.1	24
947	Structure and corrosion behavior of platinum/ruthenium/nitrogen doped diamondlike carbon thin films. Journal of Applied Physics, 2009, 106, .	1.1	42
948	Mechanical Properties of DLC/Ti-O Bilayer Films. IEEE Transactions on Plasma Science, 2009, 37, 1136-1139.	0.6	4
949	Pulsed laser deposited tetrahedral amorphous carbon with high sp3 fractions and low optical bandgaps. Journal of Applied Physics, 2009, 105, 073521.	1.1	18
950	B-spline parametrization of the dielectric function applied to spectroscopic ellipsometry on amorphous carbon. Journal of Applied Physics, 2009, 106, .	1.1	66
951	Surface roughness evolution of nanocomposite thin films. Journal of Applied Physics, 2009, 105, .	1.1	14
952	Photoconductivity of iron doped amorphous carbon films on n-type silicon substrates. Applied Physics Letters, 2009, 95, 022105.	1.5	25
953	Damage of amorphous carbon induced by soft x-ray femtosecond pulses above and below the critical angle. Applied Physics Letters, 2009, 95, 031111.	1.5	33
954	Amorphous carbon and carbon nitride bottom gate thin film transistors. Applied Physics Letters, 2009, 95, .	1.5	16
955	Surface stability and electronic structure of hydrogen- and fluorine-terminated diamond surfaces: A first-principles investigation. Journal of Materials Research, 2009, 24, 2461-2470.	1.2	38
956	Dual frequency plasma enhanced chemical vapor deposition of diamond like carbon. , 2009, , .		0
957	Plasma fluorination of diamond-like carbon surfaces: mechanism and application to nanoimprint lithography. Nanotechnology, 2009, 20, 145306.	1.3	33

#	Article	IF	Citations
958	PROPERTIES OF a-C:H FILMS DEPOSITED IN CH₄â€“H₂ AND CH₄â€“He DC PLASMA. International Journal of Nanoscience, 2009, 08, 15-18.	0.4	0
959	Effects of environmental molecular characteristics and gasâ€“surface interaction on friction behaviour of diamond-like carbon films. Journal Physics D: Applied Physics, 2009, 42, 135301.	1.3	33
960	Development of anin situellipsometer for deposition and erosion studies at the first wall of a tokamak. Nuclear Fusion, 2009, 49, 045004.	1.6	4
961	Effect of Annealing on the Optical and Chemical Bonding Properties of Hydrogenated Amorphous Carbon and Hydrogenated Amorphous Carbon Nitride Thin Films. Japanese Journal of Applied Physics, 2009, 48, 101301.	0.8	19
962	Self-lubricating chromium carbide/amorphous hydrogenated carbon nanocomposite coatings: A new alternative to tungsten carbide/amorphous hydrogenated carbon. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2009, 223, 751-757.	1.0	5
963	Nanoscale deformation mechanism of TiC/a-C nanocomposite thin films. Journal of Applied Physics, 2009, 105, .	1.1	29
964	Dose and energy dependence of mechanical properties of focused electron-beam-induced pillar deposits from Cu(C₅HF₆O₂)₂. Nanotechnology, 2009, 20, 385304.	1.3	27
965	Surface Analysis of Carbonâ€“Hydrogen Bonds in Diamondlike Carbon Films by X-ray Photoelectron Spectroscopy. Japanese Journal of Applied Physics, 2009, 48, 092304.	0.8	16
966	Mechanical, Thermal, and Tribological Properties of Amorphous Carbon Films. Japanese Journal of Applied Physics, 2009, 48, 05EC05.	0.8	10
967	Direct Control of Liquid Crystal Pretilt Angle by Deposition of Oxygen-Doped SiC Alignment Layers. Japanese Journal of Applied Physics, 2009, 48, 094503.	0.8	0
968	Characterization of Boron- and Phosphorous-Incorporated Tetrahedral Amorphous Carbon Films Deposited by the Filtered Cathodic Vacuum Arc Process. Japanese Journal of Applied Physics, 2009, 48, 065501.	0.8	15
969	Hydrogen quantification in hydrogenated amorphous carbon films by infrared, Raman, and x-ray absorption near edge spectroscopies. Journal of Applied Physics, 2009, 105, .	1.1	73
970	Effects and thermal stability of hydrogen microwave plasma treatment on tetrahedral amorphous carbon films by in situ ultraviolet photoelectron spectroscopy. Journal of Applied Physics, 2009, 106, 024901.	1.1	3
971	The study on the effect of erbium on diamond-like carbon deposited by pulsed laser deposition technique. Journal of Applied Physics, 2009, 106, .	1.1	21
972	High energy ion beam irradiation on titanium substrate in a pulsed plasma device operating with methane. Journal Physics D: Applied Physics, 2009, 42, 205207.	1.3	10
973	Diamond-like carbon (DLC) as a biocompatible coating in orthopaedic and cardiac medicine. , 2009, , 391-426.		4
974	A High Corrosion and Wear Resistant Interior Surface Coating for Use in Oilfield Applications. Advanced Materials Research, 0, 83-86, 592-600.	0.3	4
975	Structural and electrical characterization of boron-containing diamond-like carbon films deposited by femtosecond pulsed laser ablation. Solid State Sciences, 2009, 11, 1738-1741.	1.5	15

#	Article	IF	Citations
976	Electronic structure and conductivity of nanocomposite metal (Au, Ag, Cu, Mo)-containing amorphous carbon films. Solid State Sciences, 2009, 11, 1742-1746.	1.5	32
977	Tribological behaviour of nanostructured Ti-C:H coatings for biomedical applications. Solid State Sciences, 2009, 11, 1757-1761.	1.5	27
978	Up-scaling the production of modified a-C:H coatings in the framework of plasma polymerization processes. Solid State Sciences, 2009, 11, 1768-1772.	1.5	16
979	How can H content influence the tribological behaviour of W-containing DLC coatings. Solid State Sciences, 2009, 11, 1778-1782.	1.5	32
980	Nickel containing diamond like carbon thin films. Solid State Sciences, 2009, 11, 1797-1800.	1.5	50
981	Optical and surface characterization of amorphous boron nitride thin films for use as blood compatible coatings. Solid State Sciences, 2009, 11, 1801-1805.	1.5	9
982	Synthesis of silver and copper nanoparticle containing a-C:Hby ion irradiation of polymers. Solid State Sciences, 2009, 11, 1819-1823.	1.5	23
983	Effect of underlying silicon film on the evolution of microstructure and hardness of the high-temperature annealed carbon film on Si substrate. Materials Letters, 2009, 63, 2369-2372.	1.3	2
984	Short Repetitive Pulses of 50–75 kV Applied to Plasma Immersion Implantation of Aerospace Materials. IEEE Transactions on Plasma Science, 2009, 37, 204-210.	0.6	5
985	Diamond Nucleation by Carbon Transport from Buried Nanodiamond TiO₂ Solâ€Gel Composites. Advanced Materials, 2009, 21, 670-673.	11.1	32
986	Effect of Platinum and Ruthenium Incorporation on Voltammetric Behavior of Nitrogen Doped Diamondâ€Like Carbon Thin Films. Electroanalysis, 2009, 21, 2590-2596.	1.5	5
987	Diamondâ€like carbon coatings enhance scratch resistance of bearing surfaces for use in joint arthroplasty: Hard substrates outperform soft. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2009, 89B, 527-535.	1.6	11
988	Bacterial adhesion to diamondâ€like carbon as compared to stainless steel. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2009, 90B, 882-885.	1.6	22
989	Structure and Pervaporation Properties of Poly(phenyleneâ€isoâ€phthalamide) Membranes Modified by Fullerene C₆₀. Macromolecular Materials and Engineering, 2009, 294, 432-440.	1.7	34
990	Multipeak fitting analysis of Raman spectra on DLCH film. Journal of Raman Spectroscopy, 2009, 40, 1055-1059.	1.2	90
992	Direct Evidence of High Spatial Localization of Hot Spots in Surfaceâ€Enhanced Raman Scattering. Angewandte Chemie - International Edition, 2009, 48, 9932-9935.	7.2	58
993	Plane strain sliding contact of multilayer magnetic storage thin-films using the finite element method. Microsystem Technologies, 2009, 15, 1097-1110.	1.2	17
994	Applications of carbon materials in photovoltaic solar cells. Solar Energy Materials and Solar Cells, 2009, 93, 1461-1470.	3.0	318

#	Article	IF	Citations
995	Use of near atmospheric pressure and low pressure techniques to modification DLC film surface. Surface and Coatings Technology, 2009, 204, 64-68.	2.2	16
996	Tribological carbon-based coatings: An AFM and LFM study. Surface Science, 2009, 603, 973-979.	0.8	19
997	Low resistive diamond like carbon film development technique. Thin Solid Films, 2009, 517, 5404-5408.	0.8	6
998	Effect of deposition voltage on the field emission properties of electrodeposited diamond-like carbon films. Applied Surface Science, 2009, 255, 4754-4757.	3.1	12
999	Growth and characterization of branched carbon nanostructures arrays in nano-patterned surfaces from porous silicon substrates. Micron, 2009, 40, 80-84.	1.1	9
1000	Effects of working pressure on the deposition of diamond-like carbon films prepared by bipolar-type plasma based ion implantation. Nuclear Instruments & Methods in Physics Research B, 2009, 267, 1684-1687.	0.6	3
1001	Mechanical and electrical properties of diamond-like carbon films deposited by plasma source ion implantation. Nuclear Instruments & Methods in Physics Research B, 2009, 267, 1688-1691.	0.6	4
1002	High-Pressure Raman Study on the Decomposition of Polycrystalline Molybdenum Hexacarbonyl. Journal of Inorganic and Organometallic Polymers and Materials, 2009, 19, 415-421.	1.9	7
1003	Thermodynamic Stability of Transition States inÂNanosystems. Journal of Statistical Physics, 2009, 136, 117-130.	0.5	3
1004	Investigating the feasibility of DLC-coated twist drills in deep-hole drilling. International Journal of Advanced Manufacturing Technology, 2009, 44, 862-869.	1.5	19
1005	Electrical properties of boron-doped diamond-like carbon thin films deposited by femtosecond pulsed laser ablation. Applied Physics A: Materials Science and Processing, 2009, 94, 105-109.	1.1	20
1006	Structural, optical and electrical properties of sulfur-incorporated amorphous carbon films. Applied Physics A: Materials Science and Processing, 2009, 95, 343-349.	1.1	8
1007	Structure modification of highly ordered pyrolytic graphite by Ar plasma beam scanning at different incident angles. Applied Physics A: Materials Science and Processing, 2009, 95, 707-712.	1.1	7
1008	The effect of substrate size on characteristics of carbon films deposited on glass plate substrates by thermal chemical vapor deposition. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 1537-1540.	0.8	1
1009	Effects of sputtering current on the bonding structure and mechanical properties of diamondâ€like carbon films deposited by MFPUMST. Surface and Interface Analysis, 2009, 41, 560-564.	0.8	8
1010	Influence of methane flow on the microstructure and properties of TiAlâ€doped aâ€C:H films deposited by middle frequency reactive magnetron sputtering. Surface and Interface Analysis, 2009, 41, 924-930.	0.8	11
1011	Formation of Nitrogen Functional Groups on Plasma Treated DLC. Plasma Processes and Polymers, 2009, 6, 555-565.	1.6	17
1012	Study of Nanoparticles Formation in a Pulsed Magnetron Discharge in Acetylene. Plasma Processes and Polymers, 2009, 6, S6.	1.6	15

#	Article	IF	Citations
1013	Production of Highâ€Density Capacitively Coupled Plasma with RF Multiâ€Hollow Cathode and/or High Secondary Electron Emission for DLC Film Preparation. Plasma Processes and Polymers, 2009, 6, S458.	1.6	9
1014	Thermal Stability and Oxidation Resistance of Nanocomposite TiC/aâ€C Protective Coatings. Plasma Processes and Polymers, 2009, 6, S462.	1.6	12
1015	Impact of Annealing on the Conductivity of Amorphous Carbon Films Incorporating Copper and Gold Nanoparticles Deposited by Pulsed Dual Cathodic Arc. Plasma Processes and Polymers, 2009, 6, S438.	1.6	9
1016	Tribological Behaviour of Diamondâ€Like Carbon Films used in Automotive Application: A Comparison. Plasma Processes and Polymers, 2009, 6, S478.	1.6	10
1017	Effect of the Substrate Geometry on Plasma Synthesis of DLC Coatings. Plasma Processes and Polymers, 2009, 6, S425-S428.	1.6	4
1018	Structural and Mechanical Study of Nanocomposite Tiâ€“Zrâ€“Câ€“H Coatings Prepared by Reactive Magnetron Sputtering. Plasma Processes and Polymers, 2009, 6, S554.	1.6	5
1019	Tribological Properties of a Zr₂Al₃C₄Ceramic at Ambient Temperature. Journal of the American Ceramic Society, 2009, 92, 141-146.	1.9	5
1020	Zirconium Aluminum Carbides: New Precursors for Synthesizing ZrO₂â€“Al₂O₃ Composites. Journal of the American Ceramic Society, 2009, 92, 2751-2758.	1.9	8
1021	Surface plasmon characteristics of nanocrystalline gold/DLC composite films prepared by plasma CVD technique. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 164, 156-164.	1.7	33
1022	Film growth by polyatomic C2H5+ bombarding a diamond (100) surfaces: Molecular dynamics study. Nuclear Instruments & Methods in Physics Research B, 2009, 267, 3238-3241.	0.6	3
1023	In-situ investigation on the deformation and damage behaviour of diamond-like carbon coated thin films under uniaxial loading. Thin Solid Films, 2009, 517, 1681-1685.	0.8	22
1024	Effect of silver doping on optical property of diamond like carbon films. Thin Solid Films, 2009, 517, 4035-4038.	0.8	53
1025	Effect of substrate temperature on corrosion performance of nitrogen doped amorphous carbon thin films in NaCl solution. Thin Solid Films, 2009, 517, 4762-4766.	0.8	19
1026	XPS and TEM study of W-DLC/DLC double-layered film. Thin Solid Films, 2009, 517, 5010-5013.	0.8	39
1027	Relative performance of hydrogenated, argon-incorporated and nitrogen-incorporated diamond-like carbon coated Tiâ€“6Alâ€“4V samples under fretting wear loading. Thin Solid Films, 2009, 517, 4365-4371.	0.8	9
1028	Effects of different nitrogen/methane ratios on the residual stress of a-C:N thin films prepared by plasma enhanced chemical vapor deposition. Thin Solid Films, 2009, 517, 4879-4882.	0.8	5
1029	Kinetics and characterization of hydrogenated carbon with ruthenium interlayer. Thin Solid Films, 2009, 517, 5202-5206.	0.8	6
1030	Structural and mechanical properties of diamond-like carbon films deposited by an anode layer source. Thin Solid Films, 2009, 517, 6502-6507.	0.8	31

#	Article	IF	Citations
1031	Oxygen plasma etching of silver-incorporated diamond-like carbon films. Thin Solid Films, 2009, 517, 5739-5742.	0.8	16
1032	Structural and mechanical characterization of BCxNy thin films deposited by pulsed reactive magnetron sputtering. Thin Solid Films, 2009, 518, 77-83.	0.8	17
1033	Nanoporous films obtained by sacrificial layer pulsed laser deposition. Thin Solid Films, 2009, 518, 383-386.	0.8	2
1034	Plasma-enhanced chemical vapor deposition of carbon films using dibromoadamantane. Thin Solid Films, 2009, 518, 993-1000.	0.8	6
1035	Annealing effect on the structural, mechanical and electrical properties of titanium-doped diamond-like carbon films. Thin Solid Films, 2009, 518, 1503-1507.	0.8	38
1036	Raman analysis of DLC coated engine components with complex shape: Understanding wear mechanisms. Thin Solid Films, 2009, 518, 1475-1479.	0.8	27
1037	Effect of boron incorporation on the structure and electrical properties of diamond-like carbon films deposited by femtosecond and nanosecond pulsed laser ablation. Thin Solid Films, 2009, 518, 1470-1474.	0.8	18
1038	Boron doped amorphous diamond window layer deposited by filtered arc for amorphous silicon alloy pâ€“iâ€“n solar cells. Solar Energy Materials and Solar Cells, 2009, 93, 1652-1656.	3.0	8
1039	Ac conductivity in boron doped amorphous carbon films. Solid State Communications, 2009, 149, 115-120.	0.9	16
1040	Nano-graphitic clustering and break down of phonon selection rule in diamond-like carbon films. Solid State Communications, 2009, 149, 1881-1883.	0.9	6
1041	Multilayered decorative a-C:H/CrC coating on stainless steel. Surface and Coatings Technology, 2009, 203, 952-956.	2.2	5
1042	Corrosion protection of ultra-thin ta-C films for recording slider applications at varied substrate bias. Surface and Coatings Technology, 2009, 203, 963-966.	2.2	11
1043	Influence of substrate surface topography in the deposition of nanostructured diamond-like carbon films by high density plasma chemical vapor deposition. Surface and Coatings Technology, 2009, 203, 1193-1198.	2.2	12
1044	Thickness dependence of the structure of diamond-like carbon films by Raman spectroscopy. Surface and Coatings Technology, 2009, 203, 1829-1832.	2.2	52
1045	Mechanical properties of tungsten doped amorphous hydrogenated carbon films prepared by tungsten plasma immersion ion implantation. Surface and Coatings Technology, 2009, 203, 2612-2616.	2.2	5
1046	Fatigue behaviour of 2011-T6 aluminium alloy coated with PVD WC/C, PA-CVD DLC and PE-CVD SiOx coatings. Surface and Coatings Technology, 2009, 203, 3078-3087.	2.2	51
1047	Adhesion and elasticity of plasma deposited wear resistant a-C:H coatings on nickelâ€“titanium. Surface and Coatings Technology, 2009, 203, 3214-3218.	2.2	8
1048	Growth and properties of the ion beam deposited SiOx containing DLC films. Vacuum, 2009, 83, S121-S123.	1.6	12

#	Article	IF	Citations
1049	Laser-induced transformation of a-C:H thin films. Vacuum, 2009, 83, S152-S154.	1.6	2
1050	Stress and strain in DLC films induced by electron bombardment. Vacuum, 2009, 83, S159-S161.	1.6	17
1051	Improvement of adhesion of DLC coating on nitinol substrate by hybrid ion beam deposition technique. Vacuum, 2009, 83, 1179-1183.	1.6	29
1052	Mechanical properties and thermal stability of nitrogen incorporated diamond-like carbon films. Vacuum, 2009, 83, 1406-1410.	1.6	22
1053	Mechanical, electrical and spectroscopic investigations of carbon nanotube-reinforced elastomers. Vibrational Spectroscopy, 2009, 51, 52-59.	1.2	59
1054	Effect of oil additives on the durability of hydrogenated DLC coating under boundary lubrication conditions. Wear, 2009, 266, 147-157.	1.5	145
1055	A tribological study of the hybrid lubrication of DLC films with oil and water. Wear, 2009, 267, 1208-1213.	1.5	25
1056	Duplex SiCN/DLC coating as a solution to improve frettingâ€"Corrosion resistance of steel. Wear, 2009, 266, 832-838.	1.5	26
1057	Erosionâ€"corrosion and corrosion properties of DLC coated low temperature gas-nitrided austenitic stainless steel. Wear, 2009, 267, 1709-1714.	1.5	35
1058	Direct electrochemical response of glucose at nickel-doped diamond like carbon thin film electrodes. Journal of Electroanalytical Chemistry, 2009, 627, 51-57.	1.9	44
1059	Correlation between thickness and optical properties of thin diamond-like carbon films deposited with RF PACVD method. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 165, 132-134.	1.7	10
1060	Photoluminescence and bonding structure evolution of amorphous carbon films with laser intensity. Physica B: Condensed Matter, 2009, 404, 1920-1923.	1.3	7
1061	Antibacterial activity of DLC films containing TiO2 nanoparticles. Journal of Colloid and Interface Science, 2009, 340, 87-92.	5.0	104
1062	Low-temperature synthesis of amorphous carbon nanoneedle and study on its field emission property. Physica E: Low-Dimensional Systems and Nanostructures, 2009, 41, 1174-1178.	1.3	33
1063	Fabrication of DLC films by pulsed ion beam ablation in a dense plasma focus device. Physics Letters, Section A: General, Atomic and Solid State Physics, 2009, 373, 4169-4173.	0.9	28
1064	The conversion of polyaniline nanotubes to nitrogen-containing carbon nanotubes and their comparison with multi-walled carbon nanotubes. Polymer Degradation and Stability, 2009, 94, 929-938.	2.7	167
1065	Molecular dynamics modeling of chemical erosion of hydrocarbon films. Journal of Nuclear Materials, 2009, 386-388, 353-355.	1.3	4
1066	Localization by TEM and EELS of deuterium trapping sites in CFC exposed to plasma irradiation in Tore Supra. Journal of Nuclear Materials, 2009, 385, 601-605.	1.3	8

#	Article	IF	Citations
1067	The modifications of the surface wettability of amorphous carbon films. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2009, 335, 128-132.	2.3	24
1068	Interactions of SO2 and H2S with amorphous carbon films. Applied Catalysis A: General, 2009, 362, 8-13.	2.2	12
1069	Characterization of aged hydrotreating catalysts. Part I: Coke depositions, study on the chemical nature and environment. Applied Catalysis A: General, 2009, 367, 1-8.	2.2	83
1070	Atomic oxygen resistant behaviors of Mo/diamond-like carbon nanocomposite lubricating films. Applied Surface Science, 2009, 255, 4180-4184.	3.1	56
1071	Structural modifications of diamond like carbon films induced by MeV nitrogen ion irradiation. Applied Surface Science, 2009, 255, 4796-4800.	3.1	6
1072	Wettability and antibacterial activity of modified diamond-like carbon films. Applied Surface Science, 2009, 255, 8377-8382.	3.1	38
1073	Surface plasmon resonance detection using amorphous carbon/Au multilayer structure. Applied Surface Science, 2009, 256, 1236-1239.	3.1	11
1074	Influences of ultraviolet irradiation on structure and tribological properties of diamond-like carbon films. Applied Surface Science, 2009, 255, 8409-8413.	3.1	20
1075	On the influence of a TiN interlayer on DLC coatings produced by pulsed vacuum arc discharge: Compositional and morphological study. Applied Surface Science, 2009, 256, 136-141.	3.1	22
1076	Electron emission studies of CNTs grown on Ti and Ni containing amorphous carbon nanocomposite films. Applied Surface Science, 2009, 256, 178-182.	3.1	3
1077	The protective properties of ultra-thin diamond like carbon films for high density magnetic storage devices. Applied Surface Science, 2009, 256, 322-328.	3.1	37
1078	Microstructure and mechanical properties of Ag-containing diamond-like carbon films in mid-frequency dual-magnetron sputtering. Applied Surface Science, 2009, 256, 1431-1435.	3.1	46
1079	Quantitative, nanoscale mapping of sp2 percentage and crystal orientation in carbon multilayers. Carbon, 2009, 47, 94-101.	5.4	24
1080	Formation of endohedral Ni@C60 and exohedral Niâ€“C60 metallofullerene complexes by simulated ion implantation. Carbon, 2009, 47, 1028-1033.	5.4	22
1081	The characterization and application of p-type semiconducting mesoporous carbon nanofibers. Carbon, 2009, 47, 1841-1845.	5.4	31
1082	Molecular dynamics simulation of shear-induced graphitization of amorphous carbon films. Carbon, 2009, 47, 1953-1957.	5.4	122
1083	Electronic states of trans-polyacetylene, poly(p-phenylene vinylene) and sp-hybridised carbon species in amorphous hydrogenated carbon probed by resonant Raman scattering. Carbon, 2009, 47, 2481-2490.	5.4	80
1084	The structural phases of non-crystalline carbon prepared by physical vapour deposition. Carbon, 2009, 47, 3263-3270.	5.4	56

#	Article	IF	Citations
1085	Structure and gas-barrier properties of amorphous hydrogenated carbon films deposited on inner walls of cylindrical polyethylene terephthalate by plasma-enhanced chemical vapor deposition. Applied Surface Science, 2009, 255, 3983-3988.	3.1	10
1086	Defect effect on tribological behavior of diamond-like carbon films deposited with hydrogen diluted benzene gas in aqueous environment. Applied Surface Science, 2009, 255, 7005-7011.	3.1	11
1087	Improvement of field emission of graphite flakes using hydrogen thermal processing. Applied Surface Science, 2009, 255, 7679-7682.	3.1	6
1088	Effects of flow ratios on surface morphology and structure of hydrogenated amorphous carbon films prepared by microwave plasma chemical vapor deposition. Applied Surface Science, 2009, 255, 9058-9061.	3.1	7
1089	The importance of non-local shadowing for the topography evolution of a-C:H films grown by toluene based plasma enhanced chemical vapor deposition. European Physical Journal B, 2009, 69, 187-194.	0.6	5
1090	Solid nanocrystalline fullerite-containing carbon coatings. Technical Physics Letters, 2009, 35, 889-892.	0.2	4
1091	Deposition of diamond-like films of hydrogenized carbon. Protection of Metals and Physical Chemistry of Surfaces, 2009, 45, 645-651.	0.3	0
1092	Influence of an acetylene impurity on the properties of a radio-frequency gas discharge in argon. Journal of Experimental and Theoretical Physics, 2009, 109, 707-716.	0.2	2
1093	Shape-Controlled Copper Selenide Nanocubes Synthesized by an Electrochemical Crystallization Method. Journal of Physical Chemistry C, 2009, 113, 10833-10837.	1.5	48
1094	Polyamide Membranes Modified by Carbon Nanotubes: Application for Pervaporation. Separation Science and Technology, 2009, 45, 35-41.	1.3	33
1095	Corrosion behavior of nitrogen doped diamond-like carbon thin films in NaCl solutions. Corrosion Science, 2009, 51, 2158-2164.	3.0	73
1096	Investigation of electrical properties of nanostructured carbon films derived from block copolymers. Synthetic Metals, 2009, 159, 177-181.	2.1	7
1097	Diamond-like carbon films produced from high deposition rates exhibit antibacterial activity. Synthetic Metals, 2009, 159, 2167-2169.	2.1	19
1098	Influence of Ar/C2H2 ratio on the structure of hydrogenated carbon films. Journal of Non-Crystalline Solids, 2009, 355, 1240-1245.	1.5	13
1099	Formation of hydrogenated amorphous carbon films containing fullerene-like structures. Journal of Non-Crystalline Solids, 2009, 355, 1742-1746.	1.5	10
1100	Photoluminescence enhancement induced by nanoparticles from La2O3 and CeO2 doped diamond-like carbon films. Journal of Alloys and Compounds, 2009, 476, 318-323.	2.8	21
1101	Properties of W incorporated diamond-like carbon films prepared by pulsed-laser deposition. Journal of Alloys and Compounds, 2009, 479, 741-745.	2.8	15
1102	Plasma parameters of pulsed-dc discharges in methane used to deposit diamondlike carbon films. Journal of Applied Physics, 2009, 106, 033302.	1.1	25

#	Article	IF	Citations
1103	Molecular structure of SiOx-incorporated diamond-like carbon films; evidence for phase segregation. Diamond and Related Materials, 2009, 18, 1167-1173.	1.8	35
1104	The role of metal interlayer on thermal stress, film structure, wettability and hydrogen content for diamond like carbon films on different substrate. Diamond and Related Materials, 2009, 18, 407-412.	1.8	44
1105	Review on carbon-derived, solid-state, micro and nano sensors for electrochemical sensing applications. Diamond and Related Materials, 2009, 18, 1401-1420.	1.8	212
1106	A Bondâ˜Bond Description of the Intermolecular Interaction Energy: The Case of the Weakly Bound Acetyleneâ˜Hydrogen Complex. Journal of Physical Chemistry A, 2009, 113, 14867-14874.	1.1	15
1107	Flammability and Thermo-Oxidative Decomposition of Epoxy Resin Containing Ammonium Polyphosphate and Metallic Oxide. Journal of Macromolecular Science - Pure and Applied Chemistry, 2009, 46, 290-295.	1.2	28
1108	Conducting carbonized polyaniline nanotubes. Nanotechnology, 2009, 20, 245601.	1.3	131
1109	Structural, mechanical and tribological characterizations of a-Câ€‰:â€‰Hâ€‰:â€‰Si films prepared by a hybrid PECVD and sputtering technique. Journal Physics D: Applied Physics, 2009, 42, 165407.	1.3	47
1110	Synthesis of ultrathin carbon films by direct current filtered cathodic vacuum arc. Journal of Applied Physics, 2009, 105, .	1.1	69
1111	The properties of fluorine containing diamond-like carbon films prepared by plasma-enhanced chemical vapour deposition. Diamond and Related Materials, 2009, 18, 66-71.	1.8	75
1112	RAMAN, DIELECTRIC AND OPTICAL INVESTIGATIONS OF DLC THIN FILMS. Surface Review and Letters, 2009, 16, 731-736.	0.5	7
1113	Antibacterial activity of DLC and Agâ€“DLC films produced by PECVD technique. Diamond and Related Materials, 2009, 18, 1010-1014.	1.8	104
1114	Wettability of hydrogenated tetrahedral amorphous carbon. Diamond and Related Materials, 2009, 18, 43-50.	1.8	31
1115	Synthesis of diamond nanocrystals on polyimide film. Diamond and Related Materials, 2009, 18, 113-116.	1.8	10
1116	Evolution of the plasma composition of a high power impulse magnetron sputtering system studied with a time-of-flight spectrometer. Journal of Applied Physics, 2009, 105, .	1.1	37
1117	Atomic hydrogen interactions with amorphous carbon thin films. Journal of Applied Physics, 2009, 106, .	1.1	33
1118	Anti-sticking behavior of DLC-coated silicon micro-molds. Journal of Micromechanics and Microengineering, 2009, 19, 105025.	1.5	40
1119	Sp3 content in ta-C films vs pulse bias width to the substrate: A correlative structural analysis. Diamond and Related Materials, 2009, 18, 1343-1347.	1.8	10
1120	Monitoring the carburization of molybdenum bimetallic nitrides and oxynitrides with CH4/H2/Ar mixtures: identification of a new carbonitride. Dalton Transactions, 2009, , 330-339.	1.6	9

#	Article	IF	Citations
1121	Atmospheric plasma deposition of diamond-like carbon coatings. Diamond and Related Materials, 2009, 18, 1129-1133.	1.8	27
1122	Characterization of EUV induced carbon films using laser-generated surface acoustic waves. Diamond and Related Materials, 2009, 18, 768-771.	1.8	13
1123	Diamond nucleation on iridium: Local variations of structure and density within the BEN layer. Diamond and Related Materials, 2009, 18, 107-112.	1.8	13
1124	Antimicrobial surfaces and their potential in reducing the role of the inanimate environment in the incidence of hospital-acquired infections. Journal of Materials Chemistry, 2009, 19, 3819.	6.7	458
1125	Formation and characterization of DLC:Cr:Cu multi-layers coating using cathodic arc evaporation. Diamond and Related Materials, 2009, 18, 368-373.	1.8	27
1126	Numerical simulation of hydrocarbon plasmas for nanoparticle formation and the growth of nanostructured thin films. Plasma Physics and Controlled Fusion, 2009, 51, 124034.	0.9	2
1127	Evolution of microstructure and nanomechanical behavior of diamond-like carbon films at high temperature annealing. , 2009, , .		0
1128	Amorphous hydrogenated carbon films treated by SF₆plasma. Journal of Physics: Conference Series, 2009, 167, 012054.	0.3	0
1129	Characterization of Head Overcoat for 1 Tb/in^{2} Magnetic Recording. IEEE Transactions on Magnetics, 2009, 45, 805-809.	1.2	30
1130	The effect of the CH4 level on the morphology, microstructure, phase purity and electrochemical properties of carbon films deposited by microwave-assisted CVD from Ar-rich source gas mixtures. Diamond and Related Materials, 2009, 18, 1426-1434.	1.8	24
1131	Low friction and protective diamond-like carbon coatings deposited by asymmetric bipolar pulsed plasma. Diamond and Related Materials, 2009, 18, 1035-1038.	1.8	11
1132	Influence of argon gas pressure and target power on magnetron plasma parameters. Diamond and Related Materials, 2009, 18, 995-998.	1.8	7
1133	Effects of environmental conditions on fluorinated diamond-like carbon tribology. Diamond and Related Materials, 2009, 18, 923-926.	1.8	28
1134	Effect of bias and hydrogenation on the elemental concentration and the thermal stability of amorphous thin carbon films, deposited on Si substrate. Diamond and Related Materials, 2009, 18, 1333-1337.	1.8	10
1135	Limitations and possible improvements of DLC dielectric response model based on parameterization of density of states. Diamond and Related Materials, 2009, 18, 413-418.	1.8	9
1136	Effects of thermal annealing and Si incorporation on bonding structure and fracture properties of diamond-like carbon films. Diamond and Related Materials, 2009, 18, 615-619.	1.8	19
1137	Growth of ultrathin diamond-like carbon films by C60 cluster assembly: Molecular dynamics simulations. Diamond and Related Materials, 2009, 18, 88-94.	1.8	11
1138	Optical properties of nickel-incorporated amorphous carbon film deposited by femtosecond pulsed laser ablation. Diamond and Related Materials, 2009, 18, 1085-1090.	1.8	17

#	Article	IF	Citations
1139	Oral bacterial adhesion on amorphous carbon films. Diamond and Related Materials, 2009, 18, 1179-1185.	1.8	24
1140	Localized Nanodiamond Crystallization and Field Emission Performance Improvement of Amorphous Carbon upon Laser Irradiation in Liquid. Journal of Physical Chemistry C, 2009, 113, 12154-12161.	1.5	18
1141	Synthesis and characterization of composite films of silver nanoparticles embedded in DLC matrix prepared by plasma CVD technique. EPJ Applied Physics, 2009, 47, 10502.	0.3	26
1142	Analysis of nanoindentation and nanoscratch experiments of thin amorphous carbon coatings and multilayers: friction, wear and elastic â€“ plastic deformation. International Journal of Materials Research, 2009, 100, 960-967.	0.1	3
1143	Molecular dynamics simulations of synergistic erosion of amorphous hydrocarbon films. Physica Scripta, 2009, T138, 014018.	1.2	1
1144	Emergence of Diamond-like Carbon Technology: One Step Closer to OCTG Corrosion Prevention. , 2010, , .		0
1145	Chemical Precursor for the Synthesis of Diamond Films at Low Temperature. Applied Physics Express, 2010, 3, 045501.	1.1	10
1146	Plasma-surface Interactions in Material Processing. Journal of Physics: Conference Series, 2010, 257, 012007.	0.3	5
1147	Tribological performance of DLC coatings on UHMWPE. Journal of Physics: Conference Series, 2010, 252, 012006.	0.3	4
1148	Abnormal humidity-dependent electrical properties of amorphous carbon/silicon heterojunctions. Applied Physics Letters, 2010, 97, .	1.5	12
1149	Depth-dependence of electrical conductivity of diamondlike carbon films. Applied Physics Letters, 2010, 96, .	1.5	5
1150	Order and disorder of carbon deposit produced by arc discharge in liquid nitrogen. Journal of Applied Physics, 2010, 108, .	1.1	11
1151	Analysis of a hollow-cathode reflex discharge in a hydrocarbon flow. Technical Physics, 2010, 55, 1134-1137.	0.2	1
1152	Pre-exponential factor of the hopping conductivity in disordered carbon films. Bulletin of the Lebedev Physics Institute, 2010, 37, 347-351.	0.1	0
1153	Properties of nanosized carbon coatings doped with nitrogen, tungsten, and aluminium and obtained by pulse vacuum arc method. Nanotechnologies in Russia, 2010, 5, 160-164.	0.7	2
1154	Brillouin light scattering characterization of the surface acoustic wave velocity in sp2 allotropes thin films. European Physical Journal B, 2010, 75, 151-155.	0.6	3
1155	FlÃcheneinfluss bei der PACVDâ€Beschichtung. Vakuum in Forschung Und Praxis, 2010, 22, 6-10.	0.0	2
1156	Corrosion behavior of DLC-coated NiTi alloy in the presence of serum proteins. Diamond and Related Materials, 2010, 19, 1230-1234.	1.8	26

#	Article	IF	Citations
1157	A comparative study on as-deposited and in situ oxidized ZnO/diamondlike carbon (DLC) nanocomposite by pulsed laser deposition technique. Journal of Materials Research, 2010, 25, 899-909.	1.2	3
1158	Room temperature pulsed laser deposition of Si x C thin films inÂdifferent compositions. Applied Physics A: Materials Science and Processing, 2010, 100, 1115-1121.	1.1	10
1159	Diamond/graphite content and biocompatibility of DLC films fabricated by PLD. Applied Physics A: Materials Science and Processing, 2010, 101, 579-583.	1.1	26
1160	Non-enzymatic hydrogen peroxide detection using gold nanoclusters-modified phosphorus incorporated tetrahedral amorphous carbon electrodes. Electrochimica Acta, 2010, 55, 1971-1977.	2.6	41
1161	Local reactivity of diamond-like carbon modified PTFE membranes used in SO2 sensors. Electrochimica Acta, 2010, 55, 7923-7928.	2.6	13
1162	Effect of ECR-assisted microwave plasma nitriding treatment on the microstructure characteristics of FCVA deposited ultra-thin ta-C films for high-density magnetic storage applications. Applied Surface Science, 2010, 256, 3024-3030.	3.1	9
1163	Deuterated amorphous carbon films: Film growth and properties. Surface and Coatings Technology, 2010, 204, 1993-1996.	2.2	10
1164	Sub-micron size carbon structures synthesized using plasma enhanced CVD, without external heating and no catalyzer action. Surface and Coatings Technology, 2010, 204, 2940-2943.	2.2	15
1165	Antibacterial activity of fluorinated diamond-like carbon films produced by PECVD. Surface and Coatings Technology, 2010, 204, 2986-2990.	2.2	38
1166	Characterization of two DLC coatings for joint prosthesis: The role of albumin on the tribological behavior. Surface and Coatings Technology, 2010, 204, 3451-3458.	2.2	27
1167	Influence of carbon sputtering power on structure, corrosion resistance, adhesion strength and wear resistance of platinum/ruthenium/nitrogen doped diamond-like carbon thin films. Surface and Coatings Technology, 2010, 205, 853-860.	2.2	21
1168	Effect of high substrate bias and hydrogen and nitrogen incorporation on spectroscopic ellipsometric and atomic force microscopic studies of tetrahedral amorphous carbon films. Surface and Coatings Technology, 2010, 205, 2126-2133.	2.2	29
1169	Effect of fullerene coating on silicon thin film anodes for lithium rechargeable batteries. Journal of Solid State Electrochemistry, 2010, 14, 51-56.	1.2	42
1170	Raman Spectroscopy of Carbon Based Films â€“ Spectra Interpretation and Selected Applications. BHM-Zeitschrift Fuer Rohstoffe Geotechnik Metallurgie Werkstoffe Maschinen-Und Anlagentechnik, 2010, 155, 534-540.	0.4	10
1171	Assessment of adhesion between thin film and silicon based on a scratch test. Journal of Mechanical Science and Technology, 2010, 24, 97-101.	0.7	20
1172	Effect of thickness on structures of ultrathin diamond-like carbon films. Science Bulletin, 2010, 55, 1949-1951.	1.7	3
1173	Evaluation of corrosion resistance of diamond-like carbon films deposited onto AISI 4340 steel. Journal of Materials Science, 2010, 45, 5472-5477.	1.7	14
1174	Electron field emission properties of carbon nanoflakes prepared by RF sputtering. Journal of Materials Science: Materials in Electronics, 2010, 21, 926-931.	1.1	4

#	Article	IF	Citations
1175	Effect of rapid thermal annealing treatment on the field-emission characteristics of nanocrystalline diamonds grown on various metal/silicon substrates. Journal of Materials Science: Materials in Electronics, 2010, 21, 385-392.	1.1	1
1176	Tribological and Mechanical Characterization of Carbon-Coated Sliders and Disks. Tribology Letters, 2010, 40, 23-29.	1.2	3
1177	Atomistic Insights into the Running-in, Lubrication, and Failure of Hydrogenated Diamond-Like Carbon Coatings. Tribology Letters, 2010, 39, 49-61.	1.2	126
1178	Ultra-High Tribological Performance of Magnetron Sputtered a-C:H Films in Sand-Dust Environment. Tribology Letters, 2010, 38, 195-205.	1.2	11
1179	Nanocomposite Microstructure and Environment Self-Adapted Tribological Properties of Highly Hard Graphite-Like Film. Tribology Letters, 2010, 40, 301-310.	1.2	54
1180	In Situ Studies of TiC1â^'x N x Hard Coating Tribology. Tribology Letters, 2010, 40, 365-373.	1.2	20
1181	Molecular Dynamics Study of the Switching Mechanism of Carbon-Based Resistive Memory. IEEE Transactions on Electron Devices, 2010, 57, 3434-3441.	1.6	19
1182	System Integration Challenges for a Slider With an Integrated Microactuator. IEEE Transactions on Magnetics, 2010, 46, 2163-2166.	1.2	1
1183	Field emission properties of composite nano-Au/DLC films prepared by CVD technique. Materials Research Bulletin, 2010, 45, 576-583.	2.7	17
1184	Nanomechanical and nanotribological properties of carbon-based thin films: A review. International Journal of Refractory Metals and Hard Materials, 2010, 28, 51-70.	1.7	290
1185	V and N co-doped diamond-like carbon films deposited by pulsed bias arc ion plating. International Journal of Refractory Metals and Hard Materials, 2010, 28, 544-549.	1.7	12
1186	A combined in situ time-resolved UVâ€"Vis, Raman and high-energy resolution X-ray absorption spectroscopy study on the deactivation behavior of Pt and PtSn propane dehydrogenation catalysts under industrial reaction conditions. Journal of Catalysis, 2010, 276, 268-279.	3.1	256
1187	Chemically Derived Graphene Oxide: Towards Largeâ€Area Thinâ€Film Electronics and Optoelectronics. Advanced Materials, 2010, 22, 2392-2415.	11.1	2,018
1188	Raman and Xâ€ray diffraction analysis on unburned carbon powder refined from fly ash. Journal of Raman Spectroscopy, 2010, 41, 933-937.	1.2	85
1189	Diamondâ€like carbon coated polymerâ€based targets in microscope slide format for MALDI mass spectrometry. Journal of Mass Spectrometry, 2010, 45, 566-569.	0.7	7
1190	Morphology and microstructure of patterned nickel incorporated amorphous carbon films by simple pyrolysis. Applied Surface Science, 2010, 256, 4873-4878.	3.1	10
1191	Properties of boron and phosphorous incorporated tetrahedral amorphous carbon films grown using filtered cathodic vacuum arc process. Applied Surface Science, 2010, 256, 4383-4390.	3.1	33
1192	Bias voltage effect on the structure and property of chromium copperâ€"diamond-like carbon multilayer films fabricated by cathodic arc plasma. Applied Surface Science, 2010, 256, 7490-7495.	3.1	24

#	Article	IF	Citations
1193	Low energy X-ray radiation impact on coated Si constructions. Radiation Physics and Chemistry, 2010, 79, 1031-1038.	1.4	1
1194	Improvement of diamond-like carbon electrochemical corrosion resistance by addition of nanocrystalline diamond. Journal of Colloid and Interface Science, 2010, 342, 636-637.	5.0	9
1195	Electron field emission from diamond-like carbon nanodot arrays. Physica E: Low-Dimensional Systems and Nanostructures, 2010, 42, 1343-1346.	1.3	9
1196	Molecular dynamical simulations on a-C:H film growth from atomic flux of C and H: Effect of H fraction. Physics Letters, Section A: General, Atomic and Solid State Physics, 2010, 374, 2150-2155.	0.9	9
1197	Transformation of light paraffins in a microwave-induced plasma-based reactor at reduced pressure. International Journal of Hydrogen Energy, 2010, 35, 4111-4122.	3.8	27
1198	Amorphous carbon and its surfaces. Chemical Physics, 2010, 374, 77-82.	0.9	6
1199	Electrochemical deposition of sulfur doped DLC nanocomposite film at atmospheric pressure. Electrochemistry Communications, 2010, 12, 61-65.	2.3	57
1200	Effect of coating thickness on the deformation behaviour of diamond-like carbonâ€“silicon system. Thin Solid Films, 2010, 518, 2021-2028.	0.8	13
1201	Metallic contacts to nitrogen and boron doped diamond-like carbon films. Thin Solid Films, 2010, 518, 3332-3336.	0.8	40
1202	Effect of gas introduction position on substrate etching by means of Ar-dominated graphite-cathodic-arc plasma beam in Î¼T-FAD. Thin Solid Films, 2010, 518, 3546-3550.	0.8	6
1203	Preparation of diamond-like carbon films by cathodic micro-arc discharge in aqueous solutions. Thin Solid Films, 2010, 518, 4211-4214.	0.8	18
1204	Synthesis and characterization of carbon/silica superhydrophobic multi-layer films. Thin Solid Films, 2010, 518, 5183-5187.	0.8	15
1205	Characteristics of carbon coatings on optical fibers prepared by radio-frequency plasma enhanced chemical vapor deposition with different H2/C2H2 ratios. Thin Solid Films, 2010, 518, 7492-7496.	0.8	1
1206	Structural, mechanical and tribological behavior of fullerene-like carbon film. Thin Solid Films, 2010, 518, 5938-5943.	0.8	19
1207	Characterization of boron-doped diamond-like carbon prepared by radio frequency sputtering. Thin Solid Films, 2010, 519, 521-526.	0.8	40
1208	Hydrogen-free diamond-like carbon films prepared by microwave electron cyclotron resonance plasma-enhanced direct current magnetron sputtering. Thin Solid Films, 2010, 519, 86-90.	0.8	10
1209	High temperature tribological behaviour of carbon based (B4C and DLC) coatings in sliding contact with aluminum. Thin Solid Films, 2010, 519, 1611-1617.	0.8	45
1210	Synthesis of ultra-smooth and ultra-low friction DLC based nanocomposite films on rough substrates. Thin Solid Films, 2010, 519, 1618-1622.	0.8	11

#	Article	IF	Citations
1211	Investigation of the tribological behavior and its relationship to the microstructure and mechanical properties of a-SiC:H films elaborated by low frequency plasma assisted chemical vapor deposition. Thin Solid Films, 2010, 519, 1266-1271.	0.8	24
1212	Thin polymerized C60 coatings deposited in electrostatic field via electron-beam dispersion of fullerite. Thin Solid Films, 2010, 519, 1285-1292.	0.8	8
1213	Intricate nature of Pd nanocrystalâ€“hydrogen interaction investigated using thermolysed Pd hexadecylthiolate films. Sensors and Actuators B: Chemical, 2010, 149, 345-351.	4.0	6
1214	Improvement in lifetime and replication quality of Si micromold using N:DLC:Ni coatings for microfluidic devices. Sensors and Actuators B: Chemical, 2010, 150, 174-182.	4.0	18
1215	Structural and mechanical properties of a-C:H and Si doped a-C:H thin films grown by LF-PECVD. Surface and Coatings Technology, 2010, 204, 1339-1346.	2.2	45
1216	High power pulsed magnetron sputtering: A review on scientific and engineering state of the art. Surface and Coatings Technology, 2010, 204, 1661-1684.	2.2	854
1217	Influence of interlayers on corrosion resistance of diamond-like carbon coating on magnesium alloy. Surface and Coatings Technology, 2010, 204, 2193-2196.	2.2	65
1218	Effects of process parameters on the structure of hydrogenated amorphous carbon films processed by electron cyclotron resonance plasma enhanced chemical vapor deposition. Surface and Coatings Technology, 2010, 204, 3029-3033.	2.2	5
1219	Crystalline diamond particles into diamond-like carbon films: The influence of the particle sizes on the electrochemical corrosion resistance. Surface and Coatings Technology, 2010, 204, 2600-2604.	2.2	13
1220	Diffraction gratings fabricated in DLC thin films. Surface and Coatings Technology, 2010, 204, 2966-2970.	2.2	14
1221	Structural and mechanical characterization of diamond like carbon films grown by microwave plasma CVD. Surface and Coatings Technology, 2010, 204, 2817-2821.	2.2	15
1222	Influence of individual Crâ€“C layer thickness on structural and tribological properties of multilayered Crâ€“C/a-C:Cr thin films. Surface and Coatings Technology, 2010, 204, 3319-3325.	2.2	21
1223	Effect of the fluorination of DLC film on the corrosion protection of aluminum alloy (AA 5052). Surface and Coatings Technology, 2010, 204, 3022-3028.	2.2	26
1224	Cavitation erosion resistance of a-C:H coatings produced by PECVD on stainless steel and NiTi substrates. Surface and Coatings Technology, 2010, 204, 3418-3424.	2.2	17
1225	Friction reduction by texturing of DLC coatings sliding against steel under oil lubrication. Surface and Coatings Technology, 2010, 204, 3794-3797.	2.2	20
1226	Corrosion performance and mechanical stability of 316L/DLC coating system: Role of interlayers. Surface and Coatings Technology, 2010, 204, 3986-3994.	2.2	105
1227	Influence of friction modifier and antiwear additives on the tribological performance of a non-hydrogenated DLC coating. Surface and Coatings Technology, 2010, 204, 4001-4011.	2.2	81
1228	Relationship between structure and electrical resistivity in nano-structured copper-containing carbon films. Surface and Coatings Technology, 2010, 204, 4091-4094.	2.2	5

#	Article	IF	Citations
1229	Improving tribological properties of Ti6Al4V alloy with duplex surface treatment. Surface and Coatings Technology, 2010, 205, 320-324.	2.2	69
1230	Improvement of platinum adhesion to carbon surfaces using PVD coatings. Surface and Coatings Technology, 2010, 205, 306-311.	2.2	17
1231	Phase transformation studies on the a-C coating under repetitive impacts. Surface and Coatings Technology, 2010, 205, 625-631.	2.2	24
1232	Quantitative measurements of sp3 content in DLC films with Raman spectroscopy. Surface and Coatings Technology, 2010, 205, 1995-1999.	2.2	186
1233	Improving wear resistance and corrosion resistance of AZ31 magnesium alloy by DLC/AlN/Al coating. Surface and Coatings Technology, 2010, 205, 2067-2073.	2.2	85
1234	Plasma coatings CrAlN and a-C:H for high efficient power train in automobile. Surface and Coatings Technology, 2010, 205, 1502-1507.	2.2	11
1235	Synthesis, structure and mechanical properties of fullerene-like carbon nitride films deposited by DC magnetron sputtering. Surface and Coatings Technology, 2010, 205, 2474-2482.	2.2	11
1236	Diamond like carbon films as a protective surface on PMMA for biomedical applications. Surface and Coatings Technology, 2010, 205, 2495-2502.	2.2	14
1237	Effect of process parameters on mechanical and tribological performance of pulsed-DC sputtered TiC/a-C:H nanocomposite films. Surface and Coatings Technology, 2010, 205, 2633-2642.	2.2	40
1238	Influence of hardness and roughness on the tribological performance of TiC/a-C nanocomposite coatings. Surface and Coatings Technology, 2010, 205, 2624-2632.	2.2	48
1239	The influence of fluorine doping on the optical properties of diamond-like carbon thin films. Vacuum, 2010, 84, 837-842.	1.6	44
1240	Properties of nitrogen diluted hydrogenated amorphous carbon (n-type a-C:H) films and their realization in n-type a-C:H/p-type crystalline silicon heterojunction diodes. Vacuum, 2010, 84, 882-889.	1.6	32
1241	Structure of diamond polycrystalline films deposited on silicon substrates. Vacuum, 2010, 85, 518-522.	1.6	6
1242	Ion beam energy effects on structure and properties of diamond like carbon films deposited by closed drift ion source. Vacuum, 2010, 84, 1133-1137.	1.6	11
1243	Fabrication of carbon nanoflakes by RF sputtering for field emission applications. Vacuum, 2010, 84, 1452-1456.	1.6	44
1244	Effect of bias voltage on growth property of Cr-DLC film prepared by linear ion beam deposition technique. Vacuum, 2010, 85, 231-235.	1.6	94
1245	Hardness effect of stainless steel substrates on tribological properties of water-lubricated DLC films against AISI 440C ball. Wear, 2010, 268, 329-334.	1.5	7
1246	Modelling of unlubricated oscillating sliding wear of DLC-coatings considering surface topography, oxidation and graphitisation. Wear, 2010, 268, 1184-1194.	1.5	19

#	Article	IF	Citations
1247	Impact wear testing of diamond-like carbon films for engine valve-tappet surfaces. Wear, 2010, 268, 1303-1308.	1.5	46
1248	Diamond-like carbon coatings enhance the hardness and resilience of bearing surfaces for use in joint arthroplasty. Acta Biomaterialia, 2010, 6, 1619-1624.	4.1	56
1249	Tribological behavior of DLC-coated articulating joint implants. Acta Biomaterialia, 2010, 6, 2335-2341.	4.1	56
1250	Emission properties of Ti-DLC films prepared by unbalanced magnetron sputtering. Applied Surface Science, 2010, 256, 1951-1954.	3.1	7
1251	Effect of titanium incorporation on the structural, mechanical and biocompatible properties of DLC thin films prepared by reactive-biased target ion beam deposition method. Applied Surface Science, 2010, 257, 143-150.	3.1	53
1252	Structure and elastic recovery of Crâ€“C:H films deposited by a reactive magnetron sputtering technique. Applied Surface Science, 2010, 257, 244-248.	3.1	22
1253	Electrical conditioning of diamond-like carbon films for the formation of coated field emission cathodes. Applied Surface Science, 2010, 257, 388-392.	3.1	4
1254	Supported nickel catalysts with a controlled molecular architecture for the catalytic reformation of methane. Catalysis Today, 2010, 149, 394-400.	2.2	16
1255	The doping of carbon nanotubes with nitrogen and their potential applications. Carbon, 2010, 48, 575-586.	5.4	513
1256	Ultrafast electrodeposition of amorphous carbon nitride films from fullerene derivative. Electrochemistry Communications, 2010, 12, 390-393.	2.3	10
1257	Growth Mechanism of Oxygen-Containing Functional Plasma Polymers. Plasma Processes and Polymers, 2010, 7, 889-898.	1.6	61
1258	The effect of rapid thermal annealing on characteristics of carbon coatings on optical fibers. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 379-385.	0.8	9
1259	Influence of bias voltage on the structure and deposition mechanism of diamondâ€like carbon films produced by RF (13.56â€‰MHz) CH₄ plasma. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 2311-2318.	0.8	9
1260	Blueâ€“green luminescence and SERS study of carbonâ€rich hydrogenated amorphous silicon carbide films with multiphase structure. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 2543-2548.	0.8	12
1261	Xâ€ray photoelectron analysis of surface functional groups on diamondâ€like carbon films by gasâ€phase chemical derivatization method. Surface and Interface Analysis, 2010, 42, 77-87.	0.8	15
1262	Observation of self-assembled monolayers on diamond-like carbon films: agglomeration of self-assembled FDTS molecules. Surface and Interface Analysis, 2010, 42, 1373-1376.	0.8	2
1263	Surface investigation of carbon films: from diamond to graphite. Surface and Interface Analysis, 2010, 42, 1082-1084.	0.8	149
1264	Surface studies of diamondâ€like carbon films grown by plasmaâ€enhanced chemical vapor deposition. Surface and Interface Analysis, 2010, 42, 1702-1705.	0.8	8

#	Article	IF	Citations
1265	Reciprocating Friction and Wear Behavior of Zr₂[Al(Si)]₄C₅ and Zr₂[Al(Si)]₄C₅â€“SiC Composite Against Si₃N₄ Ball. Journal of the American Ceramic Society, 2010, 93, 2369-2376.	1.9	11
1266	Oxidation Behavior of Ternary Carbide Ceramics in Hfâ€“Alâ€“C System in Air. Journal of the American Ceramic Society, 2010, 93, 3427-3431.	1.9	10
1267	Ultralow nanoscale wear through atom-by-atom attrition in silicon-containing diamond-like carbon. Nature Nanotechnology, 2010, 5, 181-185.	15.6	212
1268	Mechanical and tribological properties of Ti-containing carbon nanocomposite coatings deposited on TiAlV alloys. Materials Research, 2010, 13, 527-533.	0.6	3
1269	Fabrication of copper-nanoparticle embedded in amorphous carbon films and their electrical conductive properties. International Journal of Applied Electromagnetics and Mechanics, 2010, 33, 935-940.	0.3	4
1271	A novel method to form conducting channels in SiOx(Si) films for field emission application. Journal of Applied Physics, 2010, 107, 013702.	1.1	10
1272	Evaluation of DLC Coating Damage in the Delamination and Wear Test. Tribology Online, 2010, 5, 129-135.	0.2	10
1273	Development of an Environmentally Conscious Carbon Thin Films. Journal of the Vacuum Society of Japan, 2010, 53, 30-36.	0.3	0
1274	Plasma immersion ion implantation (PIII) of light alloys. , 2010, , 362-397.		4
1275	Raman spectra of amorphous carbon films deposited by SWP. , 2010, , .		0
1276	Effect of Pulsed Substrate Bias on Evolution of Surface Morphology and <i>s</i><i>p</i>³ Hybridization Degree of Ag-DLC Films in a Mid-Frequency Dual-Magnetron Sputtering. Advanced Materials Research, 0, 105-106, 444-447.	0.3	0
1277	Structure and Mechanical Properties of (Cu, Ti) - Binary Metal Doped Diamond-Like Carbon Films. Advanced Materials Research, 2010, 150-151, 217-222.	0.3	2
1278	Nonvolatile resistive switching memory based on amorphous carbon. Applied Physics Letters, 2010, 96, .	1.5	133
1279	Metal-Containing Diamond-Like Carbon Coating as a Smart Sensor. Materials Science Forum, 0, 638-642, 2103-2108.	0.3	5
1280	Cr-Doped DLC Multilayered Thin Films Deposited Using Cathodic Vacuum Arc- and DC Magnetron-Assisted Ion Beam Sputtering. Advanced Materials Research, 2010, 105-106, 429-431.	0.3	1
1281	Tribological Performances of Polymer-Based Coating Materials Designed for Compressor Applications. Advances in Science and Technology, 2010, 64, 33-42.	0.2	3
1282	Microstructure and mechanical properties of Ti/AlTiN/Ti-diamondlike carbon composite coatings on steel. Journal of Materials Research, 2010, 25, 2159-2165.	1.2	3
1283	Molecular Dynamical Simulations on a-C:H Film Growth from C and H Atomic Flux: Effect of Incident Energy. Chinese Physics Letters, 2010, 27, 088102.	1.3	3

#	Article	IF	Citations
1284	Comparative study between erbium and erbium oxide-doped diamondlike carbon films deposited by pulsed laser deposition technique. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2010, 28, 449-455.	0.9	6
1285	Effect of high substrate bias and hydrogen and nitrogen incorporation on density of states and field-emission threshold in tetrahedral amorphous carbon films. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2010, 28, 411-422.	0.6	20
1286	Effect of substrate pretreatment on the field emission property of nano-amorphous carbon film. , 2010, , .		0
1287	Influence of deposition parameters on the microstructure and properties of nitrogen-doped diamondlike carbon films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2010, 28, 1299-1306.	0.9	7
1288	Enhancing field emission from ZnO nanowires: Diamond like carbon on surface and nanowire-substrate interface. , 2010, , .		0
1289	Beneficial silver: antibacterial nanocomposite Ag-DLC coating to reduce osteolysis of orthopaedic implants. Journal of Physics: Conference Series, 2010, 252, 012005.	0.3	6
1290	Electric field induced sp3-to-sp2 conversion and nonlinear electron transport in iron-doped diamond-like carbon thin film. Journal of Applied Physics, 2010, 107, .	1.1	13
1291	Structure of diamondlike carbon films deposited by femtosecond and nanosecond pulsed laser ablation. Journal of Applied Physics, 2010, 108, .	1.1	39
1292	Hard graphitelike hydrogenated amorphous carbon grown at high rates by a remote plasma. Journal of Applied Physics, 2010, 107, .	1.1	29
1293	Superlow friction of titanium/silicon codoped hydrogenated amorphous carbon film in the ambient air. Journal of Applied Physics, 2010, 108, .	1.1	28
1294	Stages in the interaction of deuterium atoms with amorphous hydrogenated carbon films: Isotope exchange, soft-layer formation, and steady-state erosion. Journal of Applied Physics, 2010, 108, 043307.	1.1	9
1295	H-atom interaction with amorphous hydrocarbon films: Effect of surface temperature, H flux and exposure time. Journal of Applied Physics, 2010, 107, 093305.	1.1	9
1296	THE EFFECT OF RESIDUAL STRESS ON THE WEAR PROPERTIES OF DLC COATINGS. International Journal of Modern Physics B, 2010, 24, 2977-2982.	1.0	2
1297	Multidielectric polarizations in the core/shell Co/graphite nanoparticles. Applied Physics Letters, 2010, 96, .	1.5	158
1298	Oxygen Gas Barrier Properties of Hydrogenated Amorphous Carbon Thin Films Deposited with a Pulse-Biased Inductively Coupled Plasma Chemical Vapor Deposition Method. Japanese Journal of Applied Physics, 2010, 49, 08JF10.	0.8	5
1299	The Natural Diatomite from Caldiran-Van (Turkey): Electroanalytical Application to Antimigraine Compound Naratriptan at Modified Carbon Paste Electrode. Combinatorial Chemistry and High Throughput Screening, 2010, 13, 703-711.	0.6	8
1300	Nitrogen-Induced Degradation of Corrosion Resistance of Platinum/Ruthenium/Nitrogen-Doped Diamond-like Carbon Thin Films. Journal of the Electrochemical Society, 2010, 157, C269.	1.3	6
1301	Coatings tribology drivers for high density plasma technologies. Surface Engineering, 2010, 26, 80-96.	1.1	29

#	Article	IF	Citations
1302	Functionalization of Artificial Freestanding Composite Nanomembranes. Materials, 2010, 3, 165-200.	1.3	33
1303	Temperature dependent properties of silicon containing diamondlike carbon films prepared by plasma source ion implantation. Journal of Applied Physics, 2010, 107, .	1.1	33
1304	NanoNi@C: Hochempfindliche Funktionsschicht fÃ¼r Druck- und Kraftsensoren. TM Technisches Messen, 2010, 77, 631-637.	0.3	4
1305	Critical Factors for Nucleation and Vertical Growth of Two Dimensional Nano-Graphene Sheets Employing a Novel Ar+Beam with Hydrogen and Fluorocarbon Radical Injection. Applied Physics Express, 2010, 3, 045102.	1.1	17
1306	Dielectric Coating of Cathodes for Microfabrication Using Electrochemical Method. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2010, 132, .	1.3	8
1307	High-Temperature Electrochemical Sensor for Online Corrosion Monitoring. Corrosion, 2010, 66, 095002-095002-8.	0.5	13
1308	Fullerene-like hydrogenated carbon films with super-low friction and wear, and low sensitivity to environment. Journal Physics D: Applied Physics, 2010, 43, 015404.	1.3	24
1309	Fabrication and field emission study of novel rod-shaped diamond-like carbon nanostructures. Nanotechnology, 2010, 21, 285301.	1.3	13
1310	On the evolution of film roughness during magnetron sputtering deposition. Journal of Applied Physics, 2010, 108, 094330.	1.1	19
1311	Relationship between nanoscale roughness and ion-damaged layer in argon plasma exposed polystyrene films. Journal of Applied Physics, 2010, 107, .	1.1	91
1312	Optical Properties of Evolutionary Grown Layers of Carbon Nanowalls Analyzed by Spectroscopic Ellipsometry. Japanese Journal of Applied Physics, 2010, 49, 060220.	0.8	19
1313	Modeling of amorphous carbon structures with arbitrary structural constraints. Journal of Physics Condensed Matter, 2010, 22, 395402.	0.7	7
1314	Catalytic pyrogenation synthesis of C/Ni composite nanoparticles: controllable carbon structures and high permittivities. Journal Physics D: Applied Physics, 2010, 43, 105403.	1.3	25
1315	Raman scattering in a new carbon material. Diamond and Related Materials, 2010, 19, 31-39.	1.8	15
1316	Carbon coated stainless steel bipolar plates in polymer electrolyte membrane fuel cells. Diamond and Related Materials, 2010, 19, 1354-1361.	1.8	49
1317	Substrate effect on the optical properties and thickness of diamond-like carbon films deposited by the RF PACVD method. Diamond and Related Materials, 2010, 19, 1461-1465.	1.8	38
1318	Cross-sectional hydrogen content and mass density profiles of diamond-like carbon film by neutron and X-ray reflectivity. Diamond and Related Materials, 2010, 19, 489-491.	1.8	4
1319	Improvement of DLC electrochemical corrosion resistance by addiction of fluorine. Diamond and Related Materials, 2010, 19, 537-540.	1.8	46

#	Article	IF	Citations
1320	Influence of bias voltage on diamond like carbon (DLC) film deposited on polyethylene terephthalate (PET) film surfaces using PECVD and its blood compatibility. Diamond and Related Materials, 2010, 19, 1085-1092.	1.8	30
1321	Photochemical modification and functionalization of carbon surfaces with fluorine moieties. Diamond and Related Materials, 2010, 19, 374-381.	1.8	13
1322	Structure and electrical properties of a-C:H thin films deposited by RF sputtering. Diamond and Related Materials, 2010, 19, 695-698.	1.8	4
1323	Structural characterization of dual-metal containing diamond-like carbon nanocomposite films by pulsed laser deposition. Diamond and Related Materials, 2010, 19, 637-642.	1.8	19
1324	Piezoresistive, optical and electrical properties of diamond like carbon and carbon nitride films. Diamond and Related Materials, 2010, 19, 1249-1253.	1.8	13
1325	Dependence of intrinsic stress and structure of ta-C film on ion energy and substrate temperature in model of the non-local thermoelastic peak. Diamond and Related Materials, 2010, 19, 996-998.	1.8	16
1326	The relationship between structure and mechanical properties of hydrogenated amorphous carbon films. Diamond and Related Materials, 2010, 19, 1245-1248.	1.8	16
1327	Enhancement of adhesion strength and corrosion resistance of nitrogen or platinum/ruthenium/nitrogen doped diamond-like carbon thin films by platinum/ruthenium underlayer. Diamond and Related Materials, 2010, 19, 1065-1072.	1.8	13
1328	Influence of nitrogen plasma post-treatment on diamond-like carbon films synthesized by RF plasma enhanced chemical vapor deposition. Diamond and Related Materials, 2010, 19, 783-786.	1.8	1
1329	Deposition and structural analyses of molybdenum-disulfide (MoS2)â€“amorphous hydrogenated carbon (a-C:H) composite coatings. Diamond and Related Materials, 2010, 19, 548-552.	1.8	28
1330	Structure and characterization of the multilayered Ti-DLC films by FCVA. Diamond and Related Materials, 2010, 19, 1034-1039.	1.8	44
1331	Amorphous Carbon and Related Materials. Carbon Materials, 2010, , 129-169.	0.2	6
1332	Structures and phonon properties of nanoscale fractional graphitic structures in amorphous carbon determined by molecular simulations. Journal of Applied Physics, 2010, 107, 104307.	1.1	4
1333	Hydrogenated Amorphous Carbon Films. Advanced Structured Materials, 2010, , 79-99.	0.3	4
1334	Carbon Nanotubes Towards Polymer Solar Cell. Advanced Structured Materials, 2010, , 101-123.	0.3	4
1335	Carbon-Based Nanostructured Coatings on NiTi Shape Memory Alloy for Biomedical Applications. Lecture Notes in Computer Science, 2010, , 742-753.	1.0	1
1336	Dusty plasmas: synthesis, structure and dynamics of a dust cloud in a plasma. EPJ Applied Physics, 2010, 49, 13106.	0.3	28
1337	Functional Coatings or Films for Hard-Tissue Applications. Materials, 2010, 3, 3994-4050.	1.3	128

#	Article	IF	Citations
1338	Structure and characteristics of amorphous (Ti,Si)â€“C:H films deposited by reactive magnetron sputtering. Diamond and Related Materials, 2010, 19, 1172-1177.	1.8	31
1339	Surface structuring of diamond-like carbon films by colloidal lithography with silica sub-micron particles. Diamond and Related Materials, 2010, 19, 1124-1130.	1.8	10
1340	Molecular dynamics simulation of the formation of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>s</mml:mi><mml:msup><mml:mi>p</mml:mi><mml:mn>3</mml:mn></mml:msup></mml:mrow bonds in hydrogenated diamondlike carbon deposition processes. Physical Review E, 2010, 81, 041602.	2.4	30
1341	Plasma-chemical reactions: low pressure acetylene plasmas. Journal Physics D: Applied Physics, 2010, 43, 043001.	1.3	127
1342	MD simulation of phase transformations in liquid carbon. Diamond and Related Materials, 2010, 19, 1058-1064.	1.8	2
1343	Low temperature plasma enhanced chemical vapor deposition of thin films combining mechanical stiffness, electrical insulation, and homogeneity in microcavities. Journal of Applied Physics, 2010, 108, 043303.	1.1	11
1344	Increasing sp3hybridized carbon atoms in germanium carbide films by increasing the argon ion energy and germanium content. Journal Physics D: Applied Physics, 2010, 43, 135103.	1.3	18
1345	Carbon Coatings for Cardiovascular Applications: Physico-Chemical Properties and Blood Compatibility. Journal of Biomaterials Applications, 2010, 25, 57-74.	1.2	15
1346	Effects of hydrogen incorporation in the formation of hydrogenated diamond-like carbon films. Journal of Physics: Conference Series, 2010, 232, 012007.	0.3	1
1347	Surface Chemistry for Stable and Smart Molecular and Biomolecular Interfaces via Photochemical Grafting of Alkenes. Accounts of Chemical Research, 2010, 43, 1205-1215.	7.6	51
1348	Currentâ^'Voltage Characteristics of in Situ Graphitization of Hydrocarbon Coated on ZnSe Nanowire. Journal of Physical Chemistry C, 2010, 114, 12839-12849.	1.5	7
1349	A Strategy for the Maximum Fluorescence Enhancement Based on Tetrahedral Amorphous Carbon-Coated Metal Substrates. Journal of Physical Chemistry C, 2010, 114, 9871-9875.	1.5	15
1350	Wrinkled, Dual-Scale Structures of Diamond-Like Carbon (DLC) for Superhydrophobicity. Langmuir, 2010, 26, 484-491.	1.6	125
1351	Influence of plasma condition on carbon nanotube growth by rf-PECVD. Nano-Micro Letters, 2010, 2, 37-41.	14.4	9
1352	Ultrathin Diamond-like Carbon Film Coated Silver Nanoparticles-Based Substrates for Surface-Enhanced Raman Spectroscopy. ACS Nano, 2010, 4, 2643-2648.	7.3	96
1353	Nanostructured diamond-like carbon films characterization. Journal of Alloys and Compounds, 2010, 495, 620-624.	2.8	14
1354	Influence of total gas pressure on the microstructure and properties of CrAlN films deposited by a pulsed DC balanced magnetron sputtering system. Journal of Alloys and Compounds, 2010, 503, 389-391.	2.8	16
1355	Effect of substrate temperature on structural properties and corrosion resistance of carbon thin films used as bipolar plates in polymer electrolyte membrane fuel cells. Journal of Alloys and Compounds, 2010, 502, 451-455.	2.8	26

#	Article	IF	Citations
1356	Studies of oxidized carbon nanotubes in temperature range RTâ€“630Â°C by the infrared and electron spectroscopies. Journal of Alloys and Compounds, 2010, 505, 379-384.	2.8	23
1357	A comparative study of CrAlN films synthesized by dc and pulsed dc reactive magnetron facing target sputtering system with different pulse frequencies. Journal of Alloys and Compounds, 2010, 508, 191-195.	2.8	29
1358	Bare-Eye View at the Nanoscale: New Visual Interferometric Multi-Indicator (VIMI). ACS Applied Materials & Interfaces, 2010, 2, 3052-3058.	4.0	5
1359	Structure, scratch resistance and corrosion performance of nickel doped diamond-like carbon thin films. Surface and Coatings Technology, 2010, 204, 3125-3130.	2.2	35
1360	Perspectives of Micro and Nanofabrication of Carbon for Electrochemical and Microfluidic Applications. , 2010, , 181-263.		9
1361	Influence of Nitrogen Flow Rate on the Microstructure and Properties of N and Me (Me=Cr, Zr) Co-doped Diamond-like Carbon Films. Journal of Materials Science and Technology, 2010, 26, 967-972.	5.6	18
1362	Controlling the work function of a diamond-like carbon surface by fluorination with XeF2. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2010, 28, 1250-1254.	0.9	8
1363	Properties and tool performance of ta-C films deposited by double-bend filtered cathodic vacuum arc for micro drilling applications. Diamond and Related Materials, 2010, 19, 866-869.	1.8	16
1364	Nanoindentation-induced deformation behaviour of tetrahedral amorphous carbon coating deposited by filtered cathodic vacuum arc. Diamond and Related Materials, 2010, 19, 1423-1430.	1.8	5
1365	Diamond-like carbon deposited by plasma technique as a function of methane flow rate. Diamond and Related Materials, 2010, 19, 756-759.	1.8	25
1366	Effect of Discharge Parameters on Properties of Diamond-Like Carbon Films Prepared by Dual-Frequency Capacitively Coupled Plasma Source. Plasma Science and Technology, 2010, 12, 53-58.	0.7	6
1367	The effect of duty cycle on the microstructure and properties of graphite-like amorphous carbon films prepared by unbalanced magnetron sputtering. Journal Physics D: Applied Physics, 2010, 43, 505401.	1.3	38
1368	The properties of fluorine-containing diamond-like carbon films prepared by pulsed DC plasma-activated chemical vapour deposition. Diamond and Related Materials, 2010, 19, 1466-1471.	1.8	55
1369	Laser - induced modification of hydrogenated amorphous carbon films. Journal of Physics: Conference Series, 2010, 253, 012039.	0.3	0
1370	Characterization of carbonaceous films deposited on metal substrates by liquid-phase electrodeposition in methanol. Diamond and Related Materials, 2010, 19, 946-949.	1.8	5
1371	Cathode electrodeposition and characterization of Ru nanoparticles doped a-CNx:H composite films. Diamond and Related Materials, 2010, 19, 661-664.	1.8	5
1372	Probing the electronic structure of carbon nanotubes by nanoscale spectroscopy. Nanoscale, 2010, 2, 1611.	2.8	19
1373	The physical and chemical properties of heteronanotubes. Reviews of Modern Physics, 2010, 82, 1843-1885.	16.4	239

#	Article	IF	Citations
1374	Tribological study of hydrogenated amorphous carbon films with tailored microstructure and composition produced by bias-enhanced plasma chemical vapour deposition. Diamond and Related Materials, 2010, 19, 1093-1102.	1.8	36
1375	Preparation, characterization and properties of Cr-incorporated DLC films on magnesium alloy. Diamond and Related Materials, 2010, 19, 1307-1315.	1.8	89
1376	Unfiltered and Filtered Cathodic Arc Deposition. , 2010, , 466-531.		14
1377	Plasma-Enhanced Chemical Vapor Deposition of Functional Coatings. , 2010, , 392-465.		37
1378	The effect of CNT content on the surface and mechanical properties of CNTs doped diamond like carbon films. Diamond and Related Materials, 2010, 19, 562-566.	1.8	17
1379	Characterization of crystalline diamond incorporated diamond-like carbon films. Diamond and Related Materials, 2010, 19, 1139-1143.	1.8	15
1380	Influence of krypton atoms on the structure of hydrogenated amorphous carbon deposited by plasma enhanced chemical vapor deposition. Journal of Applied Physics, 2010, 108, 123525.	1.1	2
1381	Nitrogen Doped Carbon Nanotubes from Organometallic Compounds: A Review. Materials, 2010, 3, 2141-2171.	1.3	103
1382	Ultraviolet and visible Raman analysis of thin a-C films grown by filtered cathodic arc deposition. Diamond and Related Materials, 2010, 19, 514-517.	1.8	11
1383	Evaluation of elastoplastic properties and fracture strength of thick diamond like carbon film by indentation. Diamond and Related Materials, 2010, 19, 40-49.	1.8	11
1384	Electron swarm parameters in pure C₂H₂ and in C₂H₂â€“Ar mixtures and electron collision cross sections for the C₂H₂ molecule. Journal Physics D: Applied Physics, 2010, 43, 365201.	1.3	15
1385	Experimental and FEA Scratch of Magnetic Storage Thin-Film Disks to Correlate Magnetic Signal Degradation With Permanent Deformation. Journal of Tribology, 2010, 132, .	1.0	16
1386	Surface-Energy Engineering of Graphene. Langmuir, 2010, 26, 3798-3802.	1.6	426
1387	Defect engineering of the electrochemical characteristics of carbon nanotube varieties. Journal of Applied Physics, 2010, 108, .	1.1	19
1388	Electrical properties and Raman characterization of a-C thin films deposited by thermal CVD. , 2010, , .		2
1389	Second-Stage Actuation for Hard Disc Drives Through MEMS Technology. IEEE Transactions on Magnetics, 2010, 46, 782-789.	1.2	3
1390	Preparation of pyrolyzed a-C thin films using methane as precursor. , 2010, , .		1
1391	Effects of Adhesion and Transfer Film Formation on the Tribology of Self-Mated DLC Contacts. Journal of Physical Chemistry C, 2010, 114, 5321-5330.	1.5	139

#	Article	IF	Citations
1392	Preparation and Nanomechanical Characterisation of Metal Containing Amorphous Hydrogenated Carbon Nanocomposite Films. Advanced Materials Research, 2010, 123-125, 431-434.	0.3	0
1393	Improving Ag-DLC Film Adherence on High-Speed Steel by Varying Ag Contents in A Mid-Frequency Dual-Magnetron Sputtering. Key Engineering Materials, 0, 434-435, 462-465.	0.4	0
1394	Strong location dependent surface enhanced Raman scattering on individual gold semishell and nanobowl particles. Physical Chemistry Chemical Physics, 2010, 12, 11222.	1.3	41
1395	Plasma Deposition of Diamond-Like Carbon. Japanese Journal of Applied Physics, 2011, 50, 01AF01.	0.8	43
1396	Tribomechanical studies on PLD grown DLC/Ni multilayers. , 2011, , .		1
1397	3-D hierarchical wrinkled micro-pillars for anti-cells proliferation surfaces. , 2011, , .		2
1398	Plasma polymerization at different positions in an asymmetric ethylene discharge. Journal Physics D: Applied Physics, 2011, 44, 475201.	1.3	25
1399	Passivity and electrocatalysis of nanostructured nickel encapsulated in carbon. Physical Chemistry Chemical Physics, 2011, 13, 12968.	1.3	38
1400	Effect of nitrogen incorporation to electrical and optical properties of amorphous carbon thin film prepared by thermal CVD. , 2011, , .		0
1401	Theoretical Investigation of Grain Size Tuning during Prolonged Bias-Enhanced Nucleation. Chemistry of Materials, 2011, 23, 1414-1423.	3.2	11
1402	Anisotropic ideal strengths of superhard monoclinic and tetragonal carbon and their electronic origin. Physical Review B, 2011, 83, .	1.1	30
1403	Ion energy distributions in bipolar pulsed-dc discharges of methane measured at the biased cathode. Plasma Sources Science and Technology, 2011, 20, 015006.	1.3	11
1404	Preparation of Carbon Nano-Onions and Their Application as Anode Materials for Rechargeable Lithium-Ion Batteries. Journal of Physical Chemistry C, 2011, 115, 8923-8927.	1.5	143
1405	Graphitic Tribological Layers in Metal-on-Metal Hip Replacements. Science, 2011, 334, 1687-1690.	6.0	199
1406	In SituReduction of Graphene Oxide in Polymers. Macromolecules, 2011, 44, 9821-9829.	2.2	97
1407	Surface functionalization of thin-film diamond for highly stable and selective biological interfaces. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 983-988.	3.3	87
1408	Bond-coordination lattice model for phase transformations in carbon. Diamond and Related Materials, 2011, 20, 1310-1314.	1.8	2
1409	Reactive sputter-deposition of oxygenated amorphous carbon thin films in Ar/O2. Diamond and Related Materials, 2011, 20, 509-515.	1.8	10

#	Article	IF	Citations
1410	Structure of the dense amorphous carbon phase synthesized in a mixture with diamond as a result of shock compression of carbon black. Diamond and Related Materials, 2011, 20, 974-979.	1.8	13
1411	Characteristics of carbon-related materials deposited in electron-energy controlled CH4/H2 RF discharge plasmas. Diamond and Related Materials, 2011, 20, 568-572.	1.8	3
1412	Argon plasma treatment techniques on steel and effects on diamond-like carbon structure and delamination. Diamond and Related Materials, 2011, 20, 1030-1035.	1.8	27
1413	Nanodiamond crystallites embedded in carbon films prepared by thermionic vacuum arc method. Diamond and Related Materials, 2011, 20, 1061-1064.	1.8	6
1414	Electro- and magneto-transport properties of amorphous carbon films doped with iron. Diamond and Related Materials, 2011, 20, 26-30.	1.8	27
1415	Modeling of ta-C growth: Influence of the technological parameters. Diamond and Related Materials, 2011, 20, 785-792.	1.8	14
1416	Local structural analysis of a-SiC :H films formed by decomposition of tetramethylsilane in microwave discharge flow of Ar. Diamond and Related Materials, 2011, 20, 364-367.	1.8	24
1417	Deposition of amorphous carbon films from C60 fullerene sublimated in electron beam excited plasma. Diamond and Related Materials, 2011, 20, 1036-1041.	1.8	8
1418	Effect of hydrogen on the UV Raman intensities of diamond-like carbon. Diamond and Related Materials, 2011, 20, 120-122.	1.8	18
1419	Thermally Induced Transformations of Amorphous Carbon Nanostructures Fabricated by Electron Beam Induced Deposition. ACS Applied Materials & Interfaces, 2011, 3, 710-720.	4.0	27
1420	Resistance switching at the nanometre scale in amorphous carbon. New Journal of Physics, 2011, 13, 013020.	1.2	75
1421	Application of amorphous carbon based materials as antireflective coatings on crystalline silicon solar cells. Journal of Applied Physics, 2011, 110, .	1.1	49
1422	Tribology of Nanostructured Surfaces. , 2011, , 383-418.		7
1423	Carbon-Based Materials: Growth, Properties, MEMS/NEMS Technologies, and MEM/NEM Switches. Critical Reviews in Solid State and Materials Sciences, 2011, 36, 66-101.	6.8	55
1424	Fabrication and bio-functionalization of tetrahedral amorphous carbon thin films for bio sensor applications. Diamond and Related Materials, 2011, 20, 1020-1025.	1.8	23
1425	Nanostructured carbon films with oriented graphitic planes. Applied Physics Letters, 2011, 98, 123104.	1.5	10
1426	Synthesis of cobalt/diamond-like carbon thin films by biased target ion beam deposition. Diamond and Related Materials, 2011, 20, 538-541.	1.8	9
1427	Microstructure evolution of Zr₂Al₃C₄ in Cu matrix. Journal of Materials Research, 2011, 26, 372-383.	1.2	7

#	Article	IF	Citations
1428	Apparatus for processing of samples at high pressures and high temperatures in a fast quenching-rate regime and synthesis of polyacetylene by pulsed laser heating of confined carbon thin films. Journal of Applied Physics, 2011, 109, 063529.	1.1	0
1429	Bias voltage effect on the structure and property of the (Ti:Cu)-DLC films fabricated by cathodic arc plasma. Diamond and Related Materials, 2011, 20, 123-129.	1.8	22
1430	Me-DLC films as material for highly sensitive temperature compensated strain gauges. Diamond and Related Materials, 2011, 20, 814-818.	1.8	43
1431	Ptâ€“C Nanowires Created by FIBID and FEBID. , 2011, , 99-127.		0
1432	Cantilever-like micromechanical sensors. Reports on Progress in Physics, 2011, 74, 036101.	8.1	473
1433	An explanation for laser-induced spallation effect in a-C:H films: Altered phase evolution route caused by hydrogen doping. Journal of Applied Physics, 2011, 109, 013501.	1.1	24
1434	Understanding Run-In Behavior of Diamond-Like Carbon Friction and Preventing Diamond-Like Carbon Wear in Humid Air. Langmuir, 2011, 27, 12702-12708.	1.6	82
1436	Effects of reactors on the deposition of DLC films using liquid electrochemical technique. Diamond and Related Materials, 2011, 20, 97-100.	1.8	3
1437	Nanostructured Diamond Like Carbon Thin Film Electrodes for Lithium Air Batteries. Journal of the Electrochemical Society, 2011, 158, B1211.	1.3	47
1438	Influence on the Proprieties of PET Coated Diamond-Like Carbon Film for Different Preparing Condition by PECVD. Applied Mechanics and Materials, 2011, 80-81, 104-107.	0.2	2
1439	Structural and mechanical properties of DLC films prepared by bipolar PBII&D. Diamond and Related Materials, 2011, 20, 845-848.	1.8	55
1440	Modifying surface properties of diamond-like carbon films via nanotexturing. Journal Physics D: Applied Physics, 2011, 44, 395301.	1.3	22
1441	Effect of pre-treatment of the substrate surface by energetic C⁺ ion bombardment on structure and nano-tribological characteristics of ultra-thin tetrahedral amorphous carbon (ta-C) protective coatings. Journal Physics D: Applied Physics, 2011, 44, 115502.	1.3	20
1442	Acetyleneâ€“argon plasmas measured at a biased substrate electrode for diamond-like carbon deposition: I. Mass spectrometry. Plasma Sources Science and Technology, 2011, 20, 015003.	1.3	29
1443	Thermal stability in oxidative and protective environments of a-C:H cap layer on a functional gradient coating. Diamond and Related Materials, 2011, 20, 57-63.	1.8	22
1444	Growth Mechanisms Involved in the Synthesis of Smooth and Microtextured Films by Acetylene Magnetron Discharges. Langmuir, 2011, 27, 8913-8922.	1.6	10
1445	Electrochemical characteristics of lithium metal anodes with diamond like carbon film coating layer. Diamond and Related Materials, 2011, 20, 403-408.	1.8	29
1446	Amorphous carbon film deposition on the inner surface of tubes using atmospheric pressure pulsed filamentary plasma source. Journal Physics D: Applied Physics, 2011, 44, 355206.	1.3	25

#	Article	IF	Citations
1447	Optimization of the mechanical properties of magnetron sputtered diamond-like carbon coatings. Diamond and Related Materials, 2011, 20, 682-686.	1.8	10
1448	Carbon and Diamond. , 2011, , 109-126.		4
1449	Nanostructures in controlled thermonuclear fusion devices. Physics-Uspekhi, 2011, 53, 1015-1038.	0.8	32
1450	Acetyleneâ€“argon plasmas measured at an rf-biased substrate electrode for diamond-like carbon deposition: II. Ion energy distributions. Plasma Sources Science and Technology, 2011, 20, 015004.	1.3	10
1451	Controlled glow to arc transition in sputtering for high rate deposition of carbon films. Diamond and Related Materials, 2011, 20, 68-74.	1.8	40
1452	Ion beam deposition of amorphous hydrogenated carbon films on amorphous silicon interlayer: Experiment and simulation. Diamond and Related Materials, 2011, 20, 693-702.	1.8	4
1453	Improving the conductivity of diamond-like carbon films with zinc doping and its material properties. Applied Surface Science, 2011, 257, 9616-9620.	3.1	24
1454	Super-hydrophilic properties of TiO2â€“DLC nanocomposite films fabricated by the simple electrochemical process. Applied Surface Science, 2011, 257, 10000-10004.	3.1	20
1455	Influence of high temperature annealing on the structure, hardness and tribological properties of diamond-like carbon and TiAlSiCN nanocomposite coatings. Applied Surface Science, 2011, 258, 1206-1211.	3.1	29
1456	The microstructure, mechanical and friction properties of protective diamond like carbon films on magnesium alloy. Applied Surface Science, 2011, 258, 1624-1629.	3.1	52
1457	Biradical character of D-rich carriers in the insoluble organic matter of carbonaceous chondrites: A relic of the protoplanetary disk chemistry. Geochimica Et Cosmochimica Acta, 2011, 75, 326-336.	1.6	24
1458	Temperature dependence of the optical gap of diamond-like carbon films investigated by a piezoelectric photothermal spectroscopy. Energy Procedia, 2011, 10, 66-70.	1.8	1
1459	Thermal behaviour, sulfonation and catalytic activity of phenylene-bridged periodic mesoporous organosilicas. Journal of Materials Chemistry, 2011, 21, 724-733.	6.7	36
1460	Bright blue photoluminescence from the amorphous carbon via surface plasmon enhancement. Optics Express, 2011, 19, 17935.	1.7	8
1461	Deposition and properties of Al-containing diamond-like carbon films by a hybrid ion beam sources. Journal of Alloys and Compounds, 2011, 509, 4626-4631.	2.8	94
1462	A comparison of carbon coated and uncoated 316L stainless steel for using as bipolar plates in PEMFCs. Journal of Alloys and Compounds, 2011, 509, 7400-7404.	2.8	42
1463	Magnetic and electric properties of Câ€“Co thin films prepared by vaccum arc technique. Journal of Alloys and Compounds, 2011, 509, 9123-9126.	2.8	2
1464	Systematic study of various stages during the growth process of diamond-like carbon film by atomic force microscopy. Journal of Non-Crystalline Solids, 2011, 357, 1710-1715.	1.5	17

#	Article	IF	Citations
1465	Coulomb gap variable range hopping in graphitized polymer surfaces. Synthetic Metals, 2011, 161, 528-534.	2.1	7
1466	The carbonization of granular polyaniline to produce nitrogen-containing carbon. Synthetic Metals, 2011, 161, 1122-1129.	2.1	131
1467	Micro/mesoporous conducting carbonized polyaniline 5-sulfosalicylate nanorods/nanotubes: Synthesis, characterization and electrocatalysis. Synthetic Metals, 2011, 161, 2179-2184.	2.1	33
1468	Parametric studies of diamond-like carbon by pulsed Nd:YAG laser deposition. Diamond and Related Materials, 2011, 20, 294-298.	1.8	15
1469	Amorphous Diamond: A High-Pressure Superhard Carbon Allotrope. Physical Review Letters, 2011, 107, 175504.	2.9	127
1470	Deposition of Diamond-Like Carbon Films on Inner Wall Surfaces of Millimeter-Size-Diameter Steel Tubes by Plasma Source Ion Implantation. IEEE Transactions on Plasma Science, 2011, 39, 3140-3143.	0.6	13
1471	Effect of temperature on sulfur-doped diamond-like carbon films deposited by pulsed laser ablation. Diamond and Related Materials, 2011, 20, 1218-1221.	1.8	18
1472	Performance of diamond-like carbon-protected rubber under cyclic friction. I. Influence of substrate viscoelasticity on the depth evolution. Journal of Applied Physics, 2011, 110, .	1.1	11
1473	Removal of Diamond-Like Carbon Film by Oxygen-Dominated Plasma Beam Converted from Filtered Carbon-Cathodic Arc. Japanese Journal of Applied Physics, 2011, 50, 01AF12.	0.8	3
1474	Improved adhesion and tribological properties of fast-deposited hard graphite-like hydrogenated amorphous carbon films. Diamond and Related Materials, 2011, 20, 1266-1272.	1.8	16
1475	Microstructure, mechanical and tribological properties of graphite-like amorphous carbon films prepared by unbalanced magnetron sputtering. Surface and Coatings Technology, 2011, 205, 3058-3065.	2.2	62
1476	Enhanced DLC wear performance by the presence of lubricant additives. Materials Research, 2011, 14, 222-226.	0.6	14
1477	Oral Bacterial Adhesion and Biocompatibility of Silver-Amorphous Carbon Films: A Surface Modification for Dental Implants. , 0, , .		1
1478	Structure, Properties and Applications of Diamond Like Nanocomposite (SiOx Containing DLC) Films: A Review. Medziagotyra, 2011, 17, .	0.1	19
1479	Negative Resistance Effect and Charge Transfer Mechanisms in the Ion Beam Deposited Diamond Like Carbon Superlattices. Medziagotyra, 2011, 17, 3-10.	0.1	1
1480	Deposition of hard elastic hydrogenated fullerenelike carbon films. Journal of Applied Physics, 2011, 109, .	1.1	23
1481	The effect of relatively low hydrogen dilution on the properties of carbon-rich hydrogenated amorphous silicon carbide films. Journal of Physics: Conference Series, 2011, 276, 012173.	0.3	6
1482	Hydrogenated amorphous carbon as protective coating for a forming tool. EPJ Applied Physics, 2011, 56, 24014.	0.3	3

#	Article	IF	Citations
1483	The dependence of barrier heights of a-C: Fe/n-Si heterojunctions on film-depositing temperatures. Journal of Applied Physics, 2011, 109, 103706.	1.1	2
1484	Carbon deposition map for nickel particles onto oxide substrates analyzed by micro-Raman spectroscopy. Journal of the Ceramic Society of Japan, 2011, 119, 307-309.	0.5	13
1485	Tribological Aspects of Carbon-Based Nanocoatings â€“ Theory and Simulation. Zeitschrift Fur Physikalische Chemie, 2011, 225, 379-387.	1.4	4
1487	High-frequency, scaled graphene transistors on diamond-like carbon. Nature, 2011, 472, 74-78.	13.7	813
1488	Deposition of WO3 doped amorphous hydrogenated carbon film by using liquid phase electrodeposition technique and its mechanical properties. Solid State Sciences, 2011, 13, 653-657.	1.5	9
1489	Deposition and structure characterization of carbon films prepared at atmospheric pressure by plasma jet. Surface and Coatings Technology, 2011, 205, S71-S74.	2.2	7
1490	High rate deposition of hard a-C:H films using microwave excited plasma enhanced CVD. Surface and Coatings Technology, 2011, 205, S94-S98.	2.2	10
1491	Photosensitivity and optical performance of hydrogenated amorphous carbon films processed by picosecond laser beams. Surface and Coatings Technology, 2011, 206, 734-741.	2.2	5
1492	Carbon-based nanostructured composite films: Elastic, mechanical and optoelectronic properties derived from computer simulations. Surface and Coatings Technology, 2011, 206, 696-702.	2.2	6
1493	Microstructure and chemical bonding of DLC films deposited on ACM rubber by PACVD. Surface and Coatings Technology, 2011, 205, S75-S78.	2.2	23
1494	TiBCN:CNx multilayer coatings deposited by pulsed closed field unbalanced magnetron sputtering. Surface and Coatings Technology, 2011, 206, 617-622.	2.2	9
1495	A novel technique to enhance surface properties of DLC films deposited on the inner wall of cylindrical PET barrel by DC-RF hybrid discharge. Surface and Coatings Technology, 2011, 206, 1016-1019.	2.2	5
1496	Effect of hydrogen flow on the properties of hydrogenated amorphous carbon films fabricated by electron cyclotron resonance plasma enhanced chemical vapor deposition. Surface and Coatings Technology, 2011, 206, 1007-1010.	2.2	17
1497	Mechanical properties of high-density diamond like carbon (HD-DLC) films prepared using filtered arc deposition. Surface and Coatings Technology, 2011, 206, 1003-1006.	2.2	6
1498	The structure and adhesion of hydrogenated amorphous carbon (a-C:H) films synthesized on CoCrMo alloy by plasma immersion ion implantation and deposition at different flow ratios of acetylene to argon. Surface and Coatings Technology, 2011, 206, 994-998.	2.2	5
1499	Characterization of ZrOxCyHz thin films deposited by MMPâ€“DECR reactor using Zirconium Tert-Butoxide/O2 mixture. Surface and Coatings Technology, 2011, 205, S198-S203.	2.2	4
1500	Chemical structure and mechanical properties of Si-containing a-C:H and a-C thin films and their Cr- and W-containing derivatives. Surface and Coatings Technology, 2011, 206, 630-639.	2.2	34
1501	Properties of hydrogenated amorphous carbon films deposited by PECVD and modified by SF6 plasma. Surface and Coatings Technology, 2011, 206, 640-645.	2.2	17

#	Article	IF	Citations
1502	Effect of substrate bias in amorphous carbon films having embedded nanocrystallites. Surface and Coatings Technology, 2011, 206, 155-164.	2.2	25
1503	High adhesion of diamond-like carbon thin film to an aluminum alloy achieved by substrate sputtering and redeposition method. Surface and Coatings Technology, 2011, 206, 143-148.	2.2	5
1504	Improvement in load support capability of a-C(Al)-based nanocomposite coatings by multilayer architecture. Surface and Coatings Technology, 2011, 206, 387-394.	2.2	18
1505	Tribological behavior under aggressive environment of diamond-like carbon films with incorporated nanocrystalline diamond particles. Surface and Coatings Technology, 2011, 206, 434-439.	2.2	11
1506	Hydrogen quantification of magnetron sputtered hydrogenated amorphous carbon (a-C:H) coatings produced at various bias voltages and their tribological behavior under different humidity levels. Surface and Coatings Technology, 2011, 206, 1705-1710.	2.2	22
1507	Study of growth processes and mechanical properties of nanoscale multilayered C/C films. Surface and Coatings Technology, 2011, 206, 654-666.	2.2	2
1508	Effect of the carbon ion energy on the microstructure of ta-C/Cr multilayers. Surface and Coatings Technology, 2011, 206, 1753-1758.	2.2	14
1509	Synthesis of hydrogenated amorphous carbon films with a line type atmospheric-pressure plasma CVD apparatus. Surface and Coatings Technology, 2011, 206, 2025-2029.	2.2	8
1510	Electron-emission properties of carbon nanotube micro-tips coated by amorphous carbon nitride films. Thin Solid Films, 2011, 519, 7899-7903.	0.8	4
1511	Structural and surface energy analysis of nitrogenated ta-C films. Thin Solid Films, 2011, 520, 294-301.	0.8	15
1512	Kinetic modeling of laser annealing processes in a-C:H films. Vacuum, 2011, 86, 124-130.	1.6	1
1513	Investigation of corrosion behavior of nitrogen doped and platinum/ruthenium doped diamond-like carbon thin films in Hank's solution. Materials Science and Engineering C, 2011, 31, 1539-1544.	3.8	12
1514	Preparation of self-supporting diamond-like carbon nanofoils with thickness less than 5 nm for laser-driven ion acceleration. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 655, 53-56.	0.7	32
1515	Effect of nickel incorporation on the optical properties of diamond-like carbon (DLC) matrix. Journal of Physics and Chemistry of Solids, 2011, 72, 1111-1116.	1.9	19
1516	Microstructure-induced novel white photoluminescence from rapid-thermal-annealed two-layer Si/C on Si(1 0 0) with nanocomposite Si, SiC and C nanocrystals. Scripta Materialia, 2011, 65, 432-435.	2.6	7
1517	Nanocrystalline graphite-like pyrolytic carbon film electrode for electrochemical sensing of hydrazine. Sensors and Actuators B: Chemical, 2011, 160, 121-128.	4.0	33
1518	Effect of bias voltage on the properties of hydrogenated amorphous carbon films fabricated on CoCrMo alloy by electron cyclotron resonance plasma enhance chemical vapor deposition (ECR-PECVD). Physics Procedia, 2011, 18, 122-127.	1.2	2
1519	Effect of ambient gaseous environment on the properties of amorphous carbon thin films. Materials Chemistry and Physics, 2011, 125, 558-567.	2.0	29

#	Article	IF	Citations
1520	Investigation of structure, adhesion strength, wear performance and corrosion behavior of platinum/ruthenium/nitrogen doped diamond-like carbon thin films with respect to film thickness. Materials Chemistry and Physics, 2011, 126, 220-226.	2.0	25
1521	Growth and characterization of Ni:DLC composite films using pulsed laser deposition technique. Materials Chemistry and Physics, 2011, 126, 649-654.	2.0	22
1522	Silicon nitride gradient film as the underlayer of ultra-thin tetrahedral amorphous carbon overcoat for magnetic recording slider. Materials Chemistry and Physics, 2011, 131, 127-131.	2.0	14
1523	Fabrication of PbS nanoparticle coated amorphous carbon nanotubes: Structural, thermal and field emission properties. Materials Research Bulletin, 2011, 46, 1659-1664.	2.7	35
1524	Thermal Stability of Ultrathin Amorphous Carbon Films for Energy-Assisted Magnetic Recording. IEEE Transactions on Magnetics, 2011, 47, 2277-2282.	1.2	41
1525	Role of oxygen and humidity on the tribo-chemical behaviour of non-hydrogenated diamond-like carbon coatings. Wear, 2011, 271, 2157-2163.	1.5	59
1526	Dry sliding behaviour of hydrogenated amorphous carbon (a-C:H) coatings on Ti-6Al-4V. Wear, 2011, 271, 2025-2036.	1.5	18
1527	Shear-induced lamellar ordering and interfacial sliding in amorphous carbon films: A superlow friction regime. Chemical Physics Letters, 2011, 514, 325-329.	1.2	35
1528	Probing the band structure of hydrogen-free amorphous carbon and the effect of nitrogen incorporation. Carbon, 2011, 49, 5229-5238.	5.4	13
1529	Properties of laser fabricated nanostructured Cu/diamond-like carbon composite. Journal of Materials Research, 2011, 26, 2761-2771.	1.2	11
1530	Nanometer-sized carbon coatings on a silicon wafer: The effect that nitrogen doping level has on specific conductivity and morphology. Nanotechnologies in Russia, 2011, 6, 185-188.	0.7	3
1531	Modification of the amorphous carbon films by the ns-laser irradiation. Open Physics, 2011, 9, .	0.8	5
1532	Raman scattering spectroscopy of inclusions of carbon in Al2O3 films and its solid solutions with HfO2. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2011, 110, 55-59.	0.2	3
1533	Electric discharge techniques for synthesizing carbon nanomaterials and features of their structural state. Bulletin of the Russian Academy of Sciences: Physics, 2011, 75, 1435-1441.	0.1	7
1534	Thermal properties of graphene and nanostructured carbon materials. Nature Materials, 2011, 10, 569-581.	13.3	5,065
1535	Direct hydrothermal electrochemical preparation of diamond-like carbon films on substrates. Journal of Materials Science, 2011, 46, 1136-1138.	1.7	10
1536	Enhancing electron field emission of carbon nanoflakes by hydrogen post-annealing process. Journal of Materials Science: Materials in Electronics, 2011, 22, 1269-1273.	1.1	2
1537	In vitro adhesion of staphylococci to diamond-like carbon polymer hybrids under dynamic flow conditions. Journal of Materials Science: Materials in Medicine, 2011, 22, 629-636.	1.7	15

#	Article	IF	Citations
1538	Characterization of Diamond: Like Carbon Films Synthesized by DC-Plasma Enhanced Chemical Vapor Deposition. Journal of Fusion Energy, 2011, 30, 447-452.	0.5	25
1539	Diagnosis of Active Species in Reactive Acetylene Plasma by Laser-Ionization Molecular-Beam Time-of-Flight Mass Spectrometry. Plasma Chemistry and Plasma Processing, 2011, 31, 405-415.	1.1	2
1540	Plasma-enhanced chemical vapor deposition of organic particle thin films. Journal of Nanoparticle Research, 2011, 13, 985-996.	0.8	3
1541	Influence of Surface Roughness on the Transfer Film Formation and Frictional Behavior of TiC/a-C Nanocomposite Coatings. Tribology Letters, 2011, 41, 97-101.	1.2	32
1542	Improved Tribological Behavior of DLC Films Under Water Lubrication by Surface Texturing. Tribology Letters, 2011, 41, 439-449.	1.2	80
1543	Ultralow Friction Behaviors of Hydrogenated Fullerene-Like Carbon Films: Effect of Normal Load and Surface Tribochemistry. Tribology Letters, 2011, 41, 607-615.	1.2	38
1544	Is Ultra-Low Friction Needed to Prevent Wear of Diamond-Like Carbon (DLC)? An Alcohol Vapor Lubrication Study for Stainless Steel/DLC Interface. Tribology Letters, 2011, 42, 285-291.	1.2	32
1545	Low Temperature Nano-Tribological Study on a Functionally Graded Tribological Coating Using Nanoscratch Tests. Tribology Letters, 2011, 43, 351-360.	1.2	10
1546	Investigation of wear resistance and lifetime of diamond-like carbon (DLC) coated glass disk in flying height measurement process. Microsystem Technologies, 2011, 17, 1373-1379.	1.2	5
1547	Investigation of microstructure andÂphoto-magnetic properties ofÂsulfur-doped DLC nanocomposite films byÂelectrochemical method. Applied Physics A: Materials Science and Processing, 2011, 102, 753-760.	1.1	2
1548	Femtosecond laser interaction withÂpulsed-laser deposited carbon thin films ofÂnanoscale thickness. Applied Physics A: Materials Science and Processing, 2011, 102, 27-33.	1.1	6
1549	Thermodynamic aspects of fibroblastic spreading on diamond-like carbon films containing titanium dioxide nanoparticles. Theoretical Chemistry Accounts, 2011, 130, 1085-1093.	0.5	11
1550	Matrix-free and material-enhanced laser desorption/ionization mass spectrometry for the analysis of low molecular weight compounds. Analytical and Bioanalytical Chemistry, 2011, 400, 2281-2288.	1.9	58
1551	Optimization of MnO2/vertically aligned carbon nanotube composite for supercapacitor application. Journal of Power Sources, 2011, 196, 5779-5783.	4.0	137
1552	Structural characterization of charcoal size-fractions from a burnt Pinus pinea forest by FT-IR, Raman and surface-enhanced Raman spectroscopies. Journal of Molecular Structure, 2011, 994, 155-162.	1.8	59
1553	Diamond-like carbon coatings on a CoCrMo implant alloy: A detailed XPS analysis of the chemical states at the interface. Acta Materialia, 2011, 59, 1150-1161.	3.8	35
1554	Effects of Al incorporation on the mechanical and tribological properties of Ti-doped a-C:H films deposited by magnetron sputtering. Current Applied Physics, 2011, 11, 771-775.	1.1	17
1555	Diamond-like carbon based low-emissive coatings. Solar Energy Materials and Solar Cells, 2011, 95, 1630-1637.	3.0	32

#	Article	IF	Citations
1556	Synthesis, characterization and properties of the DLC films with low Cr concentration doping by a hybrid linear ion beam system. Surface and Coatings Technology, 2011, 205, 2882-2886.	2.2	45
1557	Mechanical and tribological properties of coatings sputtered from SiC target in the presence of CH4 gas. Surface and Coatings Technology, 2011, 205, 3372-3377.	2.2	13
1558	Microscopic study on the interfacial strength of hydrogenated amorphous carbon coating systems. Surface and Coatings Technology, 2011, 205, 3429-3433.	2.2	9
1559	Wear and corrosion behaviour of HVOF WCâ€“CoCr/CVD DLC hybrid coating systems deposited onto aluminium substrate. Surface and Coatings Technology, 2011, 205, 4211-4220.	2.2	44
1560	Tribological performance of DLC films deposited on ACM rubber by PACVD. Surface and Coatings Technology, 2011, 205, 4838-4843.	2.2	22
1561	Sub-micro to nanometer scale laser direct writing techniques with a contact probe. International Journal of Precision Engineering and Manufacturing, 2011, 12, 877-883.	1.1	7
1562	Preparation, characterization and frictional properties of silane self-assembled elastomeric nanocomposite polymer layers. Journal Wuhan University of Technology, Materials Science Edition, 2011, 26, 75-78.	0.4	0
1563	A study on the graphene incorporated directâ€patternable SnO₂ thin film. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1869-1872.	0.8	4
1564	Deposition of Titaniaâ€containing Diamondâ€like Carbon Nanocomposite Films by Sputteringâ€assisted Chemical Vapor Deposition. Plasma Processes and Polymers, 2011, 8, 324-332.	1.6	2
1565	H₂: The Critical Juncture between Polymerization and Dissociation of Hydrocarbons in a Lowâ€temperature Plasma. Plasma Processes and Polymers, 2011, 8, 832-841.	1.6	3
1566	Effects of bias voltage on structure and properties of TiAlâ€doped aâ€C:H films prepared by magnetron sputtering. Surface and Interface Analysis, 2011, 43, 677-682.	0.8	12
1567	The structure and tribological properties of aluminum/carbon nanocomposite thin films synthesized by reactive magnetron sputtering. Surface and Interface Analysis, 2011, 43, 1057-1063.	0.8	17
1568	Oneâ€step electrodeposition of amorphous carbon films containing WO₃ with high conductivity and good wettability. Surface and Interface Analysis, 2011, 43, 1064-1068.	0.8	10
1569	Effects of negative bias on the structural, topological and tribological properties of amorphous carbon films prepared by magnetron sputtering. Surface and Interface Analysis, 2011, 43, 1218-1223.	0.8	13
1570	Templateâ€Free Synthesis of Interconnected Hollow Carbon Nanospheres for Highâ€Performance Anode Material in Lithiumâ€Ion Batteries. Advanced Energy Materials, 2011, 1, 798-801.	10.2	284
1571	Synthesis and Characterization of Some Carbon Based Nanostructures. Contributions To Plasma Physics, 2011, 51, 546-553.	0.5	2
1572	An experimental and theoretical examination of the effect of sulfur on the pyrolytically grown carbon nanotubes from sucrose-based solid state precursors. Carbon, 2011, 49, 508-517.	5.4	20
1573	Field emission enhancement and microstructural changes of carbon films by single pulse laser irradiation. Carbon, 2011, 49, 1018-1024.	5.4	29

#	Article	IF	Citations
1574	Catalyst-free formation of vertically-aligned carbon nanorods as induced by nitrogen incorporation. Carbon, 2011, 49, 1842-1848.	5.4	16
1575	The synthesis of microporous carbon by the fluorination of titanium carbide. Carbon, 2011, 49, 2998-3009.	5.4	22
1576	Frictional characteristics of exfoliated and epitaxial graphene. Carbon, 2011, 49, 4070-4073.	5.4	116
1577	Material transfer mechanisms between aluminum and fluorinated carbon interfaces. Acta Materialia, 2011, 59, 2601-2614.	3.8	49
1578	Influence of standoff distance on the structure and properties of carbon coatings deposited by atmospheric plasma jet. Applied Surface Science, 2011, 257, 2694-2699.	3.1	10
1579	The preparation and evaluation of graded multilayer ta-C films deposited by FCVA method. Applied Surface Science, 2011, 257, 5064-5069.	3.1	18
1580	Influence of crystalline diamond nanoparticles on diamond-like carbon friction behavior. Applied Surface Science, 2011, 257, 7387-7393.	3.1	11
1581	Synthesis and structure of nitrogenated tetrahedral amorphous carbon films prepared by nitrogen ion bombardment. Applied Surface Science, 2011, 257, 6945-6951.	3.1	9
1582	Carbon coated Nb2O5 nanowires as enhanced field emitters. Chemical Physics Letters, 2011, 501, 431-436.	1.2	4
1583	Nano-patterning of through-film conductivity in anisotropic amorphous carbon induced using conductive atomic force microscopy. Carbon, 2011, 49, 2679-2682.	5.4	14
1584	Effect of 4MeV electron beam irradiation on carbon films. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 53-56.	0.6	13
1585	Molecular dynamics study on carbon film deposition. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 1752-1754.	0.6	5
1586	A magnetron sputtering technique to prepare a-C:H films: Effect of substrate bias. Applied Surface Science, 2011, 257, 1990-1995.	3.1	43
1587	Microstructure and tribological performance of self-lubricating diamond/tetrahedral amorphous carbon composite film. Applied Surface Science, 2011, 257, 3180-3186.	3.1	36
1588	Characterization of hydrogenated amorphous carbon thin films by end-Hall ion beam deposition. Applied Surface Science, 2011, 257, 4699-4705.	3.1	28
1589	Structure and hardness of a-C:H films prepared by middle frequency plasma chemical vapor deposition. Applied Surface Science, 2011, 257, 4738-4742.	3.1	8
1590	Controllable synthesis and Photoluminescence (PL) of amorphous and crystalline carbon nanoparticles. Journal of Physics and Chemistry of Solids, 2011, 72, 749-754.	1.9	14
1591	Formation of amorphous carbon on the surface of poly(ethylene terephthalate) by helium plasma based ion implantation. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 1855-1858.	0.6	6

#	Article	IF	Citations
1592	First-principles study on the structural and electronic properties of LiB and its hydrides (Li2BnHn,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.3	6
1593	Visible photoluminescence from silicon-incorporated diamond like carbon films synthesized via direct current PECVD technique. Journal of Luminescence, 2011, 131, 2352-2358.	1.5	14
1595	The effect of amorphous carbon layer on the field emission characteristics of carbon nanotube film. Ultramicroscopy, 2011, 111, 426-430.	0.8	3
1596	Investigation into the antibacterial property and bacterial adhesion of diamond-like carbon films. Vacuum, 2011, 85, 662-666.	1.6	33
1597	Control of the energy of ion flow affecting electrically insulated surface in plasma processing reactor based on a beam plasma discharge. Vacuum, 2011, 85, 711-717.	1.6	12
1598	Modification of surface properties of silicon micro-molds by nitrogen and silicon doped diamond-like carbon coatings deposited with magnetron co-sputtering. Vacuum, 2011, 85, 1105-1107.	1.6	5
1599	Electrochemical performances of B doped and undoped diamond-like carbon (DLC) films deposited by femtosecond pulsed laser ablation for heavy metal detection using square wave anodic stripping voltammetric (SWASV) technique. Sensors and Actuators B: Chemical, 2011, 155, 120-125.	4.0	50
1600	Microstructural, mechanical and tribological properties of tungsten-gradually doped diamond-like carbon films with functionally graded interlayers. Surface and Coatings Technology, 2011, 205, 3631-3638.	2.2	50
1601	Microstructureâ€“property relations of reactively magnetron sputtered VCxNy films. Surface and Coatings Technology, 2011, 205, 3805-3809.	2.2	31
1602	Antibacterial properties of silver containing diamond like carbon coatings produced by ion induced polymer densification. Surface and Coatings Technology, 2011, 205, 4850-4854.	2.2	27
1603	Experimental study of mechanical properties and scratch resistance of ultra-thin diamond-like-carbon (DLC) coatings deposited on glass. Tribology International, 2011, 44, 55-62.	3.0	29
1604	Friction properties of DLC/DLC contacts in base oil. Tribology International, 2011, 44, 922-932.	3.0	65
1605	Effects of duty cycle and water immersion on the composition and friction performance of diamond-like carbon films prepared by the pulsed-DC plasma technique. Thin Solid Films, 2011, 519, 2043-2048.	0.8	5
1606	The influence of methane/argon plasma composition on the formation of the hydrogenated amorphous carbon films. Thin Solid Films, 2011, 519, 2049-2053.	0.8	2
1607	Microstructural and frictional control of diamond-like carbon films deposited on acrylic rubber by plasma assisted chemical vapor deposition. Thin Solid Films, 2011, 519, 2213-2217.	0.8	20
1608	Effect of composition on mechanical behaviour of diamond-like carbon coatings modified with titanium. Thin Solid Films, 2011, 519, 3061-3067.	0.8	25
1609	Ellipsometric study of nanostructured carbon films deposited by pulsed laser deposition. Thin Solid Films, 2011, 519, 2989-2993.	0.8	3
1610	Ellipsometric study of SixC films: Analysis of Taucâ€“Lorentz and Gaussian oscillator models. Thin Solid Films, 2011, 519, 2985-2988.	0.8	18

#	Article	IF	Citations
1611	Investigation of the properties of diamond-like carbon thin films deposited by single and dual-mode plasma enhanced chemical vapor deposition. Thin Solid Films, 2011, 519, 3090-3094.	0.8	26
1612	Surface characterization and nanomechanical properties of diamond-like carbon films synthesized by RF plasma enhanced chemical vapor deposition. Thin Solid Films, 2011, 519, 4870-4873.	0.8	4
1613	Determining buckling strain energy release rate through indentation-induced delamination. Thin Solid Films, 2011, 519, 4889-4893.	0.8	10
1614	Multilayer DLC coatings via alternating bias during magnetron sputtering. Thin Solid Films, 2011, 519, 4910-4916.	0.8	80
1615	Effects of rf power on the structural properties of carbon nitride thin films prepared by plasma enhanced chemical vapour deposition. Thin Solid Films, 2011, 519, 4981-4986.	0.8	21
1616	Refractive index sensor based on the diamond like carbon diffraction grating. Thin Solid Films, 2011, 519, 4082-4086.	0.8	12
1617	Multilayer amorphous hydrogenated carbon (a-C:H) and SiOx doped a-C:H films for optical applications. Thin Solid Films, 2011, 519, 4004-4007.	0.8	8
1618	Influence of PECVD parameters on the properties of diamond-like carbon films. Thin Solid Films, 2011, 519, 4087-4091.	0.8	61
1619	Optical properties of amorphous carbons and their applications and perspectives in photonics. Thin Solid Films, 2011, 519, 3990-3996.	0.8	36
1620	Preparation and analysis of amorphous carbon films deposited from (C6H12)/Ar/He chemistry for application as the dry etch hard mask in the semiconductor manufacturing process. Thin Solid Films, 2011, 519, 6737-6740.	0.8	13
1621	Dielectric response and structure of amorphous hydrogenated carbon films with nitrogen admixture. Thin Solid Films, 2011, 519, 4299-4308.	0.8	16
1622	AlTiN layer effect on mechanical properties of Ti-doped diamond-like carbon composite coatings. Thin Solid Films, 2011, 519, 5353-5357.	0.8	14
1623	Evolution of optical properties with deposition time of silicon nitride and diamond-like carbon films deposited by radio-frequency plasma-enhanced chemical vapor deposition method. Thin Solid Films, 2011, 519, 6339-6343.	0.8	40
1624	Hydrogenated amorphous carbon and carbon nitride films deposited at low pressure by plasma enhanced chemical vapor deposition. Thin Solid Films, 2011, 519, 6374-6380.	0.8	4
1625	Influence of argon neutral beam energy on the structural properties of amorphous carbon thin films grown by neutral particle beam assisted sputtering. Thin Solid Films, 2011, 519, 6703-6707.	0.8	4
1626	Deposition of amorphous hydrogenated carbon films on Si and PMMA by pulsed direct-current plasma CVD. Thin Solid Films, 2011, 519, 6688-6692.	0.8	11
1627	Investigating the flow dynamics and chemistry of an expanding thermal plasma through CH(Aâ€“X) emission spectra. Journal Physics D: Applied Physics, 2011, 44, 355205.	1.3	0
1628	Hydrogenated Amorphous Carbon Films Prepared by Filtered Vacuum Arc Method with Various C2H2Pressures. Japanese Journal of Applied Physics, 2011, 50, 01AH01.	0.8	3

#	Article	IF	Citations
1629	Mass Density as Basis Parameter on Mechanical Properties under Diamond-Like Carbon Prepared in Wide Range of Conditions Using Variety of Methods. Japanese Journal of Applied Physics, 2011, 50, 01AF11.	0.8	5
1630	A 3â€‰Âµm difference frequency laser source for probing hydrocarbon plasmas. Journal Physics D: Applied Physics, 2011, 44, 125202.	1.3	3
1631	Agâ€“Ti(C, N)-based coatings for biomedical applications: influence of silver content on the structural properties. Journal Physics D: Applied Physics, 2011, 44, 375501.	1.3	42
1632	Radical-controlled plasma processing for nanofabrication. Journal Physics D: Applied Physics, 2011, 44, 174027.	1.3	23
1633	Experimental and theoretical study on the energy-dependent surface evolution and microstructure changes in copper nanostructured composites. Journal Physics D: Applied Physics, 2011, 44, 385401.	1.3	7
1634	Thermal annealing effects on photoluminescence properties of carbon-doped silicon-rich oxide thin films implanted with erbium. Journal of Applied Physics, 2011, 109, 093521.	1.1	6
1635	Magnetoelectronic properties of Gd-implanted tetrahedral amorphous carbon. Physical Review B, 2011, 84, .	1.1	8
1636	Preparation of superior lubricious amorphous carbon films co-doped by silicon and aluminum. Journal of Applied Physics, 2011, 110, .	1.1	12
1637	Mechanism behind the surface evolution and microstructure changes of laser fabricated nanostructured carbon composite. Journal of Applied Physics, 2011, 110, 054904.	1.1	12
1638	Preparation and nanostructured properties of amorphous carbon prepared by Aerosol-Assisted CVD (AACVD). , 2011, , .		0
1639	The Design of Rewritable Ultrahigh Density Scanning-Probe Phase-Change Memories. IEEE Nanotechnology Magazine, 2011, 10, 900-912.	1.1	53
1640	Picosecond time-resolved x-ray refectivity of a laser-heated amorphous carbon film. Applied Physics Letters, 2011, 98, 101909.	1.5	11
1641	Energetic deposition of carbon in a cathodic vacuum arc with a biased mesh. Journal of Applied Physics, 2011, 109, .	1.1	10
1642	Effects of Negative Bias Voltage on Structure and Mechanical Properties of DLC Films Synthesized by FCVA Deposition. Advanced Materials Research, 0, 287-290, 2203-2206.	0.3	6
1643	Degradation of 248 nm Deep UV Photoresist by Ion Implantation. Journal of the Electrochemical Society, 2011, 158, H785.	1.3	9
1644	Electrical Conducting Diamond Thin-Films: An Alternative Counter Electrode Material for Dye Sensitized Solar Cells. Materials Research Society Symposia Proceedings, 2011, 1282, 155.	0.1	2
1645	Diamond-like Carbon Films Deposited at Room Temperature on Flexible Plastics Substrates for Antireflection Coating. Japanese Journal of Applied Physics, 2011, 50, 035802.	0.8	5
1646	Effects of Ammonia/Methane Mixtures on Characteristics of Plasma Enhanced Chemical Vapor Deposition n-Type Carbon Films. Journal of the Electrochemical Society, 2011, 159, D77-D83.	1.3	9

#	Article	IF	Citations
1647	Synergistic Effect of Cr-Doped DLC Coatings and Lubricant Additives. Key Engineering Materials, 0, 492, 155-159.	0.4	1
1648	Light emission in forward and reverse bias operation in OLED with amorphous silicon carbon nitride thin films. Journal of Physics: Conference Series, 2011, 274, 012121.	0.3	1
1649	Design and Synthesis of DLC Films with Different sp³/sp² Ratios by Middle Frequency Magnetron Sputtering. Advanced Materials Research, 0, 415-417, 1969-1972.	0.3	0
1650	Influence of Processing Conditions on Mechanical and Structural Properties of DLC Produced by FIB-CVD Method. Materials Research Society Symposia Proceedings, 2011, 1297, 137.	0.1	1
1651	A Study on the Laser Induced Damage of Diamond-Like Carbon Film. Advanced Materials Research, 2011, 411, 537-541.	0.3	1
1652	Infrared and Raman Spectroscopic Study of Carbon-Cobalt Composites. International Journal of Spectroscopy, 2011, 2011, 1-6.	1.4	12
1653	Size Effect on Bending Properties of Diamond-Like Carbon Nanopillar Fabricated by Focused Ion-Beam Assisted Chemical Vapor Deposition. Materials Research Society Symposia Proceedings, 2011, 1297, 149.	0.1	0
1654	Influence of radio frequency power on thermal diffusivity of plasma enhanced chemical vapor deposition-grown hydrogenated amorphous carbon thin-films. Journal of Applied Physics, 2011, 109, 113503.	1.1	9
1655	Ion-implanted Mechanism of the Deposition Process for Diamond-Like Carbon Films. Chinese Physics Letters, 2011, 28, 016102.	1.3	1
1656	The Optical Properties of DLC Films Processed by Laser Radiation. Advanced Materials Research, 0, 337, 120-124.	0.3	1
1657	A Study on Interface Strength of a-Si:H-DLC Film. Advanced Materials Research, 2011, 179-180, 775-780.	0.3	4
1658	Influence of humidity on the tribological behaviour of W-alloyed C-based amorphous coatings. International Journal of Surface Science and Engineering, 2011, 5, 261.	0.4	1
1659	Contact Mechanisms of Transfer Layered Surface During Sliding Wear of Amorphous Carbon Film. Journal of Tribology, 2011, 133, .	1.0	11
1660	Pulsed DC sputtered DLC based nanocomposite films: controlling growth dynamics, microstructure and frictional properties. Materials Technology, 2011, 26, 15-19.	1.5	6
1661	Carbon-induced extreme ultraviolet reflectance loss characterized using visible-light ellipsometry. Measurement Science and Technology, 2011, 22, 105705.	1.4	8
1662	Wear-Resistant Ceramic Films and Coatings. , 2011, , 127-155.		10
1663	Effect of nitrogen doping on electrical properties of amorphous carbon thin film prepared by aerosol-assisted thermal CVD. , 2011, , .		0
1664	Carbon metal composite film deposited using novel Filtered Cathodic Vacuum Arc technique. , 2011, , .		0

#	Article	IF	Citations
1665	DETERMINATION OF DENSITY-OF-STATES OF NANOCLUSTER CARBON THIN FILMS MIS STRUCTURE USING CAPACITANCEâ€"VOLTAGE TECHNIQUE. Modern Physics Letters B, 2011, 25, 763-772.	1.0	3
1666	Molecular Dynamics Simulation of Chemical Vapor Deposition of Amorphous Carbon: Dependence on H/C Ratio of Source Gas. Japanese Journal of Applied Physics, 2011, 50, 01AB01.	0.8	4
1667	Growth of Carbon Nanotubes on Metallic Substrates Using a Substrate-Shielded Microwave Plasma-Enhanced Chemical Vapor Deposition. Journal of the Electrochemical Society, 2011, 159, K50-K54.	1.3	7
1668	Wettability control by DLC coated nanowire topography. Nanotechnology, 2011, 22, 135302.	1.3	11
1669	Study on the Relation Between Rubbing Conditions and Physical Parameters of Polyimide. Molecular Crystals and Liquid Crystals, 2011, 546, 26/[1496]-33/[1503].	0.4	3
1670	Effects of Ammonia Addition on Thermal Chemical Vapor Deposition Rates and Microstructures of Carbon Films. Journal of the Electrochemical Society, 2011, 158, D445.	1.3	9
1671	Biomedical Thin Films: Mechanical Properties. , 2011, , 63-73.		4
1672	Surface modification of hollow carbon fibres using plasma treatment. Surface Engineering, 2011, 27, 623-626.	1.1	6
1673	Corrosion behaviour of Ti DLC deposition on prenitrided 316L stainless steel and Tiâ€"6Alâ€"4V alloy. Corrosion Engineering Science and Technology, 2011, 46, 439-444.	0.7	13
1674	New Approaches to the Computer Simulation of Amorphous Alloys: A Review. Materials, 2011, 4, 716-781.	1.3	14
1675	The Optical Properties of Au/Ag Nanoparticles Coated with Diamond-Like Carbon Films. Advanced Materials Research, 0, 569, 39-43.	0.3	1
1676	Study on Optical Constants of DLC Thin Films Based on Modified Genetic Algorithm. Advanced Materials Research, 2012, 462, 33-37.	0.3	2
1677	The Effects of Sputtering Pressure on the Properties of Carbon Counter Electrodes for Dye-Sensitized Solar Cells. Advanced Materials Research, 0, 430-432, 631-635.	0.3	0
1678	Raman Spectroscopy of DLC/a-Si Bilayer Film Prepared by Pulsed Filtered Cathodic Arc. Journal of Nanomaterials, 2012, 2012, 1-5.	1.5	5
1679	Synthesis of Diamond-Like Carbon Film on Copper and Titanium Interlayer by Vacuum Cathode Arc Evaporation. Applied Mechanics and Materials, 2012, 189, 167-171.	0.2	3
1680	Lead phthalocyanine films deposited by ECR plasma-induced sublimation. Journal Physics D: Applied Physics, 2012, 45, 305202.	1.3	3
1681	Thermal Stability Evaluation of Diamond-Like Carbon Coated by Filtered Cathodic Arc on Magnetic Recording Head Application. Advanced Materials Research, 0, 622-623, 1554-1558.	0.3	0
1682	Preparation and Properties of Ag-Containing Diamond-Like Carbon Films by Magnetron Plasma Source Ion Implantation. Advances in Materials Science and Engineering, 2012, 2012, 1-5.	1.0	36

#	Article	IF	Citations
1683	Effect of Substrate Bias Voltage on the Mechanical and Tribological Properties of Low Concentration Ti-Containing Diamond Like Carbon Films. Applied Mechanics and Materials, 0, 182-183, 232-236.	0.2	3
1684	Effects of Ethylene/Nitrogen Mixtures on Thermal Chemical Vapor Deposition Rates and Microstructures of Carbon Films. Journal of the Electrochemical Society, 2012, 159, D367-D374.	1.3	3
1685	Effects of Bias on the Bonding Structure and Mechanical Property of a-C:H Films Deposited by MFPUMST. Advanced Materials Research, 0, 507, 38-43.	0.3	1
1686	Reduced Roughness and Enhanced Mechanical Properties of Multilayered Diamond-Like Carbon Films by Periodic Arc Deposition. Journal of the Electrochemical Society, 2012, 159, P51-P56.	1.3	6
1687	The Structure and Bonding State for Fullerene-Like Carbon Nitride Films with High Hardness Formed by Electron Cyclotron Resonance Plasma Sputtering. Japanese Journal of Applied Physics, 2012, 51, 125602.	0.8	3
1688	Optical and Electrical Properties of Nitrogen-Doped Diamond-Like Carbon Films Prepared by a Bipolar-Type Plasma-Based Ion Implantation. Japanese Journal of Applied Physics, 2012, 51, 01AC04.	0.8	5
1689	Influence of the layer architecture of DLC coatings on their wear and corrosion resistance. International Journal of Materials Research, 2012, 103, 774-782.	0.1	6
1690	Anisotropic surface properties of micro/nanostructured a-C:H:F thin films with self-assembly applications. Journal of Applied Physics, 2012, 111, .	1.1	9
1691	Effects of the amorphous layer on laser-induced subwavelength structures on carbon allotropes. Optics Letters, 2012, 37, 677.	1.7	7
1692	Graphene sheets embedded carbon film prepared by electron irradiation in electron cyclotron resonance plasma. Applied Physics Letters, 2012, 100, .	1.5	54
1693	Wettability of Amorphous Diamond-Like Carbons Deposited on Si and PMMA in Pulse-Modulated Plasmas. IEEE Transactions on Plasma Science, 2012, 40, 1837-1842.	0.6	3
1694	Preparation and Characterizations of the High UV Sensitivity Porous Diamond-Like Carbon Thin Film MSM Photodiodes. IEEE Sensors Journal, 2012, 12, 978-983.	2.4	3
1695	Photoconductivity and characterization of nitrogen incorporated hydrogenated amorphous carbon thin films. Journal of Applied Physics, 2012, 112, .	1.1	31
1696	Study of surface cleaning methods and pyrolysis temperatures on nanostructured carbon films using x-ray photoelectron spectroscopy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2012, 30, 061407.	0.9	7
1697	Effect of diamond like carbon layer on heat dissipation and optoelectronic performance of vertical-type InGaN light emitting diodes. Applied Physics Letters, 2012, 101, .	1.5	13
1698	Role of Surface Hydrogen Bonds in Determining the Friction Behaviors of Hydrogenated Diamond-like Carbon Films. Chinese Physics Letters, 2012, 29, 056201.	1.3	3
1699	Study on the microstructure and properties of graphite-like carbon films deposited by unbalanced magnetron sputtering. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2012, 226, 714-721.	1.0	3
1700	Opto-electrical properties of amorphous carbon thin films deposited by Aerosol-Assisted Chemical Vapor Deposition. , 2012, , .		0

#	Article	IF	Citations
1701	Amorphous to crystalline phase transition in carbon induced by intense femtosecond x-ray free-electron laser pulses. Physical Review B, 2012, 86, .	1.1	34
1702	A review of monolithic and multilayer coatings within the boronâ€“carbonâ€“nitrogen system by ion-beam-assisted deposition. Journal of Materials Research, 2012, 27, 743-764.	1.2	16
1703	Extraction of emission parameters for large-area field emitters, using a technically complete Fowlerâ€“Nordheim-type equation. Nanotechnology, 2012, 23, 095706.	1.3	135
1705	Nitrogen incorporated fullerene (C<inf>60</inf>) films using pulsed laser deposition for optoelectronic application. , 2012, , .		0
1706	Mechanical Behavior of Bioactive TiC Nanocomposite Thin Films. Materials Science Forum, 2012, 729, 296-301.	0.3	4
1707	New Trends on the Boron-Doped Diamond Electrode: From Fundamental Studies to Applications. International Journal of Electrochemistry, 2012, 2012, 1-2.	2.4	7
1708	Influence of Surface Morphology on the Tribological Behavior of Diamond-Like Carbon Coating. Key Engineering Materials, 0, 527, 83-91.	0.4	2
1709	Diamond-Like Carbon Thin Films with Extremely High Compressive Stress (>8~12GPa) for Advanced CMOS Strain Engineering. Materials Research Society Symposia Proceedings, 2012, 1427, 80.	0.1	0
1710	Effects of Substrate Bias on the Microstructure and Properties of a-C:H Films Deposited by MFPUMST. Advanced Materials Research, 2012, 476-478, 2344-2347.	0.3	0
1711	Voltage-Induced Effect on Resistance of C:N/Si Heterojunctions. Chinese Physics Letters, 2012, 29, 027102.	1.3	0
1712	On the nature of the coefficient of friction of diamond-like carbon films deposited on rubber. Journal of Applied Physics, 2012, 111, .	1.1	20
1713	Tribological Properties of Si-Doped and Ti-Doped DLC/DLC Slidings. Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan, 2012, 63, 29.	0.1	1
1714	Design of air Atmospheric Pressure Diffuse Coplanar Barrier Discharge apparatus. , 2012, , .		0
1715	Tensile Test of Diamond-Like Carbon Thin Films by Nanomaterials Testing System. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2012, 76, 327-331.	0.2	1
1716	Compensation effect of boron and nitrogen codoping on the hardness and electrical resistivity of diamond-like carbon films prepared by magnetron sputtering deposition. Journal of Materials Research, 2012, 27, 3027-3032.	1.2	5
1717	Mechanism on Specific Wear of DLC Film in Engine Oil with Mo-DTC. Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A, 2012, 78, 213-222.	0.2	12
1718	Synthesis of diamond-like carbon films on Si substrates by photoemission-assisted plasma-enhanced chemical vapor deposition. Thin Solid Films, 2012, 523, 25-28.	0.8	10
1719	Nanocomposite Catalysts Producing Durable, Super-Black Carbon Nanotube Systems: Applications in Solar Thermal Harvesting. ACS Nano, 2012, 6, 10475-10485.	7.3	91

#	Article	IF	Citations
1720	Numerical and Experimental Study of Residual Stress of Multilayer Diamond-Like Carbon Films Prepared by Filtered Cathodic Vacuum Arc Deposition. IEEE Transactions on Plasma Science, 2012, 40, 2261-2266.	0.6	18
1721	Structure and optical properties of carbon films obtained by multipulse pulsed laser deposition. Journal of Applied Spectroscopy, 2012, 79, 664-669.	0.3	2
1722	Tiâ€“6Alâ€“4V alloy surface modification for medical applications. Applied Surface Science, 2012, 262, 163-167.	3.1	49
1723	Microstructure and tribological performance of diamond-like carbon films deposited on hydrogenated rubber. Thin Solid Films, 2012, 524, 218-223.	0.8	22
1724	Laser-Based Growth of Nanostructured Thin Films. Nanoscience and Technology, 2012, , 59-83.	1.5	0
1725	Thin Film Deposition and Nanoscale Characterisation Techniques. Nanoscience and Technology, 2012, , 105-129.	1.5	1
1726	Bridging Nano- and Microtribology in Mechanical and Biomolecular Layers. Nanoscience and Technology, 2012, , 431-483.	1.5	0
1727	Optical and elastic properties of diamond-like carbon with metallic inclusions: A theoretical study. Journal of Applied Physics, 2012, 112, .	1.1	31
1728	Thermal Stability Evaluation of Diamond-like Carbon for Magnetic Recording Head Application using Raman Spectroscopy. Procedia Engineering, 2012, 32, 888-894.	1.2	5
1729	Ionâ€Beam Induced Surface Roughening of Polyâ€(methyl methacrylate) (PMMA) Tuned by a Mixture of Ar and O₂ Ions. Plasma Processes and Polymers, 2012, 9, 975-983.	1.6	4
1730	Atomistic simulations of diamond-like carbon growth. Thin Solid Films, 2012, 521, 239-244.	0.8	10
1731	Modification of a-C:H film surface by atmospheric pressure plasma jet for liquid crystal alignment. Thin Solid Films, 2012, 523, 37-40.	0.8	3
1732	Determination of the interfacial strength and fracture toughness of a-C:H coatings by in-situ microcantilever bending. Thin Solid Films, 2012, 522, 480-484.	0.8	50
1733	Tensile strength of DLC films evaluated by a nanomaterials testing system. Diamond and Related Materials, 2012, 25, 1-4.	1.8	9
1734	Chemical modification of carbon films with fluorine functionalities using dry process. Diamond and Related Materials, 2012, 24, 107-110.	1.8	0
1735	Improving diamond coating on Ti6Al4V substrate using a diamond like carbon interlayer: Raman residual stress evaluation and AFM analyses. Diamond and Related Materials, 2012, 22, 105-112.	1.8	30
1736	Carbonaceous field effect transistor with graphene and diamondlike carbon. Diamond and Related Materials, 2012, 22, 118-123.	1.8	21
1737	Hydrogen isotope tracer experiment in a-C:H film deposition: Reactive RF magnetron sputtering with CH4 and D2. Diamond and Related Materials, 2012, 27-28, 60-63.	1.8	9

#	Article	IF	Citations
1738	Modification of characteristics of diamond-like carbon thin films by low chromium content addition. Diamond and Related Materials, 2012, 26, 39-44.	1.8	8
1739	Effects of Diamond-like Carbon Coatings with Different Thickness on Mechanical Properties and Corrosion Behavior of Biomedical NiTi Alloy. Rare Metal Materials and Engineering, 2012, 41, 1505-1510.	0.8	7
1740	Large photoconductivity of Pd doped amorphous carbon film/SiO2/Si. Diamond and Related Materials, 2012, 21, 24-27.	1.8	10
1741	Diamond-like carbon films as piezoresistors in highly sensitive force sensors. Diamond and Related Materials, 2012, 26, 50-54.	1.8	25
1742	Growth of nano Co encapsulated in carbon-shell. Journal of Electron Spectroscopy and Related Phenomena, 2012, 185, 567-572.	0.8	1
1743	Electrical properties of textured carbon film formed by pulsed laser annealing. Diamond and Related Materials, 2012, 23, 135-139.	1.8	11
1744	Multiscale Quantum Simulation of Resistance Switching in Amorphous Carbon. Procedia Computer Science, 2012, 9, 641-650.	1.2	5
1745	Effect of initial sp3 content on bonding structure evolution of amorphous carbon upon pulsed laser annealing. Diamond and Related Materials, 2012, 30, 48-52.	1.8	16
1746	Characterization of DLC-Si films prepared by RF-PECVD. , 2012, , .		2
1747	Incandescent porous carbon microspheres to light up cells: solution phenomena and cellular uptake. Journal of Materials Chemistry, 2012, 22, 432-439.	6.7	33
1748	Graphene oxide/titania hybrid films with dual-UV-responsive surfaces of tunable wettability. RSC Advances, 2012, 2, 10829.	1.7	15
1749	Pyrolysis-assisted graphene exfoliation from graphite particles deposited on photoresist pillars. , 2012, , .		0
1750	Effect of deposition temperature to electrical, structural and optical properties of amorphous carbon thin film prepared by TCVD. , 2012, , .		0
1751	PECVD growth of carbon nanotubes: From experiment to simulation. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, .	0.6	44
1752	Characteristics of Diamond-Like Carbon Films Deposited on Polymer Dental Materials. Japanese Journal of Applied Physics, 2012, 51, 090128.	0.8	1
1753	Correlation of the electrochemistry of poly(acrylonitrile)â€“sulfur composite cathodes with their molecular structure. Journal of Materials Chemistry, 2012, 22, 23240.	6.7	79
1754	Preparation and piezoelectric analysis of the multilayer films for fbar. , 2012, , .		0
1755	Characteristics and applications of titanium oxide as a biomaterial for medical implants. , 2012, , 1-57.		9

#	Article	IF	Citations
1756	Correlation between Tribological Properties, spÂ²/spÂ³-Ratio and H-Content of Low-Wear Diamond-Like Carbon (DLC) Layers. Materials Science Forum, 0, 706-709, 2596-2601.	0.3	1
1757	Creating New Types of Carbon-Based Membranes. Science, 2012, 335, 413-414.	6.0	120
1758	Properties of hydrogenated DLC films as prepared by a combined method of plasma source ion implantation and unbalanced magnetron sputtering. Journal of Materials Research, 2012, 27, 845-849.	1.2	12
1759	Computer simulations of nanostructured carbon under tensile load: Electronic structure and optical gap. Diamond and Related Materials, 2012, 23, 50-53.	1.8	4
1760	Spontaneous Grafting of Nitrophenyl Groups on Amorphous Carbon Thin Films: A Structureâ€“Reactivity Investigation. Chemistry of Materials, 2012, 24, 1031-1040.	3.2	36
1761	Electroanalytical Performance of Nitrogen-Containing Tetrahedral Amorphous Carbon Thin-Film Electrodes. Analytical Chemistry, 2012, 84, 6240-6248.	3.2	62
1762	Field-Effect Transistors Based on Thermally Treated Electron Beam-Induced Carbonaceous Patterns. ACS Applied Materials & Interfaces, 2012, 4, 1030-1036.	4.0	10
1763	Optical Properties and Enhanced Photothermal Conversion Efficiency of SiO2/A-Dlc Selective Absorber Films for A Solar Energy Collector Fabricated by Unbalance Sputter. Physics Procedia, 2012, 32, 206-213.	1.2	3
1764	A novel high-power pulse PECVD method. Surface and Coatings Technology, 2012, 206, 4562-4566.	2.2	24
1765	Characteristics and tribological performance of DLC and Si-DLC films deposited on nitrile rubber. Surface and Coatings Technology, 2012, 206, 4585-4593.	2.2	45
1766	Effects of applied power on hydrogenated amorphous carbon (a-C:H) film deposition by low frequency (60 Hz) plasma-enhanced chemical vapor deposition (PECVD). Vacuum, 2012, 86, 2148-2151.	1.6	15
1767	Hydrogenated amorphous carbon films used for carbon-sealed double-coated optical fibers. Thin Solid Films, 2012, 520, 6765-6773.	0.8	9
1768	Investigation of radio frequency plasma for the growth of diamond like carbon films. Physics of Plasmas, 2012, 19, 033515.	0.7	22
1769	Coating and Applications. Materials Forming, Machining and Tribology, 2012, , 175-194.	0.7	3
1770	Mechanical and tribological properties of Ti-DLC films with different Ti content by magnetron sputtering technique. Applied Surface Science, 2012, 258, 5025-5030.	3.1	99
1771	The deposition of a thick tetrahedral amorphous carbon film by argon ion bombardment. Applied Surface Science, 2012, 258, 4794-4800.	3.1	16
1772	Characterization and properties of amorphous carbon coatings prepared by middle frequency pulsed unbalanced magnetron sputtering at different substrate bias. Applied Surface Science, 2012, 258, 5462-5466.	3.1	13
1773	Ferromagnetism in nanocrystalline nickel incorporated diamond-like carbon thin films. Applied Surface Science, 2012, 258, 5850-5857.	3.1	28

#	Article	IF	Citations
1774	Synthesis and tribological properties of diamond-like carbon films by electrochemical anode deposition. Applied Surface Science, 2012, 258, 6527-6530.	3.1	14
1775	Ion beam deposition of DLC and nitrogen doped DLC thin films for enhanced haemocompatibility on PTFE. Applied Surface Science, 2012, 258, 8094-8099.	3.1	31
1776	Experimental study on friction and wear behaviour of amorphous carbon coatings for mechanical seals in cryogenic environment. Applied Surface Science, 2012, 258, 9531-9535.	3.1	31
1777	Physical properties of sputtered amorphous carbon coating. Journal of Alloys and Compounds, 2012, 513, 135-138.	2.8	19
1778	Structural, mechanical properties and composition analysis of boron phosphide coatings. Journal of Alloys and Compounds, 2012, 538, 169-172.	2.8	9
1779	Electrocatalysis of oxygen reduction reaction on polyaniline-derived nitrogen-doped carbon nanoparticle surfaces in alkaline media. Journal of Power Sources, 2012, 220, 306-316.	4.0	105
1780	Development of a polygonal barrel-plasma enhanced chemical vapor deposition method for preparing powdered materials with a diamond-like carbon film. Chemical Engineering Journal, 2012, 209, 616-622.	6.6	7
1781	Interface tailoring for adhesion enhancement of diamond-like carbon thin films. Diamond and Related Materials, 2012, 25, 8-12.	1.8	12
1782	Thickness dependency of field emission in amorphous and nanostructured carbon thin films. Nanoscale Research Letters, 2012, 7, 286.	3.1	7
1783	Temperature-dependent resistive switching of amorphous carbon/silicon heterojunctions. Diamond and Related Materials, 2012, 22, 37-41.	1.8	12
1784	Hydrogen stability in hydrogenated amorphous carbon films with polymer-like and diamond-like structure. Journal of Applied Physics, 2012, 112, .	1.1	24
1785	Mechanical and Tribological Properties of Diamond-Like Carbon Coatings with Different Ni Content. Advanced Materials Research, 2012, 532-533, 131-134.	0.3	0
1786	Band gap opening of graphene by doping small boron nitride domains. Nanoscale, 2012, 4, 2157.	2.8	225
1787	Synergistic etch rates during low-energetic plasma etching of hydrogenated amorphous carbon. Journal of Applied Physics, 2012, 112, .	1.1	18
1788	Graphene and Its Synthesis. , 2012, , 415-438.		10
1789	Bond order potentials for fracture, wear, and plasticity. MRS Bulletin, 2012, 37, 493-503.	1.7	49
1790	The mechanical and strength properties of diamond. Reports on Progress in Physics, 2012, 75, 126505.	8.1	141
1791	Tribological Characteristics of DLC Coatings in Vacuum under Sliding Contact. Journal of Surface Engineered Materials and Advanced Technology, 2012, 02, 22-27.	0.2	5

#	Article	IF	Citations
1792	Materials properties of ZnO/diamond-like carbon (DLC) nanocomposite fabricated with different source of targets. Diamond and Related Materials, 2012, 25, 103-110.	1.8	11
1793	n-Type Nanocrystalline Diamond Films. , 2012, , 103-132.		0
1794	Reactive biased target ion beam deposited Wâ€“DLC nanocomposite thin films â€" Microstructure and its mechanical properties. Diamond and Related Materials, 2012, 23, 34-43.	1.8	21
1795	Influence of Ti target current on microstructure and properties of Ti-doped graphite-like carbon films. Transactions of Nonferrous Metals Society of China, 2012, 22, 1372-1380.	1.7	8
1796	Carbon and Nickel Oxide/Carbon Composites as Electrodes for Supercapacitors. Journal of Materials Science and Technology, 2012, 28, 931-936.	5.6	24
1797	Pulsed laser deposition of functionally gradient diamond-like carbon (DLC) films using a 355 nm picosecond laser. Acta Materialia, 2012, 60, 6237-6246.	3.8	26
1798	Characterization of SiC in DLC/a-Si films prepared by pulsed filtered cathodic arc using Raman spectroscopy and XPS. Applied Surface Science, 2012, 258, 5605-5609.	3.1	23
1799	Cathodoluminescence of Cr-doped diamond-like carbon film by filtered cathodic vacuum arc plasma. Applied Surface Science, 2012, 261, 21-24.	3.1	4
1800	Irradiation of the graphite-like carbon films by ns-laser pulse. Applied Surface Science, 2012, 261, 488-492.	3.1	12
1801	Effect of nickel incorporation on microstructural and optical properties of electrodeposited diamond like carbon (DLC) thin films. Applied Surface Science, 2012, 261, 789-799.	3.1	44
1802	Molecular dynamics simulation of hydrogenated carbon film growth from CH radicals. Applied Surface Science, 2012, 263, 339-344.	3.1	8
1803	Piezoresistive and electrical properties of Cr containing diamond-like carbon films. Surface and Coatings Technology, 2012, 211, 80-83.	2.2	12
1804	Piezoresistive properties and structure of hydrogen-free DLC films deposited by DC and pulsed-DC unbalanced magnetron sputtering. Surface and Coatings Technology, 2012, 211, 172-175.	2.2	13
1805	Relationship between tribological properties and sp3/sp2 structure of nitrogenated diamond-like carbon deposited by plasma CVD. Surface and Coatings Technology, 2012, 210, 1-9.	2.2	39
1806	Classification of DLC films in terms of biological response. Surface and Coatings Technology, 2012, 207, 350-354.	2.2	37
1807	Photochemical grafting of fluorinate alkenes on DLC coated Ti6Al4V to improve in vitro cytocompatibility, friction and corrosion resistance. Surface and Coatings Technology, 2012, 208, 51-56.	2.2	6
1808	Structure and mechanical properties of diamond-like carbon films with copper functional layer by cathode arc evaporation. Surface and Coatings Technology, 2012, 208, 101-108.	2.2	20
1809	High rate deposition of amorphous hydrogenated carbon films by hollow cathode arc PECVD. Surface and Coatings Technology, 2012, 212, 67-71.	2.2	12

#	Article	IF	Citations
1810	Single and dual-mode plasma enhanced chemical vapor deposition of fluorinated diamond-like carbon films. Surface and Coatings Technology, 2012, 213, 285-290.	2.2	9
1811	Investigation of fire-resistance mechanisms of the ternary system (APP/MPP/TiO2) in PMMA. Polymer Degradation and Stability, 2012, 97, 2154-2161.	2.7	28
1812	Friction force microscopy study of annealed diamond-like carbon film. Materials Research Bulletin, 2012, 47, 2780-2783.	2.7	7
1813	Effects of plasma carburizing and DLC coating on friction-wear characteristics, mechanical properties and fatigue strength of stainless steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 558, 349-355.	2.6	40
1814	X-Ray Photoelectron Spectroscopy and Raman Spectroscopy Studies on Thin Carbon Nitride Films Deposited by Reactive RF Magnetron Sputtering. World Journal of Nano Science and Engineering, 2012, 02, 92-102.	0.3	37
1815	Comparison of the mechanism of low defect few-layer graphene fabricated on different metals by pulsed laser deposition. Diamond and Related Materials, 2012, 25, 98-102.	1.8	52
1816	Evolution of coefficient of friction with deposition temperature in diamond like carbon thin films. Journal of Applied Physics, 2012, 112, .	1.1	24
1817	Adhesion Studies of Diamond-Like Carbon Films Deposited on Ti6Al4V Alloy after Carbonitriding. Open Journal of Metal, 2012, 02, 1-7.	0.7	7
1818	Effect of deposition parameters on wear particle size distribution of DLC coatings. Diamond and Related Materials, 2012, 23, 184-188.	1.8	9
1819	Optical properties of ZnO thin films grown on diamond-like carbon by pulsed laser deposition. Optoelectronics Letters, 2012, 8, 445-448.	0.4	1
1820	Enhanced electron emission from tetrahedral amorphous carbon capped carbon nanotube core-shelled structure. Diamond and Related Materials, 2012, 21, 37-41.	1.8	3
1821	Surface modifications of amorphous hydrogenated carbon films submitted to carbon tetrafluorine plasma treatment. Diamond and Related Materials, 2012, 22, 1-5.	1.8	3
1822	Precursors of a-CNx(:H) films from the decompositions of BrCN and CH3CN with the discharged products of Ar. Diamond and Related Materials, 2012, 24, 121-125.	1.8	6
1823	Superior tribological properties of an amorphous carbon film with a graphite-like structure. Chinese Physics B, 2012, 21, 016101.	0.7	14
1824	Growth of europium-doped gallium oxide (Ga2O3:Eu) thin films deposited by homemade DC magnetron sputtering. Journal of Theoretical and Applied Physics, 2012, 6, 17.	1.4	21
1825	Characterization of amorphous hydrogenated carbon films deposited by MFPUMST at different ratios of mixed gases. Bulletin of Materials Science, 2012, 35, 1087-1091.	0.8	0
1826	Influence of bowl shaped substrate holder on growth of polymeric DLC film in a microwave plasma CVD reactor. Bulletin of Materials Science, 2012, 35, 1117-1121.	0.8	2
1827	A strategy for increased carbon ionization in magnetron sputtering discharges. Diamond and Related Materials, 2012, 23, 1-4.	1.8	97

#	Article	IF	Citations
1828	Investigation of the Growth Mechanisms of a-CH_x Coatings Deposited by Pulsed Reactive Magnetron Sputtering. Journal of Physical Chemistry C, 2012, 116, 12017-12026.	1.5	16
1829	Growth of nanocomposite films from accelerated C₆₀ ions. Journal Physics D: Applied Physics, 2012, 45, 335302.	1.3	18
1830	Disorder and optical gaps in strained dense amorphous carbon and diamond nanocomposites. Journal of Physics Condensed Matter, 2012, 24, 205502.	0.7	3
1831	Synthesis and characterization of titanium-containing graphite-like carbon films with low internal stress and superior tribological properties. Journal Physics D: Applied Physics, 2012, 45, 295301.	1.3	35
1832	Effect of substrate bias on microstructure and tribological performance of GLC films using hybrid HIPIMS technique. Transactions of Nonferrous Metals Society of China, 2012, 22, s740-s744.	1.7	6
1833	High pressure Raman and x-ray diffraction studies on the decomposition of tungsten carbonyl. Journal of Applied Physics, 2012, 111, 112606.	1.1	3
1834	Ab initio investigation of the structural stability and optical properties of low-density amorphous carbon doped with N, B, and Fe. Theoretical Chemistry Accounts, 2012, 131, 1.	0.5	1
1835	Effect of substrate bias in hydrogenated amorphous carbon films having embedded nanocrystallites deposited by cathodic jet carbon arc technique. Diamond and Related Materials, 2012, 25, 63-72.	1.8	16
1836	THE INFRARED SPECTROSCOPY OF COMPACT POLYCYCLIC AROMATIC HYDROCARBONS CONTAINING UP TO 384 CARBONS. Astrophysical Journal, 2012, 754, 75.	1.6	122
1837	Hemocompatibility of Inorganic Physical Vapor Deposition (PVD) Coatings on Thermoplastic Polyurethane Polymers. Journal of Functional Biomaterials, 2012, 3, 283-297.	1.8	17
1838	Synthesis and characterization of highâ€voltage electrodeposited diamondâ€like carbon protective coating on TiAlV biomedical substrates. Surface and Interface Analysis, 2012, 44, 1193-1197.	0.8	3
1839	Microstructure and surface roughness of graphiteâ€like carbon films deposited on silicon substrate by molecular dynamic simulation. Surface and Interface Analysis, 2012, 44, 837-843.	0.8	15
1840	Laserakustik fÃ¼r Schicht- und OberflÃchenprÃ¼fung. Vakuum in Forschung Und Praxis, 2012, 24, 17-23.	0.0	2
1841	Cost Effective Deposition System for Nitrogen Incorporated Diamondâ€like Carbon Coatings. Plasma Processes and Polymers, 2012, 9, 890-903.	1.6	6
1842	Influence of substrate resistivity on photovoltaic characteristics of Pdâ€doped amorphous carbon film/SiO₂/Si heterojunction. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 1359-1362.	0.8	4
1843	The highâ€temperature tribological properties of Siâ€DLC films. Surface and Interface Analysis, 2012, 44, 1601-1605.	0.8	34
1844	Distinguishing defect induced intermediate frequency modes from combination modes in the Raman spectrum of single walled carbon nanotubes. Journal of Applied Physics, 2012, 111, .	1.1	11
1845	Fabrication of Delamination Free, Low Stress Diamond Like Carbon (DLC) Films Using Pulsed Laser Deposition (PLD). Electrochemical and Solid-State Letters, 2012, 15, H17.	2.2	4

#	Article	IF	Citations
1846	Effect of pretreatment of Si interlayer by energetic C+ ions on the improved nanotribological properties of magnetic head overcoat. Journal of Applied Physics, 2012, 111, .	1.1	20
1847	Ultrafast Viscous Permeation of Organic Solvents Through Diamond-Like Carbon Nanosheets. Science, 2012, 335, 444-447.	6.0	322
1848	â€œCompressed Graphiteâ€•Formed During<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi mathvariant="bold">C</mml:mi><mml:mn>60</mml:mn></mml:msub></mml:math>to Diamond Transformation as Revealed by Scattering Computed Tomography. Physical Review Letters, 2012, 109, 025502.	2.9	34
1849	Ion mass spectrometry investigations of the discharge during reactive high power pulsed and direct current magnetron sputtering of carbon in Ar and Ar/N2. Journal of Applied Physics, 2012, 112, .	1.1	36
1850	Superhard behaviour, low residual stress, and unique structure in diamond-like carbon films by simple bilayer approach. Journal of Applied Physics, 2012, 112, .	1.1	46
1851	Influence of flow rate on different properties of diamond-like nanocomposite thin films grown by PECVD. AIP Advances, 2012, 2, 022132.	0.6	26
1852	Comparison of alumina and boehmite in (APP/MPP/metal oxide) ternary systems on the thermal and fire behavior of PMMA. Polymers for Advanced Technologies, 2012, 23, 1369-1380.	1.6	16
1853	Structural properties of amorphous diamond-like carbon: percolation, cluster, and pair correlation analysis. RSC Advances, 2012, 2, 4292.	1.7	18
1854	Reversible Switch Memory Effect in Hydrogenâ€Terminated Ultrananocrystalline Diamond. Advanced Functional Materials, 2012, 22, 1827-1834.	7.8	5
1855	An Electrical Rectifier Based on Au Nanoparticle Array Fabricated Using Directâ€Write Electron Beam Lithography. Advanced Functional Materials, 2012, 22, 2837-2845.	7.8	9
1856	Sulphur doped DLC films deposited by DC magnetron sputtering. Canadian Journal of Chemical Engineering, 2012, 90, 909-914.	0.9	3
1857	Preparation of H-terminated and aminated diamond like carbon surfaces. Rare Metals, 2012, 31, 189-192.	3.6	5
1858	Synthesis and Characterization of Nanostructured a-C:H (Hydrogenated Amorphous Carbon) Thin Films by Gaseous Thermionic Vacuum Arc (G-TVA) Deposition Technique. Plasma Chemistry and Plasma Processing, 2012, 32, 219-229.	1.1	4
1859	Dissociative Excitation of C2H2 in the Electron Cyclotron Resonance Plasma of Ar: Production of CH(A2Î") Radicals and Formation of Hydrogenated Amorphous Carbon Films. Plasma Chemistry and Plasma Processing, 2012, 32, 231-248.	1.1	6
1860	On diamond D5. Structural Chemistry, 2012, 23, 981-986.	1.0	12
1861	Characterization and analysis of DLC films with different thickness deposited by RF magnetron PECVD. Rare Metals, 2012, 31, 198-203.	3.6	13
1862	Chemical leaching of an Indian bituminous coal and characterization of the products by vibrational spectroscopic techniques. International Journal of Minerals, Metallurgy and Materials, 2012, 19, 279-283.	2.4	16
1863	Chemically modified diamond-like carbon (DLC) for protein enrichment and profiling by MALDI-MS. Amino Acids, 2012, 43, 823-831.	1.2	10

#	Article	IF	Citations
1864	Effect of nitrogen addition on hydrogen incorporation in diamond nanorod thin films. Current Applied Physics, 2012, 12, 712-717.	1.1	21
1865	An atomistic study of the abrasive wear and failure of graphene sheets when used as a solid lubricant and a comparison to diamond-like-carbon coatings. Carbon, 2012, 50, 4078-4084.	5.4	82
1866	The influence of hydrogenated amorphous carbon coatings (a-C:H) on the fatigue life of coated steel specimens. International Journal of Fatigue, 2012, 37, 1-7.	2.8	7
1867	Effect of substrate bias in nitrogen incorporated amorphous carbon films with embedded nanoparticles deposited by filtered cathodic jet carbon arc technique. Materials Chemistry and Physics, 2012, 132, 659-666.	2.0	13
1868	Low temperature preparation of hollow carbon nano-polyhedrons with uniform size, high yield and graphitization. Materials Chemistry and Physics, 2012, 134, 639-645.	2.0	11
1869	Spectroscopic studies on DLC/TM (Cr, Ag, Ti, Ni) multilayers. Materials Research Bulletin, 2012, 47, 843-849.	2.7	29
1870	Effects of electron beam induced carbon deposition on the mechanical properties of a micromechanical oscillator. Sensors and Actuators A: Physical, 2012, 179, 237-241.	2.0	11
1871	Erosion of tungsten-doped amorphous carbon films in oxygen plasma. Journal of Nuclear Materials, 2012, 420, 101-109.	1.3	5
1872	Determination of the sticking coefficient of energetic hydrocarbon molecules by molecular dynamics. Journal of Nuclear Materials, 2012, 420, 291-296.	1.3	15
1873	Microporous conducting carbonized polyaniline nanorods: Synthesis, characterization and electrocatalytic properties. Microporous and Mesoporous Materials, 2012, 152, 50-57.	2.2	52
1874	Plasma immersion ion implantation and deposition of DLC coating for modification of orthodontic magnets. Nuclear Instruments & Methods in Physics Research B, 2012, 272, 346-350.	0.6	13
1875	Investigation of conducting nano-structures on ta-C films made by FIB lithography. Nuclear Instruments & Methods in Physics Research B, 2012, 282, 121-124.	0.6	6
1876	Carrier gas and ion beam parameter effects on the structure and properties of a-C:H/SiOx films deposited employing closed drift ion beam source. Nuclear Instruments & Methods in Physics Research B, 2012, 282, 116-120.	0.6	12
1877	Kinetics of electron-beam dispersion of fullerite C60. Nuclear Instruments & Methods in Physics Research B, 2012, 280, 117-122.	0.6	2
1878	Morphology-controllable gold nanostructures on phosphorus doped diamond-like carbon surfaces and their electrocatalysis for glucose oxidation. Sensors and Actuators B: Chemical, 2012, 162, 135-142.	4.0	64
1879	Oxygen modified diamond-like carbon as window layer for amorphous silicon solar cells. Solar Energy, 2012, 86, 220-230.	2.9	27
1880	Câ€“HAp composite layers deposited onto AISI 316L austenitic steel. Surface and Coatings Technology, 2012, 206, 2110-2114.	2.2	13
1881	From natural lotus leaf to highly hard-flexible diamond-like carbon surface with superhydrophobic and good tribological performance. Surface and Coatings Technology, 2012, 206, 2258-2264.	2.2	37

#	Article	IF	Citations
1882	Exploring the potential of high power impulse magnetron sputtering for growth of diamond-like carbon films. Surface and Coatings Technology, 2012, 206, 2706-2710.	2.2	91
1883	Effect of the bias voltage on the structure of nc-CrC/a-C:H coatings with high carbon content. Surface and Coatings Technology, 2012, 206, 2877-2883.	2.2	29
1884	Friction and wear behavior of plasma assisted chemical vapor deposited nanocomposites made of metal nanoparticles embedded in a hydrogenated amorphous carbon matrix. Surface and Coatings Technology, 2012, 206, 3116-3124.	2.2	18
1885	Effects of tetrahedral amorphous carbon film deposited on dental cobaltâ€“chromium alloys on bacterial adhesion. Surface and Coatings Technology, 2012, 206, 3386-3392.	2.2	20
1886	Microstructure and mechanical properties of graphitic a-C:H:Si films. Surface and Coatings Technology, 2012, 206, 3467-3471.	2.2	6
1887	Microstructure, mechanical and tribological properties of Si and Al co-doped hydrogenated amorphous carbon films deposited at various bias voltages. Surface and Coatings Technology, 2012, 206, 4119-4125.	2.2	19
1888	Comparison of the effects of the lubricant-molecule chain length and the viscosity on the friction and wear of diamond-like-carbon coatings and steel. Tribology International, 2012, 50, 57-65.	3.0	35
1889	Tribological properties of pulsed laser deposited DLC/TM (TM=Cr, Ag, Ti and Ni) multilayers. Tribology International, 2012, 53, 87-97.	3.0	55
1890	Investigation of the microstructure, mechanical properties and tribological behaviors of Ti-containing diamond-like carbon films fabricated by a hybrid ion beam method. Thin Solid Films, 2012, 520, 6057-6063.	0.8	56
1891	Wear behaviour and rolling contact fatigue life of Ti/TiN/DLC multilayer films fabricated on bearing steel by PIIID. Vacuum, 2012, 86, 848-853.	1.6	30
1892	Relationships between the fretting wear behavior and mechanical properties of thin carbon films. Vacuum, 2012, 86, 675-680.	1.6	10
1893	A comparative analysis of a-C:H films deposited from five hydrocarbons by thermal desorption spectroscopy. Vacuum, 2012, 86, 667-671.	1.6	15
1894	Electrochemical corrosion behavior of amorphous carbon nitride thin films. Vacuum, 2012, 86, 696-698.	1.6	4
1895	Structure, mechanical and tribological properties of diamond-like carbon films on aluminum alloy by arc ion plating. Vacuum, 2012, 86, 1141-1146.	1.6	25
1896	Physical properties of nanofluid suspension of ferromagnetic graphite with high Zeta potential. Physics Letters, Section A: General, Atomic and Solid State Physics, 2012, 376, 544-546.	0.9	28
1897	The pairing-dependent effects of laser surface texturing on micro tribological behavior of amorphous carbon film. Wear, 2012, 274-275, 43-49.	1.5	31
1898	A DLC/diamond bilayer approach for reducing the initial friction towards a high bearing capacity. Wear, 2012, 290-291, 18-24.	1.5	8
1899	Incidence Angle Effect of Energetic Carbon Ions on Deposition Rate, Topography, and Structure of Ultrathin Amorphous Carbon Films Deposited by Filtered Cathodic Vacuum Arc. IEEE Transactions on Magnetics, 2012, 48, 2220-2227.	1.2	22

#	Article	IF	Citations
1900	Effect of reaction temperature on carbon films prepared by a hydrothermal electrochemical method. Materials Science-Poland, 2012, 30, 17-22.	0.4	4
1901	The electrochemical synthesis of poly(methylcarbyne) for diamond film coatings. Journal of Applied Polymer Science, 2012, 124, 3626-3632.	1.3	4
1902	Investigation of Raman and photoluminescence studies of reduced graphene oxide sheets. Applied Physics A: Materials Science and Processing, 2012, 106, 501-506.	1.1	279
1903	Tribology of fluorinated diamondâ€like carbon coatings: first principles calculations and sliding experiments. Lubrication Science, 2013, 25, 111-121.	0.9	17
1904	Chemico-physical characterisation and in vivo biocompatibility assessment of DLC-coated coronary stents. Analytical and Bioanalytical Chemistry, 2013, 405, 321-329.	1.9	29
1905	Growth of CuPd nanoalloys encapsulated in carbon-shell. Journal of Nanoparticle Research, 2013, 15, 1.	0.8	2
1906	Fabrication and characteristics of solutionâ€processed graphene oxideâ€“silicon heterojunction. Physica Status Solidi - Rapid Research Letters, 2013, 7, 340-343.	1.2	12
1907	DLC Coating by HiPIMS: The Influence of Substrate Bias Voltage. IEEE Transactions on Plasma Science, 2013, 41, 1819-1829.	0.6	43
1908	Graphite to diamond-like carbon phase transformation by high-pressure torsion. Applied Physics Letters, 2013, 103, .	1.5	26
1909	Solution-processable graphene oxide as an insulator layer for metalâ€“insulatorâ€“semiconductor silicon solar cells. RSC Advances, 2013, 3, 17918.	1.7	13
1910	Improved surface properties of Î²-SiAlON by diamond-like carbon coatings. Diamond and Related Materials, 2013, 36, 44-50.	1.8	11
1911	THE STRUCTURE, ORIGIN, AND EVOLUTION OF INTERSTELLAR HYDROCARBON GRAINS. Astrophysical Journal, 2013, 770, 78.	1.6	94
1912	van der Waals Interactions. , 2013, , 3947-3947.		0
1913	Thermal stability and mechanical properties of fluorinated diamond-like carbon coatings. Surface and Coatings Technology, 2013, 219, 144-150.	2.2	18
1914	Grain boundaries in graphene grown by chemical vapor deposition. New Journal of Physics, 2013, 15, 035024.	1.2	118
1915	The optoelectronic behaviour of carbon nanoparticles: evidence of the importance of the outer carbon shell. Nanoscale, 2013, 5, 7977.	2.8	15
1916	Carbon coatings with low secondary electron yield. Vacuum, 2013, 98, 29-36.	1.6	52
1917	Tribological properties of nanostructured DLC coatings deposited by C60 ion beam. Tribology International, 2013, 60, 127-135.	3.0	49

#	Article	IF	Citations
1918	Improvement of the mechanical properties of single-walled carbon nanotube networks by carbon plasma coatings. Carbon, 2013, 53, 50-61.	5.4	10
1919	Phase composition, microstructure, and tribological behavior of chrome-based ARE coatings. Journal of Friction and Wear, 2013, 34, 57-64.	0.1	5
1920	Frictional behavior of nanostructured carbon films. Friction, 2013, 1, 63-71.	3.4	21
1921	Electrochemical deposition and characterization of diamond-like carbon films doped with surface-capped silica nanoparticles. Surface and Coatings Technology, 2013, 221, 77-87.	2.2	8
1922	Deposition and characterization of diamond-like nanocomposite coatings grown by plasma enhanced chemical vapour deposition over different substrate materials. Bulletin of Materials Science, 2013, 36, 193-202.	0.8	14
1923	X-ray reflectivity study of bias graded diamond like carbon film synthesized by ECR plasma. Bulletin of Materials Science, 2013, 36, 9-14.	0.8	3
1924	Nanotribology of pulsed direct current magnetron sputtered diamond like carbon films. Surface Science, 2013, 616, 60-70.	0.8	18
1925	Spectroscopic diagnostics of a pulsed arc plasma in the presence of acetylene. Vacuum, 2013, 90, 165-169.	1.6	3
1926	Substrate and buffer layer effect on the structural and optical properties of graphene oxide thin films. RSC Advances, 2013, 3, 5926.	1.7	43
1927	Preparation and characterization of diamond-like carbon/oxides composite film on carbon steel by cathodic plasma electrolysis. Applied Physics Letters, 2013, 103, .	1.5	22
1928	STUDY ON THE PREPARATION OF DLC FILMS DEPOSITED ON SILVER NANOPARTICLES AND THE SENSITIVITY OF LSPR INTERFACE. Surface Review and Letters, 2013, 20, 1350024.	0.5	0
1929	Influence of ion bombardment on growth and properties of PLD created DLC films. Applied Physics A: Materials Science and Processing, 2013, 110, 943-947.	1.1	17
1930	Developing an (Al,Ti)N x C y Interlayer to Improve the Durability of the ta-C Coating on Magnetic Recording Heads. Tribology Letters, 2013, 50, 233-243.	1.2	9
1931	Study of colors of diamond-like carbon films. Science China: Physics, Mechanics and Astronomy, 2013, 56, 545-550.	2.0	9
1932	High-resistant multispectral optical coatings for infrared applications. , 2013, , .		1
1933	Effect of boron and silicon doping on the surface and electrical properties of diamond like carbon films by magnetron sputtering technique. Surface and Coatings Technology, 2013, 231, 131-134.	2.2	19
1934	Surface modification of amorphous carbon thin films by 1,3-dipolar cycloaddition. Diamond and Related Materials, 2013, 38, 63-68.	1.8	5
1935	Effect of Thermal Annealing on Tribological and Corrosion Properties of DLC Coatings. Journal of Materials Engineering and Performance, 2013, 22, 3093-3100.	1.2	16

#	Article	IF	Citations
1936	Argon Implantation in Tetrahedral Amorphous Carbon Deposited by Filtered Cathodic Vacuum Arc. Journal of Materials Engineering and Performance, 2013, 22, 1396-1404.	1.2	4
1937	Effect of ion bombardment on the field emission of graphite materials. Journal of Surface Investigation, 2013, 7, 299-302.	0.1	2
1938	Sticky nano-thin films for the adhesion of polymers. Applied Surface Science, 2013, 285, 893-899.	3.1	5
1939	Analysis of wear behavior and graphitization of hydrogenated DLC under boundary lubricant with MoDTC. Wear, 2013, 305, 124-128.	1.5	34
1940	Relationship between bonding characteristics and etch-durability of amorphous carbon layer. Thin Solid Films, 2013, 531, 328-331.	0.8	8
1941	PLD deposition of tungsten carbide contact for diamond photodiodes. Influence of process conditions on electronic and chemical aspects. Applied Surface Science, 2013, 278, 111-116.	3.1	2
1942	Mass density control of carbon films deposited by H-assisted plasma CVD method. Surface and Coatings Technology, 2013, 228, S15-S18.	2.2	9
1943	Preparation of carbon-based coating for flexible fabric heater by arc ion plating. Thin Solid Films, 2013, 528, 247-254.	0.8	8
1945	The field emission properties of diamond-like carbon film prepared by filtered cathodic vacuum arc. , 2013, , .		0
1946	Study on Electrochemical Corrosion Behavior Comparison between DLC and TiN Coatings under Different Corrosive Environment. Advanced Materials Research, 2013, 750-752, 1977-1981.	0.3	3
1947	Influence of Vacuum Cathodic Arc Etching on Structure and Properties of W-Doped DLC Films. Advanced Materials Research, 2013, 787, 296-300.	0.3	1
1948	Nucleation and growth of <scp>CVD</scp> diamond on fused silica optical fibres with titanium dioxide interlayer. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 1991-1997.	0.8	21
1949	Friction and Wear Performance of Boundary-lubricated DLC/DLC Contacts in Synthetic base Oil. Procedia Engineering, 2013, 68, 518-524.	1.2	20
1950	Adsorption mechanisms for fatty acids on DLC and steel studied by AFM and tribological experiments. Applied Surface Science, 2013, 283, 460-470.	3.1	58
1951	Investigating the microstructure and mechanical behaviors of DLC films on AISI52100 bearing steel surface fabricated by plasma immersion ion implantation and deposition. Surface and Coatings Technology, 2013, 228, S159-S163.	2.2	21
1952	Tribological performance of DLC coatings deposited by ion beam deposition under dry friction and oil lubricated conditions. Vacuum, 2013, 94, 14-18.	1.6	18
1953	Gas barrier properties of hydrogenated amorphous carbon films coated on polyethylene terephthalate by plasma polymerization in argon/n-hexane gas mixture. Thin Solid Films, 2013, 540, 65-68.	0.8	10
1954	Effect of atomic bonding configuration on optical properties of a-Si1â^'xCx:H thin film. Journal of Alloys and Compounds, 2013, 559, 20-23.	2.8	3

#	Article	IF	Citations
1955	Plasma parameter investigation during plasma-enhanced chemical vapor deposition of silicon-containing diamond-like carbon films. Surface and Coatings Technology, 2013, 237, 126-134.	2.2	14
1956	Characterization of temperature-induced changes in amorphous hydrogenated carbon thin films. Diamond and Related Materials, 2013, 37, 97-103.	1.8	19
1957	Influence of inert gases on the reactive high power pulsed magnetron sputtering process of carbon-nitride thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2013, 31, .	0.9	18
1958	Controlling the luminescence emission from palladium grafted graphene oxide thin films via reduction. Nanoscale, 2013, 5, 5620.	2.8	30
1959	Facile synthesis of hydrogenated carbon nanospheres with a graphite-like ordered carbon structure. Nanoscale, 2013, 5, 11306.	2.8	36
1960	An overview on diamond-like carbon coatings in medical applications. Surface and Coatings Technology, 2013, 233, 119-130.	2.2	175
1961	Wear behaviour of tetrahedral amorphous diamond-like carbon (ta-C DLC) in additive containing lubricants. Wear, 2013, 307, 1-9.	1.5	69
1962	Thickness dependency of the structure and laser irradiation stability of filtered cathodic vacuum arc grown carbon films for heat assisted magnetic recording overcoat. Surface and Coatings Technology, 2013, 236, 207-211.	2.2	3
1963	Formation of nanodiamonds at near-ambient conditions via microplasma dissociation of ethanol vapour. Nature Communications, 2013, 4, 2618.	5.8	155
1964	Preparation and properties of Ag/DLC nanocomposite films fabricated by unbalanced magnetron sputtering. Applied Surface Science, 2013, 284, 165-170.	3.1	109
1965	A simple SDS-assisted self-assembly method for the synthesis of hollow carbon nanospheres to encapsulate sulfur for advanced lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2013, 1, 14306.	5.2	88
1966	Practical Method to Limit Tipâ€“Sample Contact Stress and Prevent Wear in Amplitude Modulation Atomic Force Microscopy. ACS Nano, 2013, 7, 9836-9850.	7.3	29
1967	Influence of bias voltage on microstructure and properties of Al-containing diamond-like carbon films deposited by a hybrid ion beam system. Surface and Coatings Technology, 2013, 229, 217-221.	2.2	25
1968	Interpreting the effects of interfacial chemistry on the tribology of diamond-like carbon coatings against steel in distilled water. Wear, 2013, 302, 918-928.	1.5	19
1969	Structure of the silver containing diamond like carbon films: Study by multiwavelength Raman spectroscopy and XRD. Diamond and Related Materials, 2013, 40, 32-37.	1.8	21
1970	Adhesion enhancement of diamond-like carbon thin films on Ti alloys by incorporation of nanodiamond particles. Thin Solid Films, 2013, 528, 111-115.	0.8	18
1971	Influence of W content on tribological performance of W-doped diamond-like carbon coatings under dry friction and polyalpha olefin lubrication conditions. Materials & Design, 2013, 51, 775-779.	5.1	36
1972	Electron field emission of iron and cobaltâ€doped DLC films fabricated by electrochemical deposition. Surface and Interface Analysis, 2013, 45, 943-948.	0.8	9

#	Article	IF	Citations
1973	The effect of ammonia/acetylene ratio on characteristics of amorphous carbon films prepared by plasma enhanced chemical vapor deposition. Surface and Coatings Technology, 2013, 231, 353-356.	2.2	3
1974	Polymeric amorphous carbon films with an extended range of optical gaps. Diamond and Related Materials, 2013, 37, 29-36.	1.8	7
1975	Role of base pressure on the structural and nano-mechanical properties of metal/diamond-like carbon bilayers. Applied Surface Science, 2013, 274, 282-287.	3.1	17
1976	Structure and properties of Mo-containing diamond-like carbon films produced by ion source assisted cathodic arc ion-plating. Applied Surface Science, 2013, 286, 109-114.	3.1	19
1977	Synthesis and characterization of CrCNâ€“DLC composite coatings by cathodic arc ion-plating. Nuclear Instruments & Methods in Physics Research B, 2013, 307, 185-188.	0.6	13
1978	White light emission from polystyrene under pulsed ultra violet laser irradiation. Scientific Reports, 2013, 3, 3253.	1.6	19
1979	Effect of vacuum annealing on tribological behavior of nanosized diamond-like carbon coatings produced by pulse vacuum-arc method. Journal of Friction and Wear, 2013, 34, 481-486.	0.1	7
1980	Direct formation of amine functionality on DLC films and surface cyto-compatibility. Diamond and Related Materials, 2013, 38, 28-31.	1.8	5
1981	Implantation of xenon in amorphous carbon and silicon for brachytherapy application. Applied Surface Science, 2013, 275, 156-159.	3.1	3
1982	Development and application of cathodic vacuum arc plasma for nanostructured and nanocomposite film deposition. Surface and Coatings Technology, 2013, 229, 36-41.	2.2	10
1983	Effect of gamma-irradiation on the mechanical properties of polyacrylonitrile-based carbon fiber. Carbon, 2013, 52, 427-439.	5.4	66
1984	Electrochemical performances of diamond-like carbon coatings on carbon steel, stainless steel, and brass. Thin Solid Films, 2013, 529, 412-416.	0.8	27
1985	The friction of diamond-like carbon coatings in a water environment. Friction, 2013, 1, 210-221.	3.4	45
1986	Si seed layer thickness effect on the structure of ultrathin tetrahedral amorphous carbon films. Surface and Coatings Technology, 2013, 235, 117-120.	2.2	5
1987	Ultra-low friction of tetrahedral amorphous diamond-like carbon (ta-C DLC) under boundary lubrication in poly alpha-olefin (PAO) with additives. Tribology International, 2013, 65, 286-294.	3.0	91
1988	Effects of electrical conductivity of substrate materials on microstructure of diamond-like carbon films prepared by bipolar-type plasma based ion implantation. Journal of Physics: Conference Series, 2013, 417, 012062.	0.3	1
1989	Frictional and Optical Properties of Diamond-Like-Carbon Coatings on Polycarbonate. Plasma Science and Technology, 2013, 15, 690-695.	0.7	5
1990	Microstructure, mechanical and tribological properties of a-C/a-C:Ti nanomultilayer film. Surface and Coatings Technology, 2013, 232, 403-411.	2.2	28

#	Article	IF	Citations
1991	Nanocrystalline diamond thin films grown on Ti6Al4V alloy. Thin Solid Films, 2013, 527, 59-64.	0.8	11
1992	Improving the internal stress and wear resistance of DLC film by low content Ti doping. Solid State Sciences, 2013, 20, 17-22.	1.5	84
1993	From DLC to Si-DLC based layer systems with optimized properties for tribological applications. Surface and Coatings Technology, 2013, 215, 357-363.	2.2	68
1994	Highly resolved analysis of the chemistry and mechanical properties of an a-C:H coating system by nanoindentation and auger electron spectroscopy. Thin Solid Films, 2013, 528, 263-268.	0.8	5
1995	Piezoresistive properties of amorphous carbon based nanocomposite thin films deposited by plasma assisted methods. Thin Solid Films, 2013, 538, 78-84.	0.8	20
1996	Influence of thermal heating on diamond-like carbon film properties prepared by filtered cathodic arc. Thin Solid Films, 2013, 544, 477-481.	0.8	11
1997	X-ray reflectivity analysis on initial stage of diamond-like carbon film deposition on Si substrate by RF plasma CVD and on removal of the sub-surface layer by oxygen plasma etching. Diamond and Related Materials, 2013, 38, 36-40.	1.8	7
1998	Friction reduction by thermal treatment of arc evaporated TiAlTaN coatings in methane. Tribology International, 2013, 67, 54-60.	3.0	2
1999	Effect of N2 flow rate on the properties of CNx thin films prepared by radio frequency plasma enhanced chemical vapor deposition from ethane and nitrogen. Thin Solid Films, 2013, 529, 439-443.	0.8	8
2000	What makes a dangling bond a binding site for thermal CH3 radicals? â€" A combined molecular dynamics and potential energy analysis study on amorphous hydrocarbon films. Diamond and Related Materials, 2013, 40, 41-50.	1.8	5
2001	Gradient titanium and silver based carbon coatings deposited on AISI316L. Applied Surface Science, 2013, 275, 303-310.	3.1	21
2002	Particle beam experiments for the analysis of reactive sputtering processes in metals and polymer surfaces. Review of Scientific Instruments, 2013, 84, 103303.	0.6	20
2003	Tribological behavior of diamond-like carbon produced by rf-PCVD based on energetic evaluation. Surface and Coatings Technology, 2013, 236, 457-464.	2.2	16
2004	Interlayer formation of diamond-like carbon coatings on industrial polyethylene: Thickness dependent surface characterization by SEM, AFM and NEXAFS. Applied Surface Science, 2013, 271, 381-389.	3.1	38
2005	Carbon Overcoat Oxidation in Heat-Assisted Magnetic Recording. IEEE Transactions on Magnetics, 2013, 49, 3721-3724.	1.2	44
2006	Electrochemical hydrogen storage of the graphene sheets prepared by DC arc-discharge method. Surface and Coatings Technology, 2013, 228, S120-S125.	2.2	58
2007	Surface modification of NiTi alloys using nitrogen doped diamond-like carbon coating fabricated by plasma immersion ion implantation and deposition. Journal of Alloys and Compounds, 2013, 581, 873-876.	2.8	17
2008	Simple chemical synthesis of porous carbon spheres and its improved field emission by water vapor adsorption. Microporous and Mesoporous Materials, 2013, 171, 201-207.	2.2	16

#	Article	IF	Citations
2009	Structure and Electrochemical Performance of Nitrogen-Doped Carbon Film Formed by Electron Cyclotron Resonance Sputtering. Analytical Chemistry, 2013, 85, 9845-9851.	3.2	54
2010	Creation of low hysteresis superhydrophobic paper by deposition of hydrophilic diamond-like carbon films. Cellulose, 2013, 20, 3219-3226.	2.4	27
2011	Effect of step biasing on diamond-like carbon films deposited by pulsed unbalanced magnetron sputtering. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 1874-1880.	0.8	3
2012	The effect of empirical potential functions on modeling of amorphous carbon using molecular dynamics method. Applied Surface Science, 2013, 286, 287-297.	3.1	59
2013	Hydrophobic, mechanical, and tribological properties of fluorine incorporated hydrogenated fullerene-like carbon films. Friction, 2013, 1, 350-358.	3.4	18
2014	Ultrathin free-standing membranes from metal hydroxide nanostrands. Journal of Membrane Science, 2013, 448, 270-291.	4.1	31
2015	A Novel strategy to enhance micro/nano-tribological properties of DLC film by combining micro-pattern and thin ionic liquids film. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 428, 70-78.	2.3	26
2016	Novel ionic lubricants for amorphous carbon surfaces: molecular modeling of the structure and friction. Soft Matter, 2013, 9, 10606.	1.2	19
2017	Structure and mechanical properties of ultra-nanocrystalline diamond and nanocrystalline Cu from atomistic simulations. Mechanics of Materials, 2013, 67, 79-85.	1.7	12
2018	Hybridized carbon nanocomposite thin films. , 2013, , 405-435.		0
2019	Tribological performance and tribochemical processes in a DLC/steel system when lubricated in a fully formulated oil and base oil. Surface and Coatings Technology, 2013, 217, 1-12.	2.2	58
2020	Dispersion of single-walled carbon nanotubes in alcohol-cholic acid mixtures. Russian Journal of Physical Chemistry A, 2013, 87, 2068-2073.	0.1	13
2021	Mechanical and tribological properties of gradient a-C:H/Ti coatings. Materials Science-Poland, 2013, 31, 415-423.	0.4	12
2022	Pulsed laser deposition of thin carbon films in a neutral gas background. Journal Physics D: Applied Physics, 2013, 46, 215202.	1.3	19
2023	Formation and Classification of Amorphous Carbon by Molecular Dynamics Simulation. Japanese Journal of Applied Physics, 2013, 52, 01AL04.	0.8	3
2024	Localized growth of materials from amorphous hydrogenated carbon by barrier-discharge treatment of benzene vapor-argon mixture. High Energy Chemistry, 2013, 47, 135-139.	0.2	1
2025	Graphitic domain layered titania nanotube arrays for separation and shuttling of solar-driven electrons. Journal of Materials Chemistry A, 2013, 1, 203-207.	5.2	7
2026	Influence of diamondâ€like carbon overlay properties on refractive index sensitivity of nanoâ€coated optical fibres. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 2100-2105.	0.8	29

#	Article	IF	Citations
2027	The Effect of Thermal Heating on Corrosion Resistance of Diamond-Like Carbon Film Prepared by Filtered Cathodic Arc. Applied Mechanics and Materials, 2013, 313-314, 223-226.	0.2	0
2028	The Effects of Accelerated Aging and Contact with Food Simulants on the Adhesion of Amorphous Hydrogenated Carbon Films Deposited on Clarified Polypropylene. Journal of Adhesion, 2013, 89, 611-628.	1.8	7
2029	Nonvolatile resistive memory devices based on hydrogenated amorphous carbon. , 2013, , .		4
2030	Formation of thick textured carbon film using filtered cathodic vacuum arc technique. , 2013, , .		0
2031	Structural, surface, and thermomechanical properties of intrinsic and argon implanted tetrahedral amorphous carbon. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2013, 31, .	0.9	7
2032	In-Situ XAS Investigation of the Effect of Electrochemical Reactions on the Structure of Graphene in Aqueous Electrolytes. Journal of the Electrochemical Society, 2013, 160, C445-C450.	1.3	23
2033	Critical thickness of diamond-like carbon study using X-ray photoelectron spectroscopy depth profiling. , 2013, , .		0
2034	Thickness-dependent field emission from ZnTe films prepared by magnetron sputtering. Journal of Alloys and Compounds, 2013, 549, 88-91.	2.8	18
2035	Influence of electric field on laser damage properties of DLC films by unbalanced magnetron sputtering. Applied Surface Science, 2013, 265, 234-238.	3.1	6
2036	C/CrN multilayer coating for polymer electrolyte membrane fuel cell metallic bipolar plates. Journal of Power Sources, 2013, 222, 351-358.	4.0	54
2037	A modified Tersoff potential for pure and hydrogenated diamond-like carbon. Computational Materials Science, 2013, 67, 146-150.	1.4	55
2038	Effects of Ar gas pressure on microstructure of DLC films deposited by high-power pulsed magnetron sputtering. Vacuum, 2013, 89, 261-266.	1.6	35
2039	Fabrication of barium/strontium carbonate coated amorphous carbon nanotubes as an improved field emitter. Applied Physics A: Materials Science and Processing, 2013, 110, 493-499.	1.1	12
2040	Solid lubricants: a review. Journal of Materials Science, 2013, 48, 511-531.	1.7	549
2041	Microstructure, Morphology and Properties of Titanium Containing Graphite-Like Carbon Films Deposited by Unbalanced Magnetron Sputtering. Tribology Letters, 2013, 49, 47-59.	1.2	24
2042	Experimental study of contamination and cleaning of in-vessel mirrors for ITER optical diagnostics on T-10 and QSPA-T facilities. Journal of Nuclear Materials, 2013, 438, S1160-S1163.	1.3	9
2043	Effects of radio-frequency powers on the properties of carbon coatings on optical fibers prepared by thermal chemical vapor deposition enhanced with inductively coupled plasma. Vacuum, 2013, 87, 141-144.	1.6	4
2044	Behavior of DLC coated low-alloy steel under tribological and corrosive load: Effect of top layer and interlayer variation. Surface and Coatings Technology, 2013, 215, 110-118.	2.2	30

#	Article	IF	Citations
2045	The use of Raman spectroscopy to characterize the carbon materials found in Amazonian anthrosoils. Journal of Raman Spectroscopy, 2013, 44, 283-289.	1.2	59
2046	Tribological properties of hard a-C:H:F coatings. Surface and Coatings Technology, 2013, 237, 328-332.	2.2	7
2047	Evaluation of the transformed layer of DLC coatings after sliding in oil using spectroscopic reflectometry. Tribology International, 2013, 65, 270-277.	3.0	17
2048	Guide-mode resonance characteristics of periodic structure on base of diamond-like carbon film. Optics Communications, 2013, 301-302, 1-6.	1.0	32
2049	Cell viability and adhesion on diamond-like carbon films containing titanium dioxide nanoparticles. Applied Surface Science, 2013, 266, 176-181.	3.1	31
2050	Broadband optical absorption of amorphous carbon/Ag nanocomposite films and its potential for solar harvesting applications. Solar Energy Materials and Solar Cells, 2013, 117, 350-356.	3.0	38
2051	Comparison of arc evaporated Mo-based coatings versus Cr1N1 and taâ€“C coatings by reciprocating wear test. Wear, 2013, 298-299, 14-22.	1.5	18
2052	The effect of different radio-frequency powers on characteristics of amorphous boron carbon thin film alloys prepared by reactive radio-frequency plasma enhanced chemical vapor deposition. Thin Solid Films, 2013, 528, 86-92.	0.8	17
2053	Investigation of superfast deposition of metal oxide and Diamond-Like Carbon thin films by nanosecond Ytterbium (Yb+) fiber laser. Optical Materials, 2013, 36, 53-59.	1.7	20
2054	Early fatigue damage detecting sensorsâ€”A review and prospects. Sensors and Actuators A: Physical, 2013, 198, 46-60.	2.0	26
2055	Preparation and antibacterial properties of Ag-containing diamond-like carbon films prepared by a combination of magnetron sputtering and plasma source ion implantation. Vacuum, 2013, 89, 179-184.	1.6	64
2056	Improving the performance of a proportional 4/3 waterâ€“hydraulic valve by using a diamond-like-carbon coating. Wear, 2013, 297, 1016-1024.	1.5	29
2057	Grain size dependent physical and chemical properties of thick CVD diamond films for high energy density physics experiments. Diamond and Related Materials, 2013, 40, 75-81.	1.8	30
2058	Atomic force microscopy and tribology study of the adsorption of alcohols on diamond-like carbon coatings and steel. Applied Surface Science, 2013, 271, 317-328.	3.1	21
2059	Influence of Ag content on mechanical and tribological behavior of DLC coatings. Surface and Coatings Technology, 2013, 232, 440-446.	2.2	98
2060	Nitrogen implantation into diamond-like carbon films prepared by bipolar-type plasma based ion implantation. Nuclear Instruments & Methods in Physics Research B, 2013, 307, 333-339.	0.6	13
2061	Production of sp3 hybridization by swift heavy ion irradiation of HOPG. Nuclear Instruments & Methods in Physics Research B, 2013, 307, 562-565.	0.6	11
2062	Diamond-like carbon coating of a pure bioplastic foil. Thin Solid Films, 2013, 545, 558-563.	0.8	28

#	Article	IF	Citations
2063	Effects of acetylene/ammonia mixtures on the properties of carbon films prepared by thermal chemical vapor deposition. Surface and Coatings Technology, 2013, 215, 161-169.	2.2	14
2064	Influence of application technology on the erosion resistance of DLC coatings. Surface and Coatings Technology, 2013, 237, 284-291.	2.2	12
2065	Effects of temperature and Mo2C layer on stress and structural properties in CVD diamond film grown on Mo foil. Journal of Alloys and Compounds, 2013, 579, 638-645.	2.8	16
2066	Analysis of hydrogenated amorphous carbon films deposited by middle frequency pulsed unbalanced magnetron sputtering. Journal of Non-Crystalline Solids, 2013, 363, 77-83.	1.5	16
2067	Ultra-low density carbon foams produced by pulsed laser deposition. Carbon, 2013, 56, 358-365.	5.4	92
2068	Ion beam analysis of a-C:H films on alloy steel substrate. Thin Solid Films, 2013, 545, 171-175.	0.8	5
2069	Tailoring the structure and property of silicon-doped diamond-like carbon films by controlling the silicon content. Surface and Coatings Technology, 2013, 235, 326-332.	2.2	68
2070	Effects of H2 gas addition into process and H ion implantation on the microstructure of hydrogenated amorphous carbon films prepared by bipolar-type plasma based ion implantation. Nuclear Instruments & Methods in Physics Research B, 2013, 307, 328-332.	0.6	1
2071	Low friction and environmentally stable diamond-like carbon (DLC) coatings incorporating silicon, oxygen and fluorine sliding against aluminum. Surface and Coatings Technology, 2013, 215, 340-349.	2.2	38
2072	Transient reflectivity on vertically aligned single-wall carbon nanotubes. Thin Solid Films, 2013, 543, 51-55.	0.8	3
2073	A comparison study between atomic and ionic nitrogen doped carbon films prepared by ion beam assisted cathode arc deposition at various pulse frequencies. Applied Surface Science, 2013, 287, 150-158.	3.1	17
2074	Effects of Cr concentrations on the microstructure, hardness, and temperature-dependent tribological properties of Cr-DLC coatings. Applied Surface Science, 2013, 286, 137-141.	3.1	111
2075	Influences of ceramic mating balls on the tribological properties of Cr/a-C coatings with low chromium content in water lubrication. Wear, 2013, 303, 354-360.	1.5	16
2076	Effect of underlying silicon layer on microstructure and photoluminescence of rapid-thermal-annealed carbon and C/Si nanofilms. Journal of Alloys and Compounds, 2013, 571, 31-36.	2.8	2
2077	Effects of CH4 gas and substrate temperature on hydrogenated amorphous carbon (a-C:H) films fabricated using DC facing target sputtering. Journal of the Korean Physical Society, 2013, 62, 258-262.	0.3	3
2078	Formation of thin DLC films on SiO2/Si substrate using FCVAD technique. Nuclear Instruments & Methods in Physics Research B, 2013, 307, 147-153.	0.6	3
2079	In Situ and Real Time Characterization of Spontaneous Grafting of Aryldiazonium Salts at Carbon Surfaces. Chemistry of Materials, 2013, 25, 1144-1152.	3.2	32
2080	Structural stability of hydrogenated amorphous carbon overcoats used in heat-assisted magnetic recording investigated by rapid thermal annealing. Journal of Applied Physics, 2013, 113, .	1.1	39

#	Article	IF	Citations
2081	Organic Solar Cells: A Review of Materials, Limitations, and Possibilities for Improvement. Particulate Science and Technology, 2013, 31, 427-442.	1.1	150
2082	Comparing deuterium retention in tungsten films measured by temperature programmed desorption and nuclear reaction analysis. Nuclear Instruments & Methods in Physics Research B, 2013, 300, 54-61.	0.6	55
2083	Lubrication of DLC-coated surfaces with MoS2 nanotubes in all lubrication regimes: Surface roughness and running-in effects. Wear, 2013, 303, 361-370.	1.5	44
2084	Photochemical modification of DLC films with oxygen functionalities and their chemical structure control. Diamond and Related Materials, 2013, 33, 16-19.	1.8	24
2085	Growth and characteristics of diamond-like carbon films with titanium and titanium nitride functional layers by cathode arc plasma. Surface and Coatings Technology, 2013, 223, 17-23.	2.2	17
2086	Surface morphology, cohesive and adhesive properties of amorphous hydrogenated carbon nanocomposite films. Applied Surface Science, 2013, 276, 543-549.	3.1	10
2087	Magnetotransport properties of undoped amorphous carbon films. Carbon, 2013, 59, 278-282.	5.4	23
2088	Morphological analysis and cell viability on diamond-like carbon films containing nanocrystalline diamond particles. Applied Surface Science, 2013, 275, 258-263.	3.1	8
2089	Graphene nanochains and nanoislands in the layers of room-temperature fluorinated graphite. Carbon, 2013, 59, 518-529.	5.4	57
2090	Microstructure and surface properties of chromium-doped diamond-like carbon thin films fabricated by high power pulsed magnetron sputtering. Applied Surface Science, 2013, 276, 31-36.	3.1	25
2091	Structure and properties of diamond-like carbon thin films synthesized by biased target ion beam deposition. Surface and Coatings Technology, 2013, 223, 11-16.	2.2	22
2092	Carbon coatings on polymers and their biocompatibility. Applied Surface Science, 2013, 275, 43-48.	3.1	14
2093	Multi-wall carbon nanotubes with nitrogen-containing carbon coating. Chemical Papers, 2013, 67, .	1.0	12
2094	Study of optical properties and biocompatibility of DLC films characterized by sp3 bonds. Applied Physics A: Materials Science and Processing, 2013, 112, 143-148.	1.1	26
2095	Synthesis of structure-controlled carbon nano spheres by solution plasma process. Carbon, 2013, 60, 292-298.	5.4	128
2096	Raman analysis of DLC and Si-DLC films deposited on nitrile rubber. Surface and Coatings Technology, 2013, 232, 521-527.	2.2	42
2097	Preparation and characteristics of graphene oxide and its thin films. Surface and Coatings Technology, 2013, 231, 487-491.	2.2	44
2098	Enhanced Electrochemical Performance of FeWO₄ by Coating Nitrogen-Doped Carbon. ACS Applied Materials & Interfaces, 2013, 5, 4209-4215.	4.0	47

#	Article	IF	Citations
2099	Sputter deposition of transition-metal carbide films â€" A critical review from a chemical perspective. Thin Solid Films, 2013, 536, 1-24.	0.8	209
2100	Turbostratic-like carbon nitride coatings deposited by industrial-scale direct current magnetron sputtering. Thin Solid Films, 2013, 536, 25-31.	0.8	8
2101	Femtosecond laser pulse irradiation effects on thin hydrogenated amorphous carbon layers. Applied Physics A: Materials Science and Processing, 2013, 112, 9-14.	1.1	16
2102	Interface Architecture for Superthick Carbon-Based Films toward Low Internal Stress and Ultrahigh Load-Bearing Capacity. ACS Applied Materials & Interfaces, 2013, 5, 5015-5024.	4.0	85
2103	Friction and wear of Cr-doped DLC films under different lubrication conditions. Vacuum, 2013, 94, 1-5.	1.6	30
2104	Lower friction and higher wear resistance of fluorineâ€incorporated amorphous carbon films. Surface and Interface Analysis, 2013, 45, 1329-1333.	0.8	6
2105	Simple synthesis of ultra-small nanodiamonds with tunable size and photoluminescence. Carbon, 2013, 62, 374-381.	5.4	67
2106	Graphite-like carbon films by high power impulse magnetron sputtering. Applied Surface Science, 2013, 283, 321-326.	3.1	67
2107	Correlations between deposition parameters, mechanical properties, and microstructure for diamond-like carbon films synthesized by RF-PECVD. Journal of the Chinese Institute of Engineers, Transactions of the Chinese Institute of Engineers,Series A/Chung-kuo Kung Ch'eng Hsuch K'an, 2013, 36, 157-163.	0.6	6
2108	Preparation and characterization of amorphous carbon (a-C) membranes by molecular dynamics simulation. Desalination and Water Treatment, 2013, 51, 5231-5236.	1.0	2
2109	Effect of structure of carbon films on their tribological properties. Diamond and Related Materials, 2013, 38, 79-86.	1.8	10
2110	Atomistic simulations of low-density nanoporous materials: Carbon nanofoams. Physical Review B, 2013, 87, .	1.1	5
2111	Microwaveâ€Assisted Inâ€...Situ Synthesis of Graphene/PEDOT Hybrid and Its Application in Supercapacitors. ChemPlusChem, 2013, 78, 227-234.	1.3	61
2112	Carbonisation of biomass-derived chars and the thermal reduction of a graphene oxide sample studied using Raman spectroscopy. Carbon, 2013, 59, 383-405.	5.4	144
2113	Ultra Hydrophobic/Superhydrophilic Modified Cotton Textiles through Functionalized Diamond-Like Carbon Coatings for Self-Cleaning Applications. Langmuir, 2013, 29, 2775-2783.	1.6	85
2114	Structural and nano-mechanical properties of nanostructured diamond-like carbon thin films. Metals and Materials International, 2013, 19, 405-410.	1.8	2
2115	X-ray reflectometry study of diamond-like carbon films prepared by plasma enhanced chemical vapor deposition in a low pressure inductively coupled plasma. Thin Solid Films, 2013, 537, 102-107.	0.8	0
2116	The microstructure and mechanical properties of multilayer diamond-like carbon films with different modulation ratios. Applied Surface Science, 2013, 264, 207-212.	3.1	65

#	Article	IF	Citations
2117	Cleaning of whey protein and milk salts soiled on DLC coated surfaces at high-temperature. Journal of Food Engineering, 2013, 114, 29-38.	2.7	29
2118	Graphene ultrathin film electrode for detection of lead ions in acetate buffer solution. Talanta, 2013, 103, 47-55.	2.9	26
2119	Electrochemical Behaviors of Diamond-Like-Carbon-Coated Silicon Monoxideâ€“Graphite Composite Anode for Li-Ion Battery. Journal of the Electrochemical Society, 2013, 160, A1348-A1352.	1.3	9
2120	Electronic properties and structure of carbon nanocomposite films deposited from accelerated C₆₀ion beam. Journal Physics D: Applied Physics, 2013, 46, 485305.	1.3	5
2121	Heterogeneous Charge Transfer at the Amorphous Carbon/Solution Interface: Effect on the Spontaneous Attachment of Aryldiazonium Salts. Journal of Physical Chemistry C, 2013, 117, 22768-22777.	1.5	12
2122	Ultrahigh-Speed Coating of DLC at Over 100 $mu{m m}/{m h}$ by Using Microwave-Excited High-Density Near Plasma. IEEE Transactions on Plasma Science, 2013, 41, 1830-1836.	0.6	10
2123	Spatial characterization of H 2 :CH 4 dissociation level in microwave ECR plasma source by fibre-optic OES. European Physical Journal: Special Topics, 2013, 222, 2223-2232.	1.2	4
2124	Carbon-Binding Designer Proteins that Discriminate between sp²- and sp³-Hybridized Carbon Surfaces. Langmuir, 2013, 29, 4839-4846.	1.6	33
2125	Some trends in the development of wear-resistant functional coatings. Powder Metallurgy and Metal Ceramics, 2013, 52, 176-188.	0.4	5
2126	Porous Carbon Nanoparticle Networks with Tunable Absorbability. Scientific Reports, 2013, 3, 2524.	1.6	50
2127	Cell adhesion and osteogenic differentiation on threeâ€dimensional pillar surfaces. Journal of Biomedical Materials Research - Part A, 2013, 101A, 842-852.	2.1	26
2128	Influence of deposition pressure on hydrogenated amorphous carbon films prepared by d.c.â€pulse plasma chemical vapor deposition. Surface and Interface Analysis, 2013, 45, 800-804.	0.8	6
2129	Plasma post-processing of diamond-like carbon nano-coated long-period gratings. , 2013, , .		0
2130	Adhesion Tendency of Polymers to Hard Coatings. International Polymer Processing, 2013, 28, 415-420.	0.3	10
2131	H2/N2Plasma Etching Rate of Carbon Films Deposited by H-Assisted Plasma Chemical Vapor Deposition. Japanese Journal of Applied Physics, 2013, 52, 01AB01.	0.8	3
2132	High reflectance ta-C coatings in the extreme ultraviolet. Optics Express, 2013, 21, 27537.	1.7	37
2133	Impact of laser power density on tribological properties of Pulsed Laser Deposited DLC films. AIP Advances, 2013, 3, .	0.6	12
2134	Formation of three-dimensional carbon microstructures via two-photon microfabrication and microtransfer molding. Optical Materials Express, 2013, 3, 875.	1.6	43

#	Article	IF	Citations
2135	Growth properties and resistive switching effects of diamond-like carbon films deposited using a linear ion source. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2013, 31, .	0.6	6
2136	Large-scale molecular dynamics simulations of wear in diamond-like carbon at the nanoscale. Applied Physics Letters, 2013, 103, .	1.5	59
2137	Local network structure of a-SiC:H and its correlation with dielectric function. Journal of Applied Physics, 2013, 114, 233513.	1.1	8
2138	Nanographite Films for Solid State Electronic Applications. Advances in High Energy Physics, 2013, 2013, 1-6.	0.5	3
2139	Effect of Annealing Temperature on the Water Contact Angle of PVD Hard Coatings. Materials, 2013, 6, 3373-3386.	1.3	8
2140	Metal-Induced Crystallization of Focused Ion Beam-Induced Deposition for Functional Patterned Ultrathin Nanocarbon. Lecture Notes in Nanoscale Science and Technology, 2013, , 123-159.	0.4	2
2141	Thermal Heating Effect on Structural and Mechanical Property of Diamond-Like Carbon Film Prepared by Filtered Cathodic Arc. Applied Mechanics and Materials, 0, 313-314, 82-85.	0.2	0
2142	Experimental Study and Influence Mechanism of the Properties of Î±-C:H Thin Film at Different Bias Voltages. Applied Mechanics and Materials, 2013, 421, 217-221.	0.2	0
2143	Effect of the Temperature on Diamond-Like Carbon (DLC) Thin Film Based on LIS. Applied Mechanics and Materials, 2013, 421, 212-216.	0.2	5
2144	A Study on Wear Properties of GCV Material with DLC Coating. Applied Mechanics and Materials, 0, 470, 7-10.	0.2	0
2145	Incorporated W Roles on Microstructure and Properties of W-C:H Films by a Hybrid Linear Ion Beam Systems. Journal of Nanomaterials, 2013, 2013, 1-8.	1.5	6
2146	Surface characterisation of carbon films produced by plasma chemical vapour deposition method. Surface Engineering, 2013, 29, 474-478.	1.1	4
2147	Influence of Iodine Doping on the Properties of Amorphous Carbon Thin Films Deposited from Camphoric Carbon Precursor. Advanced Materials Research, 2013, 832, 449-454.	0.3	0
2148	Hydrogenated K4 carbon: A new stable cubic gauche structure of carbon hydride. Journal of Chemical Physics, 2013, 138, 024702.	1.2	18
2149	Packaging and coating materials for implantable devices. , 2013, , 68-107.		4
2150	Study on the Preparation of Silver Nanoparticles Coated with Diamond-Like Carbon Film and their Properties. Materials Science Forum, 0, 745-746, 60-65.	0.3	0
2151	Nitrogen Doping of Amorphous Carbon by Aerosol-Assisted Chemical Vapor Deposition for Carbon-Based Solar Cell Applications. Advanced Materials Research, 2013, 832, 706-711.	0.3	0
2152	Defect Engineered Multi-Walled Carbon Nanotube arrays as Electrochemical Double Layer Capacitors. Materials Research Society Symposia Proceedings, 2013, 1542, 1.	0.1	0

#	Article	IF	Citations
2153	Development of hydrogenated amorphous carbon thin film with high electrical resistance for use in embedded sensors in abrasive environment. Journal of Intelligent Material Systems and Structures, 2013, 24, 2197-2203.	1.4	1
2154	First-principles studies of the vibrational properties of amorphous carbon nitrides. Chinese Physics B, 2013, 22, 017101.	0.7	2
2155	Effect of Nitrogen Doping on the Structure and Optical Band Gap of Fluorinated Diamond-Like Carbon Films. Japanese Journal of Applied Physics, 2013, 52, 095502.	0.8	5
2156	Preparation of Diamond-Like Carbon on Ti Film with Tetramethylsilane Buffer Layer. Japanese Journal of Applied Physics, 2013, 52, 11NA02.	0.8	0
2157	Formation of Diamond-Like Carbon Films by Photoemission-Assisted Plasma-Enhanced Chemical Vapor Deposition. Japanese Journal of Applied Physics, 2013, 52, 110123.	0.8	10
2158	Electrochemical Characteristics of a Diamond-Like-Carbon-Coated LiV₃O₈ Cathode When Used in a Li-Metal Battery with a Li-Powder Anode. Japanese Journal of Applied Physics, 2013, 52, 10MB05.	0.8	4
2159	The Microstructure and Tribological Behavior of Ti/a-C and Ti/a-C:H Films Prepared by Magnetron Sputtering. Applied Mechanics and Materials, 0, 420, 123-128.	0.2	0
2160	The Optical Property and Sensitivity of Ag Nanoparticles Deposited Ultra-Thin Diamond-Like Carbon Films. Advanced Materials Research, 0, 803, 222-225.	0.3	0
2161	Fabrication of ZnO nanoparticles-embedded hydrogenated diamond-like carbon films by electrochemical deposition technique. Chinese Physics B, 2013, 22, 058106.	0.7	7
2162	Study and Optimization of PECVD Films Containing Fluorine and Carbon Layered with Diamond Like Carbon Films as Ultra Low Dielectric Constant Interlayer Dielectrics. Materials Research Society Symposia Proceedings, 2013, 1511, 1.	0.1	3
2163	Vapor Deposition Coating Technologies (CVD, PACVD, PVD, and Hybrid PVD-CVD) and Their Tribological Application. , 2013, , 3948-3960.		2
2164	Electrochemical Characteristics of Closely Spaced Defect Tuned Carbon Nanotube Arrays. Journal of the Electrochemical Society, 2013, 160, H360-H367.	1.3	12
2165	The multilayered structure of ultrathin amorphous carbon films synthesized by filtered cathodic vacuum arc deposition. Journal of Materials Research, 2013, 28, 2124-2131.	1.2	24
2166	Investigation into the Influence of Carbon Contamination on the Corrosion Behavior of Aluminum Microelectrodes and AA2024-T3. Journal of the Electrochemical Society, 2013, 160, C119-C127.	1.3	10
2167	Influence of surface features on the adhesion of Staphylococcus epidermidis to Agâ€“TiCN thin films. Science and Technology of Advanced Materials, 2013, 14, 035009.	2.8	27
2168	Fabrication of High Transparency Diamond-Like Carbon Film Coating on D263T Glass at Room Temperature as an Antireflection Layer. International Journal of Photoenergy, 2013, 2013, 1-8.	1.4	11
2169	PlasmaunterstÃ¼tzte DLCâ€Beschichtung von Kunststoffen. Vakuum in Forschung Und Praxis, 2013, 25, 36-41.	0.0	1
2170	Materials used for hip and knee implants. , 2013, , 178-218.		14

#	Article	IF	Citations
2171	Synthesis of carbon based nanomaterials for tissue engineering applications. , 2013, , 119-157.		5
2172	Thermally induced evolution of hydrogenated amorphous carbon. Applied Physics Letters, 2013, 103, .	1.5	60
2173	Blood compatibility of diamond-like carbon (DLC) coatings. , 2013, , 71-102.		8
2174	Nuclear Magnetic Biosignatures in the Carbonaceous Matter of Ancient Cherts: Comparison with Carbonaceous Meteorites. Astrobiology, 2013, 13, 932-947.	1.5	7
2175	Tribological behaviour analysis of hydrogenated and nonhydrogenated DLC lubricated by oils with and without additives. Lubrication Science, 2013, 25, 275-285.	0.9	8
2176	The effect of high deposition energy of carbon overcoats on perpendicular magnetic recording media. Applied Physics Letters, 2013, 103, .	1.5	3
2177	Effect of Diamondâ€Like Carbon Thin Film Coated Acrylic Resin on Candida albicans Biofilm Formation. Journal of Prosthodontics, 2013, 22, 451-455.	1.7	19
2178	IMPROVEMENTS IN THE SURFACE CHARACTERISTICS OF STAINLESS STEEL WORKPIECES BY BURNISHING WITH AN AMORPHOUS DIAMOND-COATED TIP. Machining Science and Technology, 2013, 17, 593-610.	1.4	16
2179	Magnetic behavior of graphene sheets embedded carbon film originated from graphene nanocrystallite. Applied Physics Letters, 2013, 102, .	1.5	25
2180	Influence of Deposition Rate on Optical Properties of RF-Magnetron Sputtered Carbonâ€“Nickel Composite Films Deposited at Different Deposition Times. Molecular Crystals and Liquid Crystals, 2013, 587, 105-112.	0.4	16
2181	Highâ€density remote plasma sputtering of highâ€dielectricâ€constant amorphous hafnium oxide films. Physica Status Solidi (B): Basic Research, 2013, 250, 957-967.	0.7	25
2182	Computational investigation of the mechanical and tribological responses of amorphous carbon nanoparticles. Journal of Applied Physics, 2013, 113, .	1.1	4
2183	The evolution of amorphous hydrocarbons in the ISM: dust modelling from a new vantage point. Astronomy and Astrophysics, 2013, 558, A62.	2.1	303
2184	Effects of Ethylene/Ammonia Mixtures on Thermal Chemical Vapor Deposition Rates and Microstructures of Carbon Films. ECS Journal of Solid State Science and Technology, 2013, 2, N80-N88.	0.9	4
2185	Structure of C Deposition Layers under Various Deposition Conditions. Fusion Science and Technology, 2013, 63, 371-373.	0.6	0
2186	Formation of SiC in DLC/a-Si films as characterized by Raman spectroscopy and XPS. Journal of Physics: Conference Series, 2013, 417, 012046.	0.3	0
2187	Comparison of the surface properties of <scp>DLC</scp> and ultrananocrystalline diamond films with respect to their bioâ€applications. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 2106-2110.	0.8	12
2188	Modification of clarified polypropylene by oxygen plasma to improve the adhesion of thin amorphous hydrogenated carbon films deposited by plasma enhanced chemical vapor deposition. Polymer Engineering and Science, 2013, 53, 1065-1072.	1.5	9

#	Article	IF	Citations
2189	Ion-plasma modules for application of nanostructured carbon coatings. Journal of Physics: Conference Series, 2013, 479, 012002.	0.3	0
2190	Fabrication of Amorphous Silicon Carbide Films from Decomposition of Tetramethylsilane using ECR plasma of Ar. Journal of Physics: Conference Series, 2013, 441, 012039.	0.3	9
2191	Bioactivity and hemocompatibility study of amorphous hydrogenated carbon coatings produced by pulsed magnetron discharge. Journal of Biomedical Materials Research - Part A, 2013, 101A, 1800-1812.	2.1	10
2192	Gas Barrier Properties of Diamond-like Carbon Films Synthesized by Using Remote Type Microwave Plasma CVD under Sub-ambient Atmospheric Pressure. Journal of Physics: Conference Series, 2013, 417, 012043.	0.3	1
2193	Electrodeposition of Diamond-like Carbon (DLC) Films on Mg by Plasma Electrolysis. Electrochemistry, 2013, 81, 977-980.	0.6	5
2194	Correlation between Optical Properties and Hardness of Diamond-Like Carbon Films. Journal of Solid Mechanics and Materials Engineering, 2013, 7, 187-198.	0.5	24
2195	Effect of Hybrid Surface Treatment Composed of Plasma Nitriding and DLC Coating on Friction Coefficient and Fatigue Strength of Stainless Steel. Materials Transactions, 2013, 54, 732-737.	0.4	16
2196	Thermal Stability and High-Temperature Tribological Properties of a-C:H and Si-DLC Deposited by Microwave Sheath Voltage Combination Plasma. Tribology Online, 2013, 8, 257-264.	0.2	34
2197	Nanometers Layered Conductive Carbon Coating on 316L Stainless Steel as Bipolar Plates for More Economical Automotive PEMFC. , 0, , .		1
2198	Raman Spectroscopy of Amorphous Carbon Prepared by Pulsed Arc Discharge in Various Gas Mixtures. Journal of Spectroscopy, 2013, 2013, 1-6.	0.6	53
2199	Structural, Nanomechanical, and Field Emission Properties of Amorphous Carbon Films Having Embedded Nanocrystallites Deposited by Filtered Anodic Jet Carbon Arc Technique. Journal of Nanoscience, 2013, 2013, 1-11.	2.6	8
2200	Evaluation of DLC, WC/C, and TiN Coatings on Martensitic Stainless Steel and Yttria-Stabilized Tetragonal Zirconia Polycrystal Substrates for Reusable Surgical Scalpels. , 2013, 2013, 1-9.		4
2201	Investigation of the sp3 structure of carbon fibres using UV-Raman spectroscopy. Tanso, 2013, 2013, 243-247.	0.1	4
2202	Compliant and Hard Cu(Ni)-C Nanocomposite Coatings. Journal of Materials Science Research, 2013, 2, .	0.1	0
2203	Surface Chemical Structural Analysis of Diamond-like Carbon Films by X-ray Photoelectron Spectroscopy. Journal of Surface Analysis (Online), 2013, 20, 25-54.	0.1	6
2204	Innovative Surface Technology for Customized Tribological Systems. , 2014, , .		1
2205	Advanced Low Friction Engine Coating Applied to a 70cc High Performance Chainsaw. , 2014, , .		0
2206	The Effect of Bias Voltage and Gas Pressure on the Structure, Adhesion and Wear Behavior of Diamond Like Carbon (DLC) Coatings With Si Interlayers. Coatings, 2014, 4, 214-230.	1.2	25

#	Article	IF	Citations
2207	Empirical-Statistical Study on the Relationship between Deposition Parameters, Process Variables, Deposition Rate and Mechanical Properties of a-C:H:W Coatings. Coatings, 2014, 4, 772-795.	1.2	14
2208	Characterization of SiC thin films deposited by HiPIMS. Materials Research, 2014, 17, 472-476.	0.6	13
2209	Dynamical processes of low-energy carbon ion collision with the graphene supported by diamond. EPJ Applied Physics, 2014, 67, 30402.	0.3	1
2210	Deposition of Amorphous Carbon Thin Films by RF Magnetron Sputtering using Woodceramics as Target. Transactions of the Materials Research Society of Japan, 2014, 39, 39-42.	0.2	0
2211	Emission spectroscopy of Ar + H2+ C7H8plasmas: C7H8flow rate dependence and pressure dependence. Journal of Physics: Conference Series, 2014, 518, 012010.	0.3	3
2212	Electronic and optical properties of superhard nanocomposite films obtained from C₆₀ion beam. Materials Research Express, 2014, 1, 035049.	0.8	9
2213	Kinetics of Thermal Chemical Vapor Deposition and Microstructures of Carbon Films Using Propane/Ammonia Mixtures. ECS Journal of Solid State Science and Technology, 2014, 3, M45-M53.	0.9	1
2214	Hydrophobic and high transparent honeycomb diamond-like carbon thin film fabricated by facile self-assembled nanosphere lithography. Japanese Journal of Applied Physics, 2014, 53, 05FC02.	0.8	3
2215	Diamondlike nanocomposite a-C:H:Cr Coatings: Structure, mechanical, and tribological properties. Bulletin of the Russian Academy of Sciences: Physics, 2014, 78, 1007-1014.	0.1	16
2216	Optimisation of readout performance of phase-change probe memory in terms of capping layer and probe tip. Electronic Materials Letters, 2014, 10, 1045-1049.	1.0	9
2217	Mechanical properties of Al/a-C nanocomposite thin films synthesized using a plasma focus device. Chinese Physics B, 2014, 23, 025204.	0.7	6
2218	Tuning properties of long-period gratings by plasma post-processing of their diamond-like carbon nano-overlays. Measurement Science and Technology, 2014, 25, 114001.	1.4	16
2219	Influences of nitrogen flow rate on the structures and properties of Ti and N co-doped diamond-like carbon films deposited by arc ion plating. Chinese Physics B, 2014, 23, 048102.	0.7	3
2220	Methods for preparation of transparent conductive diamond-like carbon films and mechanisms of conductivity formation. Journal of Contemporary Physics, 2014, 49, 286-292.	0.1	1
2221	Effect of tetramethylsilane flow on the deposition and tribological behaviors of silicon doped diamond-like carbon rubbed against poly(oxymethylene). Japanese Journal of Applied Physics, 2014, 53, 11RA04.	0.8	1
2222	Simulation of nanoparticle coagulation in radio-frequency capacitively coupled C 2 H 2 discharges. Chinese Physics B, 2014, 23, 085202.	0.7	1
2223	Double Side Coating of DLC on Silicon by RF-PECVD for AR Application. Procedia Engineering, 2014, 97, 1416-1421.	1.2	13
2224	Magnetoresistance sign change in iron-doped amorphous carbon films at low temperatures. Journal Physics D: Applied Physics, 2014, 47, 215002.	1.3	14

#	Article	IF	Citations
2225	Reduction of Photoluminescence Quenching by Deuteration of Ytterbium-Doped Amorphous Carbon-Based Photonic Materials. Materials, 2014, 7, 5643-5663.	1.3	16
2226	Emerging Nonvolatile Memories to Go Beyond Scaling Limits of Conventional CMOS Nanodevices. Journal of Nanomaterials, 2014, 2014, 1-10.	1.5	12
2227	Advanced Carbon-Based Coatings. , 2014, , 389-412.		2
2228	Study on Microstructure and Tribological Properties of Graphite-Like Carbon Films. Advanced Materials Research, 2014, 852, 309-313.	0.3	0
2229	Comparison of DLC and N-Doped DLC Synthesized by RF-PECVD. Advanced Materials Research, 2014, 893, 528-532.	0.3	1
2230	Diamond-Like Carbon Films, Properties and Applications. , 2014, , 101-139.		11
2231	Barrier properties to surrogates of hydrogenated carbon nano-films deposited on PET by plasma-enhanced chemical vapour deposition. Food Additives and Contaminants - Part A Chemistry, Analysis, Control, Exposure and Risk Assessment, 2014, 31, 1914-1927.	1.1	3
2232	Microstructure Changes of Ti-Al-C Films Deposited by Filtered Cathodic Vacuum Arc. Journal of Nanomaterials, 2014, 2014, 1-6.	1.5	1
2233	Erbium-Doped Amorphous Carbon-Based Thin Films: A Photonic Material Prepared by Low-Temperature RF-PEMOCVD. Materials, 2014, 7, 1539-1554.	1.3	4
2234	EPR of Primitive Organic Matter: A Tool for Astrobiology. , 2014, , 541-577.		0
2235	Negative-ion production on carbon materials in hydrogen plasma: influence of the carbon hybridization state and the hydrogen content on H^{â^'}yield. Journal Physics D: Applied Physics, 2014, 47, 085201.	1.3	32
2236	Biocompatible Coating. , 2014, , 425-447.		5
2237	PVD and CVD Hard Coatings. , 2014, , 449-467.		25
2238	Influence of Applied Bias Voltage on the Composition, Structure, and Properties of Ti:Si-Codoped a-C:H Films Prepared by Magnetron Sputtering. Journal of Nanomaterials, 2014, 2014, 1-7.	1.5	3
2239	Friction mechanism in diamond-like carbon film sliding against various counterbodies. Materials Technology, 2014, 29, 366-371.	1.5	2
2240	Wear and Friction of Diamondlike-Carbon Coated and Uncoated Steel Roller Bearings Under High Contact Pressure Oil Lubricated Rolling/Sliding Conditions. Journal of Tribology, 2014, 136, .	1.0	12
2241	Graphitization of polymer surfaces by scanning ion irradiation. Applied Physics Letters, 2014, 105, 163108.	1.5	1
2242	Electrochemically grafted polypyrrole changes photoluminescence of electronic states inside nanocrystalline diamond. Journal of Applied Physics, 2014, 116, 223103.	1.1	10

#	Article	IF	Citations
2243	Phase transformations during high-pressure torsion (HPT) in titanium, cobalt and graphite. IOP Conference Series: Materials Science and Engineering, 2014, 63, 012099.	0.3	3
2244	Tailored Mechanical Properties and Residual Stresses of a-C:H:W Coatings. Advanced Materials Research, 2014, 996, 14-21.	0.3	2
2245	Electrical characterization of diamond films deposited in nitrogen and oxygen containing gas mixture. , 2014, , .		0
2246	Enhanced optical output performance in InGaN/GaN light-emitting diode embedded with SiO_2 nanoparticles. Optics Express, 2014, 22, 21454.	1.7	10
2247	An atomistic study of growth mode and microstructure evolution of amorphous carbon films by different incident carbon atoms. Applied Surface Science, 2014, 314, 973-982.	3.1	3
2248	Effect of Methane Flow Rate on Growth and Properties of TiSi-C:H Films Deposited by Middle-frequency Magnetron Sputtering. Rare Metal Materials and Engineering, 2014, 43, 2305-2310.	0.8	1
2249	Hemocompatibility of DLC coating for blood analysis devices. , 2014, , .		1
2250	Tribological comparison of different C-based coatings in lubricated and unlubricated conditions. Surface and Coatings Technology, 2014, 257, 278-285.	2.2	8
2251	Ablation Study of WC and PCD Composites Using 10 Picosecond and 1 Nanosecond Pulse Durations at Green and Infrared Wavelengths. Physics Procedia, 2014, 56, 951-962.	1.2	31
2252	Formation mechanisms of pyrite (FeS 2) nano-crystals synthesized by colloidal route in sulfur abundant environment. Materials Chemistry and Physics, 2014, 148, 1095-1098.	2.0	17
2253	Sumanenemonoone Imines Bridged by Redoxâ€Active Ï€â€Conjugated Unit: Synthesis, Stepwise Coordination to Palladium(II), and Laserâ€Induced Formation of Nitrogenâ€Doped Graphitic Carbon. Chemistry - an Asian Journal, 2014, 9, 2568-2575.	1.7	13
2255	DLCâ€coated pure bioplastic foil. Vakuum in Forschung Und Praxis, 2014, 26, 42-47.	0.0	14
2256	Deposition and tribological behaviors of ternary BCN coatings at elevated temperatures. Surface and Coatings Technology, 2014, 259, 2-6.	2.2	32
2257	Effect of energy fluence and Ti/W co-deposition on the structural, mechanical and tribological characteristics of diamond-like carbon coatings obtained by pulsed Nd:YAG laser deposition on a steel substrate. Surface and Coatings Technology, 2014, 259, 415-425.	2.2	9
2258	Growth mechanism and composition of ultrasmooth a-C:H:Si films grown from energetic ions for superlubricity. Journal of Applied Physics, 2014, 115, .	1.1	19
2259	Simulation of nanoindentation experiments of singleâ€layer and doubleâ€layer thin films using finite element method. Surface and Interface Analysis, 2014, 46, 1071-1076.	0.8	12
2260	Tribological behavior and machining performance of non-hydrogenated diamond-like carbon coating tested against Tiâ€“6Alâ€“4V: Effect of surface passivation by ethanol. Surface and Coatings Technology, 2014, 260, 290-302.	2.2	27
2261	Bright Subcycle Extreme Ultraviolet Bursts from a Single Dense Relativistic Electron Sheet. Physical Review Letters, 2014, 113, 235002.	2.9	22

#	Article	IF	Citations
2262	Electrical and optical characteristics of Ar plasma generated by low-frequency (60Hz) power source. Korean Journal of Chemical Engineering, 2014, 31, 1892-1897.	1.2	6
2263	New electrochemically improved tetrahedral amorphous carbon films for biological applications. Diamond and Related Materials, 2014, 49, 62-71.	1.8	45
2264	Comparative study on structure and properties of titanium/silicon monoâ€•and coâ€doped amorphous carbon films deposited by midâ€frequency magnetron sputtering. Surface and Interface Analysis, 2014, 46, 139-144.	0.8	8
2265	Diamond-like carbon doped with highly Ï€-conjugated molecules by plasma-assisted CVD. Japanese Journal of Applied Physics, 2014, 53, 010203.	0.8	4
2266	Effect of the resorcinol/catalyst ratio in the capacitive performance of carbon xerogels with potential use in sodium chloride removal from saline water. Journal of Solid State Electrochemistry, 2014, 18, 2847-2856.	1.2	14
2268	Effect of Radio-Frequency and Low-Frequency Bias Voltage on the Formation of Amorphous Carbon Films Deposited by Plasma Enhanced Chemical Vapor Deposition. Plasma Science and Technology, 2014, 16, 954-959.	0.7	6
2269	Tribological properties of platinum/ruthenium/nitrogen doped diamond-like carbon thin films deposited with different negative substrate biases. Friction, 2014, 2, 317-329.	3.4	6
2270	DC electrical conductivity study of amorphous carbon nitride films prepared by reactive RF magnetron sputtering. Japanese Journal of Applied Physics, 2014, 53, 02BC03.	0.8	11
2271	Plasma Modification of DLC Films and the Resulting Surface Biocompatibility. Materials Science Forum, 0, 783-786, 1396-1401.	0.3	1
2272	Adherence Analysis of DLC Films Grown on AISI M2 Steel Substrates as a Function of Silicon Interlayer Thickness. Materials Science Forum, 0, 802, 388-391.	0.3	4
2273	Effects of Preparation and Thermal Stability on Hydrogenated Amorphous Carbon Films by Microwave Plasma Chemical Vapor Deposition. Advanced Materials Research, 2014, 1048, 378-382.	0.3	0
2274	The effect of deposition energy of energetic atoms on the growth and structure of ultrathin amorphous carbon films studied by molecular dynamics simulations. Journal Physics D: Applied Physics, 2014, 47, 245303.	1.3	12
2275	Photoluminescene and Fourier Transform Infrared Measurement of Undoped Diamond-Like Carbon Thin Films by Direct Current â€“ Plasma Enhanced Chemical Vapour Deposition. Advanced Materials Research, 2014, 903, 102-107.	0.3	0
2276	Microstructure and Adhesion Properties of a-CN and Ti/a-CN Nanocomposite Thin Films Prepared by Hybrid Ion Beam Deposition Technique. Advanced Materials Research, 0, 938, 36-39.	0.3	0
2277	Fabrication of diamond-like carbon-based two-dimensional photonic crystals. Microelectronic Engineering, 2014, 126, 99-102.	1.1	3
2278	Focused ion beam as a tool for graphene technology: Structural study of processing sequence by electron microscopy. Japanese Journal of Applied Physics, 2014, 53, 02BC22.	0.8	3
2279	Adsorption of hydrocarbon components generated in deuterated benzene plasma studied by in situ real-time infrared absorption spectroscopy. Japanese Journal of Applied Physics, 2014, 53, 096202.	0.8	5
2280	DLC coating on a micro-trench by bipolar PBII&D and analysis of plasma behaviour. Journal Physics D: Applied Physics, 2014, 47, 335306.	1.3	4

#	Article	IF	Citations
2281	Formation of ordered polymer patterns from benzene vapors in a barrier discharge. Plasma Sources Science and Technology, 2014, 23, 054001.	1.3	2
2282	Electrical and electronic properties of nitrogen doped amorphous carbon (a-CNx) thin films. Current Applied Physics, 2014, 14, 1845-1848.	1.1	26
2283	Interfacial Sliding Properties of Bone Screw Materials and Their Effect on Screw Fixation Strength. Journal of Applied Biomaterials and Functional Materials, 2014, 12, 90-96.	0.7	2
2284	Carbon Film Coating of Abutment Surfaces. Implant Dentistry, 2014, Publish Ahead of Print, 434-8.	1.7	7
2285	Hydrophilic DLC Surface Induced by Nanostructures Formed by RF O₂ Plasma Etching With Metal Micromasks. IEEE Transactions on Plasma Science, 2014, 42, 3858-3861.	0.6	2
2286	A facile nitrogen-doped carbon encapsulation of CoFe2O4 nanocrystalline for enhanced performance of lithium ion battery anodes. Journal of Solid State Electrochemistry, 2014, 18, 19-27.	1.2	10
2287	Soft X-ray irradiation effect on the surface and material properties of highly hydrogenated diamond-like carbon thin films. Diamond and Related Materials, 2014, 44, 8-10.	1.8	8
2288	Adherent amorphous hydrogenated carbon coatings on steel surfaces deposited by enhanced asymmetrical bipolar pulsed-DC PECVD method and hexane as precursor. Surface and Coatings Technology, 2014, 251, 276-282.	2.2	14
2289	Effect of double pressing/double sintering on the sliding wear of self-lubricating sintered composites. Tribology International, 2014, 70, 119-127.	3.0	50
2290	Spectroscopic ellipsometry study of N+ ion-implanted ethyleneâ€“norbornene films. Radiation Physics and Chemistry, 2014, 98, 7-13.	1.4	2
2291	Identification of the coke deposited on an HZSM-5 zeolite catalyst during the sequenced pyrolysisâ€“cracking of HDPE. Applied Catalysis B: Environmental, 2014, 148-149, 436-445.	10.8	88
2292	Investigation of the properties of amorphous carbon films obtained in a supersonic gas jet. Surface and Coatings Technology, 2014, 246, 46-51.	2.2	2
2293	Influence of low-temperature carburising on metal release from AISI316L austenitic stainless steel in acetic acid. Journal of Food Engineering, 2014, 137, 7-15.	2.7	6
2294	Electrochemical Characteristics of Diamond-Like Carbon/Cr Double-Layer Coating on Silicon Monoxide-Graphite Composite Anode for Li-Ion Batteries. Electrochimica Acta, 2014, 127, 1-6.	2.6	16
2295	Atomistic view on thin film nucleation and growth by using highly ionized and pulsed vapour fluxes. Surface and Coatings Technology, 2014, 257, 326-332.	2.2	16
2296	Deposition and characterization of Tiâ€“Cxâ€“Ny nanocomposite films by pulsed bias arc ion plating. Vacuum, 2014, 106, 27-32.	1.6	7
2297	Structural, nanomechanical, field emission and ammonia gas sensing properties of nitrogenated amorphous carbon films deposited by filtered anodic jet carbon arc technique. Talanta, 2014, 125, 276-283.	2.9	25
2298	High throughput deposition of hydrogenated amorphous carbon coatings on rubber with expanding thermal plasma. Surface and Coatings Technology, 2014, 245, 74-83.	2.2	9

#	Article	IF	Citations
2299	DLC coating of interior surfaces of steel tubes by low energy plasma source ion implantation and deposition. Applied Surface Science, 2014, 310, 262-265.	3.1	25
2300	Tribological behavior of tetrahedral amorphous carbon (ta-C) coatings at elevated temperatures. Tribology International, 2014, 75, 98-103.	3.0	50
2301	Effects of radio-frequency power on the properties of carbon thin films prepared by thermal chemical vapor deposition enhanced with remote inductively-coupled-plasma using acetylene/nitrogen mixtures. Thin Solid Films, 2014, 570, 356-362.	0.8	0
2302	Effect of pulsed bias voltage on the structure and mechanical properties of Tiâ€“Câ€“N composite films by pulsed bias arc ion plating. Nuclear Instruments & Methods in Physics Research B, 2014, 333, 1-5.	0.6	8
2303	Wear, Plasticity, and Rehybridization in Tetrahedral Amorphous Carbon. Tribology Letters, 2014, 53, 119-126.	1.2	89
2304	Laser-Heating-Induced Damage to Ultrathin Carbon Overcoat in Heat-Assisted Magnetic Recording. Tribology Letters, 2014, 53, 303-310.	1.2	10
2305	Fatty Acid Adsorption on Several DLC Coatings Studied by Neutron Reflectometry. Tribology Letters, 2014, 53, 199-206.	1.2	21
2306	Chromium-doped diamond-like carbon films deposited by dual-pulsed laser deposition. Applied Physics A: Materials Science and Processing, 2014, 117, 83-88.	1.1	13
2307	Synthesis of chemically controllable and electrically tunable graphene films by simultaneously fluorinating and reducing graphene oxide. Carbon, 2014, 72, 176-184.	5.4	38
2308	Effect of Multi-Walled Carbon Nanotubes Incorporation on the Structure, Optical and Electrochemical Properties of Diamond-Like Carbon Thin Films. Journal of the Electrochemical Society, 2014, 161, H290-H295.	1.3	22
2309	Two-photon polarization-selective etching of emergent nano-structures on diamond surfaces. Nature Communications, 2014, 5, 3341.	5.8	33
2310	Microstructural, mechanical and tribological analysis of nanocomposite Tiâ€“Câ€“N coatings deposited by industrial-scale DC magnetron sputtering. Surface and Coatings Technology, 2014, 245, 40-48.	2.2	17
2311	Surface modification and corrosion properties of implanted and DLC coated stainless steel by plasma based ion implantation and deposition. Surface and Coatings Technology, 2014, 256, 23-29.	2.2	42
2312	Microstructure and property changes induced by substrate rotation in titanium/silicon dual-doped a-C:H films deposited by mid-frequency magnetron sputtering. Surface and Coatings Technology, 2014, 240, 419-424.	2.2	10
2313	Characterization of carburized layer on T8 steel fabricated by cathodic plasma electrolysis. Surface and Coatings Technology, 2014, 245, 9-15.	2.2	45
2314	Diamond-like carbon coatings with nanocomposite structure formed by reactive magnetron sputtering of chrome in an Ar + C2H2 + N2 gas mixture and their tribological behavior. Journal of Machinery Manufacture and Reliability, 2014, 43, 29-35.	0.1	2
2315	Effects of Boron Doping on the Properties of Ultrananocrystalline Diamond Films. Journal of Electronic Materials, 2014, 43, 1302-1306.	1.0	4
2316	Effect of ion bombardment on the phase composition and mechanical properties of diamond-like carbon films. Journal of Surface Investigation, 2014, 8, 45-49.	0.1	12

#	Article	IF	Citations
2317	Mechanism of Production of CN(X2Î£+) Radicals from the Decomposition Reaction of CH3CN with Microwave Discharge Flow of Ar. Plasma Chemistry and Plasma Processing, 2014, 34, 837-851.	1.1	2
2318	Plasma Polymerization Inside Tubes in Hexamethyldisiloxanes and Ethyne Glow Discharges: Effects of Deposition Atmosphere on Wetting and Ageing in Solvents. Plasma Chemistry and Plasma Processing, 2014, 34, 259-269.	1.1	8
2319	Carbon spheres for energy applications: Raman and X-ray photoemission spectroscopy studies. International Journal of Energy Research, 2014, 38, 444-451.	2.2	19
2320	Diamond-like carbon (DLC) films as electrochemical electrodes. Diamond and Related Materials, 2014, 43, 12-22.	1.8	88
2321	Principles for designing sputtering-based strategies for high-rate synthesis of dense and hard hydrogenated amorphous carbon thin films. Diamond and Related Materials, 2014, 44, 117-122.	1.8	16
2322	Influences of added sand-dust particles on the tribological performance of graphite-like coating under solidâ€“liquid lubrication. Tribology International, 2014, 71, 69-81.	3.0	16
2323	Spontaneous synthesis of carbon nanowalls, nanotubes and nanotips using high flux density plasmas. Carbon, 2014, 68, 695-707.	5.4	20
2324	Giant photoconductivity induced by plasmonic Co nanoparticles in Co-doped amorphous carbon/silicon heterostructures. Carbon, 2014, 72, 106-113.	5.4	13
2325	Understanding Disk Carbon Loss Kinetics for Heat Assisted Magnetic Recording. IEEE Transactions on Magnetics, 2014, 50, 144-147.	1.2	23
2326	Influence of consumed power on structural and nano-mechanical properties of nano-structured diamond-like carbon thin films. Applied Surface Science, 2014, 300, 141-148.	3.1	21
2327	The role of the sp2:sp3 substrate content in carbon supported nanotube growth. Carbon, 2014, 75, 327-334.	5.4	17
2328	Hierarchical mesoporous Î³-Fe2O3/carbon nanocomposites derived from metal organic frameworks as a cathode electrocatalyst for rechargeable Li-O2 batteries. Electrochimica Acta, 2014, 134, 293-301.	2.6	91
2329	Visibleâ€Light Photochemical Activity of Nanoporous Carbons under Monochromatic Light. Angewandte Chemie - International Edition, 2014, 53, 4146-4148.	7.2	49
2330	Self-assembled folding of a biaxially compressed film on a compliant substrate. Carbon, 2014, 76, 105-112.	5.4	7
2331	Effects of substrate bias voltage and target sputtering power on the structural and tribological properties of carbon nitride coatings. Materials Chemistry and Physics, 2014, 145, 434-440.	2.0	20
2332	Potential of thick a-C:H:Si films as substitute for chromium plating. Surface and Coatings Technology, 2014, 241, 86-92.	2.2	34
2333	Self-Healing Phenomenon and Dynamic Hardness of C₆₀-Based Nanocomposite Coatings. Nano Letters, 2014, 14, 2536-2540.	4.5	17
2334	High performance graphene field effect transistors on an aluminum nitride substrate with high surface phonon energy. Applied Physics Letters, 2014, 104, 193112.	1.5	18

#	Article	IF	Citations
2335	One for Two: Conversion of Waste Chicken Feathers to Carbon Microspheres and (NH₄)HCO₃. Environmental Science & Technology, 2014, 48, 6500-6507.	4.6	29
2336	Thermal stability of diamond-like carbonâ€“MoS2 thin films in different environments. Thin Solid Films, 2014, 562, 244-249.	0.8	23
2337	Plasma modified Mgâ€“Ndâ€“Znâ€“Zr alloy with enhanced surface corrosion resistance. Corrosion Science, 2014, 78, 121-129.	3.0	73
2338	Mechanical properties of deposited carbon thin films on sapphire substrates using atomic force microscopy (AFM). Ceramics International, 2014, 40, 10159-10162.	2.3	12
2339	Effect of cofeeding n-butane with methanol on aromatization performance and coke formation over a Zn loaded ZSM-5/ZSM-11 zeolite. Applied Catalysis A: General, 2014, 470, 15-23.	2.2	60
2340	A study of diamond like carbon/chromium films deposited by microwave plasma activated chemical vapor deposition. Journal of Non-Crystalline Solids, 2014, 386, 14-18.	1.5	11
2341	Quantitative analysis of the local atomic structure in disordered carbon. Journal of Non-Crystalline Solids, 2014, 386, 1-7.	1.5	17
2342	Carbon nanotube catalysts for oxidative desulfurization of a model diesel fuel using molecular oxygen. Green Chemistry, 2014, 16, 211-220.	4.6	183
2343	Modeling of the plasmonic properties of DLCâ€Ag nanocomposite films. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 329-335.	0.8	25
2344	The effect of heat treatment temperature and time on the microstructure and mechanical properties of PAN-based carbon fibers. Journal of Materials Science, 2014, 49, 794-804.	1.7	40
2345	Effect of carbonitriding temperature process on the adhesion properties of diamond like-carbon coatings deposited by PECVD on austenitic stainless steel. Diamond and Related Materials, 2014, 42, 58-63.	1.8	17
2346	Recent progress in antireflection and self-cleaning technology â€“ From surface engineering to functional surfaces. Progress in Materials Science, 2014, 61, 94-143.	16.0	350
2347	Study of the thermal dependence of mechanical properties, chemical composition and structure of nanocomposite TiC/a-C:H coatings. Surface and Coatings Technology, 2014, 242, 62-67.	2.2	9
2348	Investigation of the surface morphologies and the microstructures of graphite cathodes for explosive emission. Applied Surface Science, 2014, 289, 197-202.	3.1	4
2349	Investigating the structural and physical properties of hydrogenated amorphous carbon films fabricated by middle frequency pulsed unbalanced magnetron sputtering. Physica B: Condensed Matter, 2014, 438, 34-40.	1.3	8
2350	Effect of Ag content on the microstructure, tribological and corrosion properties of amorphous carbon coatings on 316L SS. Surface and Coatings Technology, 2014, 240, 128-136.	2.2	48
2351	Surface, microstructure and optical properties of copper-doped diamond-like carbon coating deposited in pulsed cathodic arc plasma. Diamond and Related Materials, 2014, 42, 64-70.	1.8	29
2352	Diamond-like carbon coatings fabricated by the ball impact process. Chemical Engineering Journal, 2014, 237, 455-461.	6.6	3

#	Article	IF	Citations
2353	Diamond-like carbon (DLC) thin film bioelectrodes: Effect of thermal post-treatments and the use of Ti adhesion layer. Materials Science and Engineering C, 2014, 34, 446-454.	3.8	30
2354	Fluid simulation of the sheath formation in a multi-component plasma containing charged dust nanoparticles. Thin Solid Films, 2014, 550, 381-388.	0.8	5
2355	Surface modifications of activated carbon by gamma irradiation. Carbon, 2014, 67, 236-249.	5.4	73
2356	A novel radial anode layer ion source for inner wall pipe coating and materials modificationâ€"Hydrogenated diamond-like carbon coatings from butane gas. Review of Scientific Instruments, 2014, 85, 085118.	0.6	17
2357	Investigation of Different Piezoresistive Materials to be Integrated into Micromechanical Force Sensors Based on SU 8 Photoresist. Key Engineering Materials, 0, 613, 244-250.	0.4	1
2358	Atomic Scale Mechanisms of Friction Reduction and Wear Protection by Graphene. Nano Letters, 2014, 14, 7145-7152.	4.5	210
2359	Deposition of amorphous hydrogenated carbon films on steel surfaces through the enhanced asymmetrical modified bipolar pulsed-DC PECVD method. Surface and Coatings Technology, 2014, 260, 133-138.	2.2	23
2360	Relationship between the structure and electrical characteristics of diamond-like carbon films. Journal of Applied Physics, 2014, 116, .	1.1	23
2361	Compositional Insights and Valorization Pathways for Carbonaceous Material Deposited During Bioâ€Oil Thermal Treatment. ChemSusChem, 2014, 7, 2597-2608.	3.6	41
2362	Elastic properties, sp3 fraction, and Raman scattering in low and high pressure synthesized diamond-like boron rich carbides. Journal of Applied Physics, 2014, 116, 133519.	1.1	8
2363	Complete characterization by Raman spectroscopy of the structural properties of thin hydrogenated diamond-like carbon films exposed to rapid thermal annealing. Journal of Applied Physics, 2014, 116, .	1.1	71
2364	Effects of polycrystallinity in nano patterning by ion-beam sputtering. Journal of Applied Physics, 2014, 116, 024307.	1.1	5
2365	Sputter deposited NbC x N y films: Effect of nitrogen content on structure and mechanical and tribological properties. Surface and Coatings Technology, 2014, 258, 746-753.	2.2	34
2366	Low frictions of self-mated CNx coatings in dry and humid inert gas environments. Surface and Coatings Technology, 2014, 258, 1137-1144.	2.2	16
2367	Ultra-smooth diamond-like carbon coatings with high elasticity deposited at low temperature by direct ion beam deposition. Surface and Coatings Technology, 2014, 258, 956-962.	2.2	19
2368	Hydrogenated amorphous carbon thin films deposition by pulsed DC plasma enhanced by electrostatic confinement. Surface and Coatings Technology, 2014, 258, 219-224.	2.2	7
2369	Thickness dependence of properties and structure of ultrathin tetrahedral amorphous carbon films: A molecular dynamics simulation. Surface and Coatings Technology, 2014, 258, 938-942.	2.2	8
2370	Growth mechanism of hydrogenated amorphous carbon films: Molecular dynamics simulations. Surface and Coatings Technology, 2014, 258, 901-907.	2.2	6

#	Article	IF	Citations
2371	Negative magnetoresistance in undoped semiconducting amorphous carbon films. Journal of Applied Physics, 2014, 115, .	1.1	24
2372	c-C₄F₈Plasmas for the Deposition of Fluorinated Carbon Films. Plasma Processes and Polymers, 2014, 11, 289-299.	1.6	10
2373	Electrochemical Performance of Porous Diamond-like Carbon Electrodes for Sensing Hormones, Neurotransmitters, and Endocrine Disruptors. ACS Applied Materials & Interfaces, 2014, 6, 21086-21092.	4.0	42
2374	Diamond like Carbon (DLC) Thin Films: Preparation and Characterization. Applied Mechanics and Materials, 2014, 575, 292-295.	0.2	2
2375	Fast hydrogen release under moderate conditions from NaBH₄ destabilized by fluorographite. RSC Advances, 2013, 4, 2550-2556.	1.7	21
2376	Optical and electrical characterization of carbon nanoparticles produced in laminar premixed flames. Combustion and Flame, 2014, 161, 3201-3210.	2.8	33
2377	Protein arrangement on modified diamond-like carbon surfaces â€“ An ARXPS study. Applied Surface Science, 2014, 321, 432-438.	3.1	6
2378	Selective deposition of nanocrystalline carbon films on GaN diodes in photocatalytic reactions. CrystEngComm, 2014, 16, 10097-10102.	1.3	3
2379	Investigations on phosphorous doped hydrogenated amorphous silicon carbide thin films deposited by a filtered cathodic vacuum arc technique for photo detecting applications. RSC Advances, 2014, 4, 54388-54397.	1.7	7
2380	Reprint of "Study of the thermal dependence of mechanical properties, chemical composition and structure of nanocomposite TiC/a-C:H coatings". Surface and Coatings Technology, 2014, 255, 158-163.	2.2	0
2381	Effect of lattice structure of silicon carbide on crystal formation of carbide-derived carbon. Carbon, 2014, 79, 19-27.	5.4	13
2382	Tribological Properties of Diamond-Like Carbon Coatings. Advanced Materials Research, 0, 874, 9-15.	0.3	5
2383	Performance of Cu-Plating Vertical LEDs in Heat Dissipation Using Diamond-Like Carbon. IEEE Electron Device Letters, 2014, 35, 169-171.	2.2	3
2384	Mechanical properties of atomic force microscopy probes with deposited thin films. Thin Solid Films, 2014, 565, 267-270.	0.8	1
2385	Friction pair evaluation of cartilageâ€“diamond for partial joint repair. Carbon, 2014, 80, 551-559.	5.4	16
2386	Probing the Chemical Structure in Diamond-Based Materials Using Combined Low-Loss and Core-Loss Electron Energy-Loss spectroscopy. Microscopy and Microanalysis, 2014, 20, 779-783.	0.2	5
2387	Bonding structure and mechanical properties of carbon nitride bilayer films with Ti and TiN interlayer. Surface and Interface Analysis, 2014, 46, 591-601.	0.8	8
2388	Plasmonic properties of silver nanoparticles embedded in diamond like carbon films: Influence of structure and composition. Applied Surface Science, 2014, 317, 1041-1046.	3.1	27

#	Article	IF	Citations
2389	Lignin-based carbon fibers: Carbon nanotube decoration and superior thermal stability. Carbon, 2014, 80, 91-102.	5.4	76
2390	Carbonaceous Spheres â€“ Versatile Intermediaries for Metal Oxide Spherical Structure Synthesis. European Journal of Inorganic Chemistry, 2014, 2014, 1010-1019.	1.0	9
2392	Damage-Free Back Channel Wet-Etch Process in Amorphous Indiumâ€“Zinc-Oxide Thin-Film Transistors Using a Carbon-Nanofilm Barrier Layer. ACS Applied Materials & Interfaces, 2014, 6, 11318-11325.	4.0	20
2393	The origin of conductivity in ion-irradiated diamond-like carbon â€“ Phase transformation and atomic ordering. Carbon, 2014, 80, 677-690.	5.4	36
2394	60 years of DLC coatings: Historical highlights and technical review of cathodic arc processes to synthesize various DLC types, and their evolution for industrial applications. Surface and Coatings Technology, 2014, 257, 213-240.	2.2	381
2395	Sliding properties of Zr-DLC coatings: The effect of tribolayer formation. Surface and Coatings Technology, 2014, 258, 734-745.	2.2	32
2396	Atomic-Scale Wear of Amorphous Hydrogenated Carbon during Intermittent Contact: A Combined Study Using Experiment, Simulation, and Theory. ACS Nano, 2014, 8, 7027-7040.	7.3	51
2397	Atomic and electronic structure of tetrahedral amorphous carbon surfaces from density functional theory: Properties and simulation strategies. Carbon, 2014, 77, 1168-1182.	5.4	41
2398	Wetting and spreading of long-chain ZDOL polymer nanodroplet on graphene-coated amorphous carbon. Surface Science, 2014, 630, 71-77.	0.8	2
2399	A new dielectric ta-C film coating of Ag-nanoparticle hybrids to enhance TiO₂photocatalysis. Nanotechnology, 2014, 25, 125703.	1.3	7
2400	Toward hard yet tough ceramic coatings. Surface and Coatings Technology, 2014, 258, 1-16.	2.2	168
2401	Nonlinear optical response of graphene derivatives. , 2014, , .		2
2402	Structure and properties of DLCâ€“MoS2 thin films synthesized by BTIBD method. Journal of Physics and Chemistry of Solids, 2014, 75, 1289-1294.	1.9	22
2403	Scratch testing for micro- and nanoscale evaluation of tribocharging in DLC films containing silver nanoparticles using AFM and KPFM techniques. Surface and Coatings Technology, 2014, 260, 205-213.	2.2	86
2404	Graphene oxide nanosheet: an emerging star material for novel separation membranes. Journal of Materials Chemistry A, 2014, 2, 13772-13782.	5.2	316
2405	Conversion of Chicken Feather Waste to N-Doped Carbon Nanotubes for the Catalytic Reduction of 4-Nitrophenol. Environmental Science & Technology, 2014, 48, 10191-10197.	4.6	109
2406	On the hydrogenated silicon carbide (SiCx:H) interlayer properties prompting adhesion of hydrogenated amorphous carbon (a-C:H) deposited on steel. Vacuum, 2014, 109, 180-183.	1.6	24
2407	Adsorption of bovine serum albumin on Zr co-sputtered a-C(:H) films: Implication on wear behaviour. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 39, 316-327.	1.5	19

#	Article	IF	Citations
2408	Effect of tribochemistry on lubricity of DLC films in hydrogen. Surface and Coatings Technology, 2014, 257, 241-246.	2.2	52
2409	Fabrication of sulfur-functionalized DLC films by photochemical modification and attachment of gold nanoparticles. Applied Surface Science, 2014, 317, 443-448.	3.1	3
2410	Diamond-like carbon electrochemical corrosion resistance by addition of nanocrystalline diamond particles for biomedical applications. Surface and Coatings Technology, 2014, 259, 732-736.	2.2	10
2411	Hierarchically porous carbon membranes containing designed nanochannel architectures obtained by pyrolysis of ion-track etched polyimide. Materials Chemistry and Physics, 2014, 148, 846-853.	2.0	11
2412	Sealing of Hard CrN and DLC Coatings with Atomic Layer Deposition. ACS Applied Materials & Interfaces, 2014, 6, 1893-1901.	4.0	61
2413	A review comparing cathodic arcs and high power impulse magnetron sputtering (HiPIMS). Surface and Coatings Technology, 2014, 257, 308-325.	2.2	200
2414	The semi-empirical tight-binding model for carbon allotropes â€œbetween diamond and graphiteâ€• Journal of Applied Physics, 2014, 115, .	1.1	3
2415	Voltammetric Studies of Propranolol and Hydrochlorothiazide Oxidation in Standard and Synthetic Biological Fluids Using a Nitrogen-Containing Tetrahedral Amorphous Carbon (ta-C:N) Electrode. Electrochimica Acta, 2014, 143, 398-406.	2.6	36
2416	Effect of growth conditions on carbon film properties. , 2014, , .		0
2417	Optical and structural properties of polycrystalline CVD diamond films grown on fused silica optical fibres pre-treated by high-power sonication seeding. Applied Physics A: Materials Science and Processing, 2014, 116, 1927-1937.	1.1	15
2418	Hydrogenated amorphous carbon thin films deposited by plasma-assisted chemical vapor deposition enhanced by electrostatic confinement: structure, properties, and modeling. Applied Physics A: Materials Science and Processing, 2014, 117, 1217-1225.	1.1	8
2419	Long-term stability of hydrogenated DLC coatings: Effects of aging on the structural, chemical and mechanical properties. Diamond and Related Materials, 2014, 48, 65-72.	1.8	54
2420	Diamond like carbon films deposited by HiPIMS using oscillatory voltage pulses. Surface and Coatings Technology, 2014, 258, 1212-1222.	2.2	64
2421	Development of amorphous carbon coating with luminescent silica/CdSe/ZnS quantum dots underlayer for wear monitoring. Precision Engineering, 2014, 38, 673-679.	1.8	4
2422	On the long term antibacterial features of silver-doped diamondlike carbon coatings deposited via a hybrid plasma process. Biointerphases, 2014, 9, 029013.	0.6	34
2423	Organic matter on the Earthâ€™s Moon. Geochimica Et Cosmochimica Acta, 2014, 134, 1-15.	1.6	22
2424	Nanoscopic observations of stress-induced formation of graphitic nanocrystallites at amorphous carbon surfaces. Carbon, 2014, 74, 302-311.	5.4	50
2425	Experimental analysis of the thermal annealing of hard a-C:H films. Diamond and Related Materials, 2014, 45, 43-57.	1.8	25

#	Article	IF	Citations
2426	Study on the antiâ€reflection and structure evolution of hydrogenated amorphous carbon grown by plasma chemical vapor deposition. Surface and Interface Analysis, 2014, 46, 530-534.	0.8	1
2427	Evaluation of the Wear Energy Consumption of Nitrogenated Diamond-Like Carbon Against Alumina. Tribology Letters, 2014, 55, 279-288.	1.2	7
2428	Process Simulation and Control Optimization of a Blast Furnace Using Classical Thermodynamics Combined to a Direct Search Algorithm. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2014, 45, 307-327.	1.0	20
2429	Effects of cobalt and cobalt oxide buffer layers on nucleation and growth of hot filament chemical vapor deposition diamond films on silicon (100). Korean Journal of Chemical Engineering, 2014, 31, 1271-1275.	1.2	1
2430	Effects of platinum content on tribological properties of platinum/nitrogen doped diamond-like carbon thin films deposited via magnetron sputtering. Friction, 2014, 2, 64-72.	3.4	11
2431	Achieving superlubricity in DLC films by controlling bulk, surface, and tribochemistry. Friction, 2014, 2, 140-155.	3.4	142
2432	Surface passivation and boundary lubrication of self-mated tetrahedral amorphous carbon asperities under extreme tribological conditions. Friction, 2014, 2, 193-208.	3.4	29
2433	Guest editorial: Special issue on superlubricity. Friction, 2014, 2, 93-94.	3.4	4
2434	Electrochemiluminescence at nitrogen doped diamond-like carbon film electrodes. Russian Journal of Electrochemistry, 2014, 50, 260-266.	0.3	6
2435	The effect of nitrogen incorporation in DLC films deposited by ECR Microwave Plasma CVD. Applied Surface Science, 2014, 314, 46-51.	3.1	55
2436	Control of the Graphite Femtosecond Ablation Plume Kinetics by Temporal Laser Pulse Shaping: Effects on Pulsed Laser Deposition of Diamond-Like Carbon. Journal of Physical Chemistry C, 2014, 118, 4377-4385.	1.5	21
2437	Structure evolution of hydrogenated carbon films from amorphous carbon to fullereneâ€like nanostructure. Surface and Interface Analysis, 2014, 46, 550-555.	0.8	3
2438	Formation of hydrogenated diamond-like carbon films by reactive Ar/CH₄high-power impulse magnetron sputtering. Japanese Journal of Applied Physics, 2014, 53, 090301.	0.8	12
2439	Li-Ion Storage Performance of MnO Nanoparticles Coated with Nitrogen-Doped Carbon Derived from Different Carbon Sources. Electrochimica Acta, 2014, 146, 249-256.	2.6	42
2440	A Raman study to obtain crystallite size of carbon materials: A better alternative to the Tuinstraâ€“Koenig law. Carbon, 2014, 80, 629-639.	5.4	186
2441	Silver implanted diamond-like carbon coatings. Vacuum, 2014, 110, 78-86.	1.6	28
2442	Carbon Fluoride, CF_x: Structural Diversity as Predicted by First Principles. Journal of Physical Chemistry C, 2014, 118, 6514-6521.	1.5	41
2443	Diamond-like carbon sintered compacts formed by spark plasma sintering. Diamond and Related Materials, 2014, 50, 97-102.	1.8	9

#	Article	IF	Citations
2444	Enhanced Electrochemical Stability of Sn-Carbon Nanotube Nanocapsules as Lithium-Ion Battery Anode. Electrochimica Acta, 2014, 144, 376-382.	2.6	100
2445	Structure and electrochemical characterization of carbon films formed by unbalanced magnetron (UBM) sputtering method. Diamond and Related Materials, 2014, 49, 25-32.	1.8	50
2446	Investigation of resistive switching in graphite-like carbon thin film for non-volatile memory applications. Vacuum, 2014, 107, 1-5.	1.6	26
2447	Characteristics of CrAlSiN+DLC coating deposited by lateral rotating cathode arc PVD and PACVD process. Applied Surface Science, 2014, 312, 126-133.	3.1	20
2448	Influence of the radio-frequency power on the physical and optical properties of plasma polymerized cyclohexane thin films. Thin Solid Films, 2014, 560, 55-58.	0.8	3
2449	Semiconducting amorphous carbon thin films for transparent conducting electrodes. Carbon, 2014, 76, 64-70.	5.4	62
2450	Influence of zinc dialkyldithiophosphate tribofilm formation on the tribological performance of self-mated diamond-like carbon contacts under boundary lubrication. Thin Solid Films, 2014, 562, 389-397.	0.8	33
2451	Optical properties of thin anodic alumina membranes formed in a solution of tartaric acid. Thin Solid Films, 2014, 556, 230-235.	0.8	35
2452	Novel carbon-based nc-MoC/a-C(Al) nanocomposite coating towards low internal stress and low-friction. Surface and Coatings Technology, 2014, 242, 177-182.	2.2	17
2453	Improved in dry routing performance with optimized diamond-like carbon films. Vacuum, 2014, 107, 304-310.	1.6	2
2454	Metal oxide coating on first mirror in fusion reactor with carbon wall. Surface and Coatings Technology, 2014, 240, 464-469.	2.2	1
2455	Electrochemical analysis of strain-induced crack formation of bilayer barrier plasma polymer films on metal and polymer substrates. Surface and Coatings Technology, 2014, 244, 173-179.	2.2	5
2456	Quantitative electromechanical characterization of materials using conductive ceramic tips. Acta Materialia, 2014, 71, 153-163.	3.8	15
2457	Flexibility and frictional behaviour of DLC and Si-DLC films deposited on nitrile rubber. Surface and Coatings Technology, 2014, 239, 84-94.	2.2	36
2458	Negative DC bias effects on the structural, physical, and electrical properties of TiC-containing carbon films prepared by the UBMS method at low temperature. Materials Research Bulletin, 2014, 58, 63-68.	2.7	0
2459	In-situ generated nano-Fe3C embedded into nitrogen-doped carbon for high performance anode in lithium ion battery. Electrochimica Acta, 2014, 116, 292-299.	2.6	66
2460	Nitrogen doping for adhesion improvement of DLC film deposited on Si substrate by Filtered Cathodic Vacuum Arc (FCVA) technique. Applied Surface Science, 2014, 310, 284-292.	3.1	80
2461	Characteristics of carbon films prepared by thermal chemical vapor deposition using camphor. Thin Solid Films, 2014, 556, 544-551.	0.8	3

#	Article	IF	Citations
2462	Multifunctional three-dimensional nanodiamond-nanoporous alumina nanoarchitectures. Carbon, 2014, 75, 452-464.	5.4	37
2463	In-situ doping of erbium in hydrogenated amorphous carbon by low temperature metalorganic radio frequency plasma enhanced chemical vapor deposition. Thin Solid Films, 2014, 570, 429-435.	0.8	4
2464	Neutron-reflectometry study of alcohol adsorption on various DLC coatings. Applied Surface Science, 2014, 288, 405-410.	3.1	22
2465	Bi-level surface modification of hard disk media by carbon using filtered cathodic vacuum arc: Reduced overcoat thickness without reduced corrosion performance. Diamond and Related Materials, 2014, 44, 100-108.	1.8	20
2466	Study of depth profile of hydrogen in hydrogenated diamond like carbon thin film using ion beam analysis techniques. Nuclear Instruments & Methods in Physics Research B, 2014, 328, 27-32.	0.6	12
2467	Wear behaviour of hydrogen free diamond-like carbon thin films in diesel fuel at different temperatures. Diamond and Related Materials, 2014, 44, 78-87.	1.8	8
2468	Friction reduction mechanisms in boundary lubricated W-doped DLC coatings. Tribology International, 2014, 70, 26-33.	3.0	54
2469	Evolution of transfer layers on steel balls sliding against hydrogenated amorphous carbon coatings in ambient air. Tribology International, 2014, 70, 42-51.	3.0	15
2470	Rapid aqueous synthesis of ordered mesoporous carbons: Investigation of synthesis variables and application as anode materials for Li-ion batteries. Microporous and Mesoporous Materials, 2014, 195, 92-101.	2.2	15
2471	Interlayer-exciton mediated three-hole-Auger-decay in the Ï€âž-band of highly oriented pyrolytic graphite. Physica E: Low-Dimensional Systems and Nanostructures, 2014, 56, 441-446.	1.3	7
2472	Structural and elastic properties of a hypothetical high density sp2-rich amorphous carbon phase. Journal of Chemical Physics, 2014, 140, .	1.2	5
2473	The influence of microstructural variations on mechanical and tribological properties of low-friction TiC/diamond-like carbon nanocomposite films. Ceramics International, 2014, 40, 13329-13337.	2.3	17
2474	Corrosion and salt scale resistance of multilayered diamond-like carbon film in CO2 saturated solutions. Corrosion Science, 2014, 86, 261-267.	3.0	35
2475	Bilayer graphene synthesis by plasma treatment of copper foils without using a carbon-containing gas. Carbon, 2014, 77, 823-828.	5.4	33
2476	Impact of the difference in power frequency on diamond-like carbon thin film coating over 3-dimensional objects. Thin Solid Films, 2014, 564, 45-50.	0.8	6
2477	The effect of TiN and CrN interlayers on the tribological behavior of DLC coatings. Wear, 2014, 317, 179-187.	1.5	28
2478	Interlayer design for the graphite-like carbon film with high load-bearing capacity under sliding-friction condition in water. Applied Surface Science, 2014, 311, 816-824.	3.1	55
2479	Measurement of fracture strength in brittle thin films. Surface and Coatings Technology, 2014, 254, 1-10.	2.2	20

#	Article	IF	Citations
2480	Room temperature diamond-like carbon coatings produced by low energy ion implantation. Nuclear Instruments & Methods in Physics Research B, 2014, 331, 144-148.	0.6	14
2481	Understanding the ultra-low friction behavior of hydrogenated fullerene-like carbon films grown with different flow rates of hydrogen gas. Carbon, 2014, 77, 518-524.	5.4	54
2482	Photoacoustic spectroscopy and thermal diffusivity measurement on hydrogenated amorphous carbon thin films deposited by plasma-enhanced chemical vapor deposition. Diamond and Related Materials, 2014, 48, 1-5.	1.8	17
2483	Tunable interfacial magneticâ€“optical properties of Co doped amorphous carbon film induced by charge transfer after acid treatment. Carbon, 2014, 77, 398-404.	5.4	10
2484	Differences among the deactivation pathway of HZSM-5 zeolite and SAPO-34 in the transformation of ethylene or 1-butene to propylene. Microporous and Mesoporous Materials, 2014, 195, 284-293.	2.2	126
2485	Structuring of DLC:Ag nanocomposite thin films employing plasma chemical etching and ion sputtering. Nuclear Instruments & Methods in Physics Research B, 2014, 341, 1-6.	0.6	13
2486	Pulsed laser deposition of carbon nanodot arrays using porous alumina membranes as a mask. Surface and Coatings Technology, 2014, 253, 161-165.	2.2	6
2487	The effect of substrate geometry and surface orientation on the film structure of DLC deposited using PECVD. Surface and Coatings Technology, 2014, 254, 73-78.	2.2	33
2488	Reactive sputtering of NbCx-based nanocomposite coatings: An up-scaling study. Surface and Coatings Technology, 2014, 253, 100-108.	2.2	37
2489	Bias effects on structure and piezoresistive properties of DLC:Ag thin films. Surface and Coatings Technology, 2014, 255, 84-89.	2.2	28
2490	Effect of voltage on diamond-like carbon thin film using linear ion source. Surface and Coatings Technology, 2014, 243, 15-19.	2.2	17
2491	Enhanced field emission properties of PECVD synthesized chlorine doped diamond like carbon thin films. Surface and Coatings Technology, 2014, 253, 1-7.	2.2	24
2492	Probing the low-friction mechanism of diamond-like carbon by varying of sliding velocity and vacuum pressure. Carbon, 2014, 66, 259-266.	5.4	129
2493	Axial uniformity of diamond-like carbon film deposited on metal rod by using microwaveâ€“sheath voltage combination plasma. Surface and Coatings Technology, 2014, 238, 80-86.	2.2	6
2494	Polyynes and flexible Siâ€“H doped carbon nanoribbons by pulsed laser ablation of graphite in tetraethyl orthosilicate. Carbon, 2014, 67, 27-37.	5.4	15
2495	Nickel concentration dependent structural and optical properties of electrodeposited diamond like carbon thin films. EPJ Applied Physics, 2014, 66, 10302.	0.3	6
2496	Structural characterization of ion-vapor deposited hydrogenated amorphous carbon coatings by solid state13C nuclear magnetic resonance. Journal of Applied Physics, 2014, 115, 014303.	1.1	3
2497	Fabrication and characterization of glassy carbon membranes. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2014, 32, 042001.	0.6	6

#	Article	IF	Citations
2498	Nano-mechanical properties of nano-gold/DLC composite thin films. EPJ Applied Physics, 2014, 68, 20402.	0.3	5
2499	Various Properties of Plastic Bottles with Gas Barrier Properties Enhanced by DLC Coating. Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan, 2014, 65, 158-161.	0.1	1
2500	Mass spectrometry of refractory black carbon particles from six sources: carbon-cluster and oxygenated ions. Atmospheric Chemistry and Physics, 2014, 14, 2591-2603.	1.9	59
2501	Hydrogenated amorphous carbon coatings on implants drastically reduce biofilm formation and water permeation. Journal of Physics: Conference Series, 2014, 564, 012001.	0.3	4
2502	Laser irradiation effect on carbon overcoat for HAMR application. Surface and Interface Analysis, 2014, 46, 204-208.	0.8	5
2503	Formation of carbon nanoparticle using Ar+CH4high pressure nanosecond discharges. Journal of Physics: Conference Series, 2014, 518, 012020.	0.3	4
2504	The First principle calculation of bulk modulus and Young's modulus for amorphous carbon material. Journal of Physics: Conference Series, 2014, 518, 012011.	0.3	4
2505	Development of a new neutron mirror made of deuterated Diamond-like carbon. Journal of Physics: Conference Series, 2014, 528, 012010.	0.3	1
2507	Ampacity and electrical properties of thermally treated ultrathin carbon membranes grown by focused ion beam induced deposition of phenanthrane. , 2014, , .		0
2508	Nanoscale surface conductivity analysis of plasma sputtered carbon thin films. RSC Advances, 2015, 5, 96360-96365.	1.7	5
2509	Performance of CoCrMo Alloy with Me-Doped DLC Coatings Prepared by a Magnetron Sputtering Method. Rare Metal Materials and Engineering, 2015, 44, 2982-2986.	0.8	5
2510	Universal dispersion model for characterization of optical thin films over a wide spectral range: application to hafnia. Applied Optics, 2015, 54, 9108.	2.1	47
2511	Characterization of boron doped diamond-like carbon film by HRTEM. Applied Surface Science, 2015, 357, 2141-2146.	3.1	9
2512	Effect of carbon overcoat implantation on the magnetic and structural properties of perpendicular recording media. , 2015, , .		0
2513	Electrical conduction of ion tracks in tetrahedral amorphous carbon: temperature, field and doping dependence and comparison with matrix data. New Journal of Physics, 2015, 17, 123009.	1.2	1
2514	Effect of deposition pressure on the electrical properties of nitrogen-doped amorphous carbon films. Journal of the Korean Physical Society, 2015, 67, 638-642.	0.3	2
2516	Controlled fluoridation of amorphous carbon films deposited at reactive plasma conditions. Materials Science-Poland, 2015, 33, 606-611.	0.4	0
2517	Novel multilayer nano-composite protective coatings for metallic medical tools. International Journal of Materials Research, 2015, 106, 804-809.	0.1	1

#	Article	IF	Citations
2518	Diamond synthesis at atmospheric pressure by microwave capillary plasma chemical vapor deposition. Applied Physics Letters, 2015, 107, .	1.5	21
2519	Synthesis of hard hydrogenated amorphous carbon films by atmospheric pressure filamentary dielectric barrier discharge. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, .	0.9	5
2520	On the formation of copper nanoparticles in nanocluster aggregation source. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, .	0.9	9
2524	Ultrathin Carbon with Interspersed Graphene/Fullerene-like Nanostructures: A Durable Protective Overcoat for High Density Magnetic Storage. Scientific Reports, 2015, 5, 11607.	1.6	33
2525	Microstructure of a-C:H films prepared on a microtrench and analysis of ions and radicals behavior. Journal of Applied Physics, 2015, 118, .	1.1	8
2526	Effects of fluorine incorporation on the structural and electrical properties of Diamond-like carbon. Materials Research Society Symposia Proceedings, 2015, 1734, 40.	0.1	0
2527	Hydrogenation effects on carrier transport in boron-doped ultrananocrystalline diamond/amorphous carbon films prepared by coaxial arc plasma deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, 061514.	0.9	15
2528	Formation of noble-shaped carbon nanostructures. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 2015, 82, 179-186.	0.9	4
2529	A study of structural and wear properties of PACVD deposited aâ€C:H thin films for application as protective layers on Al alloys. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 2271-2277.	0.8	7
2530	Multiâ€instrument characterization of poly(divinylbenzene) microspheres for use in liquid chromatography: as received, air oxidized, carbonized, and acid treated. Surface and Interface Analysis, 2015, 47, 815-823.	0.8	3
2531	Microstructure and tribological behavior via modified F and Si content in duplex (F:Si)-doped carbon-based coatings. Surface and Interface Analysis, 2015, 47, 946-952.	0.8	10
2532	Tailoring Building Blocks and Their Boundary Interaction for the Creation of New, Potentially Superhard, Carbon Materials. Advanced Materials, 2015, 27, 3962-3968.	11.1	34
2533	Tuning the Surface Chemistry of Nanoporous Carbons for Enhanced Nanoconfined Photochemical Activity. ChemCatChem, 2015, 7, 3012-3019.	1.8	16
2534	Elastic Modulus and Hardness of Plasmaâ€Polymerized Organosilicones Evaluated by Nanoindentation Techniques. Plasma Processes and Polymers, 2015, 12, 864-881.	1.6	24
2535	Tunable Luminescent Carbon Nanospheres with Well-Defined Nanoscale Chemistry for Synchronized Imaging and Therapy. Small, 2015, 11, 4691-4703.	5.2	51
2536	Effects of discharge voltage on the characteristics of a-C:H films prepared by H-assisted Plasma CVD method. Transactions of the Materials Research Society of Japan, 2015, 40, 123-128.	0.2	4
2537	Depthâ€resolved slow positron beam analysis of ECR proton and argon implanted graphite and boron nitride system. Physica Status Solidi (B): Basic Research, 2015, 252, 2024-2033.	0.7	0
2538	The tribological performance of fullereneâ€like hydrogenated carbon films under ionic liquid lubrication. Surface and Interface Analysis, 2015, 47, 903-910.	0.8	6

#	Article	IF	Citations
2539	Influence of diamond and graphite bonds on mechanical properties of DLC thin films. Journal of Physics: Conference Series, 2015, 594, 012008.	0.3	5
2540	One-pot synthesis of composite NiO/graphitic carbon flakes with contact glow discharge electrolysis for electrochemical supercapacitors. International Journal of Energy Research, 2015, 39, 1689-1697.	2.2	24
2541	Numerical Analysis of Substrateâ€Incident Carbon Flux in Lowâ€Pressure Radioâ€Frequency CH₄ Plasmas for Deposition of Diamondâ€Like Carbon Films. Electronics and Communications in Japan, 2015, 98, 31-39.	0.3	4
2542	Exploring the Structure of the Modified Top Layer of Polypropylene During Plasma Treatment. Plasma Processes and Polymers, 2015, 12, 564-573.	1.6	15
2543	The Route for Ultra-High Recording Density Using Probe-Based Data Storage Device. Nano, 2015, 10, 1550118.	0.5	17
2544	The Quest for Nonthrombotic Surface Modifications to Achieve Hemocompatibility of Implantable Devices. ASAIO Journal, 2015, 61, 623-634.	0.9	11
2545	Effects of Hydrogen on Frictional Properties of DLC Films. Tribology Online, 2015, 10, 397-403.	0.2	12
2546	Computational Evaluation of Amorphous Carbon Coating for Durable Silicon Anodes for Lithium-Ion Batteries. Nanomaterials, 2015, 5, 1654-1666.	1.9	5
2547	Resistance of Hydrogenated Titanium-Doped Diamond-Like Carbon Film to Hyperthermal Atomic Oxygen. Metals, 2015, 5, 1957-1970.	1.0	6
2548	The Role of Ambient Gas and Pressure on the Structuring of Hard Diamond-Like Carbon Films Synthesized by Pulsed Laser Deposition. Materials, 2015, 8, 3284-3305.	1.3	28
2549	High Energy Radial Deposition of Diamond-Like Carbon Coatings. Coatings, 2015, 5, 326-337.	1.2	11
2550	Substrate Temperature Effect on the Microstructure and Properties of (Si, Al)/a-C:H Films Prepared through Magnetron Sputtering Deposition. Journal of Nanomaterials, 2015, 2015, 1-9.	1.5	1
2551	Friction Behavior of Diamond-Like Carbon Coated Ball Joint: Approach to Improving Vehicle Handling and Ride-Comfort. SAE International Journal of Passenger Cars - Mechanical Systems, 2015, 8, 638-646.	0.4	7
2552	Corrosion and Wear Resistance of Carbon Films Obtained by Electrodeposition on Ferritic Stainless Steel. Materials Research, 2015, 18, 292-297.	0.6	6
2553	Development of Si-DLC Coated Tappet for Improved Wear Resistance. , 2015, , .		1
2554	A Low-Stress, Elastic, and Improved Hardness Hydrogenated Amorphous Carbon Film. Journal of Nanomaterials, 2015, 2015, 1-5.	1.5	0
2555	Composition and Modifications of Dental Implant Surfaces. Journal of Oral Implants, 2015, 2015, 1-14.	1.0	24
2556	Laser-Spectroscopic Measurements of the Free Radicals Produced from the Dissociation of C₂H₂ with the Microwave Discharge Flow of Ar. Transactions of the Materials Research Society of Japan, 2015, 40, 33-36.	0.2	2

#	Article	IF	Citations
2557	Solar Energy and Clean Energy: Trends and Developments 2014. International Journal of Photoenergy, 2015, 2015, 1-4.	1.4	2
2558	Influence of WS₂Nanopowder Addition on Friction Characteristics of ta-C Coating by FCVA Method. Journal of Nanomaterials, 2015, 2015, 1-7.	1.5	0
2559	Selective dispersion of carbon fillers into dynamically vulcanized rubber/plastic blends: a thermodynamic approach to evaluate polymer reinforcement and conductivity enhancement. RSC Advances, 2015, 5, 31886-31900.	1.7	32
2560	Cell proliferation on modified DLC thin films prepared by plasma enhanced chemical vapor deposition. Biointerphases, 2015, 10, 029520.	0.6	23
2561	Influence of hydrogen incorporation and coating thickness on the corrosion resistance of carbon based coatings deposited by magnetron sputtering. Surface and Coatings Technology, 2015, 275, 127-132.	2.2	6
2562	Advancements in Diamond-Like Carbon Coatings. , 2015, , 183-205.		3
2563	Plasmas, 2015, 22, 056319.	0.7	11
2564	Effect of hexane precursor diluted with argon on the adherent diamond-like properties of carbon films on steel surfaces. Thin Solid Films, 2015, 589, 286-291.	0.8	15
2565	Carbon Substrates: A Stable Foundation for Biomolecular Arrays. Annual Review of Analytical Chemistry, 2015, 8, 263-285.	2.8	9
2566	Tribological behavior of hydrogenated DLC film: Chemical and physical transformations at nano-scale. Wear, 2015, 338-339, 105-113.	1.5	25
2567	Tribological properties of a tetrahedral amorphous carbon (ta-C) film under boundary lubrication in the presence of organic friction modifiers and zinc dialkyldithiophosphate (ZDDP). Wear, 2015, 332-333, 1293-1302.	1.5	40
2568	Microstructure and chemical bond evolution of diamond-like carbon films machined by femtosecond laser. Applied Surface Science, 2015, 340, 49-55.	3.1	10
2569	Dependence between friction of laser interference patterned carbon and the thin film morphology. Diamond and Related Materials, 2015, 55, 16-21.	1.8	26
2570	The effect of the native silicon dioxide interfacial layer on photovoltaic characteristics of gold/p-type amorphous boron carbon thin film alloy/silicon dioxide/n-type silicon/aluminum solar cells. Solar Energy Materials and Solar Cells, 2015, 137, 185-192.	3.0	8
2571	DLC films deposited on rubber substrates: a review. Surface Engineering, 2015, 31, 1-10.	1.1	20
2572	Effect of Iron Substitution in the Electrochemical Performance of Na₃V₂(PO₄)₃as Cathode for Na-Ion Batteries. Journal of the Electrochemical Society, 2015, 162, A3077-A3083.	1.3	141
2573	Iron carbide and nitride via a flexible route: synthesis, structure and magnetic properties. RSC Advances, 2015, 5, 21670-21674.	1.7	18
2574	Enhancing the high-rate performance of LiFePO4batteries using carbonized-filter paper as an interlayer. New Journal of Chemistry, 2015, 39, 3765-3769.	1.4	6

#	Article	IF	Citations
2575	Mechanical Properties and Surface Morphology of Diamond-Like Carbon Films with SiN<i>_x</i> Interlayer. Applied Mechanics and Materials, 0, 723, 515-519.	0.2	0
2576	Boron effect on the microstructure of 9% Cr ferriticâ€“martensitic steels. Journal of Nuclear Materials, 2015, 462, 280-288.	1.3	10
2577	Influence of the substrate bias potential on the properties of ta-C coatings deposited using Venetian blind plasma filter. Thin Solid Films, 2015, 581, 32-38.	0.8	19
2578	Thermal stability and long term hydrogen/deuterium release from soft to hard amorphous carbon layers analyzed using in-situ Raman spectroscopy. Comparison with Tore Supra deposits. Thin Solid Films, 2015, 581, 92-98.	0.8	19
2579	Carbon coating on the current collector and LiFePO4 nanoparticles â€“ Influence of sp and sp-like disordered carbon on the electrochemical properties. Journal of Power Sources, 2015, 293, 613-625.	4.0	47
2580	Raman studies of C-Ni/Ti films deposited on Si (100). , 2015, , .		0
2581	Diamond-like carbon thin film for tuned high sensitivity etched fiber Bragg grating refractometer. Proceedings of SPIE, 2015, , .	0.8	0
2582	Observation of carbon growth and interface structures in methanol solution. Japanese Journal of Applied Physics, 2015, 54, 115502.	0.8	0
2583	Detection of the iron impurity in CD x films formed in the T-10 tokamak and its influence on the sp 3 â†' sp 2 conversion. Journal of Surface Investigation, 2015, 9, 1221-1227.	0.1	5
2584	Broadband metasurface absorber for solar thermal applications. Journal of Optics (United Kingdom), 2015, 17, 125103.	1.0	11
2585	The influence of substrate bias voltages on structure, mechanical properties and anti-corrosion performance of Cr doped diamond-like carbon films deposited by steered cathodic arc evaporation. Thin Solid Films, 2015, 597, 88-96.	0.8	14
2586	Preparation of Thermoplastic Polyester Elastomer/Cerium Carbonate Hydroxide Composites Containing Aluminum Phosphinate with Improved Flame-Retardant and Mechanical Properties. Industrial & Engineering Chemistry Research, 2015, 54, 11048-11055.	1.8	20
2587	Theory and modelling of diamond fracture from an atomic perspective. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2015, 373, 20140139.	1.6	9
2588	Ab Initio Investigation on Cu/Cr Codoped Amorphous Carbon Nanocomposite Films with Giant Residual Stress Reduction. ACS Applied Materials & Interfaces, 2015, 7, 27878-27884.	4.0	38
2589	Antibacterial activity and cell compatibility of TiZrN, TiZrCN, and TiZr-amorphous carbon coatings. Thin Solid Films, 2015, 596, 111-117.	0.8	12
2590	Plasma Polymerization on Mesoporous Surfaces: n-Hexane on Titanium Nanoparticles. Journal of Physical Chemistry C, 2015, 119, 28906-28916.	1.5	7
2591	Diamond-Like Carbon Coatings for Joint Arthroplasty. , 2015, , 395-412.		1
2592	Thermoelectric properties of thin-film Sb0.9Bi1.1Te2.9Se0.1â€“C composites. Physics of the Solid State, 2015, 57, 1953-1962.	0.2	4

#	Article	IF	Citations
2593	Hybrid carbon nanomaterials for electrochemical detection of biomolecules. Physica Scripta, 2015, 90, 094006.	1.2	3
2594	Giant photosensitivity of a-C:Co/GaAs/Ag p-n-metal junctions. Optical Materials Express, 2015, 5, 2667.	1.6	4
2595	Magnetic Properties of Amorphous Hydrogenated Carbon Thin Films Doped by Ni. Solid State Phenomena, 2015, 233-234, 717-721.	0.3	0
2596	Atomic Degradation and Wear of Thin Carbon Films Under High-Speed Sliding Contact Using Molecular Dynamics Simulation. Tribology Letters, 2015, 60, 1.	1.2	32
2597	Reduction in EHL Friction by a DLC Coating. Tribology Letters, 2015, 60, 1.	1.2	24
2598	Friction at single-asperity contacts between hydrogen-free diamond-like carbon thin film surfaces. Diamond and Related Materials, 2015, 52, 38-42.	1.8	10
2599	Structural, nanomechanical and variable range hopping conduction behavior of nanocrystalline carbon thin films deposited by the ambient environment assisted filtered cathodic jet carbon arc technique. Journal of Alloys and Compounds, 2015, 628, 135-145.	2.8	10
2600	Diamond single micro-crystals and graphitic micro-ballsâ€™ formation in plasmoids under atmospheric pressure. Journal Physics D: Applied Physics, 2015, 48, 115201.	1.3	4
2601	Correlations between microstructure and hydrophobicity properties of pulsed laser deposited diamond-like carbon films. Superlattices and Microstructures, 2015, 81, 64-79.	1.4	48
2602	Role of humidity in reducing sliding friction of multilayered graphene. Carbon, 2015, 87, 374-384.	5.4	130
2603	Comparative analysis of thermal stability of two different nc-TiC/a-C:H coatings. Surface and Coatings Technology, 2015, 267, 32-39.	2.2	6
2604	Surface oxidation process of a diamond-like carbon film analyzed by difference X-ray photoelectron spectroscopy. Surface and Interface Analysis, 2015, 47, 345-349.	0.8	8
2605	Interfacial structure and electrochemical sensing properties of nitrogen-doped diamond-like carbon film electrodes modified with platinum nanoparticles and 4-aminobenzoic acid. Analytical Methods, 2015, 7, 1929-1935.	1.3	2
2606	Friction fade-out at polymer-like carbon films slid by ZrO₂ pins under hydrogen environment. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2015, 229, 1030-1038.	1.0	9
2607	Effects of electrical current and temperature on contamination-induced degradation in ohmic switch contacts. Tribology International, 2015, 85, 48-55.	3.0	14
2608	Effect of incorporation of deuterium on vacancy-type defects of a-C:H films prepared by plasma CVD. Applied Surface Science, 2015, 330, 142-147.	3.1	4
2609	Hybrid CO2 laser/waterjet (CO2-LWJ) cutting of Polycrystalline Cubic Boron Nitride (PCBN) blanks with phase transformation induced fracture. Optics and Laser Technology, 2015, 70, 39-44.	2.2	6
2610	Probing the Role of Carbon Microstructure on the Thermal Stability and Performance of Ultrathin (<2 nm) Overcoats on L1₀ FePt Media for Heat-Assisted Magnetic Recording. ACS Applied Materials & Interfaces, 2015, 7, 158-165.	4.0	19

#	Article	IF	Citations
2611	Deposition of diamond-like carbon films on interior surface of long and slender quartz glass tube by enhanced glow discharge plasma immersion ion implantation. Surface and Coatings Technology, 2015, 265, 218-221.	2.2	12
2612	Kinetics and thermodynamics of human serum albumin adsorption on silicon doped diamond like carbon. Materials Chemistry and Physics, 2015, 154, 84-93.	2.0	7
2613	Structural properties and surface wettability of Cu-containing diamond-like carbon films prepared by a hybrid linear ion beam deposition technique. Thin Solid Films, 2015, 584, 289-293.	0.8	30
2614	Effects of nanotube size and roof-layer coating on viscoelastic properties of hybrid diamond-like carbon and carbon nanotube composites. Carbon, 2015, 86, 163-173.	5.4	11
2615	Carbon nanotube (CNT) forest grown on diamond-like carbon (DLC) thin films significantly improves electrochemical sensitivity and selectivity towards dopamine. Sensors and Actuators B: Chemical, 2015, 211, 177-186.	4.0	52
2616	Effect of gold oxide incorporation on electrochemical corrosion resistance of diamond-like carbon. Diamond and Related Materials, 2015, 53, 40-44.	1.8	12
2617	Formation of amorphous carbon nitride films by reactive Ar/N2high-power impulse magnetron sputtering. Japanese Journal of Applied Physics, 2015, 54, 01AD06.	0.8	5
2618	Energy band alignment and electronic states of amorphous carbon surfaces in vacuo and in aqueous environment. Journal of Applied Physics, 2015, 117, 034502.	1.1	9
2619	Effects of atomic structure on the frictional properties of amorphous carbon coatings. Surface and Coatings Technology, 2015, 263, 8-14.	2.2	16
2620	Influence of the process parameters on the characteristics of silicon-incorporated a-C:H:SiOx coatings. Surface and Coatings Technology, 2015, 271, 112-118.	2.2	30
2621	Microstructure and electrochemical properties of nitrogen-doped DLC films deposited by PECVD technique. Applied Surface Science, 2015, 329, 281-286.	3.1	61
2622	Investigation of surface properties of pristine and Î³-irradiated PAN-based carbon fibers: Effects of fiber instinct structure and radiation medium. Applied Surface Science, 2015, 337, 241-248.	3.1	33
2623	Catalytically induced nanographitic phase by a platinum-ion implantation/annealing process to improve the field electron emission properties of ultrananocrystalline diamond films. Journal of Materials Chemistry C, 2015, 3, 2632-2641.	2.7	23
2624	Improved surface coverage of an optical fibre with nanocrystalline diamond by the application of dip-coating seeding. Diamond and Related Materials, 2015, 55, 52-63.	1.8	37
2625	Organic Compounds in Circumstellar and Interstellar Environments. Origins of Life and Evolution of Biospheres, 2015, 45, 113-121.	0.8	7
2626	Ultrathin undoped tetrahedral amorphous carbon films: thickness dependence of the electronic structure and implications for their electrochemical behaviour. Physical Chemistry Chemical Physics, 2015, 17, 9020-9031.	1.3	18
2627	Study of Structural, Electrical and Magnetic Properties of RF-Magnetron Sputtered Carbonâ€“Nickel Composite Films at Different Deposition Rate. Journal of Fusion Energy, 2015, 34, 646-652.	0.5	12
2628	Contact damage of hard and brittle thin films on ductile metallic substrates: an analysis of diamond-like carbon on titanium substrates. Journal of Materials Science, 2015, 50, 2779-2787.	1.7	13

#	Article	IF	Citations
2629	Growth of erbium dihydride films under low hydrogen pressure by pulsed laser deposition. Journal Wuhan University of Technology, Materials Science Edition, 2015, 30, 33-36.	0.4	0
2630	Diamond-like carbon films from CO source gas by RF plasma CVD method. Japanese Journal of Applied Physics, 2015, 54, 01AD04.	0.8	7
2631	Growth of Diamond-Like Carbon and Icosahedral Boron Carbide by Chemical Vapor Deposition System. Molecular Crystals and Liquid Crystals, 2015, 608, 223-236.	0.4	1
2632	Probing the Stress Reduction Mechanism of Diamond-Like Carbon Films by Incorporating Ti, Cr, or W Carbide-Forming Metals: Ab Initio Molecular Dynamics Simulation. Journal of Physical Chemistry C, 2015, 119, 6086-6093.	1.5	33
2633	Effects of SiN_x interlayer on characterisation of amorphous diamond-like carbon films. Materials Science and Technology, 2015, 31, 703-708.	0.8	3
2634	Friction reduction of highly-loaded rolling-sliding contacts by surface modifications under elasto-hydrodynamic lubrication. Wear, 2015, 328-329, 217-228.	1.5	36
2635	Characterization of Asphaltene Fractions: Distribution, Chemical Characteristics, and Solubility Behavior. Energy & Fuels, 2015, 29, 2143-2152.	2.5	48
2636	The importance of ions in low pressure PECVD plasmas. Frontiers in Physics, 2015, 3, .	1.0	23
2637	In situ synthesized TiCâ€“DLC nanocomposite coatings on titanium surface in acetylene ambient. Applied Surface Science, 2015, 349, 93-100.	3.1	15
2638	On the relation between chemical composition and optical properties of detonation nanodiamonds. Carbon, 2015, 94, 79-84.	5.4	45
2639	Effect of the flame environment on soot nanostructure inferred by Raman spectroscopy at different excitation wavelengths. Combustion and Flame, 2015, 162, 2431-2441.	2.8	80
2640	Implementation and mechanical characterization of 2 nm thin diamond like carbon suspended membranes. Diamond and Related Materials, 2015, 57, 53-57.	1.8	3
2641	Electrochemical detection of hydrogen peroxide on platinum-containing tetrahedral amorphous carbon sensors and evaluation of their biofouling properties. Materials Science and Engineering C, 2015, 55, 70-78.	3.8	17
2642	Protective double-layer coatings prepared by plasma enhanced chemical vapor deposition on tool steel. Surface and Coatings Technology, 2015, 272, 229-238.	2.2	11
2643	Controlled oxygen-doped diamond-like carbon film synthesized by photoemission-assisted plasma. Diamond and Related Materials, 2015, 53, 11-17.	1.8	10
2644	Multi-walled carbon nanotubes (MWCNTs) grown directly on tetrahedral amorphous carbon (ta-C): An interfacial study. Diamond and Related Materials, 2015, 56, 54-59.	1.8	11
2645	Diamond-like carbon films deposited on three-dimensional shape substrate model by liquid electrochemical technique. Thin Solid Films, 2015, 590, 60-63.	0.8	2
2646	Selective Synthesis of Graphitic Carbon and Polyacetylene by Electrochemical Reduction of Halogenated Carbons in Ionic Liquid at Room Temperature. Electrochimica Acta, 2015, 176, 388-393.	2.6	3

#	Article	IF	Citations
2647	Characterization of carbon contamination under ion and hot atom bombardment in a tin-plasma extreme ultraviolet light source. Applied Surface Science, 2015, 353, 708-713.	3.1	97
2648	High definition conductive carbon films from solution processing of nitrogen-containing oligomers. Carbon, 2015, 94, 1044-1051.	5.4	3
2649	A ternary phase diagram for amorphous carbon. Carbon, 2015, 94, 202-213.	5.4	51
2650	Graphene oxide: A promising nanomaterial for energy and environmental applications. Nano Energy, 2015, 16, 488-515.	8.2	518
2651	Graphitic Patterns on CVD Diamond Plate as Microheating/Thermometer Devices. ACS Applied Materials & Interfaces, 2015, 7, 10896-10904.	4.0	1
2652	Influence of wetting and thermophysical properties of diamond-like carbon coatings on the frictional behavior in automobile gearboxes under elasto-hydrodynamic lubrication. Surface and Coatings Technology, 2015, 284, 290-301.	2.2	35
2653	Fabrication of DLC thin films with improved diamond-like carbon character by the application of external magnetic field. Carbon, 2015, 94, 485-493.	5.4	113
2654	Optical Properties of Pyrolytic Carbon Films Versus Graphite and Graphene. Nanoscale Research Letters, 2015, 10, 946.	3.1	33
2655	Surface immobilization of Mo6I8 octahedral cluster cores on functionalized amorphous carbon using a pyridine complexation strategy. Diamond and Related Materials, 2015, 55, 131-138.	1.8	9
2656	Electrical and magnetic properties of electrodeposited nickel incorporated diamond-like carbon thin films. Applied Surface Science, 2015, 337, 195-207.	3.1	23
2657	Deformation behavior and interfacial sliding in carbon/copper nanocomposite films deposited by high power DC magnetron sputtering. Surface and Coatings Technology, 2015, 276, 279-285.	2.2	11
2658	Identification of the Chemical Bonding Prompting Adhesion of a-C:H Thin Films on Ferrous Alloy Intermediated by a SiC_x:H Buffer Layer. ACS Applied Materials & Interfaces, 2015, 7, 15909-15917.	4.0	44
2659	Mechanical Behavior of Nitrided 316L Austenitic Stainless Steel Coated with a:C-H-Si. , 2015, 9, 163-170.		9
2660	Surface morphology and grain analysis of successively industrially grown amorphous hydrogenated carbon films (a-C:H) on silicon. Applied Surface Science, 2015, 347, 657-667.	3.1	47
2661	Spatially resolved nanostructural transformation in graphite under femtosecond laser irradiation. Applied Surface Science, 2015, 355, 477-483.	3.1	3
2662	Ultrathin undoped tetrahedral amorphous carbon films: The role of the underlying titanium layer on the electronic structure. Diamond and Related Materials, 2015, 57, 43-52.	1.8	18
2663	Hybrid nanostructured thin-films by PLD for enhanced field emission performance for radiation micro-nano dosimetry applications. Journal of Alloys and Compounds, 2015, 647, 141-145.	2.8	83
2664	Facile preparation of PbS nanostructures and PbS/f-CNT nanocomposites using xanthate as sulfur source: Thermal and optical characterization. Journal of Alloys and Compounds, 2015, 647, 539-547.	2.8	9

#	Article	IF	Citations
2665	Electrical characterization of metal/diamond-like carbon/inorganic semiconductor MIS Schottky barrier diodes. Microelectronic Engineering, 2015, 140, 18-22.	1.1	32
2666	Synthesis and characterization of boron incorporated diamond-like carbon thin films. Thin Solid Films, 2015, 589, 457-464.	0.8	17
2667	The Influence of Total Acid Number of Ester Oil in Tribological Behavior of DLC Contacts. Tribology Transactions, 2015, 58, 849-858.	1.1	9
2668	Integrated Carbon Nanostructures for Detection of Neurotransmitters. Molecular Neurobiology, 2015, 52, 859-866.	1.9	37
2669	Nanocrystalline CVD Diamond Coatings on Fused Silica Optical Fibres: Optical Properties Study. Acta Physica Polonica A, 2015, 127, 868-873.	0.2	12
2670	Controlling conductivity of carbon film for L-929 cell biocompatibility using magnetron sputtering plasmas. Journal of Materials Chemistry B, 2015, 3, 3267-3278.	2.9	21
2671	Growth of Dual DLC and Icosahedral Boron Carbide Nano-Crystals by HFCVD. Molecular Crystals and Liquid Crystals, 2015, 608, 103-115.	0.4	1
2672	Optical, structural and bonding properties of diamond-like amorphous carbon films deposited by DC magnetron sputtering. Diamond and Related Materials, 2015, 56, 29-35.	1.8	60
2673	Microstructure and mechanical property of diamond-like carbon films with ductile copper incorporation. Surface and Coatings Technology, 2015, 272, 33-38.	2.2	40
2674	Electrode wear protection mechanism in mesoâ€“micro-EDM. Journal of Materials Processing Technology, 2015, 223, 22-33.	3.1	29
2675	Anti-reflection coatings for silicon solar cells from hydrogenated diamond like carbon. Applied Surface Science, 2015, 345, 204-215.	3.1	38
2676	Friction properties of amorphous carbon ultrathin films deposited by filtered cathodic vacuum arc and radio-frequency sputtering. Thin Solid Films, 2015, 579, 167-173.	0.8	25
2677	Influence of carbon concentration on the electrochemical behavior of CrCN coatings in simulated body fluid. Surface and Coatings Technology, 2015, 265, 16-23.	2.2	24
2678	Effect of substrate surface pretreatment and annealing treatment on morphology, structure, optical and electrical properties of sputtered ZnO films. Superlattices and Microstructures, 2015, 83, 604-617.	1.4	13
2679	Diamondâ€“tungsten based coatingâ€“copper composites with high thermal conductivity produced by Pulse Plasma Sintering. Materials & Design, 2015, 76, 97-109.	5.1	116
2680	Structural, optical and electrical properties of amorphous carbon films deposited by pulsed unbalanced magnetron sputtering. Optik, 2015, 126, 861-864.	1.4	20
2681	Preparation and Characterization of Sulfurized Tungsten Doped Non-hydrogenated Diamond-Like Carbon Films. Plasma Chemistry and Plasma Processing, 2015, 35, 769-783.	1.1	2
2682	Deformation of Ultra-Thin Diamond-Like Carbon Coatings Under Combined Loading on a Magnetic Recording Head. Tribology Letters, 2015, 57, 1.	1.2	4

#	Article	IF	Citations
2683	Effect of Lubricant Formulations on the Tribological Performance of Self-Mated Doped DLC Contacts: a review. Tribology Letters, 2015, 58, 1.	1.2	43
2684	Tribological behavior of uncoated and DLC-coated CoCr and Ti-alloys in contact with UHMWPE and PEEK counterbodies. Tribology International, 2015, 89, 97-104.	3.0	22
2685	Torsional Fretting Wear Behavior of Duplex DLC Coatings Deposited on Ion Nitriding Treated LZ50 Steel. Journal of Bio- and Tribo-Corrosion, 2015, 1, 1.	1.2	1
2686	Three-layer antireflection diamond-like carbon films on glass. Journal of Contemporary Physics, 2015, 50, 72-78.	0.1	0
2687	DLC-Coated Tools for Micro-forming. , 2015, , 487-512.		0
2688	Modified Electrodes Used for Electrochemical Detection of Metal Ions in Environmental Analysis. Biosensors, 2015, 5, 241-275.	2.3	264
2689	Recent advances in the mechanical and tribological properties of fluorine-containing DLC films. RSC Advances, 2015, 5, 9635-9649.	1.7	42
2690	Surface Treatments for Automotive Applications. , 2015, , 91-132.		3
2691	Chromium(III) oxide carbon nanocomposites lithium-ion battery anodes with enhanced energy conversion performance. Chemical Engineering Journal, 2015, 277, 186-193.	6.6	38
2692	Probing the Adsorption of Weak Acids on Graphite Using Amplitude Modulationâ€“Frequency Modulation Atomic Force Microscopy. Langmuir, 2015, 31, 3069-3075.	1.6	6
2693	Structural and nanomechanical properties of nanocrystalline carbon thin films for photodetection. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, 031501.	0.9	3
2694	Effect of helium gas pressure on dc conduction mechanism and EMI shielding properties of nanocrystalline carbon thin films. Materials Chemistry and Physics, 2015, 158, 10-17.	2.0	9
2695	Effects of Nano-Diamond Seeds on Mechanical Properties and Surface Morphology of Diamond-Like Carbon Films. Applied Mechanics and Materials, 2015, 723, 502-506.	0.2	3
2696	Frictional properties of DLC films in low-pressure hydrogen conditions. Wear, 2015, 340-341, 2-8.	1.5	24
2697	Graphene diamond-like carbon films heterostructure. Applied Physics Letters, 2015, 106, .	1.5	12
2698	Effect of Carbon Overcoat Implantation on the Magnetic and Structural Properties of Perpendicular Recording Media. IEEE Transactions on Magnetics, 2015, 51, 1-4.	1.2	0
2699	Ceramics and ceramic coatings in orthopaedics. Journal of the European Ceramic Society, 2015, 35, 4327-4369.	2.8	167
2700	Structural changes of hydrogenated amorphous carbon films deposited on steel rods. Applied Surface Science, 2015, 357, 814-818.	3.1	11

#	Article	IF	Citations
2701	Properties of W/DLC/Wâ€“Sâ€“C composite films fabricated by magnetron sputtering. Transactions of Nonferrous Metals Society of China, 2015, 25, 3002-3011.	1.7	11
2702	Influence of acetylene precursor diluted with argon on the microstructure and the mechanical and tribological properties of a-C:H films deposited via the modified pulsed-DC PECVD method. Surface and Coatings Technology, 2015, 284, 145-152.	2.2	28
2703	Structurally Driven Enhancement of Resonant Tunneling and Nanomechanical Properties in Diamond-like Carbon Superlattices. ACS Applied Materials & Interfaces, 2015, 7, 20726-20735.	4.0	10
2704	Monitoring Ni 0 and coke evolution during the deactivation of a Ni/La 2 O 3 â€“Î±Al 2 O 3 catalyst in ethanol steam reforming in a fluidized bed. Journal of Catalysis, 2015, 331, 181-192.	3.1	208
2705	Dissolution of single-walled carbon nanotubes in alkanol-cholic acid mixtures. Russian Journal of Physical Chemistry A, 2015, 89, 1628-1632.	0.1	15
2706	An evaluation of the tribological characteristics of DLC films grown on Inconel Alloy 718 using the Active Screen Plasma technique in a Pulsed-DC PECVD system. Surface and Coatings Technology, 2015, 284, 235-239.	2.2	16
2707	Effects of TiCN interlayer on bonding characteristics and mechanical properties of DLC-coated Ti-6Al-4V ELI alloy. International Journal of Refractory Metals and Hard Materials, 2015, 53, 13-16.	1.7	23
2708	N-doped carbon encapsulated ultrathin MoO₃ nanosheets as superior anodes with high capacity and excellent rate capability for Li-ion batteries. Journal of Materials Chemistry A, 2015, 3, 24245-24253.	5.2	54
2709	Plasma-synthesised carbon-based coatings for cardiovascular applications. Biosurface and Biotribology, 2015, 1, 146-160.	0.6	29
2710	Influence of alloying elements on the sintering thermodynamics, microstructure and properties of Feâ€“MoS2 composites. Journal of Alloys and Compounds, 2015, 652, 450-458.	2.8	30
2711	Role of target-substrate distance on the structural, mechanical and electrical properties of amorphous carbon films. Journal of Materials Science: Materials in Electronics, 2015, 26, 6552-6556.	1.1	3
2712	The study of composition and surface electron structure of nitrogen-doped DLC film prepared by PIII-D. Functional Materials Letters, 2015, 08, 1540015.	0.7	2
2713	The Role of Duty Cycle of Substrate Pulse Biasing in Filtered Cathodic Vacuum Arc Deposition of Amorphous Carbon Films. IEEE Transactions on Magnetics, 2015, 51, 1-9.	1.2	8
2714	Irradiation of the amorphous carbon films by picosecond laser pulses. Thin Solid Films, 2015, 593, 116-123.	0.8	2
2715	Strong optical nonlinearity of the nonstoichiometric silicon carbide. Journal of Materials Chemistry C, 2015, 3, 10164-10176.	2.7	47
2716	Oxygenated amorphous carbon for resistive memory applications. Nature Communications, 2015, 6, 8600.	5.8	86
2717	Improved tribological, electrochemical and biocompatibility properties of Ti6Al4V alloy by gas-nitriding and Tiâ€“C:H coating. Surface and Coatings Technology, 2015, 283, 70-79.	2.2	19
2718	Residual stress measurement in DLC films deposited by PBIID method using Raman microprobe spectroscopy. Surface and Coatings Technology, 2015, 283, 274-280.	2.2	39

#	Article	IF	Citations
2719	Microstructure and tribomechanical properties of (Cr, N)-DLC/DLC multilayer films deposited by a combination of filtered and direct cathodic vacuum arcs. Diamond and Related Materials, 2015, 60, 66-74.	1.8	48
2720	Corrosion behaviour of tetrahedral amorphous carbon (ta-C) filled titania nano tubes. RSC Advances, 2015, 5, 93131-93138.	1.7	11
2721	Excellent wear life of silicon nitride/tetrahedral amorphous carbon bilayer overcoat on functional tape heads. Applied Physics Letters, 2015, 106, 091604.	1.5	8
2722	Angular magnetoresistance in semiconducting undoped amorphous carbon thin films. Journal of Applied Physics, 2015, 117, .	1.1	19
2723	Hydrogen accumulation as the origin of delamination at the a-carbon/SiO2 interface. Journal of Applied Physics, 2015, 117, 215302.	1.1	1
2724	Stress reduction of Cu-doped diamond-like carbon films from ab initio calculations. AIP Advances, 2015, 5, .	0.6	9
2725	Correlation of sp2 carbon bonds content in magnetron-sputtered amorphous carbon films to their electrochemical H2O2 production for water decontamination applications. Carbon, 2015, 94, 988-995.	5.4	30
2726	Single walled carbon nanotube networkâ€"Tetrahedral amorphous carbon composite film. Journal of Applied Physics, 2015, 117, 225302.	1.1	8
2727	Mechanical characterization of segment-structured hydrogen-free a-C films fabricated by filtered cathodic vacuum arc method. Surface and Coatings Technology, 2015, 278, 71-79.	2.2	8
2729	The influence of antiâ€wear additive ZDDP on doped and undoped diamondâ€like carbon coatings. Surface and Interface Analysis, 2015, 47, 755-763.	0.8	7
2730	The study and fabrication of DLC micropattern on roll mold. Modern Physics Letters B, 2015, 29, 1540005.	1.0	0
2731	Measuring interphase stiffening effects in styrene-based polymeric thin films. Polymer, 2015, 75, 161-167.	1.8	23
2732	Piezoresistive properties of diamond like carbon films containing copper. Diamond and Related Materials, 2015, 60, 20-25.	1.8	16
2733	Electrochemical reactions of catechol, methylcatechol and dopamine at tetrahedral amorphous carbon (ta-C) thin film electrodes. Diamond and Related Materials, 2015, 59, 30-39.	1.8	59
2734	Surface treatment of diamond-like carbon films by reactive Ar/CF4 high-power pulsed magnetron sputtering plasmas. Nuclear Instruments & Methods in Physics Research B, 2015, 365, 155-158.	0.6	3
2735	Improvement of Hydrophilic Stability of Diamond-Like Carbon Films by O₂/CF₄ Plasma Post-Treatment. Advanced Materials Research, 0, 1125, 38-44.	0.3	1
2736	Theoretical model of the interaction of glycine with hydrogenated amorphous carbon (HAC). Physical Chemistry Chemical Physics, 2015, 17, 28966-28976.	1.3	6
2737	High-toughness/low-friction ductile epoxy coatings reinforced with carbon nanostructures. Polymer Testing, 2015, 47, 113-119.	2.3	24

#	Article	IF	Citations
2738	Improvement of surface properties on microfluidic devices by Diamond-Like Carbon coatings. , 2015, , .		0
2739	Friction and wear performance of multilayered a-C:H:Al coatings. Surface and Coatings Technology, 2015, 284, 159-165.	2.2	6
2740	Development of DLC coating architectures for demanding functional surface applications through nano- and micro-mechanical testing. Surface and Coatings Technology, 2015, 284, 334-343.	2.2	48
2741	Buckled diamond-like carbon nanomechanical resonators. Nanoscale, 2015, 7, 14747-14751.	2.8	11
2742	Graphene oxide: the new membrane material. Applied Materials Today, 2015, 1, 1-12.	2.3	386
2743	Three-layered sandwich structured carbon film prepared by sputtering and ion/electron/ion alternative irradiation. Surface and Coatings Technology, 2015, 278, 12-17.	2.2	4
2744	Effect of Carbon Overcoat on Heat-Assisted Magnetic Recording Performance. IEEE Transactions on Magnetics, 2015, 51, 1-5.	1.2	2
2745	Chemical vapor deposition of Si/SiC nano-multilayer thin films. Thin Solid Films, 2015, 593, 44-52.	0.8	6
2746	A THEORETICAL STUDY ON THE VIBRATIONAL SPECTRA OF POLYCYCLIC AROMATIC HYDROCARBON MOLECULES WITH ALIPHATIC SIDEGROUPS. Astrophysical Journal, 2015, 801, 34.	1.6	21
2747	Researches on uniformity of diamond-like carbon films deposited on inner surface of long and slender quartz glass tube by enhanced glow discharge plasma immersion ion implantation and deposition. Surface and Coatings Technology, 2015, 280, 81-85.	2.2	6
2748	The influence of hydrogen on the chemical, mechanical, optical/electronic, and electrical transport properties of amorphous hydrogenated boron carbide. Journal of Applied Physics, 2015, 118, .	1.1	34
2749	Nanoindentation response analysis of Cu-rich carbonâ€“copper composite films deposited by PVD technique. Surface and Coatings Technology, 2015, 280, 308-316.	2.2	10
2750	Enhancement of adhesion and corrosion resistance of diamond-like carbon thin films on Tiâ€“6Alâ€“4V alloy by nitrogen doping and incorporation of nanodiamond particles. Surface and Coatings Technology, 2015, 284, 153-158.	2.2	21
2751	Characterization of thick and soft DLC coatings deposited on plasma nitrided austenitic stainless steel. Diamond and Related Materials, 2015, 59, 73-79.	1.8	33
2752	Tuning of the microstructure, mechanical and tribological properties of a-C:H films by bias voltage of high frequency unipolar pulse. Applied Surface Science, 2015, 356, 695-700.	3.1	14
2753	Effect of various concentrations of Ti in hydrocarbon plasma polymer films on the adhesion, proliferation and differentiation of human osteoblast-like MG-63 cells. Applied Surface Science, 2015, 357, 459-472.	3.1	3
2754	The influence of different silicon adhesion interlayers on the tribological behavior of DLC thin films deposited on steel by EC-PECVD. Surface and Coatings Technology, 2015, 283, 115-121.	2.2	49
2755	Effect of the reaction time on the microstructure and porous texture of carbon materials obtained by chlorination of Ti(C5H5)Cl2. Materials Chemistry and Physics, 2015, 166, 233-240.	2.0	3

#	Article	IF	Citations
2756	Synthesis of Graphene-layer Nanosheet Coatings by PECVD. Materials Today: Proceedings, 2015, 2, 4247-4255.	0.9	13
2757	Laser cleaning of diagnostic mirrors from tokamak-like carbon contaminants. Journal of Nuclear Materials, 2015, 463, 944-947.	1.3	15
2758	Investigating atomic structure of thin carbon film under mechanical stress and frictional heat generation. Surface and Coatings Technology, 2015, 261, 79-85.	2.2	15
2759	Making porous conductive carbon films with unbalanced magnetron sputtering. Japanese Journal of Applied Physics, 2015, 54, 010304.	0.8	10
2760	The critical influence of surface topography on nanoindentation measurements of a-SiC:H films. Surface and Coatings Technology, 2015, 261, 114-121.	2.2	18
2761	Freestanding Sulfur/3D Carbon Fiber Membrane Cathodes for Advanced Lithiumâ€“Sulfur Batteries. ChemElectroChem, 2015, 2, 246-252.	1.7	32
2762	Electrochemical characteristics of amorphous carbon nanorod synthesized by radio frequency magnetron sputtering. Applied Surface Science, 2015, 326, 243-250.	3.1	4
2763	Enhanced performance of interconnected LiFePO4/C microspheres with excellent multiple conductive network and subtle mesoporous structure. Electrochimica Acta, 2015, 152, 398-407.	2.6	75
2764	Chemistry of Sumanene. Chemical Record, 2015, 15, 310-321.	2.9	115
2765	Microstructure and properties of (Cr:N)-DLC films deposited by a hybrid beam technique. Surface and Coatings Technology, 2015, 261, 398-403.	2.2	22
2766	Hard thin films. , 2015, , 543-567.		7
2767	Influence of scratches on the wear behavior of DLC coatings. Wear, 2015, 330-331, 380-389.	1.5	9
2768	Wear behavior of DLC film on plasma nitrocarburized AISI 4140 steel by pulsed DC PACVD: Effect of nitrocarburizing temperature. Diamond and Related Materials, 2015, 52, 32-37.	1.8	44
2769	Effect of carbon content on nanostructural, mechanical and electrochemical characteristics of self-organized nc-ZrCN/a-CNx nanocomposite films. Applied Surface Science, 2015, 327, 350-357.	3.1	17
2770	Hybridization and tribomechanical properties of ultrathin amorphous carbon films synthesized by radio-frequency low-pressure plasma discharges. Surface and Coatings Technology, 2015, 262, 15-20.	2.2	9
2771	Silver surface segregation in Ag-DLC nanocomposite coatings. Surface and Coatings Technology, 2015, 267, 90-97.	2.2	42
2772	Ab initio molecular dynamics simulation on stress reduction mechanism of Ti-doped diamond-like carbon films. Thin Solid Films, 2015, 584, 204-207.	0.8	10
2773	Catalytic effect of Al and AlN interlayer on the growth and properties of containing carbon films. Applied Surface Science, 2015, 326, 174-180.	3.1	7

#	Article	IF	Citations
2774	Investigations on phosphorus doped amorphous/nanocrystalline silicon films deposited by a filtered cathodic vacuum arc technique in the presence of hydrogen gas. Materials Science in Semiconductor Processing, 2015, 31, 1-9.	1.9	10
2775	An investigation on the effect of high partial pressure of hydrogen on the nanocrystalline structure of silicon carbide thin films prepared by radio-frequency magnetron sputtering. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2015, 136, 1409-1417.	2.0	12
2776	Raman and thermal desorption spectroscopy analyses of amorphous graphite-like carbon films with incorporated xenon. Vacuum, 2015, 112, 17-24.	1.6	15
2777	A model for single asperity perturbation on lubricated sliding contact with DLC-coated solids. Tribology International, 2015, 82, 423-430.	3.0	6
2778	Enhanced characteristics of pulsed DC sputtered ultrathin (<2nm) amorphous carbon overcoats on hard disk magnetic media. Diamond and Related Materials, 2015, 51, 14-23.	1.8	15
2779	Charge-induced formation of thin conducting layers on fluorinated graphite surface. Carbon, 2015, 82, 446-458.	5.4	25
2780	Strain-induced photoconductivity in thin films of Co doped amorphous carbon. Scientific Reports, 2014, 4, 6738.	1.6	8
2781	Environmental effect on the load-dependent friction behavior of a diamond-like carbon film. Tribology International, 2015, 82, 195-199.	3.0	44
2782	High surface area diamond-like carbon electrodes grown on vertically aligned carbon nanotubes. Carbon, 2015, 82, 288-296.	5.4	19
2783	Optical properties of diamond like carbon films containing copper, grown by high power pulsed magnetron sputtering and direct current magnetron sputtering: Structure and composition effects. Thin Solid Films, 2015, 581, 48-53.	0.8	28
2784	Structural dependence of corrosion resistance of amorphous carbon films against nitric acid. Diamond and Related Materials, 2015, 51, 49-54.	1.8	13
2785	Band engineering magneto-resistance effect in Co:a-C films. Carbon, 2015, 81, 821-825.	5.4	2
2786	Influence of transition metal doping on the tribological properties of pulsed laser deposited DLC films. Ceramics International, 2015, 41, 1797-1805.	2.3	53
2787	Multifunctional titanium oxycarbide films fabricated by filtered cathodic vacuum arc technique using CO2 as a precusor. Ceramics International, 2015, 41, 1701-1709.	2.3	6
2789	A shear localization mechanism for lubricity of amorphous carbon materials. Scientific Reports, 2014, 4, 3662.	1.6	92
2790	An updated overview of diamond-like carbon coating in tribology. Critical Reviews in Solid State and Materials Sciences, 2015, 40, 90-118.	6.8	126
2791	Tribology optimization by laser surface texturing. , 2015, , 405-422.		10
2792	Cohesive and adhesive failure of hard and brittle films on ductile metallic substrates: A film thickness size effect analysis of the model system hydrogenated diamond-like carbon (a-C:H) on Ti substrates. Acta Materialia, 2015, 83, 29-36.	3.8	25

#	Article	IF	Citations
2793	Architecture of superthick diamond-like carbon films with excellent high temperature wear resistance. Tribology International, 2015, 81, 129-138.	3.0	56
2794	Physicochemical characterisation of tribolayers by micro-Raman and GDOES analyses. Tribology International, 2015, 81, 223-230.	3.0	6
2795	Analysis of the friction behavior of DLC in warm bulk forming by using the ring compression test. Production Engineering, 2015, 9, 41-49.	1.1	6
2796	Probing the role of C+ ion energy, thickness and graded structure on the functional and microstructural characteristics of ultrathin carbon films (<2 nm). Tribology International, 2015, 81, 73-88.	3.0	19
2797	Released Plasmonic Electric Field of Ultrathin Tetrahedral-Amorphous-Carbon Films Coated Ag Nanoparticles for SERS. Scientific Reports, 2015, 4, 4494.	1.6	21
2798	Urinary catheter with polyurethane coating modified by ion implantation. Nuclear Instruments & Methods in Physics Research B, 2015, 342, 39-46.	0.6	10
2799	Effect of exposure environment on surface decomposition of SiCâ€“silver ion implantation diffusion couples. Journal of Nuclear Materials, 2015, 456, 281-286.	1.3	7
2800	X-Ray Residual Stress in the S-Phase of Stainless Steel Nitrided by Plasma Nitriding Method and Residual Stress Measurement of DLC Film Deposited on the S-Phase. Zairyo/Journal of the Society of Materials Science, Japan, 2016, 65, 517-524.	0.1	3
2801	Ultralow Friction of a Tetrahedral Amorphous Carbon Film Lubricated with an Environmentally Friendly Ester-Based Oil. Tribology Online, 2016, 11, 102-113.	0.2	18
2802	Protective Sliding Carbon-Based Nanolayers Prepared by Argon or Nitrogen Ion-Beam Assisted Deposition on Ti6Al4V Alloy. Journal of Nanomaterials, 2016, 2016, 1-9.	1.5	5
2803	High quality and large-area graphene synthesis with a high growth rate using plasma-enhanced CVD. Synthesiology, 2016, 9, 124-138.	0.2	0
2804	DLC Films Grown On Steel Using An Innovator Active Screen System For PECVD Technique. Materials Research, 2016, 19, 882-888.	0.6	12
2805	High quality large-area graphene synthesis with high growth rate using plasma-enhanced CVD. Synthesiology, 2016, 9, 124-138.	0.2	1
2806	Fabrication and Characterization of ZnS/Diamond-Like Carbon Core-Shell Nanowires. Journal of Nanomaterials, 2016, 2016, 1-6.	1.5	3
2807	The Influence of Titanium Dioxide on Diamond-Like Carbon Biocompatibility for Dental Applications. Journal of Nanomaterials, 2016, 2016, 1-7.	1.5	11
2808	Low-Temperature Production of Genuinely Amorphous Carbon from Highly Reactive Nanoacetylide Precursors. Journal of Chemistry, 2016, 2016, 1-6.	0.9	13
2809	Spectroscopic Study of Plasma Polymerized a-C:H Films Deposited by a Dielectric Barrier Discharge. Materials, 2016, 9, 594.	1.3	9
2810	Physicochemical and Biological Investigation of Different Structures of Carbon Coatings Deposited onto Polyurethane. Brazilian Archives of Biology and Technology, 2016, 59, .	0.5	4

#	Article	IF	Citations
2811	The Effect of Oxide and Tribofilm Formation on the Wear of Cylinder Bores from Flex-Fuel Engines. , 2016, , .		7
2812	Iron nanoparticles embedded in carbon films: structural and optical properties. EPJ Applied Physics, 2016, 74, 30402.	0.3	2
2813	Recycling and Refurbishing of Epoxy Packaging Mold Ports and Plungers. Inventions, 2016, 1, 11.	1.3	0
2814	Synthesis and characterization of thin amorphous carbon films doped with nitrogen on (001) Si substrates. Journal of Physics: Conference Series, 2016, 764, 012013.	0.3	3
2815	Synthesis of nanostructured amorphous carbon-copper composite films by plasma-enhanced chemical vapour deposition. Thin Solid Films, 2016, 615, 195-201.	0.8	3
2816	Equilibrium diamondâ€like carbon nanostructures with cubic anisotropy: Elastic properties. Physica Status Solidi (B): Basic Research, 2016, 253, 1295-1302.	0.7	37
2817	ZrB₂â€“SiCâ€“G Composite Prepared by Spark Plasma Sintering of Inâ€Situ Synthesized ZrB₂â€“SiCâ€“C Composite Powders. Journal of the American Ceramic Society, 2016, 99, 2131-2137.	1.9	25
2818	Self-lubricating and anti-corrosion amorphous carbon/Fe3C composite coating on M50NiL steel by low temperature plasma carburizing. Surface and Coatings Technology, 2016, 304, 142-149.	2.2	33
2819	Two-dimensional materials for novel liquid separation membranes. Nanotechnology, 2016, 27, 332001.	1.3	45
2820	Gold nanoparticles promote amorphous carbon to be ammonia gas sensor. Europhysics Letters, 2016, 114, 40001.	0.7	2
2821	Mott lecture: How bonding concepts can help understand amorphous semiconductor behavior. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 1641-1652.	0.8	17
2822	Valenceâ€band electronic structure evolution of graphene oxide upon thermal annealing for optoelectronics. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 2380-2386.	0.8	13
2823	Optical and electrical properties of boron doped diamond thin conductive films deposited on fused silica glass substrates. Applied Surface Science, 2016, 387, 846-856.	3.1	43
2824	Shape effect of silver nanoparticles on plasmon properties of DLC: Ag nanocomposites. , 2016, , .		3
2825	Ellipsometric investigation of nitrogen doped diamond thin films grown in microwave CH4/H2/N2 plasma enhanced chemical vapor deposition. Applied Physics Letters, 2016, 108, .	1.5	32
2826	Organic dust in galaxies. Journal of Physics: Conference Series, 2016, 728, 062001.	0.3	0
2827	Bilayer amorphous carbon films synthesized by filtered cathodic vacuum arc deposition. Journal of Materials Research, 2016, 31, 3161-3167.	1.2	7
2828	Interpretation of friction and wear in DLC film: role of surface chemistry and test environment. Journal Physics D: Applied Physics, 2016, 49, 445302.	1.3	26

#	Article	IF	Citations
2829	A Reactive Force Field Study on the Interaction of Lubricant with Diamond-Like Carbon Structures. Journal of Physical Chemistry C, 2016, 120, 27443-27451.	1.5	10
2830	Density and localized states' impact on amorphous carbon electron transport mechanisms. Journal of Applied Physics, 2016, 120, 214303.	1.1	3
2831	Sticking non-stick: Surface and Structure control of Diamond-like Carbon in Plasma Enhanced Chemical Vapour Deposition. Journal of Physics: Conference Series, 2016, 768, 012011.	0.3	3
2832	Synthesis of flat sticky hydrophobic carbon diamond-like films using atmospheric pressure Ar/CH4 dielectric barrier discharge. Journal of Applied Physics, 2016, 119, 223303.	1.1	15
2833	Advanced Carbon-Based Coatings. , 2016, , .		0
2834	Amorphous hydrogenated carbon films. Synthesis, structure and properties. Journal of Physics: Conference Series, 2016, 751, 012027.	0.3	0
2835	TCAD-based investigation on transport properties of Diamond-like carbon coatings for HV-ICs. , 2016, , .		6
2836	A molecular dynamics analysis of ion irradiation of ultrathin amorphous carbon films. Journal of Applied Physics, 2016, 120, 125311.	1.1	0
2837	Dispersion of single-walled carbon nanotubes in dimethylacetamide and a dimethylacetamideâ€“cholic acid mixture. Russian Journal of Physical Chemistry A, 2016, 90, 2434-2439.	0.1	12
2838	Influence of tungsten content on microstructure and properties of tungsten-doped graphite-like carbon films. Journal of Materials Research, 2016, 31, 3766-3776.	1.2	9
2839	Growth of single and bilayer graphene by filtered cathodic vacuum arc technique. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2016, 34, 021504.	0.9	7
2840	Structure, mechanical, and frictional properties of hydrogenated fullerene-like amorphous carbon film prepared by direct current plasma enhanced chemical vapor deposition. Journal of Applied Physics, 2016, 120, 045303.	1.1	19
2841	Multi-functionality Redefined with Colloidal Carotene Carbon Nanoparticles for Synchronized Chemical Imaging, Enriched Cellular Uptake and Therapy. Scientific Reports, 2016, 6, 29299.	1.6	18
2842	Hard DLC coating deposited over nitrided martensitic stainless steel: analysis of adhesion and corrosion resistance. Journal of Materials Research, 2016, 31, 3549-3556.	1.2	8
2843	Microstructure, mechanical property and thermal stability of diamond-like carbon coatings with Al, Cr and Si multi-doping. Diamond and Related Materials, 2016, 70, 98-104.	1.8	27
2844	Effect of microstructural evolution on mechanical and tribological properties of Ti-doped DLC films: How was an ultralow friction obtained?. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2016, 34, .	0.9	13
2845	Investigation of pitting corrosion of diamond-like carbon films using synchrotron-based spectromicroscopy. Journal of Applied Physics, 2016, 120, .	1.1	20
2846	Surface plasmon driven lowering of the electron emission order in a carbon/gold bilayer film. Applied Physics Letters, 2016, 109, .	1.5	3

#	Article	IF	Citations
2847	Synthesis of hydrogenated diamondlike carbon thin films using neonâ€“acetylene based high power impulse magnetron sputtering discharges. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2016, 34, 061504.	0.9	18
2848	Characterization at Atomic Resolution of Carbon Nanotube/Resin Interface in Nanocomposites by Mapping sp2-Bonding States Using Electron Energy-Loss Spectroscopy. Microscopy and Microanalysis, 2016, 22, 666-672.	0.2	6
2849	Differentiation of Osteoblast and Osteoclast Cells on Hydrogenated-Tetrahedral Amorphous Carbon Coated Titanium. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2016, 29, 413-418.	0.1	5
2850	Voltage assisted asymmetric nanoscale wear on ultra-smooth diamond like carbon thin films at high sliding speeds. Scientific Reports, 2016, 6, 25439.	1.6	5
2851	Microscopic Electrical Conductivity of Nanodiamonds after Thermal and Plasma Treatments. MRS Advances, 2016, 1, 1105-1111.	0.5	8
2852	Diamond-like-carbon nanoparticle production and agglomeration following UV multi-photon excitation of static naphthalene/helium gas mixtures. Journal of Chemical Physics, 2016, 145, 024303.	1.2	1
2853	Deposition of a-C:H films on inner surface of high-aspect-ratio microchannel. Journal of Applied Physics, 2016, 120, .	1.1	4
2854	Antibacterial metal ion release from diamond-like carbon modified surfaces for novel multifunctional implant materials. Journal of Materials Research, 2016, 31, 2571-2577.	1.2	14
2855	Effect of tetrahedral amorphous carbon coating on the resistivity and wear of single-walled carbon nanotube network. Journal of Applied Physics, 2016, 119, 185306.	1.1	5
2856	Sub-micro a-C:H patterning of silicon surfaces assisted by atmospheric-pressure plasma-enhanced chemical vapor deposition. Journal Physics D: Applied Physics, 2016, 49, 445306.	1.3	2
2857	Phonon transport in amorphous carbon using Greenâ€“Kubo modal analysis. Applied Physics Letters, 2016, 108, .	1.5	28
2858	Study of layered diamond like carbon and PECVD fluorocarbon films for ultra low dielectric constant interlayer dielectric applications. Journal of Materials Research, 2016, 31, 1027-1037.	1.2	2
2859	Nanodiamond embedded ta-C composite film by pulsed filtered vacuum arc deposition from a single target. Applied Physics Letters, 2016, 109, 201905.	1.5	4
2860	Testing and modelling of DIARC plasma coated elasticâ€“plastic steel wedge specimens. International Journal of Adhesion and Adhesives, 2016, 68, 219-228.	1.4	6
2861	Tribological Behavior of Nickel-Doped Diamond-Like Carbon Thin Films Prepared on Silicon Substrates via Magnetron Sputtering Deposition. Tribology Transactions, 2016, 59, 845-855.	1.1	8
2863	Synergistic effect of Cu/Cr co-doping on the wettability and mechanical properties of diamond-like carbon films. Diamond and Related Materials, 2016, 68, 1-9.	1.8	43
2864	MoDTC lubrication of DLC-involving contacts. Impact of MoDTC degradation. Wear, 2016, 348-349, 116-125.	1.5	33
2865	Diamond Like Carbon Deposition by Inverted Fireballs. Materials Today: Proceedings, 2016, 3, S184-S189.	0.9	6

#	Article	IF	Citations
2866	Pulsed DC-plasma sputtering induced synthesis of hydrogenated carbon thin films for L-929 cell cultivation. Surface and Coatings Technology, 2016, 307, 1119-1123.	2.2	5
2867	Iron, nitrogen and silicon doped diamond like carbon (DLC) thin films: A comparative study. Thin Solid Films, 2016, 610, 42-47.	0.8	56
2868	Enhancement of conductivity in nano carbon balls by the addition of carbon tetrachloride via room temperature solution plasma process. RSC Advances, 2016, 6, 51864-51870.	1.7	15
2869	Wettability, nanoscratch resistance and thermal stability of filtered cathodic vacuum arc grown nitrogenated amorphous carbon films. Surface and Coatings Technology, 2016, 292, 30-36.	2.2	1
2870	Patterning of diamond like carbon films for sensor applications using silicon containing thermoplastic resist (SiPol) as a hard mask. Applied Surface Science, 2016, 385, 145-152.	3.1	9
2871	Visible Raman spectroscopy of carbon films synthesized by ion-plasma sputtering of graphite. Journal of Materials Research, 2016, 31, 127-136.	1.2	11
2872	Tribological performance of an H-DLC coating prepared by PECVD. Applied Surface Science, 2016, 383, 222-232.	3.1	66
2873	Autohesion of polymers. Polymer, 2016, 97, 387-407.	1.8	61
2874	Antibacterial Ag/a-C nanocomposite coatings: The influence of nano-galvanic a-C and Ag couples on Ag ionization rates. Applied Surface Science, 2016, 377, 283-291.	3.1	55
2875	Silicon and aluminum doping effects on the microstructure and properties of polymeric amorphous carbon films. Applied Surface Science, 2016, 379, 358-366.	3.1	12
2876	Effect of additional sample bias in Meshed Plasma Immersion Ion Deposition (MPIID) on microstructural, surface and mechanical properties of Si-DLC films. Applied Surface Science, 2016, 376, 26-33.	3.1	22
2877	Optical properties of oxygen doped diamond-like carbon thin films. Journal of Alloys and Compounds, 2016, 672, 426-432.	2.8	30
2878	Rolling contact fatigue of bearing components coated with carbon nitride thin films. Tribology International, 2016, 98, 100-107.	3.0	21
2879	Hydrogen analysis in diamond-like carbon by glow discharge optical emission spectroscopy. Journal of Analytical Atomic Spectrometry, 2016, 31, 940-947.	1.6	16
2880	Large-scale nanoelectromechanical switches based on directly deposited nanocrystalline graphene on insulating substrates. Nanoscale, 2016, 8, 6659-6665.	2.8	58
2881	Absorption edge and the refractive index dispersion of carbon-nickel composite films at different annealing temperatures. European Physical Journal Plus, 2016, 131, 1.	1.2	24
2882	Microstructure and Nano-wear Property of Si-doped Diamond-like Carbon Films Deposited by a Hybrid Sputtering System. Materials Today: Proceedings, 2016, 3, S190-S196.	0.9	10
2883	Solid state magnetic resonance investigation of the thermally-induced structural evolution of silicon oxide-doped hydrogenated amorphous carbon. Carbon, 2016, 105, 163-175.	5.4	24

#	Article	IF	Citations
2884	Characterization of N-doped DLC Thin Films Prepared by Hydrocarbons Pyrolysis Method. Materials Today: Proceedings, 2016, 3, S197-S202.	0.9	11
2885	Morphological and Chemical Evolution of Gradually Deposited Diamond-Like Carbon Films on Polyethylene Terephthalate: From Subplantation Processes to Structural Reorganization by Intrinsic Stress Release Phenomena. ACS Applied Materials & Interfaces, 2016, 8, 10636-10646.	4.0	36
2886	Effects of annealing temperature on characteristics of amorphous nickel carbon thin film alloys deposited on n-type silicon substrates by reactive sputtering. Thin Solid Films, 2016, 618, 21-27.	0.8	8
2887	An analysis of the tribological mechanism of GLC film in artificial seawater. RSC Advances, 2016, 6, 32922-32931.	1.7	23
2888	Development of ultra-smooth ballas diamond incorporated nano-composite carbon thin films using PECVD technique. Journal of Materials Science: Materials in Electronics, 2016, 27, 8188-8196.	1.1	4
2889	Theoretical Prediction and Synthesis of CS_xF_y Thin Films. Journal of Physical Chemistry C, 2016, 120, 9527-9534.	1.5	6
2890	Properties of a-C:H:Si thin films deposited by middle-frequency magnetron sputtering. Applied Surface Science, 2016, 379, 516-522.	3.1	21
2891	A scanning electron microscopy and energy dispersive X-ray spectroscopy analysis of the substrate-to-thin-film-surface cross-section of thin carbon films deposited on curved Ti6Al4V substrates with and without silicon adhesion layers. Journal of Non-Crystalline Solids, 2016, 442, 40-43.	1.5	4
2892	Nanostructured carbon-based membranes: nitrogen doping effects on reverse osmosis performance. NPG Asia Materials, 2016, 8, e258-e258.	3.8	17
2893	Friction and Delamination Properties of Self-Mating Diamond-Like Carbon Coatings in Water. Tribology Letters, 2016, 62, 1.	1.2	9
2894	Controlled synthesis of nanocrystalline glass-like carbon thin films with tuneable electrical and optical properties. Chemical Engineering Journal, 2016, 299, 8-14.	6.6	11
2895	Bond topography and nanostructure of hydrogenated fullerene-like carbon films: A comparative study. Chemical Physics Letters, 2016, 660, 160-163.	1.2	15
2896	Investigation of (Ti:N)-DLC coatings prepared by ion source assisted cathodic arc ion-plating with varying Ti target currents. Diamond and Related Materials, 2016, 69, 183-190.	1.8	11
2897	Amorphous hydrogenated carbon (a-C:H) depositions on polyoxymethylene: Substrate influence on the characteristics of the developing coatings. Surface and Coatings Technology, 2016, 307, 658-665.	2.2	19
2898	Effects of Tiâ€“C:H coating and plasma nitriding treatment on tribological, electrochemical, and biocompatibility properties of AISI 316L. Journal of Biomaterials Applications, 2016, 31, 215-229.	1.2	4
2899	Theoretical and experimental study of characteristics of the planar tetrode with field emission of diamond-like carbon film. , 2016, , .		1
2900	Impact of Argon gas on optical and electrical properties of Carbon thin films. Physica B: Condensed Matter, 2016, 503, 157-161.	1.3	6
2901	Carbon-Coated Nanoparticles. , 2016, , 401-428.		0

#	Article	IF	Citations
2902	Thiolâ€“Ene Modified Amorphous Carbon Substrates: Surface Patterning and Chemically Modified Electrode Preparation. Langmuir, 2016, 32, 10529-10536.	1.6	12
2903	A Raman spectroscopic analysis of thin carbon films deposited onto curved Ti6Al4V substrates with and without silicon adhesion layers. Diamond and Related Materials, 2016, 70, 59-64.	1.8	7
2904	Hybridization of inorganic CoB noncrystal with graphene and its Kubas-enhanced hydrogen adsorption at room temperature. RSC Advances, 2016, 6, 93238-93244.	1.7	7
2905	Effect of ion energy on microstructure and adhesion of diamond-like carbon on Ti6Al4V by ion beam deposition. Diamond and Related Materials, 2016, 70, 12-17.	1.8	3
2906	Preparation of Titanium-Doped Diamond-Like Carbon Films With Electrical Conductivity Using High Power Pulsed Magnetron Sputtering System With Bipolar Pulse Voltage Source for Substrate. IEEE Transactions on Plasma Science, 2016, 44, 3083-3090.	0.6	7
2907	Controlled Distribution and Clustering of Silver in Ag-DLC Nanocomposite Coatings Using a Hybrid Plasma Approach. ACS Applied Materials & Interfaces, 2016, 8, 21020-21027.	4.0	39
2908	Interface Engineering and Controlling the Friction and Wear of Ultrathin Carbon Films: High sp³ Versus High sp² Carbons. Advanced Functional Materials, 2016, 26, 1526-1542.	7.8	44
2909	Hard coating of ultrananocrystalline diamond/nonhydrogenated amorphous carbon composite films on cemented tungsten carbide by coaxial arc plasma deposition. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	1.1	20
2910	Study on failure mechanisms of DLC coated Ti6Al4V and CoCr under cyclic high combined contact stress. Journal of Alloys and Compounds, 2016, 688, 964-973.	2.8	9
2911	Dry machining of metal using an engraving cutter coated with a droplet-free ta-C film prepared via a T-shape filtered arc deposition. Surface and Coatings Technology, 2016, 307, 1029-1033.	2.2	26
2912	Electrical conductivity of oxidized-graphenic nanoplatelets obtained from bamboo: effect of the oxygen content. Nanotechnology, 2016, 27, 365708.	1.3	35
2913	Long-term thermal stability of Si-containing diamond-like carbon films prepared by plasma source ion implantation. Surface and Coatings Technology, 2016, 305, 93-98.	2.2	19
2914	Preparation of renewable lignin-derived nitrogen-doped carbon nanospheres as anodes for lithium-ion batteries. RSC Advances, 2016, 6, 77143-77150.	1.7	42
2915	Twoâ€Ðimensional Fluorinated Graphene: Synthesis, Structures, Properties and Applications. Advanced Science, 2016, 3, 1500413.	5.6	469
2916	Structure and properties of GLC films deposited by PEMS. Surface Engineering, 2016, 32, 853-860.	1.1	6
2917	Robust All-Carbon Molecular Junctions on Flexible or Semi-Transparent Substrates Using â€œProcess-Friendlyâ€•Fabrication. ACS Nano, 2016, 10, 8918-8928.	7.3	61
2918	Evaluation of Stoney equation for determining the internal stress of DLC thin films using an optical profiler. Surface and Coatings Technology, 2016, 308, 98-100.	2.2	36
2919	Synthesis of a-C coatings by HPPMS using Ar, Ne and He as process gases. Surface and Coatings Technology, 2016, 308, 80-89.	2.2	16

#	Article	IF	Citations
2920	The Impact of Sulfur on Ethanol Steam Reforming. Catalysis Letters, 2016, 146, 1361-1372.	1.4	5
2921	A study on thick coatings of tetrahedral amorphous carbon deposited by filtered cathode vacuum arc plasma. Journal of Materials Research, 2016, 31, 1957-1963.	1.2	23
2922	Optimization of pulsed DC PACVD parameters: Toward reducing wear rate of the DLC films. Applied Surface Science, 2016, 389, 521-531.	3.1	18
2923	Development of a radio frequency atmospheric pressure plasma jet for diamond-like carbon coatings on stainless steel substrates. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	1.1	9
2924	Scanning probe microscopy of laser-graphitized diamond-like carbon films. Nanotechnologies in Russia, 2016, 11, 461-467.	0.7	2
2925	Angle dependent magnetotransport in transfer-free amorphous carbon thin films. Journal Physics D: Applied Physics, 2016, 49, 415005.	1.3	13
2926	Growth process of hydrogenated amorphous carbon films synthesized by atmospheric pressure plasma enhanced CVD using nitrogen and helium as a dilution gas. Japanese Journal of Applied Physics, 2016, 55, 045503.	0.8	23
2927	The catalytic effect of boron nitride on the mechanical properties of polyacrylonitrile-based carbon fiber. Journal of Materials Science, 2016, 51, 10690-10700.	1.7	13
2928	Improvement of the properties and the adherence of DLC coatings deposited using a modified pulsed-DC PECVD technique and an additional cathode. Surface and Coatings Technology, 2016, 308, 70-79.	2.2	34
2929	Efficiency improvement in automobile bucket tappet/camshaft contacts by DLC coatings â€“ Influence of engine oil, temperature and camshaft speed. Surface and Coatings Technology, 2016, 308, 360-373.	2.2	43
2930	Structure and optical properties of Cu-DLC composite films deposited by cathode arc with double-excitation source. Diamond and Related Materials, 2016, 69, 191-197.	1.8	33
2931	Graphitic Carbon Films Across Systems. Tribology Letters, 2016, 63, 1.	1.2	19
2932	Fabrication and Field Emission Properties of Diamond-Like Carbon Nanostructure Arrays Deposited by Filtered Cathodic Vacuum Arc. Plasma Processes and Polymers, 2016, 13, 1044-1052.	1.6	4
2933	A planar diamond-like carbon nanostructure for a low-voltage field emission cathode with a developed surface. Technical Physics Letters, 2016, 42, 509-512.	0.2	10
2934	Properties of diamond-like carbon films prepared by high power pulsed sputtering with two facing targets. Surface and Coatings Technology, 2016, 307, 1053-1058.	2.2	12
2935	Fatigue crack growth behavior of DLC coated AISI 4140 steel under constant and variable amplitude loading conditions. Surface and Coatings Technology, 2016, 304, 316-324.	2.2	15
2936	Molecular Dynamic Simulation of Collision-Induced Third-Body Formation in Hydrogen-Free Diamond-Like Carbon Asperities. Tribology Letters, 2016, 63, 26.	1.2	16
2937	Structural peculiarities of single crystal diamond needles of nanometer thickness. Nanotechnology, 2016, 27, 455707.	1.3	12

#	Article	IF	Citations
2938	Preparation of diamond-like carbon films using reactive Ar/CH4high power impulse magnetron sputtering system with negative pulse voltage source for substrate. Japanese Journal of Applied Physics, 2016, 55, 046201.	0.8	5
2939	The Relationship Between Characteristics of DLC Film and Electron Temperature Measured by Optical Emission Spectroscopy. IEEE Transactions on Plasma Science, 2016, 44, 3207-3213.	0.6	1
2940	Annealing-Based Electrical Tuning of Cobaltâ€“Carbon Deposits Grown by Focused-Electron-Beam-Induced Deposition. ACS Applied Materials & Interfaces, 2016, 8, 32496-32503.	4.0	28
2941	The effect of CH₄/H₂ ratio on the surface properties of HDPE treated by CHx ion beam bombardment. Modern Physics Letters B, 2016, 30, 1650214.	1.0	3
2942	Structural analysis of a-C:H and a-C:H:Si films under high-pressure and high-temperature by synchrotron X-ray diffraction. Diamond and Related Materials, 2016, 70, 83-90.	1.8	3
2943	Effect of active gas mixture composition on tribological behavior of coatings obtained by reactive magnetron sputtering of chromium in acetyleneâ€“nitrogen and acetyleneâ€“air gas mixtures. Journal of Friction and Wear, 2016, 37, 407-414.	0.1	2
2944	Silver nanoparticle-enriched diamond-like carbon implant modification as a mammalian cell compatible surface with antimicrobial properties. Scientific Reports, 2016, 6, 22849.	1.6	47
2945	Influence of the silicon and oxygen content on the properties of non-hydrogenated amorphous carbon coatings. Diamond and Related Materials, 2016, 70, 201-210.	1.8	35
2946	Compositional depth profiling of diamond-like carbon layers by glow discharge optical emission spectroscopy. Journal of Analytical Atomic Spectrometry, 2016, 31, 2207-2212.	1.6	9
2947	Further improvement of mechanical and tribological properties of Cr-doped diamond-like carbon nanocomposite coatings by N codoping. Japanese Journal of Applied Physics, 2016, 55, 115501.	0.8	5
2948	Nanoindentation and nanoscratch behaviors of DLC films growth on different thickness of Cr nanolayers. Diamond and Related Materials, 2016, 70, 76-82.	1.8	31
2949	Diamond-like carbon thin films with high density and low internal stress deposited by coupling DC/RF magnetron sputtering. Diamond and Related Materials, 2016, 70, 151-158.	1.8	33
2950	Structure and mechanical properties of oxygen doped diamond-like carbon thin films. Diamond and Related Materials, 2016, 70, 91-97.	1.8	27
2951	Chapter 1 Multifunctional Coatings for Solar Energy Applications. , 2016, , 1-88.		0
2952	In situ observation, Xâ€“ray diffraction and Raman analyses of carbon minerals in ureilites: Origin and formation mechanisms of diamond in ureilites. Journal of Mineralogical and Petrological Sciences, 2016, 111, 252-269.	0.4	9
2953	Non-contact Hardness Evaluation of Materials by means of Craters Formation with Gas Cluster Ions. Transactions of the Materials Research Society of Japan, 2016, 41, 329-331.	0.2	3
2954	Precursor of N atoms of hydrogenated amorphous carbon nitride films formed from the microwave discharge of C2H2/N2gas mixture. Japanese Journal of Applied Physics, 2016, 55, 01AA12.	0.8	0
2955	Preparation of self-supporting Au thin films on perforated substrate by releasing from water-soluble sacrificial layer. Japanese Journal of Applied Physics, 2016, 55, 07LE05.	0.8	5

#	Article	IF	Citations
2956	Optically transparent boron-doped nanocrystalline diamond films for spectroelectrochemical measurements on different substrates. IOP Conference Series: Materials Science and Engineering, 2016, 104, 012024.	0.3	10
2957	On the study of the mechanical properties of Mo-B-C coatings. EPJ Applied Physics, 2016, 75, 24716.	0.3	17
2958	Fabrication of Diamond-Like Carbon Microgears in Room-Temperature Curing Nanoimprint Lithography Using Ladder-Type Hydrogen Silsesquioxane. MRS Advances, 2016, 1, 1119-1124.	0.5	0
2959	The effect of alloying on the structure and peculiarities of tribological behavior of vacuum-deposited diamond-like coatings. Moscow University Physics Bulletin (English Translation of) Tj ETQq1 1 0.784314 rgBT /Ove		
2961	Deposition of Cu/a-C:H Nanocomposite Films. Plasma Processes and Polymers, 2016, 13, 879-887.	1.6	20
2962	Electronically designed amorphous carbon and silicon. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 1653-1660.	0.8	10
2963	Corrosion and tribocorrosion behaviour of superâ€thick diamondâ€like carbon films deposited on stainless steel in NaCl solution. Surface and Interface Analysis, 2016, 48, 360-367.	0.8	20
2964	Effect of Implantation Sequence on Tribological Behavior of GCr15 Steel by PBII. Journal of Materials Engineering and Performance, 2016, 25, 1903-1908.	1.2	1
2965	Nanoscale scanning electron microscopy based graphitization in tetrahedral amorphous carbon thin films. Carbon, 2016, 107, 536-541.	5.4	3
2966	Increasing fluorine concentration to control the microstructure from fullerene-like to amorphous in carbon films. RSC Advances, 2016, 6, 21719-21724.	1.7	3
2967	Stability of friction fade-out at polymer-like carbon films slid by ZrO₂ pins under alcohol-vapored hydrogen gas environment. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2016, 230, 1389-1397.	1.0	8
2968	Ultra-thin carbon-based nanocomposite coatings for superior wear resistance under lubrication with nano-diamond additives. RSC Advances, 2016, 6, 56918-56929.	1.7	15
2969	Preparation of hydrogenated diamond-like carbon films using high-density pulsed plasmas of Ar/C₂H₂ and Ne/C₂H₂ mixture. Japanese Journal of Applied Physics, 2016, 55, 07LE02.	0.8	7
2970	Preparation and properties of DLC/MoS₂multilayer coatings for high humidity tribology. Materials Research Express, 2016, 3, 066401.	0.8	24
2971	Derivation of dielectric function and inelastic mean free path from photoelectron energy-loss spectra of amorphous carbon surfaces. Applied Surface Science, 2016, 387, 1125-1139.	3.1	12
2972	Atomic Scale Interface Manipulation, Structural Engineering, and Their Impact on Ultrathin Carbon Films in Controlling Wear, Friction, and Corrosion. ACS Applied Materials & Interfaces, 2016, 8, 17606-17621.	4.0	20
2973	Single-step flame synthesis of carbon nanoparticles with tunable structure and chemical reactivity. RSC Advances, 2016, 6, 61620-61629.	1.7	18
2974	Monitoring the nanostructure of a hydrogenated fullerene-like film by pulse bias duty cycle. RSC Advances, 2016, 6, 59039-59044.	1.7	5

#	Article	IF	Citations
2975	Enhancement of adhesion by a transition layer: Deposition of a-C film on ultrahigh molecular weight polyethylene (UHMWPE) by magnetron sputtering. Applied Surface Science, 2016, 364, 280-287.	3.1	11
2976	Tribological behavior of O2 and CF4 plasma post-treated diamond-like carbon films under dry air and in a high relative humidity environment. Surface and Coatings Technology, 2016, 306, 200-204.	2.2	9
2977	Chromium-modified a-C films with advanced structural, mechanical and corrosive-resistant characteristics. Applied Surface Science, 2016, 379, 424-432.	3.1	26
2978	Graphitization and amorphization of textured carbon using high-energy nanosecond laser pulses. Carbon, 2016, 105, 227-232.	5.4	6
2979	Spatial confinement model applied to phonons in disordered graphene-based carbons. Carbon, 2016, 105, 275-281.	5.4	26
2980	Practical aspects of the quantification of sp2-hybridized carbon atoms in diamond-like carbon by electron energy loss spectroscopy. Carbon, 2016, 102, 198-207.	5.4	30
2981	Improved multilayer coatings by combined use of electrochemical and ultra-short pulsed laser deposition techniques. Surface and Coatings Technology, 2016, 300, 58-66.	2.2	5
2982	The effect of ion irradiation and elevated temperature on the microstructure and the properties of C/W/C/B multilayer coating. Applied Surface Science, 2016, 365, 306-313.	3.1	7
2983	Clarification of relationship between friction coefficient and transformed layer of CNx coating by in-situ spectroscopic analysis. Tribology International, 2016, 93, 660-665.	3.0	24
2984	Optical nonlinearity in nanostructured carbon thin films fabricated by pulsed laser deposition technique. Thin Solid Films, 2016, 611, 56-61.	0.8	15
2985	Correlation between sp³-to-sp² Ratio and Surface Oxygen Functionalities in Tetrahedral Amorphous Carbon (ta-C) Thin Film Electrodes and Implications of Their Electrochemical Properties. Journal of Physical Chemistry C, 2016, 120, 8298-8304.	1.5	43
2986	Endothelialization of TiO2 Nanorods Coated with Ultrathin Amorphous Carbon Films. Nanoscale Research Letters, 2016, 11, 145.	3.1	9
2987	Annealing Effects on Structure and Optical Properties of Diamond-Like Carbon Films Containing Silver. Nanoscale Research Letters, 2016, 11, 146.	3.1	37
2988	Growth of ideal amorphous carbon films at low temperature by e-beam evaporation. RSC Advances, 2016, 6, 42353-42360.	1.7	19
2989	Modelling of Three-Dimensional Nanographene. Nanoscale Research Letters, 2016, 11, 151.	3.1	5
2990	Toward a Better Understanding of the Influence of the Hydrocarbon Precursor on the Mechanical Properties of aâ€C:H Coatings Synthesized by a Hybrid PECVD/PVD Method. Plasma Processes and Polymers, 2016, 13, 316-323.	1.6	22
2991	Deposition of a-C:H films on a nanotrench pattern by bipolar PBII&D. Journal Physics D: Applied Physics, 2016, 49, 245303.	1.3	6
2992	Advanced DLC coating technique on silicone-based tubular medical devices. Surface and Coatings Technology, 2016, 307, 1084-1087.	2.2	5

#	Article	IF	Citations
2993	Influence of intrinsic and extrinsic conditions on the tribological characteristics of diamond-like carbon coatings: A review. Journal of Materials Research, 2016, 31, 1814-1836.	1.2	25
2994	Physicochemical structure of SiC_x:H to improve DLC adhesion on steel. Surface Engineering, 2016, 32, 779-785.	1.1	26
2995	Effects of Substrate Bias on Tribological Properties of Diamondlike Carbon Thin Films Deposited Via Microwave-Excited Plasma-Enhanced Chemical Vapor Deposition. Journal of Tribology, 2016, 138, .	1.0	3
2996	Ferromagnetic order in diamond-like carbon films by Co implantation. Journal Physics D: Applied Physics, 2016, 49, 055002.	1.3	11
2997	Abutment Coating With Diamondâ€Like Carbon Films to Reduce Implantâ€“Abutment Bacterial Leakage. Journal of Periodontology, 2016, 87, 168-174.	1.7	14
2998	Nano scale investigation of particulate contribution to diamond like carbon film by pulsed laser deposition. RSC Advances, 2016, 6, 6016-6028.	1.7	17
2999	Structure and optical properties of conglobate hydrogenated amorphous carbon films prepared by pulsed laser-induced chemical vapor deposition. Journal of Alloys and Compounds, 2016, 667, 96-100.	2.8	5
3000	Structural, chemical and nanomechanical investigations of SiC/polymeric a-C:H films deposited by reactive RF unbalanced magnetron sputtering. Solid State Sciences, 2016, 53, 1-8.	1.5	6
3001	Alternative nano-structured thin-film materials used as durable thermal nanoimprint lithography templates. Nanotechnology, 2016, 27, 075302.	1.3	4
3002	Nickel-enhanced graphitic ordering of carbon ad-atoms during physical vapor deposition. Carbon, 2016, 100, 656-663.	5.4	19
3003	Fabrication of diamond-like carbon films using short-pulse HiPIMS. Surface and Coatings Technology, 2016, 286, 239-245.	2.2	53
3004	Recent progress and new directions in density functional theory based design of hard coatings. Surface and Coatings Technology, 2016, 286, 178-190.	2.2	56
3005	Modified Z-scan set-up using CCD for measurement of optical nonlinearity in PLD carbon thin film. Optics and Laser Technology, 2016, 77, 51-54.	2.2	20
3006	Characteristics of industrially manufactured amorphous hydrogenated carbon (a-C:H) depositions on high-density polyethylene. Carbon, 2016, 96, 661-671.	5.4	41
3007	Analytical applications of chemiluminescence systems assisted by carbon nanostructures. TrAC - Trends in Analytical Chemistry, 2016, 80, 387-415.	5.8	49
3008	Ultralow effective work function surfaces using diamondoid monolayers. Nature Nanotechnology, 2016, 11, 267-272.	15.6	42
3009	Multilayered Zrâ€“C/a-C film on stainless steel 316L as bipolar plates for proton exchange membrane fuel cells. Journal of Power Sources, 2016, 314, 58-65.	4.0	76
3010	Growth feature of ionic nitrogen doped CNx bilayer films with Ti and TiN interlayer by pulse cathode arc discharge. Applied Surface Science, 2016, 361, 169-176.	3.1	9

#	Article	IF	Citations
3011	Changes of chemical structure of hydrogenated amorphous silicon carbide films with the application of radio-frequency bias voltages during chemical vapor deposition. Diamond and Related Materials, 2016, 66, 1-9.	1.8	4
3012	Electrical percolation threshold in Agâ€“DLC nanocomposite films prepared by RF-sputtering and RF-PECVD in acetylene plasma. Journal of Materials Science: Materials in Electronics, 2016, 27, 6713-6720.	1.1	14
3013	Effects of rf power on chemical composition and surface roughness of glow discharge polymer films. Applied Surface Science, 2016, 366, 499-505.	3.1	19
3014	Influence of Hydrogen Content on Optical and Mechanical Performances of Diamond-Like Carbon Films on Glass Substrate. Journal of Materials Engineering and Performance, 2016, 25, 1570-1577.	1.2	9
3015	Hydrogen content influence on tribological properties of nc-WC/a-C:H coatings. Diamond and Related Materials, 2016, 67, 16-25.	1.8	27
3016	Carbon Nanotube Interconnects Realized through Functionalization and Sintered Silver Attachment. ACS Applied Materials & Interfaces, 2016, 8, 5563-5570.	4.0	20
3017	Unusual anti-bacterial behavior and corrosion resistance of magnesium alloy coated with diamond-like carbon. RSC Advances, 2016, 6, 14756-14762.	1.7	13
3018	Laser Heating-Induced Degradation of Ultrathin Media Carbon Overcoat for Heat-Assisted Magnetic Recording. IEEE Transactions on Magnetics, 2016, 52, 1-6.	1.2	3
3019	Fabrication and study of optical and electrochemical properties of CdS nanoparticles and the GOâ€“CdS nanocomposite. New Journal of Chemistry, 2016, 40, 3528-3535.	1.4	10
3020	Nitrogen doped carbide derived carbon aerogels by chlorine etching of a SiCN aerogel. Journal of Materials Chemistry A, 2016, 4, 4525-4533.	5.2	36
3021	Ultrafast Processes in Graphene Oxide during Femtosecond Laser Excitation. Journal of Physical Chemistry C, 2016, 120, 4104-4111.	1.5	17
3022	PAH structure analysis of soot in a non-premixed flame using high-resolution transmission electron microscopy and optical band gap analysis. Combustion and Flame, 2016, 164, 250-258.	2.8	69
3023	Nanocrystalline carbon flakes deposited by RF magnetron sputtering. Materials Letters, 2016, 167, 242-245.	1.3	6
3024	Synthesis of amorphous hydrogenated carbon thin films by magnetized radio-frequency discharge in argonâ€“acetylene mixture at very low gas pressure. Thin Solid Films, 2016, 599, 84-97.	0.8	1
3025	Membrane Desalination: Where Are We, and What Can We Learn from Fundamentals?. Annual Review of Chemical and Biomolecular Engineering, 2016, 7, 29-64.	3.3	50
3026	Quantitative Evaluation of the Carbon Hybridization State by Near Edge X-ray Absorption Fine Structure Spectroscopy. Analytical Chemistry, 2016, 88, 2817-2824.	3.2	24
3027	Self-passivating carbon film as bipolar plate protective coating in polymer electrolyte membrane fuel cell. International Journal of Hydrogen Energy, 2016, 41, 5783-5792.	3.8	28
3028	The effect of diamond-like carbon coating on LiNi0.8Co0.15Al0.05O2 particles for all solid-state lithium-ion batteries based on Li2Sâ€“P2S5 glass-ceramics. Journal of Power Sources, 2016, 314, 85-92.	4.0	104

#	Article	IF	Citations
3029	Opportunities and Challenges of Atomistic Modeling to Simulate Amorphous Carbon Properties for Computer Hard-Disk Applications. IEEE Transactions on Magnetics, 2016, 52, 1-12.	1.2	1
3030	Complex organics in space from Solar System to distant galaxies. Astronomy and Astrophysics Review, 2016, 24, 1.	9.1	63
3031	Aging of oxygen and hydrogen plasma discharge treated a-C:H and ta-C coatings. Applied Surface Science, 2016, 371, 613-623.	3.1	16
3032	Recent Advances in Superhard Materials. Annual Review of Materials Research, 2016, 46, 383-406.	4.3	119
3033	Synthesis of Fe 3 C branches via a hexamethylenetetramine route. Materials Research Bulletin, 2016, 76, 327-331.	2.7	9
3034	Plasma diagnostics for the low-pressure plasma polymerization process: A critical review. Thin Solid Films, 2016, 606, 19-44.	0.8	91
3035	Fabrication of Semiordered Nanopatterned Diamond-like Carbon and Titania Films for Blood Contacting Applications. ACS Applied Materials & Interfaces, 2016, 8, 6802-6810.	4.0	16
3036	Influence of annealing temperature on thermal stabilities of hydrogenated amorphous carbon on silicon nitride balls. Vacuum, 2016, 127, 96-102.	1.6	14
3037	EPR and photoluminescence spectra of smooth CD x films from T-10 tokamak: The effect of iron impurity. Journal of Surface Investigation, 2016, 10, 23-34.	0.1	5
3038	Genesis and stability of tribolayers in solid lubrication: case of pair DLC-stainless steel. Journal of Materials Research and Technology, 2016, 5, 136-143.	2.6	11
3039	FERROMAGNETISM IN SEMICONDUCTOR Câ€“Ni FILMS AT DIFFERENT ANNEALING TEMPERATURE. Surface Review and Letters, 2016, 23, 1650002.	0.5	6
3040	Effect of hybrid surface treatment composed of nitriding and DLC coating on friction-wear properties and fatigue strength of alloy steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 661, 105-114.	2.6	32
3041	FTIR Spectroscopy for Carbon Family Study. Critical Reviews in Analytical Chemistry, 2016, 46, 502-520.	1.8	751
3042	Surface characterization and biological evaluation of silver-incorporated DLC coatings fabricated by hybrid RF PACVD/MS method. Materials Science and Engineering C, 2016, 63, 462-474.	3.8	38
3043	Mechanical properties and tribological behavior of fullerene-like hydrogenated carbon films prepared by changing the flow rates of argon gas. Applied Surface Science, 2016, 364, 288-293.	3.1	7
3044	Amorphous hydrogenated carbon thin films deposited on stainless steel using high energy plasma focus device. Surface and Coatings Technology, 2016, 288, 1-7.	2.2	9
3045	Amorphous carbon nanotubes as potent sorbents for removal of a phenolic derivative compound and arsenic: theoretical support of experimental findings. RSC Advances, 2016, 6, 8913-8922.	1.7	17
3046	Nanotribology of silver and silicon doped carbon coatings. Diamond and Related Materials, 2016, 67, 8-15.	1.8	23

#	Article	IF	Citations
3047	Adsorption of alcohols and fatty acids onto hydrogenated (a-C:H) DLC coatings. Applied Surface Science, 2016, 363, 466-476.	3.1	17
3048	Low voltage and ambient temperature electrodeposition of uniform carbon films. Electrochemistry Communications, 2016, 63, 22-25.	2.3	14
3049	Studies on the influence of sputtering power on amorphous carbon films deposited by pulsed unbalanced magnetron sputtering. Optik, 2016, 127, 2512-2515.	1.4	19
3050	Nitrogen-Incorporated Hydrogenated Amorphous Carbon Film Electrodes on Ti Substrates by Hybrid Deposition Technique and Annealing. Journal of the Electrochemical Society, 2016, 163, E54-E61.	1.3	23
3051	Microstructure and property of diamond-like carbon films with Al and Cr co-doping deposited using a hybrid beams system. Applied Surface Science, 2016, 388, 503-509.	3.1	40
3052	Diamond formation through metastable liquid carbon. Diamond and Related Materials, 2016, 62, 42-48.	1.8	1
3053	Synthesis of diamond-like carbon films by electro-deposition technique for solar cell applications. Optical and Quantum Electronics, 2016, 48, 1.	1.5	14
3054	A new approach to the non-oxidative conversion of gaseous alkanes in a barrier discharge and features of the reaction mechanism. Journal Physics D: Applied Physics, 2016, 49, 025205.	1.3	19
3055	Correlation study of structural, optical and electrical properties of amorphous carbon thin films prepared by ion beam sputtering deposition technique. Applied Surface Science, 2016, 360, 52-58.	3.1	28
3056	Advanced characterization methods for wear resistant hard coatings: A review on recent progress. Surface and Coatings Technology, 2016, 285, 31-46.	2.2	116
3057	Structure and residual stress evolution of Ti/Al, Cr/Al or W/Al co-doped amorphous carbon nanocomposite films: Insights from ab initio calculations. Materials and Design, 2016, 89, 1123-1129.	3.3	23
3058	[INVITED] Control of femtosecond pulsed laser ablation and deposition by temporal pulse shaping. Optics and Laser Technology, 2016, 78, 42-51.	2.2	19
3059	The effect of hydrogen and acetylene mixing ratios on the surface, mechanical and biocompatible properties of diamond-like carbon films. Diamond and Related Materials, 2016, 63, 108-114.	1.8	21
3060	Nanomechanical and nanotribological behavior of ultra-thin silicon-doped diamond-like carbon films. Tribology International, 2016, 94, 616-623.	3.0	7
3061	Fluorine and sulfur co-doped amorphous carbon films to achieve ultra-low friction under high vacuum. Carbon, 2016, 96, 411-420.	5.4	60
3062	Torsional â€œsuperplasticityâ€•of graphyne nanotubes. Carbon, 2016, 96, 14-19.	5.4	37
3063	Minimizing Frictional Losses in Crankshaft Bearings of Automobile Powertrain by Diamond-like Carbon Coatings under Elasto-hydrodynamic Lubrication. Surface and Coatings Technology, 2016, 290, 100-109.	2.2	24
3064	Near-surface hydrogen depletion of diamond-like carbon films produced by direct ion deposition. Nuclear Instruments & Methods in Physics Research B, 2016, 371, 230-234.	0.6	7

#	Article	IF	Citations
3065	On the understanding of the silicon-containing adhesion interlayer in DLC deposited on steel. Tribology International, 2016, 94, 464-469.	3.0	43
3066	Synthesis and characterization of ETS-10: supported hollow carbon nano-polyhedrons nanosorbent for adsorption of krypton at near ambient temperatures. Adsorption, 2016, 22, 129-137.	1.4	14
3067	Polymer Surface Modifications by Coating. , 2016, , 143-160.		0
3068	Advances in atomic-scale tribological mechanisms of solid interfaces. Tribology International, 2016, 94, 1-13.	3.0	25
3069	Phase and stress evolution in diamond microparticles during diamond-coated wire sawing of Si ingots. International Journal of Advanced Manufacturing Technology, 2016, 82, 1675-1682.	1.5	12
3070	Electric Susceptibility and Energy Loss Functions of Carbon-Nickel Composite Films at Different Deposition Times. Silicon, 2017, 9, 717-722.	1.8	11
3071	Characteristics of sub-atmospheric pressure glow discharge plasmas for preparation of a-C:H films. Vacuum, 2017, 136, 196-202.	1.6	6
3072	Linear and Nonlinear Absorption Properties of Diamond-Like Carbon Doped With Cu Nanoparticles. Plasmonics, 2017, 12, 47-58.	1.8	14
3073	Size effect in the titanium/diamondâ€like carbon bilayer films: effect of relative thickness on their structure and mechanical properties. Surface and Interface Analysis, 2017, 49, 47-54.	0.8	11
3074	Impact of high N₂flow ratio on the chemical and morphological characteristics of sputtered N-DLC films. Surface and Interface Analysis, 2017, 49, 99-106.	0.8	8
3075	Improvement in anti-corrosion property of hydrogenated diamond-like carbon film by modifying CrC interlayer. Diamond and Related Materials, 2017, 72, 99-107.	1.8	13
3076	The effect of two-step heat treatment on hardness, fracture toughness, and wear of different biased diamond-like carbon coatings. Surface and Coatings Technology, 2017, 320, 118-125.	2.2	22
3077	Collision cascades enhanced hydrogen redistribution in cobalt implanted hydrogenated diamond-like carbon films. Nuclear Instruments & Methods in Physics Research B, 2017, 394, 6-11.	0.6	7
3078	Electron-beam modification of DLC coatings for biomedical applications. Surface and Coatings Technology, 2017, 311, 248-256.	2.2	33
3079	Adhesion behavior of diamond-like carbon films with F and Si co-doping prepared by radio frequency reactive magnetron sputtering. Thin Solid Films, 2017, 622, 89-94.	0.8	6
3080	Tribological properties of amorphous carbon films obtained by electrodeposition from DMF using 2HEAL protic ionic liquid as dopant. Diamond and Related Materials, 2017, 71, 30-37.	1.8	6
3081	Smart conservation methodology for the preservation of copper-based objects against the hazardous corrosion. Thin Solid Films, 2017, 622, 130-135.	0.8	27
3082	Adhesion and tribological properties of gradient designed a-C film on ultrahigh molecular weight polyethylene. Thin Solid Films, 2017, 624, 7-15.	0.8	4

#	Article	IF	Citations
3083	Deposition of diamond-like carbon thin films by the high power impulse magnetron sputtering method. Diamond and Related Materials, 2017, 72, 71-76.	1.8	12
3084	Optimization of Diamond-Like Carbon Thin Film on Copper Substrate for Carbon Nanotubes Synthesis by ACVD Technique. Materials Science Forum, 0, 883, 65-69.	0.3	1
3085	Thickness dependent optical dispersion parameters and nonlinear optical properties of nanostructured Cr doped CdO thin films. Optical and Quantum Electronics, 2017, 49, 1.	1.5	13
3086	Superhard nanocomposite nc-TiC/a-C:H coatings: The effect of HiPIMS on coating microstructure and mechanical properties. Surface and Coatings Technology, 2017, 311, 257-267.	2.2	52
3087	Evaluation of a variety of a-C:H coatings on PEEK for biomedical implants. Surface and Coatings Technology, 2017, 313, 96-106.	2.2	23
3088	Influence of CH₄ Flow Rate on Microstructure and Properties of Ti-C:H Films Deposited by DC Reactive Magnetron Sputtering. Tribology Transactions, 2017, 60, 852-860.	1.1	5
3089	Molecular Luminescence of White Carbon. Small, 2017, 13, 1603495.	5.2	15
3090	Direct observation of thickness and foreign interlayer driven abrupt structural transformation in ultrathin carbon and hybrid silicon nitride/carbon films. Carbon, 2017, 115, 701-719.	5.4	18
3091	Correlation of structural and optical properties of PVD grown amorphous carbon thin films. Diamond and Related Materials, 2017, 75, 69-77.	1.8	13
3092	The effect of radio frequency power on the structural and optical properties of a-C:H films prepared by PECVD. Journal of Materials Research, 2017, 32, 1231-1238.	1.2	8
3093	Experimental study by Secondary Ion Mass Spectrometry focused on the relationship between hardness and sputtering rate in hard coatings. Thin Solid Films, 2017, 625, 35-41.	0.8	7
3094	Thick diamond like carbon coatings deposited by deep oscillation magnetron sputtering. Surface and Coatings Technology, 2017, 315, 294-302.	2.2	29
3095	Radial structure and property relationship in the thermal stabilization of PAN precursor fibres. Polymer Testing, 2017, 59, 203-211.	2.3	37
3096	In vitro cytotoxicity evaluation of nano-carbon particles with different sp 2 /sp 3 ratios. Materials Science and Engineering C, 2017, 75, 854-862.	3.8	6
3097	Temperature Evolution in Nanoscale Carbon-Based Memory Devices Due to Local Joule Heating. IEEE Nanotechnology Magazine, 2017, 16, 806-811.	1.1	15
3098	Plasma-assisted purification of nanodiamonds and their application for direct writing of a high purity nanodiamond pattern. Carbon, 2017, 116, 640-647.	5.4	19
3099	Ion beam energy dependence of surface and structural properties of amorphous carbon films deposited by IBSD method on Niâ€“Cu alloy. Journal of Materials Research, 2017, 32, 1258-1266.	1.2	9
3100	Influence of Ne sputtering gas on structure and properties of diamond-like carbon films deposited by pulsed-magnetron sputtering. Thin Solid Films, 2017, 625, 163-167.	0.8	8

#	Article	IF	Citations
3101	Operando formation of an ultra-low friction boundary film from synthetic magnesium silicon hydroxide additive. Tribology International, 2017, 110, 35-40.	3.0	53
3102	Evolution of the sp2 content and revealed multilayer growth of amorphous hydrogenated carbon (a-C:H) films on selected thermoplastic materials. Carbon, 2017, 117, 351-359.	5.4	22
3103	Thermal stability of ultrathin amorphous carbon films synthesized by plasma-enhanced chemical vapor deposition and filtered cathodic vacuum arc. Philosophical Magazine, 2017, 97, 820-832.	0.7	10
3104	The investigation of the structures and tribological properties of F-DLC coatings deposited on Ti-6Al-4V alloys. Surface and Coatings Technology, 2017, 316, 22-29.	2.2	57
3105	Thermal conductive performance of deposited amorphous carbon materials by molecular dynamics simulation. Molecular Physics, 2017, 115, 831-838.	0.8	3
3106	Tensile properities of single-crystal-silicon fully coated with submicrometer-thick PECVD DLC. , 2017, , .		0
3107	Microstructure and mechanical properties of Ti/Al co-doped DLC films: Dependence on sputtering current, source gas, and substrate bias. Applied Surface Science, 2017, 410, 51-59.	3.1	51
3108	Tunable (violet to green) emission by high-yield graphene quantum dots and exploiting its unique properties towards sun-light-driven photocatalysis and supercapacitor electrode materials. Materials Today Communications, 2017, 11, 76-86.	0.9	96
3109	Development of diamond-like carbon (DLC) coatings with alternate soft and hard multilayer architecture for enhancing wear performance at high contact stress. Surface and Coatings Technology, 2017, 320, 7-12.	2.2	58
3110	Effect of running-in for delamination and friction properties of self-mating diamond-like carbon coatings in water. Wear, 2017, 378-379, 27-34.	1.5	9
3111	Machine learning based interatomic potential for amorphous carbon. Physical Review B, 2017, 95, .	1.1	431
3112	Unveiling descriptors for predicting the bulk modulus of amorphous carbon. Physical Review B, 2017, 95, .	1.1	8
3113	Deactivation dynamics of a Ni supported catalyst during the steam reforming of volatiles from waste polyethylene pyrolysis. Applied Catalysis B: Environmental, 2017, 209, 554-565.	10.8	93
3114	Surface characterization and orientation interaction between diamond- like carbon layer structure and dimeric liquid crystals. Journal of Physics: Conference Series, 2017, 780, 012010.	0.3	0
3115	Nitrogen-doped amorphous carbon-silicon core-shell structures for high-power supercapacitor electrodes. Scientific Reports, 2017, 7, 42425.	1.6	16
3116	Effect of Ar+ ion assist on the properties of a-C:H films deposited on a trench. Thin Solid Films, 2017, 631, 57-63.	0.8	4
3117	A preliminary wear studies of isolated carbon particles embedded diamond-like carbon coatings. Tribology International, 2017, 114, 42-47.	3.0	14
3118	Nanoplasmonic Sensing at the Carbon-Bio Interface: Study of Protein Adsorption at Graphitic and Hydrogenated Carbon Surfaces. Langmuir, 2017, 33, 4198-4206.	1.6	14

#	Article	IF	Citations
3119	Diamond-like carbon coating under oleic acid lubrication: Evidence for graphene oxide formation in superlow friction. Scientific Reports, 2017, 7, 46394.	1.6	90
3120	Stabilization of enhanced field emission of the film DLC structure in conditions of field localization. , 2017, , .		1
3121	Wear properties of diamond-like carbon coatings with silicon and chromium as adhesion layer using a high frequency reciprocating rig. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2017, 231, 1605-1615.	1.0	3
3122	Synthesis and properties of CS_xF_ythin films deposited by reactive magnetron sputtering in an Ar/SF₆discharge. Journal of Physics Condensed Matter, 2017, 29, 195701.	0.7	9
3123	Effect of nitrogen pressure on the performance of a-C:N/p-Si photodetector prepared by pulsed laser deposition. Optik, 2017, 139, 328-337.	1.4	8
3124	The effect of hydrogen addition in argon-acetylene plasma on the structure of amorphous carbon films. Journal of Non-Crystalline Solids, 2017, 466-467, 1-7.	1.5	4
3125	Hierarchical structure graphitic-like/MoS2 film as superlubricity material. Applied Surface Science, 2017, 413, 381-386.	3.1	57
3126	Superior photocatalytic properties of carbonized PANI/TiO2 nanocomposites. Applied Catalysis B: Environmental, 2017, 213, 155-166.	10.8	62
3127	Equilibrium structures of carbon diamond-like clusters and their elastic properties. Physics of the Solid State, 2017, 59, 820-828.	0.2	22
3128	Phonon-mediated high-T c superconductivity in hole-doped diamond-like crystalline hydrocarbon. Scientific Reports, 2017, 7, 1464.	1.6	6
3129	Evolution of the nitrogen depth distribution in an implanted titanium alloy with a surface carbon nanolayer. Chemical Physics Letters, 2017, 679, 25-30.	1.2	8
3130	Hybrid carbon based nanomaterials for electrochemical detection of biomolecules. Progress in Materials Science, 2017, 88, 499-594.	16.0	137
3131	Shear-Induced Structural Changes and Origin of Ultralow Friction of Hydrogenated Diamond-like Carbon (DLC) in Dry Environment. ACS Applied Materials & Interfaces, 2017, 9, 16704-16714.	4.0	127
3132	Superlubricity of hydrogenated carbon films in a nitrogen gas environment: adsorption and electronic interactions at the sliding interface. RSC Advances, 2017, 7, 3025-3034.	1.7	24
3133	Salt Templating with Pore Padding: Hierarchical Pore Tailoring towards Functionalised Porous Carbons. ChemSusChem, 2017, 10, 199-209.	3.6	24
3134	Formation of interfacial molybdenum carbide for DLC lubricated by MoDTC: Origin of wear mechanism. Wear, 2017, 370-371, 17-28.	1.5	34
3135	Structure and infrared spectra of hydrocarbon interstellar dust analogs. Physical Chemistry Chemical Physics, 2017, 19, 1352-1360.	1.3	16
3136	Synthesis and characterization of Ti 2 AlC coatings by magnetron sputtering from three elemental targets and ex-situ annealing. Surface and Coatings Technology, 2017, 309, 445-455.	2.2	41

#	Article	IF	Citations
3137	Tribological properties of hydrogenated amorphous carbon films in different atmospheres. Diamond and Related Materials, 2017, 77, 84-91.	1.8	27
3138	Carbon layer application in phase change memory to reduce power consumption and atomic migration. Materials Letters, 2017, 206, 52-55.	1.3	10
3139	Improved water barrier properties of polylactic acid films with an amorphous hydrogenated carbon (a-C:H) coating. Carbon, 2017, 120, 157-164.	5.4	16
3140	Hydrogenated amorphous carbon films on steel balls and Si substrates: Nanostructural evolutions and their trigging tribological behaviors. Applied Surface Science, 2017, 420, 586-593.	3.1	17
3141	Investigation of working pressure on the surface roughness controlling technology of glow discharge polymer films based on the diagnosed plasma. Plasma Science and Technology, 2017, 19, 075505.	0.7	8
3142	Activated biochar: Preparation, characterization and electroanalytical application in an alternative strategy of nickel determination. Analytica Chimica Acta, 2017, 983, 103-111.	2.6	59
3143	Self-organized formation of nano-multilayer structure in the carbon-copper thin film during reactive magnetron sputtering deposition process. Journal of Alloys and Compounds, 2017, 722, 242-249.	2.8	13
3144	Advanced characterization of by-product carbon film obtained by thermal chemical vapor deposition during CNT manufacturing. Manufacturing Review, 2017, 4, 7.	0.9	10
3145	Large magnetoresistance of amorphous carbon films. Carbon, 2017, 122, 122-127.	5.4	12
3146	Raman studies of amorphous carbon thin films. , 2017, , .		1
3147	Rolling performance of carbon nitride-coated bearing components in different lubrication regimes. Tribology International, 2017, 114, 141-151.	3.0	22
3148	Effects of source gases on the properties of silicon/nitrogen-incorporated diamond-like carbon films prepared by plasma-enhanced chemical vapor deposition. Thin Solid Films, 2017, 636, 177-182.	0.8	8
3149	Compressed glassy carbon: An ultrastrong and elastic interpenetrating graphene network. Science Advances, 2017, 3, e1603213.	4.7	110
3150	Condensation on hybrid-patterned copper tubes (I): Characterization of condensation heat transfer. International Journal of Heat and Mass Transfer, 2017, 112, 991-1004.	2.5	94
3151	Structure, mechanical and tribological properties of Ti-doped amorphous carbon films simultaneously deposited by magnetron sputtering and pulse cathodic arc. Diamond and Related Materials, 2017, 77, 1-9.	1.8	24
3152	The effects of gas dilution on the nanoparticles nucleation in a low pressure capacitively coupled acetylene discharge. Physics of Plasmas, 2017, 24, .	0.7	11
3153	Diamond-like carbon layers modified by ion bombardment during growth and researched by Resonant Ultrasound Spectroscopy. Applied Surface Science, 2017, 417, 213-217.	3.1	6
3154	Influence of Surface Microstructures on Explosive Electron Emission Properties for Graphite Cathodes. IEEE Transactions on Plasma Science, 2017, 45, 959-968.	0.6	5

#	Article	IF	Citations
3155	Antimicrobial and anti-biofilm properties of polypropylene meshes coated with metal-containing DLC thin films. Journal of Materials Science: Materials in Medicine, 2017, 28, 97.	1.7	29
3156	Effect of substrate bias on the tribological behavior of ta-C coating prepared by filtered cathodic vacuum arc. International Journal of Precision Engineering and Manufacturing, 2017, 18, 779-784.	1.1	9
3157	Anomalous electron transport in metal/carbon multijunction devices by engineering of the carbon thickness and selecting metal layer. Journal of Applied Physics, 2017, 121, .	1.1	2
3158	Catalytic growth of diamond-like carbon on Fe3C-containing carburized layer through a single-step plasma-assisted carburizing process. Carbon, 2017, 122, 1-8.	5.4	49
3159	Assessment of a multifuncional tribological coating (nitride+DLC) deposited on grey cast iron in a mixed lubrication regime. Wear, 2017, 376-377, 803-812.	1.5	13
3160	The role of substrate bias and nitrogen doping on the structural evolution and local elastic modulus of diamond-like carbon films. Journal Physics D: Applied Physics, 2017, 50, 175601.	1.3	9
3161	Fouling formed on SS316L tube surface from thermal oxidative degradation of exo -tetrahydrodicyclopentadiene. Applied Thermal Engineering, 2017, 118, 464-470.	3.0	7
3162	Titaniumâ€“Oxo Cluster Based Precise Assembly for Multidimensional Materials. Chemistry of Materials, 2017, 29, 2681-2684.	3.2	50
3163	Depth-resolved study of hydrogen-free amorphous carbon films on stainless steel. Diamond and Related Materials, 2017, 74, 173-181.	1.8	4
3164	Effects of nitrogen substitution in amorphous carbon films on electronic structure and surface reactivity studied with x-ray and ultra-violet photoelectron spectroscopies. Journal of Applied Physics, 2017, 121, 095302.	1.1	5
3165	Mass spectrometric investigations of plasma chemical reactions in a radiofrequency discharge with Ar/C2H2 and Ar/C2H2/O2 gas mixtures. Journal of Applied Physics, 2017, 121, .	1.1	12
3166	Conversion of hydrocarbon gases in dielectric barrier discharge in the presence of water. High Energy Chemistry, 2017, 51, 128-131.	0.2	6
3167	Determination of surface Î¶â€potential and isoelectric point of carbon surfaces using tracer particle suspensions. Surface and Interface Analysis, 2017, 49, 781-787.	0.8	11
3168	Influences of Interfacial Carbonization on the Structure and Mechanical Properties of Multilayered Cr-Containing Diamond-Like Carbon Films. Journal of Physical Chemistry C, 2017, 121, 6781-6787.	1.5	10
3169	Effect of substrate thickness on properties of protective antireflection a-C:H films deposited by PECVD. Proceedings of SPIE, 2017, , .	0.8	0
3170	Ion bombardment induced buried lateral growth: the key mechanism for the synthesis of single crystal diamond wafers. Scientific Reports, 2017, 7, 44462.	1.6	157
3171	Synthesis of high-quality AZO polycrystalline films via target bias radio frequency magnetron sputtering. Ceramics International, 2017, 43, 7543-7551.	2.3	11
3172	Surface Engineering with Deposition Technologies. , 0, , 116-230.		1

#	Article	IF	Citations
3173	Surface Engineering for Automotive Engine Components. , 0, , 387-422.		0
3174	Nanostructured Bulk-Heterojunction Solar Cells Based on Amorphous Carbon. ACS Energy Letters, 2017, 2, 882-888.	8.8	3
3175	Functionalized, biocompatible, and impermeable nanoscale coatings for PEEK. Materials Science and Engineering C, 2017, 76, 865-870.	3.8	9
3176	Ti-doped hydrogenated diamond like carbon coating deposited by hybrid physical vapor deposition and plasma enhanced chemical vapor deposition. Japanese Journal of Applied Physics, 2017, 56, 035506.	0.8	17
3177	Monitoring the transformation of aliphatic and fullerene molecules by high-energy electrons using surface-enhanced Raman spectroscopy. Nanotechnology, 2017, 28, 165701.	1.3	2
3178	Exchange bias in graphitic C/Co composites. Carbon, 2017, 114, 642-648.	5.4	6
3179	Electron transport determines the electrochemical properties of tetrahedral amorphous carbon (ta-C) thin films. Electrochimica Acta, 2017, 225, 1-10.	2.6	49
3180	The microstructure, mechanical and tribological properties of a-C:H films with self-assembled carbon nanohoops. Surface and Coatings Technology, 2017, 311, 27-34.	2.2	10
3181	Argon and hydrogen plasma influence on the protective properties of diamond-like carbon films as barrier coating. Surfaces and Interfaces, 2017, 6, 60-71.	1.5	29
3182	The ice content of Kuiper belt objects. Nature Astronomy, 2017, 1, .	4.2	8
3183	The effects of temperature, pressure and dissolved oxygen concentration (DO) in water on the wear of the hydrogenated diamond-like carbon (HDLC) at high temperature and pressurized water. Tribology International, 2017, 109, 48-57.	3.0	6
3184	Thermal stability of hard nanocomposite Mo-B-C coatings. Vacuum, 2017, 138, 199-204.	1.6	18
3185	Tribological behavior of unlubricated sliding between a steel ball and Si-DLC deposited by ultra-high-speed coating employing an MVP method. Surface and Coatings Technology, 2017, 332, 128-134.	2.2	13
3186	Structural Characteristics of Diamond-Like Carbon Films Synthesized by Different Methods. Key Engineering Materials, 2017, 743, 112-117.	0.4	0
3187	Advanced deposition of hard a-C:Me coatings by HPPMS using Ne as process gas. Surface and Coatings Technology, 2017, 332, 242-252.	2.2	7
3188	Enhancing the nanoscratch resistance of pulsed laser deposited DLC films through molybdenum-doping. Surface and Coatings Technology, 2017, 330, 185-195.	2.2	23
3189	Comparative study on effects of load and sliding distance on amorphous hydrogenated carbon (a-C:H) coating and tetrahedral amorphous carbon (ta-C) coating under base-oil lubrication condition. Wear, 2017, 392-393, 84-92.	1.5	17
3190	Low-temperature Condensation of Carbon. Astrophysical Journal, 2017, 847, 89.	1.6	20

#	Article	IF	Citations
3191	Dependence of the features of diamondlike carbon films on their synthesis methods, as analyzed by Raman spectroscopy. Surface and Coatings Technology, 2017, 330, 26-33.	2.2	8
3192	Effect of sputtering power on the structure and optical band gap of SiC thin films. Optical Materials, 2017, 73, 723-728.	1.7	32
3193	Fatigue performance of DIARCÂ® plasma coated bonded metal specimens. International Journal of Adhesion and Adhesives, 2017, 79, 83-94.	1.4	2
3194	Plasma Focus Device: A Novel Facility for Hard Coatings. , 2017, , 355-412.		0
3195	Structure dependent negative and positive magnetoresistance of amorphous carbon films. Journal of Applied Physics, 2017, 121, .	1.1	10
3196	Effect of various nitrogen flow ratios on the optical properties of (Hf:N)-DLC films prepared by reactive magnetron sputtering. AIP Advances, 2017, 7, .	0.6	10
3197	Deposition of a Diamond-Like-Carbon Film by Ion Plating and Investigation on its Adhesiveness. Key Engineering Materials, 0, 749, 70-75.	0.4	0
3198	Tribology of multilayer coatings for wear reduction: A review. Friction, 2017, 5, 248-262.	3.4	145
3199	Carbonâ€Enriched Amorphous Hydrogenated Boron Carbide Films for Veryâ€Lowâ€k Interlayer Dielectrics. Advanced Electronic Materials, 2017, 3, 1700116.	2.6	12
3200	Derivation of Hamaker Dispersion Energy of Amorphous Carbon Surfaces in Contact with Liquids Using Photoelectron Energy-Loss Spectra. Brazilian Journal of Physics, 2017, 47, 594-605.	0.7	1
3201	Diamond thin films: giving biomedical applications a new shine. Journal of the Royal Society Interface, 2017, 14, 20170382.	1.5	69
3202	Effect of Ion Source Current on the Microstructure and Properties of Cr-DLC Coatings Prepared by Ion Beam-Assisted Arc Ion Plating. Nano, 2017, 12, 1750053.	0.5	1
3203	Towards a taxonomy of topology for polynuclear aromatic hydrocarbons: linking electronic and molecular structure. Physical Chemistry Chemical Physics, 2017, 19, 28458-28469.	1.3	23
3204	Correlation study of microstructure and photoluminescence properties of a-C:H thin films deposited by plasma-enhanced chemical vapor deposition technique. Diamond and Related Materials, 2017, 80, 76-83.	1.8	8
3205	Frictional wear stability mechanisms of an activated carbon composite derived from palm kernel by phase transformation study. Industrial Lubrication and Tribology, 2017, 69, 945-951.	0.6	7
3206	Ion irradiation-induced, localized sp 2 to sp 3 hybridized carbon transformation in walls of multiwalled carbon nanotubes. Nuclear Instruments & Methods in Physics Research B, 2017, 412, 115-122.	0.6	11
3208	Improved interfacial adhesion between TiAlN/DLC multi-layered coatings by controlling the morphology via bias. Surface and Coatings Technology, 2017, 331, 15-20.	2.2	10
3209	Adhesion enhancement of DLC on CoCrMo alloy by diamond and nitrogen incorporation for wear resistant applications. Surface and Coatings Technology, 2017, 332, 120-127.	2.2	39

#	Article	IF	Citations
3210	Amorphous carbon thin film electrodes with intrinsic Pt-gradient for hydrogen peroxide detection. Electrochimica Acta, 2017, 251, 60-70.	2.6	10
3211	Atomistic simulations of graphite etching at realistic time scales. Chemical Science, 2017, 8, 7160-7168.	3.7	6
3212	High performance diamond-like carbon layers obtained by pulsed laser deposition for conductive electrode applications. Applied Physics A: Materials Science and Processing, 2017, 123, 1.	1.1	13
3213	High-Yield Functional Molecular Electronic Devices. ACS Nano, 2017, 11, 6511-6548.	7.3	136
3214	Soft X-ray irradiation effect on the fluorinated DLC film. Diamond and Related Materials, 2017, 79, 14-20.	1.8	6
3215	Integrated characterization study of diamond like carbon (DLC) synthesized by 2.45 GHZ microwave electron cyclotron resonance (ECR) plasma CVD. Surface and Coatings Technology, 2017, 328, 30-43.	2.2	8
3216	Siliconâ€“Carbon Nanocomposite Semi-Solid Negolyte and Its Application in Redox Flow Batteries. Chemistry of Materials, 2017, 29, 7533-7542.	3.2	37
3217	Fast nanostructured carbon microparticle synthesis by one-step high-flux plasma processing. Carbon, 2017, 124, 403-414.	5.4	5
3218	Quantifying adhesion of ultra-thin multi-layer DLC coatings to Ni and Si substrates using shear, tension, and nanoscratch molecular dynamics simulations. Acta Materialia, 2017, 141, 317-326.	3.8	20
3219	A finite element correction method for sub-20â€¯nm nanoindentation considering tip bluntness. International Journal of Solids and Structures, 2017, 129, 49-60.	1.3	10
3220	Enhanced electrochemical properties of the DLC films with an arc interlayer, nitrogen doping and annealing. Surface and Coatings Technology, 2017, 329, 77-85.	2.2	36
3221	Combination of laser surface texturing and DLC coating on PEEK for enhanced tribological properties. Surface and Coatings Technology, 2017, 329, 29-41.	2.2	39
3222	White light induced covalent modification of graphene using a phenazine dye. Chemical Communications, 2017, 53, 10715-10718.	2.2	11
3223	Tribological behaviour of sintered iron based self-lubricating composites. Friction, 2017, 5, 285-307.	3.4	45
3224	Synthesis of high hardness, low COF diamond-like carbon using RF-PECVD at room temperature and evaluating its structure using electron microscopy. Diamond and Related Materials, 2017, 80, 108-112.	1.8	9
3225	Tailoring the mechanical and tribological properties of B 4 C/a-C coatings by controlling the boron carbide content. Surface and Coatings Technology, 2017, 329, 11-18.	2.2	53
3226	Ion induced stress relaxation in dense sputter-deposited DLC thin films. Applied Physics Letters, 2017, 111, .	1.5	16
3227	Nonâ€stick properties of thinâ€film coatings on dentalâ€restorative instruments. European Journal of Oral Sciences, 2017, 125, 495-503.	0.7	2

#	Article	IF	Citations
3228	Stress Writing Textured Graphite Conducting Wires/Patterns in Insulating Amorphous Carbon Matrix as Interconnects. Scientific Reports, 2017, 7, 9727.	1.6	6
3229	Optical properties of organic carbon and soot produced in an inverse diffusion flame. Carbon, 2017, 124, 372-379.	5.4	47
3230	Synthesis of quenchable amorphous diamond. Nature Communications, 2017, 8, 322.	5.8	74
3232	Superior wear resistance and low friction in hybrid ultrathin silicon nitride/carbon films: synergy of the interfacial chemistry and carbon microstructure. Nanoscale, 2017, 9, 14937-14951.	2.8	17
3233	Structure and mechanical properties of a-C:H films deposited on a 3D target: comparative study on target scale and aspect ratio. Journal Physics D: Applied Physics, 2017, 50, 155204.	1.3	5
3234	Stress reduction mechanism of diamond-like carbon films incorporated with different Cu contents. Thin Solid Films, 2017, 640, 45-51.	0.8	28
3235	Tribocorrosion behaviors of multilayer PVD DLC coated 304L stainless steel in seawater. Diamond and Related Materials, 2017, 79, 70-78.	1.8	58
3236	Dramatic Modification of Coupled-Plasmon Resonances Following Exposure to Electron Beams. Journal of Physical Chemistry Letters, 2017, 8, 3607-3612.	2.1	8
3237	Mode transition in dusty micro-plasma driven by pulsed radio-frequency source in C 2 H 2 /Ar mixture. Chinese Physics B, 2017, 26, 045202.	0.7	1
3238	High temperature nanotribology of ultra-thin hydrogenated amorphous carbon coatings. Carbon, 2017, 123, 112-121.	5.4	27
3239	Temperature effect on hydrogenated amorphous carbon leading to hydrogenated graphene by pulsed laser deposition. Applied Surface Science, 2017, 426, 874-880.	3.1	10
3240	Understanding heterogeneity in Genesis diamond-like carbon film using SIMS analysis of implants. Journal of Materials Science, 2017, 52, 11282-11305.	1.7	7
3241	Synthesis of high hardness IR optical coating using diamond-like carbon by PECVD at room temperature. Diamond and Related Materials, 2017, 78, 39-43.	1.8	32
3242	Positioning of cobalt atoms in amorphous carbon films by pre-selecting the hydrogen concentration. Nuclear Instruments & Methods in Physics Research B, 2017, 409, 116-120.	0.6	3
3243	Fractal nature of hard carbon prepared from C60 fullerene. Carbon, 2017, 124, 708-721.	5.4	4
3244	Oxygen doping effect on the wettability of diamond-like carbon thin films. Journal of Non-Crystalline Solids, 2017, 471, 410-414.	1.5	18
3245	Interfacial microstructure and improved wetting mechanism of SiO 2f /SiO 2 brazed with Nb by plasma treatment. Vacuum, 2017, 143, 320-328.	1.6	13
3246	Identification of foreign particles in packages of failed products by application of our modified failure analysis flow. Microelectronics Reliability, 2017, 76-77, 426-430.	0.9	2

#	Article	IF	Citations
3247	Compositionally modulated multilayer diamond-like carbon coatings with AlTiSi multi-doping by reactive high power impulse magnetron sputtering. Applied Surface Science, 2017, 425, 855-861.	3.1	22
3248	Biomineralized diamond-like carbon films with incorporated titanium dioxide nanoparticles improved bioactivity properties and reduced biofilm formation. Materials Science and Engineering C, 2017, 81, 373-379.	3.8	24
3249	Achieving low friction and wear under various humidity conditions by co-doping nitrogen and silicon into diamond-like carbon films. Thin Solid Films, 2017, 638, 375-382.	0.8	18
3250	Thermally activated diffusion of copper into amorphous carbon. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, 061401.	0.9	4
3251	Tensile test of a silicon microstructure fully coated with submicrometer-thick diamond like carbon film using plasma enhanced chemical vapor deposition method. Japanese Journal of Applied Physics, 2017, 56, 06GN01.	0.8	3
3252	Multilayer diamond-like amorphous carbon coatings produced by ion irradiation of polymer films. Surface and Coatings Technology, 2017, 327, 42-47.	2.2	18
3253	Recognition of the carbon thin films sub-structures: thermo-optical measurements. Chemical Papers, 2017, 71, 2167-2171.	1.0	0
3254	The characteristics of DC laser photodetachment signals in a hot carbon cathode discharge. AIP Conference Proceedings, 2017, , .	0.3	0
3255	Structural analysis of amorphous carbon films by BEMA theory based on spectroscopic ellipsometry measurement. Diamond and Related Materials, 2017, 79, 46-59.	1.8	4
3256	Structural analysis of amorphous carbon films by spectroscopic ellipsometry, RBS/ERDA, and NEXAFS. Applied Physics Letters, 2017, 110, .	1.5	19
3257	Structure-property relationships from universal signatures of plasticity in disordered solids. Science, 2017, 358, 1033-1037.	6.0	218
3258	Nanoscale investigation of enhanced electron field emission for silver ion implanted/post-annealed ultrananocrystalline diamond films. Scientific Reports, 2017, 7, 16325.	1.6	18
3259	Ab Initio Study of Interfacial Structure Transformation of Amorphous Carbon Catalyzed by Ti, Cr, and W Transition Layers. ACS Applied Materials & Interfaces, 2017, 9, 41115-41119.	4.0	19
3260	Protective amorphous carbon coatings on glass substrates. AIP Advances, 2017, 7, 115206.	0.6	3
3261	1.7 Carbon and Diamond. , 2017, , 145-164.		1
3262	Corrosion resistance of low-carbon steel modified by plasma nitriding and diamond-like carbon. Diamond and Related Materials, 2017, 80, 153-161.	1.8	30
3263	Properties of amorphous carbon thin films grown by ion beam sputtering. Technical Physics, 2017, 62, 1724-1730.	0.2	5
3264	Preparation and characteristics study of diamond like carbon/silicon heterojunction photodetector by pulsed laser deposition. Optical and Quantum Electronics, 2017, 49, 1.	1.5	7

#	Article	IF	Citations
3265	Nanoindentation data analysis of loading curve performed on DLC thin films: Effect of residual stress on the elasto-plastic properties. Journal of Applied Physics, 2017, 122, .	1.1	10
3266	Effect of hexagonal boron nitride and graphite on mechanical and scuffing resistance of self lubricating iron based composite. Wear, 2017, 376-377, 1084-1090.	1.5	43
3267	Direct Electron Beam Writing of Silver-Based Nanostructures. ACS Applied Materials & Interfaces, 2017, 9, 24071-24077.	4.0	29
3268	Doping as a means to probe the potential dependence of dopamine adsorption on carbon-based surfaces: A first-principles study. Journal of Chemical Physics, 2017, 146, 234704.	1.2	13
3269	Corrosion and Wear Behaviors of Cr-Doped Diamond-Like Carbon Coatings. Journal of Materials Engineering and Performance, 2017, 26, 3633-3647.	1.2	33
3270	1.8 Wear-Resistant Ceramic Films and Coatings â˜†. , 2017, , 165-203.		7
3271	Tribocorrosion behavior of DLC-coated Ti-6Al-4V alloy deposited by PIID and PEMS + PIID techniques for biomedical applications. Surface and Coatings Technology, 2017, 332, 223-232.	2.2	50
3272	Role of oxygenates and effect of operating conditions in the deactivation of a Ni supported catalyst during the steam reforming of bio-oil. Green Chemistry, 2017, 19, 4315-4333.	4.6	97
3273	Spray-dried encapsulated starch and subsequent synthesis of carbon-silica core-shell micro-granules. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 529, 696-704.	2.3	6
3274	Hydrogen permeability of diamondlike amorphous carbons. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, .	0.9	7
3275	The global dust modelling framework THEMIS. Astronomy and Astrophysics, 2017, 602, A46.	2.1	176
3277	Development of a Durable and Modified Coating for Braiding Pultrusion. Lightweight Design Worldwide, 2017, 10, 18-23.	0.1	1
3278	Interactions of superhydrophobic carbon soot coatings with short alkyl chain alcohols and fluorocarbon solutions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 529, 715-724.	2.3	27
3279	Pulsed magnetron sputtering and ion-induced annealing of carbon films. Journal of Surface Investigation, 2017, 11, 305-314.	0.1	0
3280	Optical and electrical properties of synthetic single-crystal diamond under high-fluence ion irradiation. Journal of Surface Investigation, 2017, 11, 619-624.	0.1	4
3281	The effect of diborane additive on the plasma-chemical properties of deposited carbon films. Technical Physics Letters, 2017, 43, 81-84.	0.2	5
3282	Infrared, Raman and Magnetic Resonance Spectroscopic Study of SiO2:C Nanopowders. Nanoscale Research Letters, 2017, 12, 292.	3.1	15
3283	Photovoltaic Properties and Ultrafast Plasmon Relaxation Dynamics of Diamond-Like Carbon Nanocomposite Films with Embedded Ag Nanoparticles. Nanoscale Research Letters, 2017, 12, 288.	3.1	12

#	Article	IF	Citations
3284	A new approach to create isolated carbon particles by sputtering: A detailed parametric study and a concept of carbon particles embedded carbon coatings. Diamond and Related Materials, 2017, 76, 97-107.	1.8	6
3285	The tribological behaviors between fullerene-like hydrogenated carbon films produced on Si substrates, steel and Si 3 N 4 balls. Tribology International, 2017, 115, 518-524.	3.0	4
3286	3.8 Biomedical Thin Films: Mechanical Properties â˜†. , 2017, , 128-143.		2
3287	Developments and Applications of Diamond-Like Carbon. Applied Mechanics and Materials, 2017, 864, 14-24.	0.2	7
3288	Dual phase amorphous carbon ceramic achieves theoretical strength limit and large plasticity. Carbon, 2017, 122, 276-280.	5.4	14
3289	Conformal nanocarbon coating of alumina nanocrystals for biosensing and bioimaging. Carbon, 2017, 122, 422-427.	5.4	22
3290	Conductive diamond-like carbon films prepared by high power pulsed magnetron sputtering with bipolar type plasma based ion implantation system. Diamond and Related Materials, 2017, 77, 122-130.	1.8	16
3291	Coke formation on the surface of Ni/HZSM-5 and Ni-Cu/HZSM-5 catalysts during bio-oil hydrodeoxygenation. Fuel, 2017, 189, 23-31.	3.4	142
3292	Comparative study on structure and wetting properties of diamond-like carbon films by W and Cu doping. Diamond and Related Materials, 2017, 73, 278-284.	1.8	27
3293	Antibacterial properties of fluorinated diamond-like carbon films deposited by direct and remote plasma. Materials Letters, 2017, 188, 84-87.	1.3	17
3294	The composition, structure and surface properties of the titanium-carbon coatings prepared by PVD technique. Surface and Coatings Technology, 2017, 309, 680-686.	2.2	31
3295	Advanced spectroscopic analyses on a:C-H materials: Revisiting the EELS characterization and its coupling with multi-wavelength Raman spectroscopy. Carbon, 2017, 112, 149-161.	5.4	51
3296	Ti/Al co-doping induced residual stress reduction and bond structure evolution of amorphous carbon films: An experimental and ab initio study. Carbon, 2017, 111, 467-475.	5.4	39
3297	Tribological properties of ta-CNx coatings with different nitrogen content under oil lubrication conditions. Thin Solid Films, 2017, 621, 12-18.	0.8	8
3298	Computed electronic structure of polynuclear aromatic hydrocarbon agglomerates. Proceedings of the Combustion Institute, 2017, 36, 957-964.	2.4	39
3299	Magnetic-field enhanced plasma immersion ion implantation and deposition (PIII&D) of diamond-like carbon films inside tubes. Surface and Coatings Technology, 2017, 312, 47-54.	2.2	13
3300	Polymeric amorphous carbon films with high hardness. Diamond and Related Materials, 2017, 73, 253-259.	1.8	3
3301	Effect of temperature on the synthesis of nanoporous carbon from copper/carbon thin films to nanoporous carbon for sensing applications. Thin Solid Films, 2017, 630, 59-65.	0.8	3

#	Article	IF	Citations
3302	Generation of amorphous carbon models using liquid quench method: A reactive molecular dynamics study. Carbon, 2017, 113, 87-99.	5.4	74
3303	Simultaneous Voltammetric Determination of Paracetamol, Codeine and Caffeine on Diamondâ€like Carbon Porous Electrodes. Electroanalysis, 2017, 29, 907-916.	1.5	21
3304	Investigation of the antimicrobial properties of modified multilayer diamond-like carbon coatings on 316 stainless steel. Surface and Coatings Technology, 2017, 314, 72-78.	2.2	34
3305	Electrical behavior of nickel/carbon nanocomposite thin films. Carbon, 2017, 111, 878-886.	5.4	4
3306	Structural and fluorescence characterization of anodic alumina/carbon composites formed in tartaric acid solution. Journal of Luminescence, 2017, 182, 233-239.	1.5	22
3307	Comparison of the scuffing behaviour and wear resistance of candidate engineered coatings for automotive piston rings. Tribology International, 2017, 106, 10-22.	3.0	50
3308	In situ one-pot preparation of reduced graphene oxide/polyaniline composite for high-performance electrochemical capacitors. Applied Surface Science, 2017, 392, 71-79.	3.1	85
3309	Origin of the nano-carbon allotropes in pulsed laser ablation in liquids synthesis. Journal of Colloid and Interface Science, 2017, 489, 114-125.	5.0	62
3310	Plasmon-enhanced optical absorption with graded bandgap in diamond-like carbon (DLC) films. Journal of Materials Science, 2017, 52, 218-228.	1.7	29
3311	Molecular Dynamics Simulations for Plasmaâ€Surface Interactions. Plasma Processes and Polymers, 2017, 14, 1600145.	1.6	53
3312	A Review on Effects of Lubricant Formulations on Tribological Performance and Boundary Lubrication Mechanisms of Non-Doped DLC/DLC Contacts. Critical Reviews in Solid State and Materials Sciences, 2017, 42, 267-294.	6.8	27
3313	Synthesis and electrochemical activities of TiC/C core-shell nanocrystals. Journal of Alloys and Compounds, 2017, 693, 500-509.	2.8	25
3314	Structure and density profile of diamond-like carbon films containing copper: Study by X-ray reflectivity, transmission electron microscopy, and spectroscopic ellipsometry. Thin Solid Films, 2017, 630, 48-58.	0.8	15
3315	Topography evolution and friction coefficient of gray and nodular cast irons with duplex plasma nitrided + DLC coating. Surface and Coatings Technology, 2017, 314, 18-27.	2.2	23
3316	Quantitative NEXAFS and solid-state NMR studies of sp 3 /(sp 2 + sp 3) ratio in the hydrogenated DLC films. Diamond and Related Materials, 2017, 73, 232-240.	1.8	24
3317	WC/C:H films synthesized by an hybrid reactive magnetron sputtering/Plasma Enhanced Chemical Vapor Deposition process: An alternative to Cr (VI) based hard chromium plating. Thin Solid Films, 2017, 630, 79-85.	0.8	21
3318	Mechanical and corrosion behavior of thick and soft DLC coatings. Surface and Coatings Technology, 2017, 312, 101-109.	2.2	74
3319	Effect of an optical emission spectrometer feedback-controlled method on the characterizations of nc-TiC/a-C:H coated by high power impulse magnetron sputtering. Diamond and Related Materials, 2017, 73, 19-24.	1.8	12

#	Article	IF	Citations
3320	Microstructure and nanomechanical properties of pulsed excimer laser deposited DLC:Ag films: Enhanced nanotribological response. Surface and Coatings Technology, 2017, 309, 320-330.	2.2	35
3321	Nanostructured substrate effects on diamond-like Carbon films properties grown by pulsed laser deposition. Surface and Coatings Technology, 2017, 312, 55-60.	2.2	9
3322	Ordered amorphous hydrogenated carbon structures formed in a barrier discharge. AIP Conference Proceedings, 2017, , .	0.3	1
3323	Correlation of the structure and optical properties of carbon nitride films CN<inf>x</inf>. , 2017, , .		0
3324	Evolution of tribo-induced interfacial nanostructures governing superlubricity in a-C:H and a-C:H:Si films. Nature Communications, 2017, 8, 1675.	5.8	179
3325	Structural variation in a synchrotron-induced contamination layer (a-C:H) deposited on a toroidal Au mirror surface. Journal of Synchrotron Radiation, 2017, 24, 757-764.	1.0	8
3326	Characteristics of the Raman spectra of diamond-like carbon films. Influence of methods of synthesis. Materials Today: Proceedings, 2017, 4, 11480-11485.	0.9	9
3327	Investigation of the properties of hydrogenated carbon films (a-C:H) deposited on germanium using a linear anode layer ion source. Materials Today: Proceedings, 2017, 4, 11500-11504.	0.9	0
3328	Microwave plasma induced surface modification of diamond-like carbon films. Surface Topography: Metrology and Properties, 2017, 5, 045005.	0.9	6
3329	Angular distribution of hybridization in sputtered carbon thin film. AIP Advances, 2017, 7, 085303.	0.6	3
3330	Etching yields and surface reactions of amorphous carbon by fluorocarbon ion irradiation. Japanese Journal of Applied Physics, 2017, 56, 06HB09.	0.8	11
3331	Nanoparticles as a Metal Source in Plasma Processes. Transactions of the Materials Research Society of Japan, 2017, 42, 31-36.	0.2	0
3332	Properties of Zinc-containing Diamond-like Carbon Films Prepared by Plasma Source Ion Implantation. Transactions of the Materials Research Society of Japan, 2017, 42, 37-40.	0.2	3
3333	Characterization of Carbon Thin Films Prepared by High Power Impulse Magnetron Sputtering. Journal of the Vacuum Society of Japan, 2017, 60, 341-345.	0.3	0
3334	Preface to the Special Issue for the High Power Impulse/Pulsed Magnetron Sputtering. Journal of the Vacuum Society of Japan, 2017, 60, 339-340.	0.3	1
3335	Electrical properties and Mott parameters of polycrystalline diamond films synthesized by HF CVD method from hydrogen/methanol gas mixture. Materials Science-Poland, 2017, 35, 830-837.	0.4	2
3336	Investigation of the Structure and Functional Properties of Diamond-Like Coatings Obtained by Physical Vapor Deposition. Journal of Surface Investigation, 2017, 11, 1177-1184.	0.1	2
3337	The quasicrystal model of cluster systems in condensed matter. IOP Conference Series: Materials Science and Engineering, 2017, 168, 012020.	0.3	4

#	Article	IF	Citations
3338	Modified electrical characteristics of filtered cathodic vacuum arc amorphous carbon film on n-Si (100) by heat treatment. , 2017, , .		0
3339	Nanocluster's magnetron sputtering of carbon-nitride and hybrid nickel-carbon-nitride films. , 2017, , .		1
3340	Coatings and surface treatments for enhanced performance suspensions for future gravitational wave detectors. Classical and Quantum Gravity, 2017, 34, 235012.	1.5	4
3341	Study of Phosphorus Doped Micro/Nano Crystalline Silicon Films Deposited by Filtered Cathodic Vacuum Arc Technique. Silicon, 2017, 9, 473-481.	1.8	2
3342	The Run-in Process for Stable Friction Fade-Out and Tribofilm Analyses by SEM and Nano-Indenter. Tribology Online, 2017, 12, 274-280.	0.2	11
3343	Analysis of Wear Track on DLC Coatings after Sliding with MoDTC-Containing Lubricants. Tribology Online, 2017, 12, 110-116.	0.2	29
3344	2.4 Fundamentals in Reverse Osmosis. , 2017, , 79-94.		0
3345	Tribological Behavior of DLC and WDLC Carbon Based Coatings During Reciprocating Wear Tests. , 0, , .		2
3346	Friction and Wear Properties of Tetrahedral Si-Containing Hydrogenated Diamond-Like Carbon Coating under Lubricated Condition with Engine-Oil Containing ZnDTP and MoDTC. Tribology Online, 2017, 12, 123-134.	0.2	19
3347	Diamond-Like Carbon Nanofoam from Low-Temperature Hydrothermal Carbonization of a Sucrose/Naphthalene Precursor Solution. Journal of Carbon Research, 2017, 3, 23.	1.4	9
3348	A Guide to and Review of the Use of Multiwavelength Raman Spectroscopy for Characterizing Defective Aromatic Carbon Solids: from Graphene to Amorphous Carbons. Coatings, 2017, 7, 153.	1.2	272
3349	An Experimental Study on Nano-Carbon Films as an Anti-Wear Protection for Drilling Tools. Coatings, 2017, 7, 228.	1.2	7
3350	Preparation of Metal-Containing Diamond-Like Carbon Films by Magnetron Sputtering and Plasma Source Ion Implantation and Their Properties. Advances in Materials Science and Engineering, 2017, 2017, 1-8.	1.0	14
3351	Investigation of the Influence of Ni Doping on the Structure and Hardness of Ti-Ni-C Coatings. Journal of Nanomaterials, 2017, 2017, 1-13.	1.5	3
3352	Carbon Thin Film on Silicon by Microwave Plasma. Applied Mechanics and Materials, 2017, 866, 309-312.	0.2	0
3353	Comparison of Suppressing Effect for Soldering Reactions by Surface Modifications Using Nitriding and Amorphous Carbon Film in Zinc Alloy Die Casting. Materials Transactions, 2017, 58, 1695-1701.	0.4	5
3354	Scanning Probe Lithography of Dendrite-Like Nanostructures in Ultrathin Diamond-Like Nanocomposite Films. Nanotechnologies in Russia, 2017, 12, 376-384.	0.7	1
3355	Lubrication Mechanism of Halogen-Free Ionic Liquids. Tribology Online, 2017, 12, 155-161.	0.2	13

#	Article	IF	Citations
3356	Spectroscopic Ellipsometry - Application on the Classification of Diamond-Like Carbon Films. , 2017, , .		0
3357	Effect of substrate bias voltage on tensile properties of single crystal silicon microstructure fully coated with plasma CVD diamond-like carbon film. Applied Surface Science, 2018, 443, 48-54.	3.1	11
3358	Influence of postâ€annealing on a diamondlike carbon film analyzed by Raman spectroscopy. Surface and Interface Analysis, 2018, 50, 441-447.	0.8	8
3359	Highly durable and biocompatible periodical Si/DLC nanocomposite coatings. Nanoscale, 2018, 10, 4852-4860.	2.8	23
3360	Numerical and Experimental Study of Near-Field Heating Using Tip-Enhanced Raman Spectroscopy (TERS). Tribology Letters, 2018, 66, 1.	1.2	7
3361	Effect of magnetic and electric coupling fields on micro- and nano- structure of carbon films in the CVD diamond process and their electron field emission property. Materials Research Express, 2018, 5, 035009.	0.8	7
3362	Plasma generation and processing of interstellar carbonaceous dust analogs. Plasma Sources Science and Technology, 2018, 27, 035007.	1.3	9
3363	Temperature-Induced Changes in the Optical and Material Characteristics of HAMR Media COC and Its Effect on Recording Performance. IEEE Transactions on Magnetics, 2018, 54, 1-4.	1.2	2
3364	Ag/Au Alloy LSPR Engineering by Coâ€deposition of RFâ€Sputtering and RFâ€PECVD. Applied Organometallic Chemistry, 2018, 32, e4316.	1.7	5
3365	Structural and electronic properties of two-dimensional (110) diamond nanofilms by first-principles calculations. Diamond and Related Materials, 2018, 84, 55-61.	1.8	21
3366	Modification of hydrophobicity properties of diamond like carbon films using glancing angle deposition method. Materials Letters, 2018, 220, 301-304.	1.3	26
3367	Influence of Deposition Conditions. Springer Series in Materials Science, 2018, , 273-298.	0.4	1
3368	Observation of structure transition as a function of temperature in depositing hydrogenated sp2-rich carbon films. Applied Surface Science, 2018, 439, 1152-1157.	3.1	13
3369	Evolution of amorphous carbon across densities: An inferential study. Carbon, 2018, 131, 168-174.	5.4	49
3370	Optical emission spectroscopy as a process-monitoring tool in plasma enhanced chemical vapor deposition of amorphous carbon coatings - multivariate statistical modelling. Thin Solid Films, 2018, 649, 106-114.	0.8	4
3371	The effect of the H2/(H2â€¯+â€¯Ar) flow-rate ratio on hydrogenated amorphous carbon films grown using Ar/H2/C7H8 plasma chemical vapor deposition. Thin Solid Films, 2018, 660, 891-898.	0.8	4
3372	Synthesis and characterization of Ti and N binaryâ€doped É‘â€€ films deposited by pulse cathode arc with ionic source assistant. Surface and Interface Analysis, 2018, 50, 506-515.	0.8	3
3373	Deposition, characterization and high-temperature steam oxidation behavior of single-phase Ti2AlC-coated Zircaloy-4. Corrosion Science, 2018, 135, 87-98.	3.0	73

#	Article	IF	Citations
3374	Study on nanocrystalline silicon thin films grown by the filtered cathodic vacuum arc technique using boron doped solid silicon for fast photo detectors. Journal of the Taiwan Institute of Chemical Engineers, 2018, 86, 185-191.	2.7	10
3375	Evidence of hydrogenated carbon in the nanostructure of carbide-derived carbons obtained from hydrochlorination reaction. Materials Chemistry and Physics, 2018, 211, 270-277.	2.0	4
3376	Tribological mechanism of diamond-like carbon films induced by Ti/Al co-doping. Surface and Coatings Technology, 2018, 342, 167-177.	2.2	33
3377	Tribocorrosion behavior of low friction TiSiCN nanocomposite coatings deposited on titanium alloy for biomedical applications. Surface and Coatings Technology, 2018, 347, 1-12.	2.2	52
3378	Evolution of Structural and Electrical Properties of Carbon Films from Amorphous Carbon to Nanocrystalline Graphene on Quartz Glass by HFCVD. ACS Applied Materials & Interfaces, 2018, 10, 17427-17436.	4.0	35
3379	Controllable synthesizing DLC nano structures as a super hydrophobic layer on cotton fabric using a low-cost ethanol electrospray-assisted atmospheric plasma jet. Nanotechnology, 2018, 29, 265603.	1.3	24
3380	Giant Negative Piezoresistive Effect in Diamond-like Carbon and Diamond-like Carbon-Based Nickel Nanocomposite Films Deposited by Reactive Magnetron Sputtering of Ni Target. ACS Applied Materials & Interfaces, 2018, 10, 15778-15785.	4.0	12
3381	Manufacturing and Characterization of a Carbon-Based Amorphous (a-CNX) Coating Material. Nanomanufacturing and Metrology, 2018, 1, 156-170.	1.5	4
3382	Growth Mechanism and Origin of High <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>s</mml:mi><mml:msup><mml:mi>p</mml:mi><mml:mn>3</mml:mn></mml:msup></mml:math> Content in Tetrahedral Amorphous Carbon. Physical Review Letters, 2018, 120, 166101.	8.6	128
3383	Chemical structure and surface morphology evolution of glow discharge polymer films by <scp>Ar</scp>â€ions intermittent etching. Surface and Interface Analysis, 2018, 50, 571-578.	0.8	0
3384	Analysis of microstructure and surface morphology of a-C:H films deposited on a trench target. Diamond and Related Materials, 2018, 83, 1-7.	1.8	6
3385	Characterization of diamond-like carbon films prepared using various source gases by plasma-based ion implantation and deposition. Surface and Coatings Technology, 2018, 355, 136-142.	2.2	7
3386	Coking and sintering progress of a Ni supported catalyst in the steam reforming of biomass pyrolysis volatiles. Applied Catalysis B: Environmental, 2018, 233, 289-300.	10.8	134
3387	The influence of gas flow rate on the structural, mechanical, optical and wettability of diamond-like carbon thin films. Optical and Quantum Electronics, 2018, 50, 1.	1.5	14
3388	The effect of different radio-frequency powers on characteristics of carbon-titanium nanocomposite thin films prepared by reactive sputtering. Thin Solid Films, 2018, 660, 899-906.	0.8	5
3389	Improvement of adhesion of hydrogen-free DLC film by employing an interlayer of tungsten carbide. AIP Conference Proceedings, 2018, , .	0.3	5
3390	The effects of phase transformation on the structure and mechanical properties of TiSiCN nanocomposite coatings deposited by PECVD method. Applied Surface Science, 2018, 444, 377-386.	3.1	24
3391	The effect of DLC-coating deposition method on the reliability and mechanical properties of abutmentâ€™s screws. Dental Materials, 2018, 34, e128-e137.	1.6	14

#	Article	IF	Citations
3392	Characteristics of carbonâ€'nickel nanocomposite thin films prepared by reactive sputtering under different radio frequency powers and their applications for electronic devices. Thin Solid Films, 2018, 653, 350-358.	0.8	1
3393	Preparation and characterisation of diamond-like carbon films prepared by MW ECR/PACVD process deposited on 41Crâ€"Alâ€"Mo7 nitrided steel. Transactions of the Institute of Metal Finishing, 2018, 96, 145-154.	0.6	9
3394	Novel nanocapsules with Coâ€"TiC twin cores and regulable graphitic shells for superior electromagnetic wave absorption. RSC Advances, 2018, 8, 6397-6405.	1.7	26
3395	Raman and EPR spectroscopic studies of chromium-doped diamond-like carbon films. Diamond and Related Materials, 2018, 83, 30-37.	1.8	20
3396	A yolkâ€"shelled Co₉S₈/MoS₂â€"CN nanocomposite derived from a metalâ€"organic framework as a high performance anode for sodium ion batteries. Journal of Materials Chemistry A, 2018, 6, 4776-4782.	5.2	131
3397	Graphitization of amorphous carbon by swift heavy ion impacts: Molecular dynamics simulation. Diamond and Related Materials, 2018, 83, 134-140.	1.8	11
3398	Characterization of sp 3 bond content of carbon films deposited by high power gas injection magnetron sputtering method by UV and VIS Raman spectroscopy. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2018, 194, 136-140.	2.0	14
3399	Investigation of Cr(N)/DLC multilayer coatings elaborated by PVD for high wear resistance and low friction applications. Surface and Coatings Technology, 2018, 337, 396-403.	2.2	68
3400	Tribological behavior of DLC films and duplex ceramic coatings under different sliding conditions. Ceramics International, 2018, 44, 7151-7158.	2.3	43
3401	Electron field emission property of nanostructure wrinkle thin film induced by amorphous diamond like carbon. Materials Today: Proceedings, 2018, 5, 2082-2088.	0.9	4
3402	Synthesis and characteristics of nc-WC/a-C:H thin films deposited via a reactive HIPIMS process using optical emission spectrometry feedback control. Surface and Coatings Technology, 2018, 350, 1120-1127.	2.2	9
3403	DLC deposited onto nitrided grey and nodular cast iron substrates: An unexpected tribological behaviour. Tribology International, 2018, 121, 460-467.	3.0	16
3404	Thermally Induced Structural Evolution of Silicon- and Oxygen-Containing Hydrogenated Amorphous Carbon: A Combined Spectroscopic and Molecular Dynamics Simulation Investigation. Langmuir, 2018, 34, 2989-2995.	1.6	19
3405	Superâ€Elasticity and Ultralow Friction of Hydrogenated Fullereneâ€Like Carbon Films: Associated with the Size of Graphene Sheets. Advanced Materials Interfaces, 2018, 5, 1701303.	1.9	19
3406	Surface-Enhanced Raman Spectroscopy of Carbon Nanomembranes from Aromatic Self-Assembled Monolayers. Langmuir, 2018, 34, 2692-2698.	1.6	10
3407	A study for anticorrosion and tribological behaviors of thin/thick diamond-like carbon films in seawater. Surface Topography: Metrology and Properties, 2018, 6, 014004.	0.9	11
3408	Enhanced thermal conductivity in a hydrated salt PCM system with reduced graphene oxide aqueous dispersion. RSC Advances, 2018, 8, 1022-1029.	1.7	17
3409	Foundations of low-temperature plasma enhanced materials synthesis and etching. Plasma Sources Science and Technology, 2018, 27, 023001.	1.3	98

#	Article	IF	Citations
3410	Unusual strain response of thermal transport in dimerized three-dimensional graphene. Nanoscale, 2018, 10, 5229-5238.	2.8	22
3411	Associative behaviour and effect of functional groups on the fluorescence of graphene oxide. Physical Chemistry Chemical Physics, 2018, 20, 7559-7569.	1.3	11
3412	Si doping enhances the thermal stability of diamond-like carbon through reductions in carbon-carbon bond length disorder. Carbon, 2018, 131, 72-78.	5.4	59
3413	Temperature Programmed Oxidation Coupled with Inâ€…Situ Techniques Reveal the Nature and Location of Coke Deposited on a Ni/La₂O₃âˆ±Al₂O₃ Catalyst in the Steam Reforming of Bioâ€oil. ChemCatChem, 2018, 10, 2311-2321.	1.8	44
3414	Electrodeposition of Siâ€“DLC nanocomposite film and its electronic application. Microsystem Technologies, 2018, 24, 2287-2294.	1.2	13
3415	Improving the mechanical property of amorphous carbon films by silicon doping. Diamond and Related Materials, 2018, 82, 137-142.	1.8	21
3416	The effect of axial ion parameters on the properties of glow discharge polymer in T₂B/H₂ plasma. Journal Physics D: Applied Physics, 2018, 51, 095604.	1.3	6
3417	Mechanism of high growth rate for diamond-like carbon films synthesized by helicon wave plasma chemical vapor deposition. Plasma Science and Technology, 2018, 20, 025505.	0.7	5
3418	Self-lubricating composites containing MoS2: A review. Tribology International, 2018, 120, 280-298.	3.0	191
3419	Properties of iodine containing diamond-like carbon films prepared by plasma source ion implantation. Diamond and Related Materials, 2018, 81, 108-112.	1.8	0
3420	Wear Mechanisms Characterization Operating in Micro- and Nanoscale of the a-C:H Coating Implanted by Ag-Pt. Biotribology, 2018, 13, 16-22.	0.9	5
3421	In-situ thermal stability analysis of amorphous carbon films with different sp3 content. Carbon, 2018, 130, 401-409.	5.4	48
3422	Fabrication of nitrogen-containing diamond-like carbon film by filtered arc deposition as conductive hard-coating film. Japanese Journal of Applied Physics, 2018, 57, 01AE07.	0.8	6
3423	Effect of silicon and oxygen dopants on the stability of hydrogenated amorphous carbon under harsh environmental conditions. Carbon, 2018, 130, 127-136.	5.4	45
3424	Synthesis of Ag and Au nanoparticles embedded in carbon film: Optical, crystalline and topography analysis. Results in Physics, 2018, 8, 336-340.	2.0	12
3425	Effect of H2 dilution on the structure and properties of nc-CrC/a-C:H coatings deposited by a hybrid beams system. Nuclear Science and Techniques/Hewuli, 2018, 29, 1.	1.3	1
3426	Pulsed DC plasma CVD system for the deposition of DLC films. Materials Today Communications, 2018, 14, 40-46.	0.9	21
3427	Tribo-mechanical properties of CrC/a-C thin films sequentially deposited by HiPIMS and mfMS. Surface and Coatings Technology, 2018, 335, 173-180.	2.2	21

#	Article	IF	Citations
3428	Study on the property of low friction complex graphite-like coating containing tantalum. Results in Physics, 2018, 8, 41-47.	2.0	3
3429	Effect of graphite target power density on tribological properties of graphite-like carbon films. Applied Surface Science, 2018, 439, 900-909.	3.1	26
3430	Removal of textile dyes by carbon nanotubes: A comparison between adsorption and UV assisted photocatalysis. Physica E: Low-Dimensional Systems and Nanostructures, 2018, 99, 6-15.	1.3	49
3431	The influence of the ion plasma flow on the phase composition and microhardness of carbon coatings doped with metals. IOP Conference Series: Materials Science and Engineering, 2018, 289, 012036.	0.3	1
3432	Corrosion and wear resistance properties of multilayered diamondâ€like carbon nanocomposite coating. Surface and Interface Analysis, 2018, 50, 265-276.	0.8	25
3433	Diamond-like carbon prepared by pulsed laser deposition with ion bombardment: physical properties. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	1.1	13
3434	The correlation between nano-hardness and elasticity and fullerene-like clusters in hydrogenated amorphous carbon films. Chemical Physics Letters, 2018, 692, 258-263.	1.2	11
3435	Composites Based on Conducting Polymers and Carbon Nanomaterials for Heavy Metal Ion Sensing (Review). Critical Reviews in Analytical Chemistry, 2018, 48, 293-304.	1.8	128
3436	Thermal stability of ultrathin and high dielectric taâ€€ films coated with Ag nanostructures for SERS. Journal of Raman Spectroscopy, 2018, 49, 431-437.	1.2	3
3437	Phosphorus doping of diamond-like carbon films by radio frequency CVD-cum-evaporation technique. Diamond and Related Materials, 2018, 82, 70-78.	1.8	15
3438	Orders of Magnitude Changes in the Friction of an Ionic Liquid on Carbonaceous Surfaces. Journal of Physical Chemistry C, 2018, 122, 2145-2154.	1.5	21
3439	Microstructure, mechanical and tribological characterization of CrN/DLC/Cr-DLC multilayer coating with improved adhesive wear resistance. Applied Surface Science, 2018, 439, 24-32.	3.1	126
3440	Effect of Deposition Time on Polaron Hopping Conduction Parameters in Carbon Films Embedded by Nickel Nanoparticles. Silicon, 2018, 10, 2889-2894.	1.8	2
3441	Synthetic magnesium silicate hydroxide nanoparticles coated with carbonaceous shell in subcritical water condition. Applied Surface Science, 2018, 450, 312-317.	3.1	15
3442	Dual-doped(Si-Ag) graphite-like carbon coatings with ultra-low friction and high antibacterial activity prepared by magnetron sputtering deposition. Diamond and Related Materials, 2018, 86, 47-53.	1.8	12
3443	Silver doped diamond-like carbon antibacterial and corrosion resistance coatings on titanium. Thin Solid Films, 2018, 657, 16-23.	0.8	56
3444	Self-Healing in Carbon Nitride Evidenced As Material Inflation and Superlubric Behavior. ACS Applied Materials & Interfaces, 2018, 10, 16238-16243.	4.0	51
3445	Preparation of multi-layer film consisting of hydrogen-free DLC and nitrogen-containing DLC for conductive hard coating. AIP Conference Proceedings, 2018, , .	0.3	5

#	Article	IF	Citations
3446	Effect of amorphous silicon interlayer on the adherence of amorphous hydrogenated carbon coatings deposited on several metallic surfaces. Surface and Coatings Technology, 2018, 344, 644-655.	2.2	27
3447	Erosion of fluorinated diamond-like carbon films by exposure to soft X-rays. Japanese Journal of Applied Physics, 2018, 57, 045501.	0.8	3
3448	Structure of Amorphous Carbon. Springer Series in Materials Science, 2018, , 195-272.	0.4	4
3449	Hydrogen plasma-enhanced atomic layer deposition of hydrogenated amorphous carbon thin films. Surface and Coatings Technology, 2018, 344, 12-20.	2.2	9
3450	Understanding the thermal properties of amorphous solids using machine-learning-based interatomic potentials. Molecular Simulation, 2018, 44, 866-880.	0.9	69
3451	Surface and in-depth distribution of sp2 and sp3 coordinated carbon atoms in diamond-like carbon films modified by argon ion beam bombardment during growth. Carbon, 2018, 134, 71-79.	5.4	39
3452	Cometary Dust. Space Science Reviews, 2018, 214, 1.	3.7	88
3453	Formation of a carbon nanofilm on oil-coated KU-1 glass annealed by KrF laser radiation. Quantum Electronics, 2018, 48, 136-144.	0.3	3
3454	The effect of fluoroalkylsilanes on tribological properties and wettability of Si-DLC coatings. Materials Research Express, 2018, 5, 036411.	0.8	7
3455	Diamond-like carbon thin films prepared by pulsed-DC PE-CVD for biomedical applications. Surface Innovations, 2018, 6, 167-175.	1.4	58
3456	The correlation between optical and mechanical properties of amorphous diamond-like carbon films prepared by pulsed filtered cathodic vacuum arc deposition. Thin Solid Films, 2018, 653, 317-325.	0.8	22
3457	Density and microstructure of a-C thin films. Diamond and Related Materials, 2018, 84, 71-76.	1.8	12
3458	Discharge runaway in high power impulse magnetron sputtering of carbon: the effect of gas pressure, composition and target peak voltage. Journal Physics D: Applied Physics, 2018, 51, 165201.	1.3	12
3460	Growth of ta-C Films. Springer Series in Materials Science, 2018, , 299-370.	0.4	0
3461	Wear Resistance of Coated SAE 305 Aluminum Alloy Under Dry Friction Reciprocate Sliding. Tribology Letters, 2018, 66, 1.	1.2	11
3462	Investigation of tribological behaviour of a-C:H coatings for dry deep drawing of aluminium alloys. Tribology International, 2018, 118, 484-490.	3.0	19
3463	Preparations and tribological properties of soft-metal/DLC composite coatings by RF magnetron sputter using composite targets. International Journal of Mechanics and Materials in Design, 2018, 14, 313-327.	1.7	20
3464	Chemical structural analysis of diamondlike carbon films: I. Surface growth model. Surface Science, 2018, 668, 29-35.	0.8	8

#	Article	IF	Citations
3465	Investigation of Structural and Electronic Environments of Nitrogen-Doped CVD-Grown DLC Films. Lecture Notes in Electrical Engineering, 2018, , 301-306.	0.3	1
3466	On the role of the energetic species in TiN thin film growth by reactive deep oscillation magnetron sputtering in Ar/N2. Thin Solid Films, 2018, 645, 253-264.	0.8	25
3467	Synthesis and electrochemical properties of Ti-doped DLC films by a hybrid PVD/PECVD process. Applied Surface Science, 2018, 433, 1184-1191.	3.1	91
3468	The Radial Distribution of Ions and Electrons in RF Inductively Coupled H2/T2B Plasmas. Plasma Chemistry and Plasma Processing, 2018, 38, 281-292.	1.1	1
3469	Diamond like carbon nanocomposites with embedded metallic nanoparticles. Reports on Progress in Physics, 2018, 81, 024501.	8.1	45
3470	Tribocorrosion evaluation of hydrogenated and silicon DLC coatings on carbon steel for use in valves, pistons and pumps in oil and gas industry. Wear, 2018, 394-395, 60-70.	1.5	28
3471	Corrosion resistance and self-cleaning behaviour of Ni/a-C: H superhydrophobic films. Surface Engineering, 2018, 34, 611-619.	1.1	13
3472	Experimental study and modeling of wall slip of polymethylmethacrylate considering different die surfaces. Polymer Engineering and Science, 2018, 58, 1391-1398.	1.5	7
3473	Aspect ratio dependent cold cathode emission from vertically aligned hydrophobic silicon nanowires. Materials Research Bulletin, 2018, 97, 232-237.	2.7	14
3474	Bias voltage dependence of superlubricity lifetime of hydrogenated amorphous carbon films in high vacuum. Tribology International, 2018, 117, 107-111.	3.0	44
3475	A Hierarchically Porous Carbon Fabric for Highly Sensitive Electrochemical Sensors. Advanced Engineering Materials, 2018, 20, 1700608.	1.6	18
3476	Intensified electrochemical hydrogen storage capacity of multi-walled carbon nanotubes supported with Ni nanoparticles. Journal of Solid State Electrochemistry, 2018, 22, 395-405.	1.2	10
3477	Low-energy electron-beam modification of DLC coatings reduces cell count while maintaining biocompatibility. Surface and Coatings Technology, 2018, 336, 34-38.	2.2	9
3478	Applications of Raman spectroscopy in grapheneâ€related materials and the development of parameterized PCA for largeâ€scale data analysis. Journal of Raman Spectroscopy, 2018, 49, 54-65.	1.2	28
3479	Chemical structural analysis of diamondlike carbon films: II. Raman analysis. Surface Science, 2018, 668, 36-41.	0.8	20
3480	Influence of discharge power and bias potential on microstructure and hardness of sputtered amorphous carbon coatings. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2018, 36, 021501.	0.9	4
3481	Deformation behavior of diamond-like phases: Molecular dynamics simulation. Diamond and Related Materials, 2018, 81, 154-160.	1.8	26
3482	Carbon-metal vibrating nanomembranes for high frequency microresonators. Diamond and Related Materials, 2018, 81, 138-145.	1.8	3

#	Article	IF	Citations
3483	Self-organized multi-layered grapheneâ€“boron-doped diamond hybrid nanowalls for high-performance electron emission devices. Nanoscale, 2018, 10, 1345-1355.	2.8	57
3484	Selective detection of morphine in the presence of paracetamol with anodically pretreated dual layer Ti/tetrahedral amorphous carbon electrodes. Electrochemistry Communications, 2018, 86, 166-170.	2.3	21
3485	Exploring the low friction of diamond-like carbon films in carbon dioxide atmosphere by experiments and first-principles calculations. Applied Surface Science, 2018, 436, 893-899.	3.1	31
3486	Correlation between structural and mechanical properties of silicon doped DLC thin films. Diamond and Related Materials, 2018, 82, 25-32.	1.8	32
3487	Effect of unbonded hydrogen on amorphous carbon film deposited by PECVD with annealing treatment. Diamond and Related Materials, 2018, 81, 146-153.	1.8	20
3488	Cu incorporated amorphous diamond like carbon (DLC) composites: An efficient electron field emitter over a wide range of temperature. Physica E: Low-Dimensional Systems and Nanostructures, 2018, 97, 120-125.	1.3	10
3489	Double-shelled hollow Na2FePO4F/C spheres cathode for high-performance sodium-ion batteries. Journal of Materials Science, 2018, 53, 2735-2747.	1.7	28
3490	Preparation of anatase films from titanium containing diamond-like carbon films. Materials Letters, 2018, 213, 148-150.	1.3	1
3491	Evolution of the mechanical and tribological properties of DLC thin films doped with low-concentration hafnium on 316L steel. Journal Physics D: Applied Physics, 2018, 51, 025301.	1.3	6
3492	Influence of chemical bonding on the variability of diamond-like carbon nanoscale adhesion. Carbon, 2018, 128, 267-276.	5.4	42
3493	Excellent adhered thick diamond-like carbon coatings by optimizing hetero-interfaces with sequential highly energetic Cr and C ion treatment. Journal of Alloys and Compounds, 2018, 735, 155-162.	2.8	27
3494	Selfâ€Organization of Amorphous Carbon Nanocapsules into Diamond Nanocrystals Driven by Selfâ€Nanoscopic Excessive Pressure under Moderate Electron Irradiation without External Heating. Small, 2018, 14, 1702072.	5.2	5
3495	Chemical structure and electrical characteristics of diamondlike carbon films. Diamond and Related Materials, 2018, 81, 16-26.	1.8	14
3496	Atmospheric-pressure chemical purification of detonation-synthesized nanodiamond by using perchloric acid: Intensive parametric study to control sp3/sp2carbon ratio. Diamond and Related Materials, 2018, 81, 27-32.	1.8	11
3497	Structural and optical characterization of carbon nitride layers deposited by plasma assisted chemical vapor deposition at various conditions. Thin Solid Films, 2018, 646, 28-35.	0.8	2
3498	Tailored CuO nanostructures decorated amorphous carbon nanotubes hybrid for efficient field emitter with theoretical validation. Carbon, 2018, 127, 510-518.	5.4	21
3499	Memristive effects in oxygenated amorphous carbon nanodevices. Nanotechnology, 2018, 29, 035201.	1.3	12
3500	THE ROLE OF PRESSURE TO QUANTIFY THE DEFECTS AND ITS EFFECT ON THE MORPHOLOGY OF GRAPHENE LAYERS. Surface Review and Letters, 2018, 25, 1850055.	0.5	2

#	Article	IF	Citations
3501	Enhanced piezoâ€electric property induced in graphene oxide/polyvinylidene fluoride composite flexible thin films. Polymer Composites, 2018, 39, 4205-4216.	2.3	15
3502	Thermo-optical characterization and thermal properties of grapheneâ€“polymer composites: a review. Journal of Materials Chemistry C, 2018, 6, 2901-2914.	2.7	28
3503	Effect of Oxygen Plasma Treatment on Film Structure for Different Types of DLC film. Transactions of the Materials Research Society of Japan, 2018, 43, 275-278.	0.2	1
3504	Effect of Substrate Bias and Temperature on Friction and Wear Properties for ta-C Coating Prepared under Different Substrate Bias Voltages with Filtered Cathodic Vacuum Arc Deposition. Tribology Online, 2018, 13, 241-247.	0.2	18
3505	Growth of Boron Carbide Nanostructures on Silicon Using Hot Filament Chemical Vapour Deposition. Journal of Chemical Research, 2018, 42, 73-76.	0.6	19
3506	Nanoindentation unidirectional sliding and lateral force microscopy: Evaluation of experimental techniques to measure friction at the nanoscale. AIP Advances, 2018, 8, 125013.	0.6	2
3507	PorosityPlus: characterisation of defective, nanoporous and amorphous materials. JPhys Materials, 2018, 1, 016002.	1.8	14
3508	Measurement of negative carbon ions near a plasma deposited carbon thin film by laser photodetachment. AIP Conference Proceedings, 2018, , .	0.3	0
3509	Synthesis of amorphous hydrogenated carbon (a-C:H) films on Germanium by the use of the linear anode layer source. Journal of Physics: Conference Series, 2018, 1115, 032095.	0.3	1
3510	Electric Properties of Nanocomposite Films Based on Amorphous Hydrogenated Carbon. Technical Physics, 2018, 63, 1620-1625.	0.2	1
3511	Plasma chemical conversion of methane in the presence of water. AIP Conference Proceedings, 2018, , .	0.3	1
3512	A MOF-derived coral-like NiSe@NC nanohybrid: an efficient electrocatalyst for the hydrogen evolution reaction at all pH values. Nanoscale, 2018, 10, 22758-22765.	2.8	78
3513	Structure, chemical composition, mechanical properties of fluorine-containing coatings based on diamond-like carbon. Journal of Physics: Conference Series, 2018, 1121, 012016.	0.3	1
3514	Overview of Phase-Change Electrical Probe Memory. Nanomaterials, 2018, 8, 772.	1.9	13
3515	Mechanical Properties of Hydrogen Free Diamond-Like Carbon Thin Films Deposited by High Power Impulse Magnetron Sputtering with Ne. Coatings, 2018, 8, 385.	1.2	31
3516	Potential of ITO thin film for electrical probe memory applications. Science and Technology of Advanced Materials, 2018, 19, 791-801.	2.8	21
3517	Effects of the Carbon Fiber-Carbon Microcoil Hybrid Formation on the Effectiveness of Electromagnetic Wave Shielding on Carbon Fibers-Based Fabrics. Materials, 2018, 11, 2344.	1.3	17
3518	Superior wear resistance of diamond and DLC coatings. Current Opinion in Solid State and Materials Science, 2018, 22, 243-254.	5.6	105

#	Article	IF	Citations
3519	Special Features of the Electrochemistry of Undoped Tetrahedral Amorphous Carbon (ta-C) Thin Films. , 2018, , 856-862.		3
3520	The use of Films of Metal-Containing Nanocomposites with a Silicon-Carbon Matrix in Thermal Imitators of the Components of Micro-and Nanoelectronics. , 2018, , .		2
3521	Influence of the Chemical Composition of Al/AlC/a-C:H Coatings on the Mechanical Properties of Magnesium Alloy AZ31. Metal Science and Heat Treatment, 2018, 60, 443-449.	0.2	3
3522	Properties of ta-C coatings prepared by pulsed cathodic arc source at various distances. Journal of Physics: Conference Series, 2018, 1115, 032066.	0.3	1
3523	Near Edge X-Ray Absorption Fine Structure Spectroscopy: A Powerful Tool for Investigating the Surface Structure and Chemistry of Solid Lubricants. Microtechnology and MEMS, 2018, , 63-106.	0.2	2
3524	Nanostructure Formation on Diamond-Like Carbon Films Induced with Few-Cycle Laser Pulses at Low Fluence from a Ti:Sapphire Laser Oscillator. Nanomaterials, 2018, 8, 535.	1.9	6
3525	Multi-phase carbonaceous coating with super wear resistance. Vacuum, 2018, 157, 442-446.	1.6	7
3526	Diamond-like carbon films for use in medical implants. AIP Conference Proceedings, 2018, , .	0.3	4
3527	TCAD study of DLC coatings for large-area high-power diodes. Microelectronics Reliability, 2018, 88-90, 1094-1097.	0.9	3
3528	Diamond-Like Carbon Films Obtained by the Method of High-Frequency Diode Sputtering. Journal of Communications Technology and Electronics, 2018, 63, 1068-1069.	0.2	5
3529	Tailoring the Tribocorrosion and Antifouling Performance of (Cr, Cu)-GLC Coatings for Marine Application. ACS Applied Materials & Interfaces, 2018, 10, 36531-36539.	4.0	55
3530	Novel DLC Coating Technique on an Inner-wall of Extended Polytetrafluoroethylene Vascular Grafts Using Methane Plasma Produced by AC HV Discharge. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2018, 31, 373-377.	0.1	7
3531	A novel copper precursor for electron beam induced deposition. Beilstein Journal of Nanotechnology, 2018, 9, 1220-1227.	1.5	7
3532	Femtosecond Laser Technology for Solid-State Material Processing: Creation of Functional Surfaces and Selective Modification of Nanoscale Layers. High Temperature, 2018, 56, 587-604.	0.1	6
3533	Structure, Mechanical and Tribological Properties of Me-Doped Diamond-Like Carbon (DLC) (Me = Al,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.2	38
3534	Structural alteration induced by substrate bias voltage variation in diamond-like carbon films fabricated by unbalanced magnetron sputtering. Diamond and Related Materials, 2018, 90, 214-220.	1.8	37
3535	Low Wear and Low Friction DLC Coating With Good Adhesion to CoCrMo Metal Substrates. Physica Status Solidi (B): Basic Research, 2018, 255, 1800225.	0.7	4
3536	Preparation of hydrogenated amorphous carbon films using a microsecond-pulsed DC capacitive-coupled plasma chemical vapor deposition system operated at high frequency up to 400 kHz. Japanese Journal of Applied Physics, 2018, 57, 06JF02.	0.8	3

#	Article	IF	Citations
3537	Effect of Si incorporation on corrosion resistance of hydrogenated amorphous carbon film. Diamond and Related Materials, 2018, 90, 207-213.	1.8	12
3538	Wear of diamond in scribing of multi-crystalline silicon. Journal of Applied Physics, 2018, 124, .	1.1	19
3539	Tribological Behaviour of Ti:Ta-DLC Films Under Different Tribo-Test Conditions. IOP Conference Series: Materials Science and Engineering, 2018, 295, 012005.	0.3	2
3540	Synthesis of Nano-Crystalline Graphite Films in Hollow Cathode Discharge. Technical Physics, 2018, 63, 1157-1159.	0.2	3
3541	Laser-Induced Surface Acoustic Waves for Material Testing. , 2018, , 1-64.		0
3542	Reactive magnetron sputtering of N-doped carbon thin films on quartz glass for transmission photocathode applications. Journal of Physics: Conference Series, 2018, 992, 012031.	0.3	0
3543	The Potential of Tribological Application of DLC/MoS2 Coated Sealing Materials. Coatings, 2018, 8, 267.	1.2	10
3544	Reaction mechanisms between chlorine plasma and a spin-on-type polymer mask for high-temperature plasma etching. Japanese Journal of Applied Physics, 2018, 57, 106502.	0.8	1
3545	Mechanistic Insights into UV-Initiated Thiolâ€“Ene Reactions on Amorphous Carbon Films. Journal of Physical Chemistry C, 2018, 122, 21854-21860.	1.5	7
3546	Fabrication of Transparent Very Thin SiOx Doped Diamond-Like Carbon Films on a Glass Substrate. Coatings, 2018, 8, 240.	1.2	6
3547	Impact of Film Thickness on Defects and the Graphitization of Nanothin Carbon Coatings Used for Metallic Bipolar Plates in Proton Exchange Membrane Fuel Cells. ACS Applied Materials & Interfaces, 2018, 10, 34561-34572.	4.0	59
3548	Effective passivation of Ag nanowire network by transparent tetrahedral amorphous carbon film for flexible and transparent thin film heaters. Scientific Reports, 2018, 8, 13521.	1.6	40
3549	The effect of microstructure on the tribological properties of a-C:H films. Diamond and Related Materials, 2018, 89, 94-100.	1.8	16
3550	Tridimensional few-layer graphene-like structures from sugar-salt mixtures as high-performance supercapacitor electrodes. Materials Today Energy, 2018, 10, 118-125.	2.5	3
3551	Computational Surface Chemistry of Tetrahedral Amorphous Carbon by Combining Machine Learning and Density Functional Theory. Chemistry of Materials, 2018, 30, 7438-7445.	3.2	69
3552	Reactivity of Amorphous Carbon Surfaces: Rationalizing the Role of Structural Motifs in Functionalization Using Machine Learning. Chemistry of Materials, 2018, 30, 7446-7455.	3.2	77
3553	Bridging the Gap between Reality and Ideal in Chemical Vapor Deposition Growth of Graphene. Chemical Reviews, 2018, 118, 9281-9343.	23.0	260
3554	Annealing effects of high sensitive thin strain gauges consisting of nickel carbon nanocomposites. Journal of Reinforced Plastics and Composites, 2018, 37, 1378-1384.	1.6	3

#	Article	IF	Citations
3555	Performance of InGaN/GaN Light Emitting Diodes with n-GaN Layer Embedded with SiO2 Nano-Particles. Applied Sciences (Switzerland), 2018, 8, 1574.	1.3	3
3556	Micro-wear and friction of carbon film with molecularly thin PFPE lubricants. Journal of Mechanical Science and Technology, 2018, 32, 3291-3297.	0.7	2
3557	Comparative study of post-growth annealing of Cu(hfac)₂, Co₂(CO)₈ and Me₂Au(acac) metal precursors deposited by FEBID. Beilstein Journal of Nanotechnology, 2018, 9, 91-101.	1.5	20
3558	Towards the third dimension in direct electron beam writing of silver. Beilstein Journal of Nanotechnology, 2018, 9, 842-849.	1.5	17
3559	Enhanced Corrosion Resistance and Interfacial Conductivity of TiC_x/a-C Nanolayered Coatings via Synergy of Substrate Bias Voltage for Bipolar Plates Applications in PEMFCs. ACS Applied Materials & Interfaces, 2018, 10, 19087-19096.	4.0	51
3560	Carbon Felt Monoliths Coated with a Highly Hydrophobic Mesoporous Carbon Phase for the Continuous Oil Sorption/Filtration from Water. Advanced Sustainable Systems, 2018, 2, 1800040.	2.7	5
3561	Micro-architecture embedding ultra-thin interlayer to bond diamond and silicon via direct fusion. Applied Physics Letters, 2018, 112, 211601.	1.5	0
3562	Probing buckling and post-buckling deformation of hollow amorphous carbon nanospheres: In-situ experiment and theoretical analysis. Carbon, 2018, 137, 411-418.	5.4	16
3563	Comparative study on phenol and naphthalene steam reforming over Ni-Fe alloy catalysts supported on olivine synthesized by different methods. Energy Conversion and Management, 2018, 168, 60-73.	4.4	85
3564	Effects of bias voltage on the microstructure and properties of Al-doped hydrogenated amorphous carbon films synthesized by a hybrid deposition technique. Vacuum, 2018, 154, 159-166.	1.6	25
3565	Deposition of amorphous carbon thin films by aerosol-assisted CVD method. AIP Conference Proceedings, 2018, , .	0.3	1
3566	Nanometric thin films of non-doped diamond-like carbon grown on n-type (P-doped) silicon substrates as electrochemical electrodes. Journal of Solid State Electrochemistry, 2018, 22, 2845-2853.	1.2	8
3567	Universal Features of the Electron Transport in Tungstenâ€“Carbon Nanocomposites. Journal of Low Temperature Physics, 2018, 192, 299-314.	0.6	1
3568	Radio-frequency plasma-enhanced chemical vapour deposition of carbon films on AISI 316LVM steel: Formation of a transition layer and metal whiskers, and their influence on coating properties. Thin Solid Films, 2018, 659, 16-23.	0.8	4
3569	Surface amorphisation of TiZrN coatings by laser carburisation. Advances in Applied Ceramics, 2018, 117, 414-419.	0.6	0
3570	Comparison of empirical potentials for calculating structural properties of amorphous carbon films by molecular dynamics simulation. Computational Materials Science, 2018, 151, 246-254.	1.4	38
3571	Influence of structure evolution on tribological properties of fluorine-containing diamond-like carbon films: From fullerene-like to amorphous structures. Applied Surface Science, 2018, 457, 388-395.	3.1	21
3572	Tribomechanical Properties of a Carbon-Based Nanolayer Prepared by Nitrogen Ion Beam Assisted Deposition for Finger Joint Replacements. Journal of Nanomaterials, 2018, 2018, 1-9.	1.5	6

#	Article	IF	Citations
3573	High performance hierarchical SiCN nanowires for efficient photocatalytic - photoelectrocatalytic and supercapacitor applications. Applied Catalysis B: Environmental, 2018, 237, 876-887.	10.8	27
3574	How can a short stem hip implant preserve the natural, pre-surgery force flow? A finite element analysis on a collar cortex compression concept (CO 4). Medical Engineering and Physics, 2018, 58, 1-12.	0.8	4
3575	Enhancing the adhesion of diamond-like carbon films to steel substrates using silicon-containing interlayers. Surface and Coatings Technology, 2018, 350, 74-83.	2.2	35
3576	Control of residual stress of tetrahedral amorphous carbon thin film deposited on dielectric material by filtered cathodic vacuum arc source by using mid-frequency pulse bias voltage. Surface and Coatings Technology, 2018, 349, 909-916.	2.2	16
3577	Magnetoelectrical Transport Improvements of Postgrowth Annealed Ironâ€“Cobalt Nanocomposites: A Possible Route for Future Room-Temperature Spintronics. ACS Applied Nano Materials, 2018, 1, 3364-3374.	2.4	9
3578	Hard and adherent a-C:H gradient coatings by stress engineering. Journal of Alloys and Compounds, 2018, 765, 921-926.	2.8	14
3579	Conductive Polymers: Opportunities and Challenges in Biomedical Applications. Chemical Reviews, 2018, 118, 6766-6843.	23.0	579
3580	Computational Study on the Effects of Mechanical Constraint on the Performance of Si Nanosheets as Anode Materials for Lithium-Ion Batteries. Journal of Physical Chemistry C, 2018, 122, 16374-16379.	1.5	3
3581	Geometry-Controlled Carbon Coils by SF6 Flow Injection Time with Reaction Temperature. Journal of Nanomaterials, 2018, 2018, 1-11.	1.5	0
3582	Hydrogen influence on the properties of amorphous carbon films for transparent conductive electrode by HFCVD. Journal of Materials Science: Materials in Electronics, 2018, 29, 14277-14284.	1.1	5
3583	Nanostructure, structural stability, and diffusion characteristics of layered coatings for heat-assisted magnetic recording head media. Scientific Reports, 2018, 8, 9807.	1.6	11
3584	Accelerated thermal degradation of DLC-coatings via growth defects. Surface and Coatings Technology, 2018, 349, 272-278.	2.2	13
3585	X-Ray Residual Stress in the S-Phase of Stainless Steel Nitrided by a Plasma Nitriding Method and Residual Stress Measurement of a DLC Film Deposited on the S-Phase. Zairyo/Journal of the Society of Materials Science, Japan, 2018, 67, 715-721.	0.1	4
3586	An Electrochemical SensorÂBased on an Ionic Liquid Covalently FunctionalizedÂGraphene Oxide forÂSimultaneous Determination ofÂCopper (II) and Antimony (III). ChemistrySelect, 2018, 3, 8252-8258.	0.7	2
3588	Bias effects on wear and corrosion behavior of amorphous hydrogenated carbon films with zirconia interlayer. Surface and Coatings Technology, 2018, 350, 603-620.	2.2	7
3589	Probing the lubrication mechanism of rough diamond-like carbon films against silicon nitride under water. Tribology International, 2018, 128, 248-259.	3.0	29
3590	Evaluation of Carbon thin Films Using Raman Spectroscopy. Materials Research, 2018, 21, .	0.6	20
3591	Towards superlubricity in nanostructured surfaces: the role of van der Waals forces. Physical Chemistry Chemical Physics, 2018, 20, 21949-21959.	1.3	11

#	Article	IF	Citations
3592	Influence of Calf Serum on Fretting Behaviors of Tiâ€“6Alâ€“4V and Diamond-Like Carbon Coating for Neck Adapterâ€“Femoral Stem Contact. Tribology Letters, 2018, 66, 1.	1.2	8
3593	Outstanding superhydrophobicity and corrosion resistance on carbon-based film surfaces coupled with multi-walled carbon nanotubes and nickel nano-particles. Surface Science, 2018, 677, 193-202.	0.8	33
3594	Amorphization Optimization of Ge2Sb2Te5 Media for Electrical Probe Memory Applications. Nanomaterials, 2018, 8, 368.	1.9	6
3595	Effect of soft substrate topography on tribological behavior of multifunctional DLC coatings. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2018, 40, 1.	0.8	10
3596	Effect of magnetic field on Ni nanoclusters prepared via a combined plasma-enhanced chemical vapor deposition and radio frequency sputtering. European Physical Journal Plus, 2018, 133, 1.	1.2	1
3597	Influence of the Structure-Forming Agent on the Performance of Fe-N-C Catalysts. Catalysts, 2018, 8, 260.	1.6	6
3598	Effect of TiN/C Microstructure Composite Layer on the Adhesion of FDLC Film onto Silicon Substrate. Coatings, 2018, 8, 18.	1.2	9
3599	Improving the Tribological Properties of Spark-Anodized Titanium by Magnetron Sputtered Diamond-Like Carbon. Coatings, 2018, 8, 83.	1.2	15
3600	Evaluation of Thermal Degradation of DLC Film Using a Novel Raman Spectroscopy Technique. Coatings, 2018, 8, 143.	1.2	15
3601	The study of adaptable amorphous carbon films deposited on As40Se60 glass. Optik, 2018, 171, 744-753.	1.4	2
3602	Understanding shear-induced <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>s</mml:mi><mml:msup><mml:mi>p</mml:mi><mml:mn> -to- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>s</mml:mi><mml:msup><mml:mi>p</mml:mi><mml:mn> phase transitions in glassy carbon at low pressure using first-principles calculations. Physical Review B, 2018, 98, .	1.1	8
3603	2.20 Batteries. , 2018, , 629-662.		9
3604	Removal of water-soluble dyes by conjugated organic skeletons through drainflow-diffusion filtration. Journal of Environmental Chemical Engineering, 2018, 6, 4612-4622.	3.3	6
3605	A DLC-Punch Array to Fabricate the Micro-Textured Aluminum Sheet for Boiling Heat Transfer Control. Micromachines, 2018, 9, 147.	1.4	15
3606	Metal (Ag/Ti)-Containing Hydrogenated Amorphous Carbon Nanocomposite Films with Enhanced Nanoscratch Resistance: Hybrid PECVD/PVD System and Microstructural Characteristics. Nanomaterials, 2018, 8, 209.	1.9	11
3607	Low pressure plasma modifications for the generation of hydrophobic coatings for biomaterials applications. Plasma Processes and Polymers, 2018, 15, 1800059.	1.6	21
3608	Effect of deposition conditions on optical properties of a-C:H:SiOx films prepared by plasma-assisted chemical vapor deposition method. Optik, 2018, 172, 107-116.	1.4	5
3609	Leather Waste-Derived Biochar with High Performance for Supercapacitors. Journal of the Electrochemical Society, 2018, 165, A2061-A2068.	1.3	22

#	Article	IF	Citations
3610	Sculpting Extreme Electromagnetic Field Enhancement in Free Space for Molecule Sensing. Small, 2018, 14, e1801146.	5.2	36
3611	Unmodified and multi-walled carbon nanotube modified tetrahedral amorphous carbon (ta-C) films as in vivo sensor materials for sensitive and selective detection of dopamine. Biosensors and Bioelectronics, 2018, 118, 23-30.	5.3	44
3612	Enhancing adhesion strength of a-C:H:Cu composite coatings on Ti6Al4V by graded copper deposition in a rf-PVD/PECVD hybrid process. Surface and Coatings Technology, 2018, 350, 659-671.	2.2	13
3613	Ultrathin amorphous carbon films synthesized by filtered cathodic vacuum arc used as protective overcoats of heat-assisted magnetic recording heads. Scientific Reports, 2018, 8, 9647.	1.6	17
3614	Adhesion enhancement of DLC hard coatings by HiPIMS metal ion etching pretreatment. Surface and Coatings Technology, 2018, 349, 787-796.	2.2	48
3615	Influence of oxygen on growth of carbon thin films. AIP Conference Proceedings, 2018, , .	0.3	0
3616	Characteristics and sources of ambient refractory black carbon aerosols: Insights from soot particle aerosol mass spectrometer. Atmospheric Environment, 2018, 185, 147-152.	1.9	16
3617	Optical properties of diamond like carbon nanocomposite thin films. AIP Conference Proceedings, 2018, , .	0.3	8
3618	Characterization and electrochemical properties of iron-doped tetrahedral amorphous carbon (ta-C) thin films. RSC Advances, 2018, 8, 26356-26363.	1.7	12
3619	Biocompatibility of different graphene oxide coatings on polymers. Materialia, 2018, 2, 9-18.	1.3	7
3620	Advanced 3D Current Collectors for Lithiumâ€Based Batteries. Advanced Materials, 2018, 30, e1802014.	11.1	218
3621	Manipulation of the magneto-optical properties of a Co/C heterostructure under an applied voltage. Carbon, 2018, 140, 10-16.	5.4	4
3622	Effect of target composition on the microstructural, mechanical, and corrosion properties of TiAlN thin films deposited by high-power impulse magnetron sputtering. Surface and Coatings Technology, 2018, 352, 330-337.	2.2	20
3623	Diamond-like amorphous carbon layer film by an inductively coupled plasma system for next generation etching hard mask. Thin Solid Films, 2018, 663, 21-24.	0.8	19
3624	Effect of Humidity on Friction and Wearâ€”A Critical Review. Lubricants, 2018, 6, 74.	1.2	106
3625	Synthesis of Amorphous Carbon Film in Ethanol Inverse Diffusion Flames. Nanomaterials, 2018, 8, 656.	1.9	4
3626	Experimental study of wear-induced delamination for DLC coated automotive components. Surface and Coatings Technology, 2018, 352, 549-560.	2.2	20
3627	Microstructure and properties of Nb-doped diamond-like carbon films deposited by high power impulse magnetron sputtering. Thin Solid Films, 2018, 663, 159-167.	0.8	21

#	Article	IF	Citations
3628	Microstructure, tribological and cutting performance of Ti-DLC/Î±-C:H multilayer film on cemented carbide. Surface and Coatings Technology, 2018, 353, 163-170.	2.2	55
3629	Efficient electrical detection of mid-infrared graphene plasmons at room temperature. Nature Materials, 2018, 17, 986-992.	13.3	119
3630	Interface carbon defects at 4H-SiC(0001)/SiO2 interfaces studied by electron-spin-resonance spectroscopy. Applied Physics Letters, 2018, 113, .	1.5	38
3631	Carbon-Based Polymer Nanocomposite for Photovoltaic Devices. , 2018, , 559-584.		3
3632	Spontaneous Shape Alteration and Size Separation of Surfactant-Free Silver Particles Synthesized by Laser Ablation in Acetone during Long-Period Storage. Nanomaterials, 2018, 8, 529.	1.9	28
3633	A contribution to the thermal effects of DLC coatings on fluid friction in EHL contacts. Lubrication Science, 2018, 30, 285-299.	0.9	18
3634	Microstructure changes of self-mated fullerene-like hydrogenated carbon films from low friction to super-low friction with the increasing normal load. Diamond and Related Materials, 2018, 88, 276-281.	1.8	13
3635	Magnetic Fe@FeOx, Fe@C and Î±-Fe2O3 Single-Crystal Nanoblends Synthesized by Femtosecond Laser Ablation of Fe in Acetone. Nanomaterials, 2018, 8, 631.	1.9	33
3636	Optimizing lateral homogeneity of ion-induced surface modifications of non-planar dielectric polyethylene components employing ion fluence simulations and optical measurements of the sp2-dependent reflectivity. Nuclear Instruments & Methods in Physics Research B, 2018, 433, 98-105.	0.6	0
3637	Plasma based nitrogen ion implantation to hydrogenated diamond-like carbon films. Nuclear Instruments & Methods in Physics Research B, 2018, 433, 87-92.	0.6	3
3638	Laser-Induced Surface Acoustic Waves for Material Testing. , 2018, , 1-63.		6
3639	Graphite Surface Microhardening with Femtosecond Laser Pulses. High Temperature, 2018, 56, 616-619.	0.1	1
3640	Plasma Printing of Micro-Punch Assembly for Micro-Embossing of Aluminum Sheets. Materials Science Forum, 0, 920, 161-166.	0.3	0
3641	Exploring Active Sites in Multiâ€Heteroatomâ€Doped Coâ€Based Catalysts for Hydrogen Evolution Reactions. Chemistry - A European Journal, 2018, 24, 12480-12484.	1.7	17
3642	Hydrogen plasma etching mechanism at the a-C:H/a-SiCx:H interface: A key factor for a-C:H adhesion. Applied Surface Science, 2018, 455, 1179-1184.	3.1	7
3643	Synthesis of amorphous carbon from bio-products by drying method. AIP Conference Proceedings, 2018, , .	0.3	6
3644	Amorphous carbon films with MoCu dual-doping deposited by a hybrid sputtering system. Diamond and Related Materials, 2018, 87, 107-114.	1.8	13
3645	Decreased hydrogen content in diamond-like carbon grown by CH4/Ar photoemission-assisted plasma chemical vapor deposition with CO2 gas. Surface and Coatings Technology, 2018, 350, 863-867.	2.2	6

#	Article	IF	Citations
3646	Fast growth of conductive amorphous carbon films by HFCVD with filament temperature control. Materials Letters, 2018, 228, 293-296.	1.3	2
3647	Generation of Pd@Niâ€CNTs from Polyethylene Wastes and Their Application in the Electrochemical Hydrogen Evolution Reaction. ChemistrySelect, 2018, 3, 5321-5325.	0.7	13
3648	Carbon-based nanomaterial synthesis using nanosecond electrical discharges in immiscible layered liquids: n-heptane and water. Journal Physics D: Applied Physics, 2018, 51, 244003.	1.3	12
3649	Ultra-low friction mechanism of highly sp3-hybridized amorphous carbon controlled by interfacial molecule adsorption. Physical Chemistry Chemical Physics, 2018, 20, 22445-22454.	1.3	18
3650	Amorphous Carbon Nanotubesâ€“Nickel Oxide Nanoflower Hybrids: A Low Cost Energy Storage Material. ACS Omega, 2018, 3, 6311-6320.	1.6	22
3651	Structural properties of hydrogenated Al-doped diamond-like carbon films fabricated by a hybrid plasma system. Diamond and Related Materials, 2018, 87, 177-185.	1.8	30
3652	Formation mechanism and properties of nanorod-structured ZnO films prepared by pyrolysis of Zn acetate films. Vacuum, 2018, 155, 403-407.	1.6	3
3653	Aliphatic hydrocarbon content of interstellar dust. Monthly Notices of the Royal Astronomical Society, 2018, 479, 4336-4344.	1.6	15
3654	In-situ tribochemical formation of self-lubricating diamond-like carbon films. Carbon, 2018, 138, 61-68.	5.4	65
3655	Influence of deposition conditions on mechanical properties of a-C:H:SiOx films prepared by plasma-assisted chemical vapor deposition method. Surface and Coatings Technology, 2018, 349, 547-555.	2.2	22
3656	Possibility of elasto-hydrostatic evolved-gas bearing as one of the mechanisms of superlubricity. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2019, 233, 532-540.	1.0	5
3657	Pulsed-DC Discharge for Plasma CVD of Carbon Thin Films. IEEE Transactions on Plasma Science, 2019, 47, 22-31.	0.6	2
3658	Regulating the uniformity of DLC films in ECR plasma with negative substrate biasing. Surface and Coatings Technology, 2019, 365, 15-23.	2.2	7
3659	Effect of sputtering pressure on the surface topography, structure, wettability and tribological performance of DLC films coated on rubber by magnetron sputtering. Surface and Coatings Technology, 2019, 365, 33-40.	2.2	29
3660	Fast Synthesis of Graphene with a Desired Structure via Ni-Catalyzed Transformation of Amorphous Carbon during Rapid Thermal Processing: Insights from Molecular Dynamics and Experimental Study. Journal of Physical Chemistry C, 2019, 123, 27834-27842.	1.5	4
3661	Order versus disorder: In situ high-pressure structural study of highly polymerized three-dimensional C60 fullerite. Journal of Applied Physics, 2019, 126, 065102.	1.1	6
3662	Radical-functionalized plasma polymers: Stable biomimetic interfaces for bone implant applications. Applied Materials Today, 2019, 16, 456-473.	2.3	37
3663	Evidence of magnetism in RF magnetron sputtered deposited carbon films and investigation of its origin. Carbon, 2019, 154, 485-496.	5.4	5

#	Article	IF	Citations
3664	Modification of magnetron sputter deposition of nc-WC/a-C(:H) coatings with an additional RF discharge. Diamond and Related Materials, 2019, 98, 107509.	1.8	9
3665	Derivation of a current-voltage-type plot beyond the Fowler-Nordheim one: The role of the voltage-dependency on the emission area. Journal of Applied Physics, 2019, 126, 075302.	1.1	4
3666	Experimental confirmation of the nearly power-law relation between macroscopic current and characteristic current density in carbon nanotube-based large-area field emitters. Journal of Applied Physics, 2019, 126, .	1.1	3
3667	Cu₂O-Ag nanocomposites with tunable optical property. Materials Research Express, 2019, 6, 105080.	0.8	2
3668	Microstructural and tribological characterization of DLC coating by in-situ duplex plasma nitriding and arc ion plating. Diamond and Related Materials, 2019, 98, 107473.	1.8	18
3669	Improved adhesion of a-C and a-C:H films with a CrC interlayer on 16MnCr5 by HiPIMS-pretreatment. Surface and Coatings Technology, 2019, 375, 877-887.	2.2	13
3670	Low friction coefficient of superhard nc-TiC/a-C:H nanocomposite coatings deposited by filtered cathodic vacuum arc. Materials Research Express, 2019, 6, 096418.	0.8	15
3671	Ultra-low friction of a-C:H films enabled by lubrication of nanodiamond and graphene in ambient air. Carbon, 2019, 154, 203-210.	5.4	44
3672	Enhancement of Tribological Behavior of Rolling Bearings by Applying a Multilayer ZrN/ZrCN Coating. Coatings, 2019, 9, 434.	1.2	15
3673	Structural analysis of hydrogenated amorphous carbon nitride films formed from the decomposition of CH₃CN in the microwave discharge flow of Ar. Japanese Journal of Applied Physics, 2019, 58, SEED02.	0.8	1
3674	Observation of uniformity of diamond-like carbon coatings utilizing hollow cathode discharges inside metal tubes. Surface and Coatings Technology, 2019, 375, 123-131.	2.2	19
3675	Enhancement in the corrosive and tribological properties of the inner wall of 6063Al and CI pipes by thick multilayer Si-DLC coatings. Materials Research Express, 2019, 6, 085634.	0.8	13
3676	Synergistic effect of plasma nitriding and bias voltage on the adhesion of diamond-like carbon coatings on M2 steel by PECVD. Surface and Coatings Technology, 2019, 374, 327-337.	2.2	25
3677	Optical detection of CO gas by the surface-plasmon resonance of Ag nanoparticles and nanoclusters synthesized on a hydrogenated amorphous carbon (a-C:H) film. European Physical Journal Plus, 2019, 134, 1.	1.2	4
3678	Reprint of â€œEffect of target composition on the microstructural, mechanical, and corrosion properties of TiAlN thin films deposited by high-power impulse magnetron sputteringâ€• Surface and Coatings Technology, 2019, 376, 124784.	2.2	6
3679	Piezoresistive behavior of amorphous carbon films for high performance MEMS force sensors. Applied Physics Letters, 2019, 114, .	1.5	16
3680	Effect of MoS₂ on tribological properties and corrosion resistance of MoS₂/a-C:H films fabricated via reactive magnetron sputtering technology. Materials Research Express, 2019, 6, 096419.	0.8	3
3681	Investigation on mechanical properties of tribofilm formed on Tiâ€“6Alâ€“4V surface sliding against a DLC coating by nano-indentation and micro-pillar compression techniques. Wear, 2019, 432-433, 202954.	1.5	10

#	Article	IF	Citations
3682	Reprint of â€œEffect of substrate bias on biocompatibility of amorphous carbon coatings deposited on Ti6Al4V by PECVDâ€• Surface and Coatings Technology, 2019, 376, 124787.	2.2	2
3683	Effects of annealing atmospheres (Ar, N2 and air) on structural, morphological, and surface corrosion properties of a-C:H thin films. Diamond and Related Materials, 2019, 98, 107482.	1.8	7
3684	High-Temperature Reactor Cleaning Using Chlorine Trifluoride Gas for Silicon Carbide Chemical Vapor Deposition. ECS Journal of Solid State Science and Technology, 2019, 8, P400-P406.	0.9	4
3685	The optical band gap in amorphous carbon nitride thin films: Effect of sp² hybridized C atoms configurations. Fullerenes Nanotubes and Carbon Nanostructures, 2019, 27, 796-802.	1.0	4
3686	Impact of encapsulation method on the adsorbate induced electrical instability of monolayer graphene. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37, 051502.	0.9	1
3687	A root-mean-square-error analysis of two-peak Gaussian and Lorentzian fittings of thin-film carbon Raman spectral data. Journal of Applied Physics, 2019, 126, .	1.1	5
3688	Effects of carbon concentration on high-hardness plasma-polymer-fluorocarbon film deposited by mid-range frequency sputtering. Scientific Reports, 2019, 9, 10664.	1.6	8
3689	Surface micro-texturing design for improving tribological behaviour of graphene oxide thin films. Bulletin of Materials Science, 2019, 42, 1.	0.8	4
3690	Overcoming the insulating materials limitation in HiPIMS: Ion-assisted deposition of DLC coatings using bipolar HiPIMS. Applied Surface Science, 2019, 494, 871-879.	3.1	36
3691	Silver effect on the tribological and antibacterial properties of a-C:Ag coatings. Tribology International, 2019, 140, 105837.	3.0	25
3692	DLC-coating Application to Improve the Durability of Ceramic Tools. Journal of Materials Engineering and Performance, 2019, 28, 4415-4426.	1.2	38
3693	Using non-destructive testing to predict bending modulus of carbon infiltrated-carbon nanotubes. Journal of Micromechanics and Microengineering, 2019, 29, 115015.	1.5	1
3694	Wear and corrosion resistance of diamond-like carbon coatings deposited by filtered cathodic vacuum arc coupled with a high-voltage pulse power. Materials Research Express, 2019, 6, 105625.	0.8	4
3695	Changing Contents of Carbon Hybridizations in Amorphous Hydrogenated Carbon Layers (a-C:H) on Sustainable Polyhydroxybutyrate (PHB) Exhibit a Significant Deterioration in Stability, Depending on Thickness. Journal of Carbon Research, 2019, 5, 52.	1.4	11
3696	Machine Learning Interatomic Potentials as Emerging Tools for Materials Science. Advanced Materials, 2019, 31, e1902765.	11.1	389
3697	Irradiation enhanced electric property of Palladium doped diamond like carbon thin films. Materials Research Express, 2019, 6, 116447.	0.8	4
3698	Impact wear behavior of WC/a-C nanomultilayers. Materials Research Express, 2019, 6, 116443.	0.8	3
3699	Enhancement in the tribological properties of Cr/DLC multilayers in methane: structural transformation induced by sliding. SN Applied Sciences, 2019, 1, 1.	1.5	7

#	Article	IF	Citations
3700	Review: new insights into optimizing chemical and 3D surface structures of carbon electrodes for neurotransmitter detection. Analytical Methods, 2019, 11, 247-261.	1.3	68
3701	Structural properties of protective diamond-like-carbon thin films grown on multilayer graphene. Journal of Physics Condensed Matter, 2019, 31, 505703.	0.7	6
3704	Understanding X-ray Spectroscopy of Carbonaceous Materials by Combining Experiments, Density Functional Theory, and Machine Learning. Part II: Quantitative Fitting of Spectra. Chemistry of Materials, 2019, 31, 9256-9267.	3.2	49
3705	Evolution of physical properties of diamond nanoparticles deposited by DC-PECVD method after post deposition annealing. Journal of Materials Science: Materials in Electronics, 2019, 30, 20451-20458.	1.1	6
3706	Understanding X-ray Spectroscopy of Carbonaceous Materials by Combining Experiments, Density Functional Theory, and Machine Learning. Part I: Fingerprint Spectra. Chemistry of Materials, 2019, 31, 9243-9255.	3.2	62
3707	Differences in surface reactivity in two synthetic routes between HiPIMS and DC magnetron sputtered carbon. Surface and Coatings Technology, 2019, 378, 125003.	2.2	2
3708	Specifying the interlayer turning point and dehydrogenation in a-C:H layers plasma deposited on high-density polyethylene with X-ray synchrotron techniques. Thin Solid Films, 2019, 691, 137617.	0.8	9
3709	Red-shifted photoluminescence and gamma irradiation stability of â€œmicromorphâ€•(nc-Si/SiO)/DLC down-converter anti-reflection coatings. Diamond and Related Materials, 2019, 100, 107578.	1.8	8
3710	Wetting behavior investigation of a complex surface prepared by laser processing combined with carbon films coating. Surface and Coatings Technology, 2019, 378, 124989.	2.2	15
3711	The effect of bias voltage and methane concentration on chemical structure and breakdown strength of polymer-like hydrogenated carbon (PLCH) dielectric films. IEEE Transactions on Dielectrics and Electrical Insulation, 2019, 26, 1471-1478.	1.8	2
3712	Black Phosphorusâ€“Graphene Oxide Hybrid Nanomaterials toward Advanced Lubricating Properties under Water. Advanced Materials Interfaces, 2019, 6, 1901174.	1.9	30
3713	Fabrication of Amorphous Carbon Thin Film from CH₄ Using PEVCD. Materials Science Forum, 2019, 966, 95-99.	0.3	3
3714	Fluence Enhanced Optical Response of Ag Implanted Amorphous Carbon Thin Films. Journal of Carbon Research, 2019, 5, 45.	1.4	2
3715	Construction of a sp³/sp² Carbon Interface in 3D Nâ€Doped Nanocarbons for the Oxygen Reduction Reaction. Angewandte Chemie, 2019, 131, 15233-15241.	1.6	49
3716	Construction of a sp³/sp² Carbon Interface in 3D Nâ€Doped Nanocarbons for the Oxygen Reduction Reaction. Angewandte Chemie - International Edition, 2019, 58, 15089-15097.	7.2	215
3717	Diamond-Like Carbon: An Efficient Cost-Effective Material for Beverage Storing. , 2019, , 135-161.		0
3718	Highly porous carbon films fabricated by magnetron plasma enhanced chemical vapor deposition: Structure, properties and implementation. Applied Surface Science, 2019, 496, 143735.	3.1	5
3719	The efficiency of diamond-like coatings for increased wear resistance of end mills at the machining aluminum alloys. Journal of Physics: Conference Series, 2019, 1281, 012024.	0.3	0

#	Article	IF	Citations
3720	Structure Changes in Carbon Films Prepared by Electron-Beam-Assisted Deposition. Journal of Surface Investigation, 2019, 13, 317-325.	0.1	0
3721	Mass Sensing for the Advanced Fabrication of Nanomechanical Resonators. Nano Letters, 2019, 19, 6987-6992.	4.5	35
3722	Sensor Based on Diamond-Like Film Modified Electrodes for Bilirubin Detection. , 2019, , .		2
3723	Scale-up of Qâ€‘carbon and nanodiamonds by pulsed laser annealing. Diamond and Related Materials, 2019, 99, 107531.	1.8	20
3724	Fabrication of Micro- and Nanopillars from Pyrolytic Carbon and Tetrahedral Amorphous Carbon. Micromachines, 2019, 10, 510.	1.4	11
3725	Enhanced oxygen-induced properties of bulk oxygenated amorphous carbon films deposited with an anode layer ion source. Vacuum, 2019, 169, 108915.	1.6	9
3726	Effect of oxidation of copper nanoparticles on absorption spectra of DLC:Cu nanocomposites. Diamond and Related Materials, 2019, 99, 107538.	1.8	17
3727	The Effect of Nonequilibrium Synthesis Conditions on the Structure and Optical Properties of Amorphous Carbon Films. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2019, 127, 251-259.	0.2	10
3728	Producing graphene nanosheets by pulsed laser ablation: Effects of liquid environment. Journal of Laser Applications, 2019, 31, .	0.8	22
3729	Physics of High-Density Radio Frequency Capacitively Coupled Plasma with Various Electrodes and Its Applications. , 0, , .		5
3730	Structure, wear and corrosion behaviours of Crâ€“Alâ€“C and multilayer [Crâ€“Alâ€“C/a-C] coatings fabricated by physical vapour deposition and plasma-assisted chemical vapour deposition techniques. Surface and Coatings Technology, 2019, 377, 124912.	2.2	13
3731	High Temperature Characterization of a MIS Schottky Diode Based on Diamond-Like Carbon Nanocomposite Film. Journal of Electronic Materials, 2019, 48, 7874-7881.	1.0	6
3732	Effects of process parameters on optical characteristics of diamond-like carbon thin films deposited using high-power impulse magnetron sputtering. Thin Solid Films, 2019, 690, 137562.	0.8	4
3733	Influence of Deposition Positions on Fretting Behaviors of DLC Coating on Ti-6Al-4V. Tribology Transactions, 2019, 62, 1155-1172.	1.1	7
3734	Exploring the Conversion Mechanisms of Toluene as a Biomass Tar Model Compound on NiFe₂O₄ Oxygen Carrier. ACS Sustainable Chemistry and Engineering, 2019, 7, 16539-16548.	3.2	46
3735	Enhancing anti-corrosion and antifouling properties of Cu/GLC composite film for marine application. Surface and Coatings Technology, 2019, 375, 414-426.	2.2	33
3736	A boron-doped diamond like carbon coating with high hardness and low friction coefficient. Wear, 2019, 436-437, 203031.	1.5	16
3737	In situ rejuvenation on deactivated ZSM-5 zeolites by toluene during methanol to propylene reaction. Catalysis Communications, 2019, 132, 105805.	1.6	4

#	Article	IF	Citations
3738	Corrosion and scratch resistance of DLC coatings applied on chromium molybdenum steel. Surface and Coatings Technology, 2019, 378, 124944.	2.2	29
3739	One-Minute Joule Annealing Enhances the Thermoelectric Properties of Carbon Nanotube Yarns via the Formation of Graphene at the Interface. ACS Applied Energy Materials, 2019, 2, 7700-7708.	2.5	24
3740	Structure and tribological properties of DLC:Si/AlCrN low friction thin film. MATEC Web of Conferences, 2019, 252, 08002.	0.1	3
3741	Novel Solution for High-Temperature Dielectric Application to Encapsulate High-Voltage Power Semiconductor Devices. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2019, 9, 3-9.	1.4	6
3742	Tribological performance of oilâ€based ZnO and diamond nanofluids. Lubrication Science, 2019, 31, 73-84.	0.9	20
3743	Quasi-Saturated Arsenic Concentration and Uniform Electron Emission by Regulating Thermal Oxidation of Si Nanotips. IEEE Transactions on Electron Devices, 2019, 66, 1545-1551.	1.6	8
3744	Effect of oxygen on degradation of defects on ta-C coatings deposited by filtered arc deposition. Surface and Coatings Technology, 2019, 362, 200-207.	2.2	26
3745	Correlation study of structural, optical, and hydrophobicity properties of diamond-like carbon films prepared by an anode layer source. Materials Research Express, 2019, 6, 055601.	0.8	9
3746	DLC Layers Created Using CVD Techniques and Their Application. , 2019, , .		2
3747	Adjustable optical transmittance of superhydrophobic carbon soot coatings by in-situ single-step control of their physicochemical profile. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 567, 325-333.	2.3	18
3748	Superior lubrication of dense/porous-coupled nanoscale C/WS2 multilayer coating on ductile substrate. Applied Surface Science, 2019, 476, 724-732.	3.1	20
3749	Wear performance of DLC coating on plasma nitrided Astaloy Mo. Diamond and Related Materials, 2019, 93, 8-15.	1.8	18
3750	Amorphous carbon films doped with silver and chromium to achieve ultra-low interfacial electrical resistance and long-term durability in the application of proton exchange membrane fuel cells. Carbon, 2019, 145, 333-344.	5.4	60
3751	Probing fretting performance of DLC and MoS2 films under fluid lubrication. Applied Surface Science, 2019, 478, 661-679.	3.1	15
3752	Analysis of biochar with different pyrolysis temperatures used as filler in epoxy resin composites. Biomass and Bioenergy, 2019, 122, 466-471.	2.9	65
3753	Tuning the tribological property of PLD deposited DLC-Au nanocomposite thin films. Ceramics International, 2019, 45, 8847-8855.	2.3	24
3754	Capacitive storage at nitrogen doped amorphous carbon electrodes: structural and chemical effects of nitrogen incorporation. RSC Advances, 2019, 9, 4063-4071.	1.7	15
3755	A hydrothermal reacting approach to prepare few-layer graphene from bulk graphite. Applied Surface Science, 2019, 479, 20-24.	3.1	10

#	Article	IF	Citations
3756	Microstructure, adhesion and tribological behaviors of Si interlayer/Si doping diamond-like carbon film developed on nitrile butadiene rubber. Diamond and Related Materials, 2019, 92, 208-218.	1.8	15
3757	Are octahedral clusters missing on the carbon energy landscape?. Nanoscale Advances, 2019, 1, 89-93.	2.2	6
3758	Friction Features of a Rubber Surface Modified by a Carbon Coating. Journal of Friction and Wear, 2019, 40, 188-193.	0.1	3
3759	Interactions of Atomic and Molecular Hydrogen with a Diamond-like Carbon Surface: H₂ Formation and Desorption. Astrophysical Journal, 2019, 878, 23.	1.6	11
3760	Plasma enhanced Chemical Vapour deposited amorphous carbon coating for hydrophobicity enhancement in commercial cotton fabrics. Physica E: Low-Dimensional Systems and Nanostructures, 2019, 114, 113594.	1.3	14
3761	Tribological behavior of diamond-like carbon coatings with patterned structure deposited by the filtered cathodic vacuum arc. Thin Solid Films, 2019, 685, 123-130.	0.8	13
3762	The tribology behaviors of textured graphite-like carbon film under air and aqueous environments. Surface Topography: Metrology and Properties, 2019, 7, 044004.	0.9	4
3763	Synthesis of nano-carbon by in-liquid plasma method and its application to a support material of Pt catalyst for fuel cell. Nanomaterials and Nanotechnology, 2019, 9, 184798041985315.	1.2	10
3764	A study of coke formed by heavy oil volatilization/decomposition on Y-zeolite. Journal of Analytical and Applied Pyrolysis, 2019, 141, 104630.	2.6	14
3765	Wear-resistive and electrically conductive nitrogen-containing DLC film consisting of ultra-thin multilayers prepared by using filtered arc deposition. Japanese Journal of Applied Physics, 2019, 58, SEED05.	0.8	8
3766	Effect of discharge power and silicon content on optical and mechanical properties of carbon-rich amorphous silicon carbide filmsÂobtained by PECVD. Journal of Alloys and Compounds, 2019, 801, 285-294.	2.8	7
3767	Surface nanopatterning by colloidal lithography. , 2019, , 63-95.		1
3768	The Role of Substrate Temperature and Magnetic Filtering for DLC by Cathodic Arc Evaporation. Coatings, 2019, 9, 345.	1.2	8
3769	Target fabrication for laser-ion acceleration research at the Technological Laboratory of the LMU Munich. Matter and Radiation at Extremes, 2019, 4, 035201.	1.5	9
3770	The structure and properties of low temperature deposited durable infrared Ge1-xCx films on As40Se60 chalcogenide glass. Journal of Non-Crystalline Solids, 2019, 519, 119453.	1.5	4
3771	Ion irradiation (low & high energy ion) induced surface plasmon resonance in Cu(10%)C70 nanocomposite thin films. Materials Research Express, 2019, 6, 085626.	0.8	3
3772	Metal concentration dependent mechanical properties of electrodeposited nickel incorporated diamond like carbon (Ni-DLC) thin films studied by nanoindentation. Applied Surface Science, 2019, 489, 73-79.	3.1	22
3773	Hybrid graphene oxide/amorphous carbon coatings and their effect on the viability and toxicity of different cell types. Surface and Coatings Technology, 2019, 374, 95-102.	2.2	6

#	Article	IF	Citations
3774	Enhanced tribological and corrosion properties of multilayer ta-C films via alternating sp3 content. Surface and Coatings Technology, 2019, 374, 317-326.	2.2	36
3775	The optical properties of silicon carbide thin films prepared by HWCVD from pure silane and methane under various total gas partial pressure. Materials Research Express, 2019, 6, 086469.	0.8	5
3776	Quartz tuning fork as a mass sensitive biosensor platform with a bi-layer film modification via plasma polymerization. MRS Communications, 2019, 9, 710-718.	0.8	9
3777	Highly efficient steam reforming of ethanol (SRE) over CeO x grown on the nano Ni x Mg y O matrix: H 2 production under a high GHSV condition. International Journal of Energy Research, 2019, 43, 3823-3836.	2.2	12
3778	Identifying structural signatures of shear banding in model polymer nanopillars. Soft Matter, 2019, 15, 4548-4561.	1.2	22
3779	Effect of Carbon Diffusion on Friction and Wear Behaviors of Diamond-Like Carbon Coating Against Germanium in Boundary Base Oil Lubrication. Tribology Letters, 2019, 67, 1.	1.2	24
3780	Development and validation of a Ni-based catalyst for carbon dioxide dry reforming of methane process coupled to solid oxide fuel cells. International Journal of Hydrogen Energy, 2019, 44, 16582-16593.	3.8	15
3781	Effect of thickness and additional elements on the filtering properties of a thin Nafion layer. Journal of Electroanalytical Chemistry, 2019, 843, 12-21.	1.9	8
3782	Interaction effects of cathode power, bias voltage, and mid-frequency on the structural and mechanical properties of sputtered amorphous carbon films. Applied Surface Science, 2019, 487, 857-867.	3.1	16
3783	Excellent mechanical, tribological and anti-corrosive performance of novel Ti-DLC nanocomposite thin films prepared via magnetron sputtering method. Carbon, 2019, 151, 136-147.	5.4	81
3784	Key Role of Transfer Layer in Load Dependence of Friction on Hydrogenated Diamond-Like Carbon Films in Humid Air and Vacuum. Materials, 2019, 12, 1550.	1.3	33
3785	Plasma preparation method and tribological properties of diamond-like carbon coating on magnesium alloy AZ31 substrate. Science China Technological Sciences, 2019, 62, 1939-1947.	2.0	4
3786	The effects of the applied current and the measurement temperature on the negative differential resistance behaviour of carbonized xerogel. Chemical Physics, 2019, 524, 85-91.	0.9	2
3787	Effects of consecutive processing between cleaning and deposition on adhesion of diamond-like carbon prepared by plasma-based ion implantation and deposition. Nuclear Instruments & Methods in Physics Research B, 2019, 449, 58-61.	0.6	1
3788	Investigation of mechanical and tribological properties of super-thick DLC films with different modulation ratios prepared by PECVD. Materials Research Express, 2019, 6, 086433.	0.8	9
3789	High bond difference parameter-induced low thermal transmission in carbon allotropes with sp2 and sp3 hybridization. Physical Chemistry Chemical Physics, 2019, 21, 12611-12619.	1.3	3
3790	The Effects of Precursor C2H2 Fraction on Microstructure and Properties of Amorphous Carbon Composite Films Containing Si and Ag Prepared by Magnetron Sputtering Deposition. Nanomaterials, 2019, 9, 528.	1.9	3
3791	Effect of deposition pressure on the properties of amorphous carbon films by hot-filament chemical vapor deposition. Journal of Materials Science: Materials in Electronics, 2019, 30, 10145-10151.	1.1	2

#	Article	IF	Citations
3792	On the fatigue strength of uncoated and DLC coated 7075-T6 aluminum alloy. Engineering Failure Analysis, 2019, 102, 219-225.	1.8	37
3793	Structural and magnetic evolution of FexOy@carbon core-shell nanoparticles synthesized by a one-step thermal pyrolysis. Materials Characterization, 2019, 150, 213-219.	1.9	13
3794	Microstructure, mechanical and tribological properties of DLC/Cu-DLC/W-DLC composite films on SUS304 stainless steel substrates. Materials Research Express, 2019, 6, 086406.	0.8	9
3795	Preparation, Characterization, and Performance Control of Nanographitic Films. Nanomaterials, 2019, 9, 628.	1.9	4
3796	Computational study on surface energy of amorphous DLC with respect to hybridization state of carbon and potential functions. Diamond and Related Materials, 2019, 95, 127-134.	1.8	12
3797	Prediction of a-C:H layer failure on industrial relevant biopolymer polylactide acide (PLA) foils based on the sp2/sp3 ratio. Surface and Coatings Technology, 2019, 368, 79-87.	2.2	14
3798	Stabilization of Field- and Photoemission of a Planar Structure with a Nanosized Diamond-Like Carbon Film. Journal of Communications Technology and Electronics, 2019, 64, 83-88.	0.2	6
3799	Enhanced boron doping of thin diamond films grown in deuterium-rich microwave plasma. Diamond and Related Materials, 2019, 96, 198-206.	1.8	5
3800	Structural and optical properties of doped amorphous carbon films deposited by magnetron sputtering. Thin Solid Films, 2019, 681, 15-22.	0.8	12
3801	Ti content on the tribological properties of W/Ti-doped diamond-like carbon film lubricating with additives. Wear, 2019, 430-431, 137-144.	1.5	5
3802	Correlation of acetylene plasma discharge environment and the optical and electronic properties of the hydrogenated amorphous carbon films. Diamond and Related Materials, 2019, 96, 74-84.	1.8	7
3803	Plasmochemical investigations of DLC/WCx nanocomposite coatings synthesized by gas injection magnetron sputtering technique. Diamond and Related Materials, 2019, 96, 1-10.	1.8	15
3804	Nanomaterials in Superlubricity. Advanced Functional Materials, 2019, 29, 1806395.	7.8	170
3805	A Chemical, Mechanical, and Tribological Analysis of DLC Coatings Deposited by Magnetron Sputtering. Lubricants, 2019, 7, 38.	1.2	22
3806	Tailoring of carbonized polypyrrole nanotubes core by different polypyrrole shells for oxygen reduction reaction selectivity modification. Journal of Colloid and Interface Science, 2019, 551, 184-194.	5.0	27
3807	Contact-focusing electron flow induced nanosized graphene sheet formation in amorphous carbon films for fast low-friction. Carbon, 2019, 149, 45-54.	5.4	31
3808	Formation and wear performance of diamond-like carbon films on 316L stainless steel prepared by cathodic plasma electrolytic deposition. Diamond and Related Materials, 2019, 95, 135-140.	1.8	10
3809	Effect of Power Density on the Electrochemical Properties of Undoped Amorphous Carbon (aâ€C) Thin Films. Electroanalysis, 2019, 31, 746-755.	1.5	6

#	Article	IF	Citations
3810	Can insulating graphene oxide contribute the enhanced conductivity and durability of silver nanowire coating?. Nano Research, 2019, 12, 1571-1577.	5.8	29
3811	Comparative Study of Candida albicans Inactivation by Nonthermal Plasma on Stainless Steel with and without Diamond-like Carbon Film. ACS Omega, 2019, 4, 6891-6902.	1.6	7
3812	Layer dependence of graphene-diamene phase transition in epitaxial and exfoliated few-layer graphene using machine learning. 2D Materials, 2019, 6, 035043.	2.0	40
3813	Alternative Friction Mechanism for Amorphous Carbon Films Sliding against Alumina. Industrial & Engineering Chemistry Research, 2019, 58, 4810-4817.	1.8	16
3814	Enzyme-catalysed biodegradation of carbon dots follows sequential oxidation in a time dependent manner. Nanoscale, 2019, 11, 8226-8236.	2.8	38
3815	Effect of precursor gas on the structure and mechanical properties of hydrogenated amorphous carbon films deposited on a trench sidewall. Journal of Applied Physics, 2019, 125, .	1.1	7
3816	Evolution of SPR in 120ÂMeV silver ion irradiated Cu (18%) C60 nanocomposites thin films. Journal of Materials Science: Materials in Electronics, 2019, 30, 8301-8311.	1.1	2
3817	Friction performance of DLC film textured surface of high pressure dry gas sealing ring. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2019, 41, 1.	0.8	6
3818	Low-friction study between diamond-like carbon coating and Ti 6Al 4V under fretting conditions. Tribology International, 2019, 135, 368-388.	3.0	22
3819	Dependence of Wear and Mechanical Behavior of Nitrocarburized/CrN/DLC Layer on Film Thickness. Materials Research, 2019, 22, .	0.6	13
3820	Reading Contrast of Phase-Change Electrical Probe Memory in Multiple Bit Array. IEEE Nanotechnology Magazine, 2019, 18, 260-269.	1.1	5
3821	Studying the effects of plasma produced species on the optical characteristics and bonding structure of diamond-like carbon films deposited by direct current unbalanced magnetron sputtering. Materials Chemistry and Physics, 2019, 229, 348-354.	2.0	9
3822	Exploring the fluorescence properties of reduced graphene oxide with tunable device performance. Diamond and Related Materials, 2019, 94, 59-64.	1.8	10
3823	Effective Heat Treatment for Improvement in Diamond-like Carbon Coatings for Biomedical Applications. , 2019, , 205-224.		0
3824	Enhancement the graphitic nature of DLC by Au doping and incorporation of 300 keV Ni²⁺ ions in DLC thin films. Materials Research Express, 2019, 6, 066413.	0.8	1
3825	Tailoring Electro/Optical Properties of Transparent Boron-Doped Carbon Nanowalls Grown on Quartz. Materials, 2019, 12, 547.	1.3	15
3826	In situ reactivation of spent NiMoP/Î³-Al2O3 catalyst for hydrodesulfurization of straight-run gas oil. Catalysis Today, 2019, 329, 44-52.	2.2	6
3827	Optical Properties of Oxidized Plasma-Polymerized Organosilicones and Their Correlation with Mechanical and Chemical Parameters. Materials, 2019, 12, 539.	1.3	10

#	Article	IF	Citations
3828	Investigation of diamond-like carbon films as a promising dielectric material for triboelectric nanogenerator. Nano Energy, 2019, 60, 875-885.	8.2	41
3829	Atomistic understanding on friction behavior of amorphous carbon films induced by surface hydrogenated modification. Tribology International, 2019, 136, 446-454.	3.0	26
3830	Genetically optimized diamond-like carbon thin film coatings. Materials and Manufacturing Processes, 2019, 34, 1476-1487.	2.7	27
3831	High-rate, room-temperature synthesis of amorphous silicon carbide films from organo-silicon in high-density helicon wave plasma. Vacuum, 2019, 164, 355-360.	1.6	7
3832	Direct growth of nitrogen-doped graphene films on glass by plasma-assisted hot filament CVD for enhanced electricity generation. Journal of Materials Chemistry A, 2019, 7, 12038-12049.	5.2	36
3833	Hydrogenated diamond-like carbon film prepared by RF bias assisting magnetron sputtering. Materials Research Express, 2019, 6, 076403.	0.8	2
3834	Influence of particulate on surface energy and mechanical property of diamond-like carbon films synthesized by pulsed laser deposition. Applied Surface Science, 2019, 484, 1176-1183.	3.1	3
3835	DLC and DLC-WS2 Coatings for Machining of Aluminium Alloys. Coatings, 2019, 9, 192.	1.2	16
3836	Deposition of hydrophilic amorphous carbon film with ether as a source molecule and analysis of its deposition reaction. Electronics and Communications in Japan, 2019, 102, 3-9.	0.3	1
3837	Role of the carbon source in the transformation of amorphous carbon to graphene during rapid thermal processing. Physical Chemistry Chemical Physics, 2019, 21, 9384-9390.	1.3	12
3838	The effect of low temperature thermal treatment on structural and chemical composition of a-C film with nc-G admixture studied by Raman spectroscopy. Diamond and Related Materials, 2019, 95, 44-54.	1.8	1
3839	Preparation of anti-fouling heat transfer surface by magnetron sputtering a-C film on electrical discharge machining Cu surface. Surface and Coatings Technology, 2019, 369, 44-51.	2.2	7
3840	Formation of tribochemical reaction layers on a metal modified amorphous carbon coating a-C:H:Zr (ZrCg). Tribology International, 2019, 135, 152-160.	3.0	6
3841	The effects of contact configuration and coating morphology on the tribological behaviour of tetrahedral amorphous diamond-like carbon (ta-C DLC) coatings under boundary lubrication. Tribology - Materials, Surfaces and Interfaces, 2019, 13, 120-129.	0.6	2
3842	Wetting on a-C:H coatings decorated with sub-micron structures. Surface and Coatings Technology, 2019, 367, 165-172.	2.2	7
3843	Substrate Bias Voltage Tailoring the Interfacial Chemistry of a-SiC_x:H: A Surprising Improvement in Adhesion of a-C:H Thin Films Deposited on Ferrous Alloys Controlled by Oxygen. ACS Applied Materials & Interfaces, 2019, 11, 18024-18033.	4.0	19
3844	Ab initiothermodynamics study of ambient gases reacting with amorphous carbon. Physical Review B, 2019, 99, .	1.1	3
3845	Self-supporting tetrahedral amorphous carbon films consisting of multilayered structure prepared using filtered arc deposition. Thin Solid Films, 2019, 675, 123-127.	0.8	0

#	Article	IF	Citations
3846	Mechanical and Corrosion Behaviour of DLC and TiN Coatings Deposited on Martensitic Stainless Steel. Journal of Bio- and Tribo-Corrosion, 2019, 5, 1.	1.2	11
3847	Self-Saturable Absorption and Reverse-Saturable Absorption Effects in Diamond-Like Carbon Films with Embedded Copper Nanoparticles. Coatings, 2019, 9, 100.	1.2	7
3848	A self-lubricated Si incorporated hydrogenated amorphous carbon (a-C:H) film in simulated acid rain. Diamond and Related Materials, 2019, 94, 43-51.	1.8	9
3849	Raman spectroscopic studies of stress-induced structure alteration in diamond-like carbon films. Diamond and Related Materials, 2019, 94, 1-7.	1.8	19
3850	Investigation of diamond-like carbon coated steel corrosion: Enhancing the optical detection of defects by a controlled electrochemical activation. Surface and Coatings Technology, 2019, 363, 344-351.	2.2	5
3851	Highâ€Pressure Highâ€Temperature Transparent Fixedâ€Bed Reactor for Operando Gasâ€Liquid Reaction Followâ€up. Chemical Engineering and Technology, 2019, 42, 655-660.	0.9	5
3852	Heating induced nanostructure and superlubricity evolution of fullerene-like hydrogenated carbon films. Solid State Sciences, 2019, 90, 29-33.	1.5	17
3853	Surface Structuring of Diamond-Like Carbon Films by Chemical Etching of Zinc Inclusions. Coatings, 2019, 9, 125.	1.2	5
3854	Surface modification of chalcogenide glass for diamond-like-carbon coating. Applied Surface Science, 2019, 478, 802-805.	3.1	4
3855	In Situ Synthesis of CNTs/Cu Nanocomposites and the Electronic Transport Properties. Physica Status Solidi (B): Basic Research, 2019, 256, 1800557.	0.7	6
3856	Vacancy induced formation of nanoporous silicon, carbon and silicon carbide. Physical Chemistry Chemical Physics, 2019, 21, 6517-6524.	1.3	7
3857	Surface Characterization and Copper Release of a-C:H:Cu Coatings for Medical Applications. Coatings, 2019, 9, 119.	1.2	7
3858	Azideâ€'alkyne click reactions to prepare chemically modified amorphous carbon electrodes. Applied Surface Science, 2019, 480, 1109-1115.	3.1	7
3859	Effect of recovery process on the efficiency of nano-diamond synthesis by shock compression. Computational Materials Science, 2019, 160, 137-148.	1.4	2
3860	Anomalous carbon clusters in 4H-SiC/SiO2 interfaces. Journal of Applied Physics, 2019, 125, .	1.1	20
3861	Multifractal analysis of DLC thin films deposited by pulsed laser deposition. Applied Surface Science, 2019, 479, 639-645.	3.1	22
3862	Carbon-based coatings for metallic bipolar plates used in proton exchange membrane fuel cells. International Journal of Hydrogen Energy, 2019, 44, 6813-6843.	3.8	85
3863	Microscopic studies of disordered carbon-rich inclusions in ultra-high pressure glasses from impactites of the Kara astrobleme. IOP Conference Series: Materials Science and Engineering, 2019, 699, 012013.	0.3	1

#	Article	IF	Citations
3864	Aliphatic hydrocarbon content of interstellar dust. Proceedings of the International Astronomical Union, 2019, 15, 241-244.	0.0	1
3865	Structural, mechanical, and tribological characteristics of diamond-like carbon coatings. , 2019, , 171-194.		3
3866	Modeling of Amorphous-Carbon Cells for Molecular Dynamics Simulations. , 2019, , .		0
3867	Micrometric Growth Defects of DLC Thin Films. Journal of Carbon Research, 2019, 5, 73.	1.4	3
3868	High Density Arrays of Carbon Nanomembrane Ultrasonic MEMS. , 2019, , .		0
3869	A review on the mechanical properties for thin film and block structure characterised by using nanoscratch test. Nanotechnology Reviews, 2019, 8, 628-644.	2.6	38
3870	Anomalous Non-Linear to Linear Shift in Magnetoresistance of Amorphous Carbon Films. Crystals, 2019, 9, 618.	1.0	2
3871	Preliminary testing for reduction of insertion torque of orthodontic mini-screw implant using diamond-like carbon films. Journal of Physics: Conference Series, 2019, 1380, 012062.	0.3	1
3872	First principles investigation on energetics, structure, and mechanical properties of amorphous carbon films doped with B, N, and Cl. Scientific Reports, 2019, 9, 18961.	1.6	12
3873	Tribological properties of amorphous carbon in hydrochloric acid with ta-C counterpart. Surface and Coatings Technology, 2019, 380, 125004.	2.2	14
3874	Relationship between hardness and optical properties of diamond-like carbon coatings. IOP Conference Series: Materials Science and Engineering, 2019, 675, 012051.	0.3	4
3875	Effect of Amorphous Silicon Carbide Interlayer on Diamond-Like Carbon Film Structure and Film Hardness. Key Engineering Materials, 0, 825, 99-105.	0.4	0
3876	Optical and Electrical Properties of Diamond-Like Carbon Thin Film with Deposition by ECR-CVD System. Key Engineering Materials, 2019, 814, 47-52.	0.4	2
3877	Plasma Chemical Synthesis of Amorphous Hydrocarbon Films Alloyed by Silicon, Oxygen and Nitrogen. Russian Physics Journal, 2019, 62, 1199-1206.	0.2	2
3878	Performance and Durability Enhancement of Tungsten Carbide Micro-Drills by Ti/ta-C Coatings. Key Engineering Materials, 2019, 806, 76-80.	0.4	1
3879	Corrosion Resistance of DLC Film-Coated SUS316L Steel Prepared by Ion Beam Enhanced Deposition. Advances in Materials Science and Engineering, 2019, 2019, 1-13.	1.0	2
3880	Weak adhesion and delamination of hydrogenated diamond like carbon coating on a rough surface of tappet valve substrate. IOP Conference Series: Materials Science and Engineering, 2019, 689, 012001.	0.3	1
3881	Smart antimicrobial efficacy employing pH-sensitive ZnO-doped diamond-like carbon coatings. Scientific Reports, 2019, 9, 17246.	1.6	18

#	Article	IF	Citations
3882	Evaluation of the dielectric rod attenuation using the modified parallel strips that provide a relatively reasonable field environment. AIP Advances, 2019, 9, 125007.	0.6	0
3883	Investigation of Anti-Corrosive Performance of a Si-Doped DLC-Coated Magnesium Alloy Stent Deposited by RF-Plasma CVD. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2019, 32, 511-517.	0.1	10
3884	Structural and elastic properties of amorphous carbon from simulated quenching at low rates. Modelling and Simulation in Materials Science and Engineering, 2019, 27, 085009.	0.8	30
3885	Investigation of tribological behaviour of DLC coating on hyper-eutectic Al-Si alloys, a review. Materials Today: Proceedings, 2019, 18, 2581-2589.	0.9	5
3886	Fabricating Ultra-Smooth Diamond-Like Carbon Film and Investigating its Antifungal and Antibiofilm Activity. Journal of Biomimetics, Biomaterials and Biomedical Engineering, 2019, 43, 109-123.	0.5	2
3887	Assessment of Tribological Properties of Low Friction Thin Layers Produced by Vacuum Methods. Solid State Phenomena, 0, 293, 125-140.	0.3	0
3888	Hydrogen-free fluorinated DLC films with high hardness prepared by using T-shape filtered arc deposition system. Vacuum, 2019, 167, 536-541.	1.6	15
3889	A critical review of diamond like carbon coating for wear resistance applications. International Journal of Refractory Metals and Hard Materials, 2019, 78, 107-122.	1.7	170
3890	ZnSxSe1-x/N-C (xâ€¯=â€¯0.24) hierarchical nanosphere with improved energy storage capability as sodium-ion battery anode. Journal of Alloys and Compounds, 2019, 771, 147-155.	2.8	20
3891	Approach to excellent superhydrophobicity and corrosion resistance of carbonâ€based films by graphene and cobalt synergism. Surface and Interface Analysis, 2019, 51, 152-163.	0.8	6
3892	UV laser annealing of Diamond-Like Carbon layers obtained by Pulsed Laser Deposition for optical and photovoltaic applications. Applied Surface Science, 2019, 464, 562-566.	3.1	23
3893	Structure and Mechanical Properties of Gradient Metal-Carbon Coatings. Lecture Notes in Networks and Systems, 2019, , 3-10.	0.5	1
3894	The sp2-sp3 carbon hybridization content of nanocrystalline graphite from pyrolyzed vegetable oil, comparison of electrochemistry and physical properties with other carbon forms and allotropes. Carbon, 2019, 144, 831-840.	5.4	30
3895	Numerical simulation of lubricated DLC-coated point contacts under infinite sliding conditions. Tribology International, 2019, 133, 136-151.	3.0	7
3896	Tribological and corrosion performance of DLC coating on sintered Al alloy. Materials Research Express, 2019, 6, 046412.	0.8	0
3897	Attaching Photochemically Active Ruthenium Polypyridyl Complex Units to Amorphous Hydrogenated Carbon (aâ€C:H) Layers. Advanced Materials Interfaces, 2019, 6, 1801308.	1.9	4
3898	Selective bonding effect on microstructure and mechanical properties of (Al,N)-DLC composite films by ion beam-assisted cathode arc evaporation. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	1.1	9
3899	Optical and structural characterization of ultrananocrystalline diamond/hydrogenated amorphous carbon composite films deposited via coaxial arc plasma. Current Applied Physics, 2019, 19, 143-148.	1.1	13

#	Article	IF	Citations
3900	Conventional Carbon Allotropes. , 2019, , 9-33.		0
3901	Microstructure, adhesion, in vitro corrosion resistance and tribological behavior of (Si:N)-DLC coated pure Ti. Diamond and Related Materials, 2019, 92, 109-116.	1.8	23
3902	Kinetics of graphitization of thin diamond-like carbon (DLC) films catalyzed by transition metal. Diamond and Related Materials, 2019, 91, 190-198.	1.8	23
3903	Influence of pore size of Ti substrate on structural and capacitive properties of Ti/boron doped diamond electrode. Journal of Alloys and Compounds, 2019, 777, 84-93.	2.8	15
3904	Characterization and performance of coupled atmospheric pressure argon plasma jet with n-hexane electrospray for hydrophobic layer coatings on cotton textile. Diamond and Related Materials, 2019, 91, 34-45.	1.8	20
3905	Nanocrystalline Diamond. , 2019, , 123-181.		6
3906	Structural state of diamond-like amorphous carbon films, obtained by laser evaporation of carbon target. Diamond and Related Materials, 2019, 91, 225-229.	1.8	13
3907	Thermal conductivity of plasma deposited amorphous hydrogenated boron and carbon rich thin films. Journal of Nuclear Materials, 2019, 514, 154-160.	1.3	11
3908	Frequency-Modulation Atomic Force Microscopic Observation for Ultralow Frictional Solidâ€“Liquid Interface of Diamond-Like Carbon in an Environmentally Friendly Oil. Tribology Letters, 2019, 67, 1.	1.2	13
3909	Insights on low-friction mechanism of amorphous carbon films from reactive molecular dynamics study. Tribology International, 2019, 131, 567-578.	3.0	41
3910	Characterization and Formation Mechanism of the Nanodiamond Synthesized by A High Energy Arcâ€Plasma. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800704.	0.8	2
3911	Effect of temperature and bias voltage on electrical and electrochemical properties of diamond-like carbon films deposited with HiPIMS. Surface and Coatings Technology, 2019, 358, 987-993.	2.2	23
3912	Steam reforming and carbon deposition evaluation of phenol and naphthalene used as tar model compounds over Ni and Fe olivine-supported catalysts. Journal of the Energy Institute, 2019, 92, 1765-1778.	2.7	41
3913	Tribological Properties of Steel/Steel, Steel/DLC and DLC/DLC Contacts in the Presence of Biodegradable Oil. Journal of the Japan Petroleum Institute, 2019, 62, 11-18.	0.4	3
3914	Deposition temperature influence on the wear behaviour of carbon-based coatings deposited on hardened steel. Applied Surface Science, 2019, 475, 762-773.	3.1	9
3915	Low temperature, pressureless sp2 to sp3 transformation of ultrathin, crystalline carbon films. Carbon, 2019, 145, 10-22.	5.4	64
3916	Effects of bilayer number and thickness ratio on structure and properties of (Cr, N)-DLC/DLC multilayer films. Diamond and Related Materials, 2019, 92, 187-197.	1.8	11
3917	Critical methanol to ethanol volume ratio effect on the electrodeposition of DLC films. Optik, 2019, 179, 29-36.	1.4	4

#	Article	IF	Citations
3918	Characterization of DLC coatings over nitrided stainless steel with and without nitriding pre-treatment using annealing cycles. Journal of Materials Research and Technology, 2019, 8, 1653-1662.	2.6	10
3919	Fracture strength of silicon torsional mirror resonators fully coated with submicrometer-thick PECVD DLC film. Sensors and Actuators A: Physical, 2019, 286, 28-34.	2.0	11
3920	Diamond like carbon films with embedded Cu nanoclusters deposited by reactive high power impulse magnetron sputtering: Pulse length effects. Thin Solid Films, 2019, 673, 1-6.	0.8	3
3921	Mechano-chemical decomposition of organic friction modifiers with multiple reactive centres induces superlubricity of ta-C. Nature Communications, 2019, 10, 151.	5.8	118
3922	Structure and Anticorrosion, Friction, and Wear Characteristics of Pure Diamond-Like Carbon (DLC), Cr-DLC, and Cr-H-DLC Films on AZ91D Mg Alloy. Journal of Materials Engineering and Performance, 2019, 28, 1213-1225.	1.2	29
3923	Simultaneous electrochemical detection of tramadol and O-desmethyltramadol with Nafion-coated tetrahedral amorphous carbon electrode. Electrochimica Acta, 2019, 295, 347-353.	2.6	30
3924	Influence of plasma nitriding pretreatments on the tribo-mechanical properties of DLC coatings sputtered on AISI H11. Surface and Coatings Technology, 2019, 357, 1027-1036.	2.2	25
3925	Friction and wear performance of different carbon coatings for use in dry aluminium forming processes. Surface and Coatings Technology, 2019, 357, 1048-1059.	2.2	16
3926	The refractory-to-ice mass ratio in comets. Monthly Notices of the Royal Astronomical Society, 2019, 482, 3326-3340.	1.6	59
3927	Improvement of thermal stability, adhesion strength and corrosion performance of diamond-like carbon films with titanium doping. Applied Surface Science, 2019, 469, 471-486.	3.1	52
3928	The influence of positive pulses on HiPIMS deposition of hard DLC coatings. Surface and Coatings Technology, 2019, 358, 43-49.	2.2	52
3929	Effect of humidity on the friction properties of a-C:H and a-C:H:Si films deposited by PECVD employing microwave sheath-voltage combination plasma. Japanese Journal of Applied Physics, 2019, 58, SAAC06.	0.8	2
3930	Triboâ€Induced Structural Transformation and Lubricant Dissociation at Amorphous Carbonâ€“Alpha Olefin Interface. Advanced Theory and Simulations, 2019, 2, 1800157.	1.3	18
3931	Silicon Oxideâ€Rich Diamondâ€Like Carbon: A Conformal, Ultrasmooth Thin Film Material with High Thermoâ€Oxidative Stability. Advanced Materials Interfaces, 2019, 6, 1801416.	1.9	13
3932	Hydrogenated amorphous carbon films with different nanostructure: A comparative study. Chemical Physics Letters, 2019, 715, 330-334.	1.2	10
3933	Tuning the structure and wetting properties of organic-inorganic nanocomposite coatings prepared by aerosol-assisted atmospheric pressure cold plasma deposition. Surface and Coatings Technology, 2019, 358, 67-75.	2.2	10
3934	Detailed study of structural, mechanical and tribological characteristics of ~100â€¯nm sized carbon particles embedded amorphous carbon coatings. Surface and Coatings Technology, 2019, 357, 313-321.	2.2	4
3935	Synthesis and structural evolution of hydrogenated amorphous silicon carbide thin film with carbon nanostructures. Journal of Non-Crystalline Solids, 2019, 503-504, 252-259.	1.5	10

#	Article	IF	Citations
3936	Effect of substrate bias on biocompatibility of amorphous carbon coatings deposited on Ti6Al4V by PECVD. Surface and Coatings Technology, 2019, 357, 212-217.	2.2	14
3937	The comparison of structure and properties in DC magnetron sputtered and HiPIMS W-C:H coatings with different hydrogen content. Ceramics International, 2019, 45, 9502-9514.	2.3	19
3938	Hollow cathode effects observed in magnetically confined plasmas used for deposition of DLC films via PIII&D in tubes. Applied Surface Science, 2019, 465, 824-832.	3.1	8
3939	Electric-field-induced photoconductivity and resistance switching in Fe-doped amorphous carbon/PMN-PT heterostructures. Materials Research Express, 2019, 6, 015203.	0.8	0
3940	High-ion-energy and low-temperature deposition of diamond-like carbon (DLC) coatings with pulsed kV bias. Surface and Coatings Technology, 2019, 365, 152-157.	2.2	21
3941	Tribology of Nanostructured Surfaces. , 2019, , 309-342.		4
3942	Improved wear resistance at high contact stresses of hydrogen-free diamond-like carbon coatings by carbon/carbon multilayer architecture. Applied Surface Science, 2019, 477, 137-146.	3.1	35
3943	On the S/W stoichiometry and triboperformance of WSxC(H) coatings deposited by magnetron sputtering. Surface and Coatings Technology, 2019, 365, 41-51.	2.2	20
3944	Tribological performance of graphite-like carbon films with varied thickness. Tribology International, 2020, 149, 105586.	3.0	26
3945	Multiscale boundary frictional performance of diamond like carbon coatings. Tribology International, 2020, 149, 105539.	3.0	13
3946	Synchrotron-based NEXAFS analysis of thermal-treated diamond-like carbon films. Radiation Physics and Chemistry, 2020, 175, 108271.	1.4	3
3947	Electrical and Optical Characterization of Acetylene RF CCP for Synthesis of Different Forms of Hydrogenated Amorphous Carbon Films. Plasma Chemistry and Plasma Processing, 2020, 40, 387-406.	1.1	2
3948	Adhesion, biological corrosion resistance and biotribological properties of carbon films deposited on MAO coated Ti substrates. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 101, 103448.	1.5	27
3949	Towards a better understanding of the structure of diamanoÃ¯ds and diamanoÃ¯d/graphene hybrids. Carbon, 2020, 156, 234-241.	5.4	40
3950	Influence of deposition temperature on the structure, optical and electrical properties of a-C films by DCMS. Applied Surface Science, 2020, 503, 144310.	3.1	12
3951	Synthesis of thin films and coatings by high power impulse magnetron sputtering. , 2020, , 333-374.		6
3952	Effects of working pressure on structure and properties of Al-containing amorphous carbon films prepared by high-power impulse magnetron sputtering. Journal of Alloys and Compounds, 2020, 816, 152587.	2.8	6
3953	Characteristics of DLC/oxynitriding duplex-treated V8 tool steel by DC-pulsed PECVD. Surface Engineering, 2020, 36, 516-523.	1.1	8

#	Article	IF	Citations
3954	Electro-tribological properties of diamond like carbon coatings. Friction, 2020, 8, 451-461.	3.4	13
3955	Dualâ€Electromagnetic Field Enhancements through Suspended Metal/Dielectric/Metal Nanostructures and Plastic Phthalates Detection in Child Urine. Advanced Optical Materials, 2020, 8, 1901305.	3.6	14
3956	Nanosecond pulsed laser-processing of CVD diamond. Optics and Lasers in Engineering, 2020, 126, 105917.	2.0	26
3957	Atmospheric pressure plasma jet: A complete tool for surface enhanced Raman spectroscopy substrates preparation. Vacuum, 2020, 172, 109033.	1.6	8
3958	Novel strategy to improve the tribological property of polymer: In-situ growing amorphous carbon coating on the surface. Applied Surface Science, 2020, 505, 144626.	3.1	9
3959	Thermal decomposition and structural variation by heating on hydrogenated amorphous carbon films. Diamond and Related Materials, 2020, 101, 107609.	1.8	6
3960	Production and performance study of Diamond-Like Carbon resistive electrode in MPGD. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 958, 162759.	0.7	12
3961	On the adhesion and wear resistance of DLC films deposited on nitrile butadiene rubber: A Ti-C interlayer. Diamond and Related Materials, 2020, 101, 107563.	1.8	20
3962	Rewritable Optical Memory Based on Sign Switching of Magnetoresistance. Advanced Electronic Materials, 2020, 6, 1900701.	2.6	3
3963	Tailoring of Silver Nanoparticle Size Distributions in Hydrogenated Amorphous Diamondâ€Like Carbon Nanocomposite Thin Films by Direct Femtosecond Laser Interference Patterning. Advanced Engineering Materials, 2020, 22, 1900951.	1.6	12
3964	Karite â€“ diamond fossil: A new type of natural diamond. Geoscience Frontiers, 2020, 11, 1163-1174.	4.3	8
3965	A comparative study of surface morphology, mechanical and tribological properties of DLC films deposited on Cr and Ni nanolayers. Ceramics International, 2020, 46, 5077-5085.	2.3	30
3966	Crystalline transformation from ta-C to graphene induced by a catalytic Ni layer during annealing. Diamond and Related Materials, 2020, 101, 107556.	1.8	5
3967	Pressure-induced irreversible amorphization of naphthalene and nitrogen-containing heteroaromatic compounds at room temperature. Chemical Physics Letters, 2020, 739, 136921.	1.2	2
3968	Effects of acetylene flow rate and bias voltage on the structural and tribo-mechanical properties of sputtered a-C:H films. Thin Solid Films, 2020, 693, 137691.	0.8	8
3969	Influence of the solvent environment on luminescent centers within carbon dots. Nanoscale, 2020, 12, 602-609.	2.8	47
3970	Tribological behavior under high temperature of BCN films deposited by sputtering-PBII hybrid system. Surfaces and Interfaces, 2020, 18, 100434.	1.5	4
3971	Tribochemistry of ultra-low friction fullerene-like carbon films in humid air. Applied Surface Science, 2020, 507, 145040.	3.1	16

#	Article	IF	Citations
3972	Integration of MoST and Graphit-iC coatings for the enhancement of tribological and corrosive properties. Applied Surface Science, 2020, 506, 144961.	3.1	8
3973	Preparation of silicon-doped diamond-like carbon films with electrical conductivity by reactive high-power impulse magnetron sputtering combined with a plasma-based ion implantation system. Diamond and Related Materials, 2020, 101, 107635.	1.8	6
3974	An efficient ITO-free transparent electrode based on diamond-like carbon with an engineered intermediate metallic thin-film. Solar Energy, 2020, 196, 327-335.	2.9	11
3975	Friction properties of carbon nanoparticles (nanodiamond and nanoscroll) confined between DLC and a-SiO2 surfaces. Tribology International, 2020, 145, 106153.	3.0	22
3976	Influence of the distribution of local field enhancement factors on the shape of the current-voltage characteristics of carbon-nanotube-based large-area emitters. Vacuum, 2020, 173, 109159.	1.6	10
3977	High-Density COH_x Network Glass. Journal of Physical Chemistry C, 2020, 124, 107-114.	1.5	3
3978	Ultrastrong Ï€-Bonded Interface as Ductile Plastic Flow Channel in Nanostructured Diamond. ACS Applied Materials & Interfaces, 2020, 12, 4135-4142.	4.0	7
3979	Pure carbon conductive transparent electrodes synthetized by a full laser deposition and annealing process. Applied Surface Science, 2020, 505, 144505.	3.1	14
3980	Stability, elastic properties and deformation behavior of graphene-based diamond-like phases. Computational Materials Science, 2020, 172, 109355.	1.4	22
3981	Mode transition induced by gas pressure in dusty acetylene microdischarges: two-dimensional simulation. Plasma Science and Technology, 2020, 22, 045402.	0.7	2
3982	Current density effect on current-carrying friction of amorphous carbon film. Carbon, 2020, 157, 113-119.	5.4	49
3983	Changes in oriented graphitic carbon properties upon exposure to atomic hydrogen. Diamond and Related Materials, 2020, 101, 107612.	1.8	1
3984	Tribological studies on multi-coated forming tools. Journal of Manufacturing Processes, 2020, 49, 141-152.	2.8	11
3986	New generation carbon particles embedded diamond-like carbon coatings for transportation industry. , 2020, , 307-332.		1
3987	Comparison of the properties of a-C:H films deposited from methane and heptane precursors: study of the mechanical, chemical and structural properties. Thin Solid Films, 2020, 695, 137733.	0.8	4
3988	Electrochemical reduction of CO2 to carbon films on stainless steel around room temperature. Electrochemistry Communications, 2020, 110, 106606.	2.3	5
3989	MEMS piezo-resistive force sensor based on DC sputtering deposited amorphous carbon films. Sensors and Actuators A: Physical, 2020, 303, 111700.	2.0	14
3990	Formation of rod-shaped wear debris and the graphitization tendency of Cu-doped hydrogenated diamond-like carbon films. Diamond and Related Materials, 2020, 102, 107654.	1.8	15

#	Article	IF	Citations
3991	Crack-tip plasticity and intrinsic toughening in nano-sized brittle amorphous carbon. International Journal of Plasticity, 2020, 127, 102642.	4.1	9
3992	The formation of the â€œrod-like wear debrisâ€•and tribological properties of Ag-doped diamond-like carbon films fabricated by a high-power pulsed plasma vapor deposition technique. Vacuum, 2020, 173, 109125.	1.6	22
3993	Effect of Electrolyte Type on Properties of Diamond - like Carbon Films Electrodeposited onto N-Type Si Substrate, Application as Electrode for Supercapacitors. Silicon, 2020, 12, 2445-2453.	1.8	7
3994	An XPS/UPS study of the surface/near-surface bonding in nuclear grade graphites: A comparison of monatomic and cluster depth-profiling techniques. Applied Surface Science, 2020, 508, 144764.	3.1	53
3995	Improvement of tribological properties of sintered self-lubricating composites produced by surface Mo-enrichment. Wear, 2020, 442-443, 203123.	1.5	4
3996	Preparation of Fe3O4@C composite nanoparticles with core-shell structure in subcritical water condition. Diamond and Related Materials, 2020, 101, 107627.	1.8	8
3997	Effects of pulse power and argon flux flow rate on mechanical and tribological properties of diamond-like carbon coatings prepared using high power impulse magnetron sputtering technology. Thin Solid Films, 2020, 693, 137712.	0.8	7
3998	Tribological solutions for engine piston ring surfaces: an overview on the materials and manufacturing. Materials and Manufacturing Processes, 2020, 35, 498-520.	2.7	31
3999	Superlubricity of carbon nanostructures. Carbon, 2020, 158, 1-23.	5.4	163
4000	Coke formation and deactivation during catalytic reforming of biomass and waste pyrolysis products: A review. Renewable and Sustainable Energy Reviews, 2020, 119, 109600.	8.2	278
4001	Optical band gap analysis of soot and organic carbon in premixed ethylene flames: Comparison of in-situ and ex-situ absorption measurements. Carbon, 2020, 158, 89-96.	5.4	26
4002	Structure and properties of molybdenum-disulfide/amorphous carbon composited coatings deposited by co-sputtering method. Diamond and Related Materials, 2020, 101, 107643.	1.8	4
4003	Atomic layer deposition for nonconventional nanomaterials and their applications. Journal of Materials Research, 2020, 35, 656-680.	1.2	9
4004	The role of methane in the formation of fullerene-like nanostructure in amorphous carbon film deposited by reactive magnetron sputtering. Diamond and Related Materials, 2020, 109, 108018.	1.8	3
4005	Corrosion performance of DLC coatings with laser-induced graphitized periodic surface structure. Diamond and Related Materials, 2020, 109, 108046.	1.8	2
4006	Properties of polydimethylsiloxane hydrophobic modified duplex microarc oxidation/diamond-like carbon coatings on AZ31B Mg alloy. Journal of Magnesium and Alloys, 2020, , .	5.5	25
4007	Probing fatigue resistance in multi-layer DLC coatings by micro- and nano-impact: Correlation to erosion tests. Surface and Coatings Technology, 2020, 402, 126319.	2.2	22
4008	Loosening behaviour of threaded fasteners under cyclic shear displacement. Wear, 2020, 460-461, 203453.	1.5	3

#	Article	IF	Citations
4009	The relationship between the Raman spectral form and the location of the corresponding sample within the overall thin-film carbon genome. Solid State Communications, 2020, 322, 114059.	0.9	3
4010	Influence of growth defects on the running-in behavior of an a-C:H:W coating under pure sliding contact conditions. Surface and Coatings Technology, 2020, 402, 126278.	2.2	5
4011	Different Cr Contents on the Microstructure and Tribomechanical Properties of Multi-Layered Diamond-Like Carbon Films Prepared by Unbalanced Magnetron Sputtering. Journal of Materials Engineering and Performance, 2020, 29, 7131-7140.	1.2	9
4012	Effect of Fluorine Incorporation on DLC Films Deposited by Pulsed Cathodic Arc Deposition on Nitrile Butadiene Rubber and Polyurethane Rubber Substrates. Coatings, 2020, 10, 878.	1.2	6
4013	Synthesis of Diamond-Like Carbon Nanofiber Films. ACS Nano, 2020, 14, 13663-13672.	7.3	14
4014	Robust and durable superhydrophobic F-DLC coating for anti-icing in aircrafts engineering. Surface and Coatings Technology, 2020, 404, 126468.	2.2	23
4015	Preparation of boron-doped diamond nanospikes on porous Ti substrate for high-performance supercapacitors. Electrochimica Acta, 2020, 354, 136649.	2.6	14
4016	Effect of the Variation of Film Thickness on the Properties of Multilayered Si-Doped Diamond-Like Carbon Films Deposited on SUS 304, Al and Cu Substrates. Journal of Materials Engineering and Performance, 2020, 29, 8473-8483.	1.2	6
4017	Evaluation of Nitriding, Nitrocarburizing, Organosilicon Interlayer, Diamond-Like Carbon Film and Duplex Plasma Treatment in the Wear and Corrosion Resistance of AISI 4340 Steel. Journal of Materials Engineering and Performance, 2020, 29, 8107-8121.	1.2	7
4018	Effects of Varying Power and Argon Gas Flux on Tribological Properties and High-Speed Drilling Performance of Diamond-Like Carbon Coatings Deposited using High-Power Impulse Magnetron Sputtering System. Journal of Materials Engineering and Performance, 2020, 29, 7291-7307.	1.2	3
4019	Mechanical and Tribological Properties and High-Speed Drilling Performance of NbTiN Coatings Prepared by High-Power Impulse Magnetron Sputtering with Varying Nitrogen and Acetylene Flux Rates. Journal of Materials Engineering and Performance, 2020, 29, 8194-8212.	1.2	1
4020	Effect of Cellulose Nanocrystals on the Coating of Chitosan Nanocomposite Film Using Plasma-Mediated Deposition of Amorphous Hydrogenated Carbon (aâ€“C:H) Layers. Journal of Carbon Research, 2020, 6, 51.	1.4	3
4021	Experimental and theoretical study of a magnetron DC-PECVD acetylene discharge: Determination of the main species and reactions taking place in the plasma. Surface and Coatings Technology, 2020, 400, 126195.	2.2	4
4022	Influence Factors on Mechanisms of Superlubricity in DLC Films: A Review. Frontiers in Mechanical Engineering, 2020, 6, .	0.8	33
4023	The effect of Ge content on the structure and properties of low temperature deposited infrared Ge100-xCx films on As40Se60 chalcogenide glass. Optik, 2020, 224, 165413.	1.4	0
4024	Nanoscale Run-In of Silicon Oxide-Doped Hydrogenated Amorphous Carbon: Dependence of Interfacial Shear Strength on Sliding Length and Humidity. Tribology Letters, 2020, 68, 1.	1.2	4
4025	Structural and mechanism study on enhanced thermal stability of hydrogenated diamond-like carbon films doped with Si/O. Diamond and Related Materials, 2020, 108, 107923.	1.8	16
4026	Formation mechanisms of zinc, molybdenum, sulfur and phosphorus containing reaction layers on a diamondâ€like carbon (DLC) coating. Materialwissenschaft Und Werkstofftechnik, 2020, 51, 1009-1030.	0.5	2

#	Article	IF	Citations
4027	Sustainable production of self-activated bio-derived carbons through solar pyrolysis for their use in supercapacitors. Journal of Analytical and Applied Pyrolysis, 2020, 150, 104901.	2.6	21
4028	Effect of chromium doping on high temperature tribological properties of silicon-doped diamond-like carbon films. Tribology International, 2020, 152, 106546.	3.0	13
4029	Effect of interatomic potentials on modeling the nanostructure of amorphous carbon by liquid quenching method. Computational Materials Science, 2020, 184, 109939.	1.4	10
4030	Molecular dynamics simulation on deformation behavior of DLC films based on Î³-Fe/CrN matrix. Materials Today Communications, 2020, 25, 101460.	0.9	4
4031	Quantitative Effects of Disorder on Chemically Modified Amorphous Carbon Electrodes. ACS Applied Energy Materials, 2020, 3, 8038-8047.	2.5	8
4032	Anti-sand erosion and tribological performance of thick DLC coatings deposited by the filtered cathodic vacuum arc. Applied Surface Science, 2020, 533, 147371.	3.1	23
4033	Molecular dynamics simulations of internal stress evolution in ultrathin amorphous carbon films subjected to thermal annealing. Thin Solid Films, 2020, 713, 138247.	0.8	9
4034	Low resistivity amorphous carbon-based thin films employed as anti-reflective coatings on copper. Thin Solid Films, 2020, 712, 138319.	0.8	6
4035	Machine learning driven simulated deposition of carbon films: From low-density to diamondlike amorphous carbon. Physical Review B, 2020, 102, .	1.1	44
4036	Influence of cellulose microfiber reinforcement for polyvinyl alcohol on the layer growth of plasma-deposited a-C:H. Diamond and Related Materials, 2020, 109, 108065.	1.8	2
4037	Fundamental understanding on low-friction mechanisms at amorphous carbon interface from reactive molecular dynamics simulation. Carbon, 2020, 170, 621-629.	5.4	23
4038	Optical measure of disorder: Why Urbach analysis works for amorphous silicon but fails for amorphous carbon. Diamond and Related Materials, 2020, 110, 108137.	1.8	4
4039	Mechanical Properties and Biocompatibility of Ti-doped Diamond-like Carbon Films. ACS Omega, 2020, 5, 22772-22777.	1.6	31
4040	CVD-diamond nanoparticle synthesis for DLC film application. Journal of Nanoparticle Research, 2020, 22, 1.	0.8	6
4041	Tribological properties improvement of H-DLC films through reconstruction of microstructure and surface morphology by low-energy helium ion irradiation. Diamond and Related Materials, 2020, 109, 108080.	1.8	5
4042	Synthesis and characterization of hexamethyldisilane films deposited on stainless steel by plasma-enhanced chemical vapour deposition. Surface and Coatings Technology, 2020, 404, 126443.	2.2	4
4043	Deposition, morphology and functional properties of layers based on DLC:Si and DLC:N on polyurethane. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	1.1	7
4044	Probing Tribological Behaviors of Cr-DLC in Corrosion Solution by Tailoring Sliding Interface. Tribology Letters, 2020, 68, 1.	1.2	9

#	Article	IF	Citations
4045	Diamond-Like Carbon Films with Low Internal Stress by a Simple Bilayer Approach. Coatings, 2020, 10, 696.	1.2	4
4046	Thermal Annealing of Molecular Layer-Deposited Indicone Toward Area-Selective Atomic Layer Deposition. ACS Applied Materials & Interfaces, 2020, 12, 43212-43221.	4.0	11
4047	Nanoâ€Twisted Double Helix Carbon Debris Improves the Wear Resistance of Ultraâ€Thick Diamondâ€Like Carbon Coatings. Advanced Materials Interfaces, 2020, 7, 2000857.	1.9	10
4048	Tailoring the Nanostructure of Graphene as an Oil-Based Additive: toward Synergistic Lubrication with an Amorphous Carbon Film. ACS Applied Materials & Interfaces, 2020, 12, 43320-43330.	4.0	34
4049	Modification of the Ratio between sp2- to sp3-Hybridized Carbon Components in PECVD Diamond-Like Films. Semiconductors, 2020, 54, 1047-1050.	0.2	0
4050	Accurate estimation of DLC thin film hardness using genetic programming. International Journal of Materials Research, 2020, 111, 453-462.	0.1	10
4051	Development of THGEM-like detectors with diamond-like carbon resistive electrodes. Journal of Instrumentation, 2020, 15, P11013-P11013.	0.5	4
4052	Influence of Diamond-Like Carbon Coating on the Channel Deformation of Injection-Molded Microfluidic Chips during the Demolding Process. Polymers, 2020, 12, 2914.	2.0	8
4053	Reactive Plasma N-Doping of Amorphous Carbon Electrodes: Decoupling Disorder and Chemical Effects on Capacitive and Electrocatalytic Performance. Frontiers in Chemistry, 2020, 8, 593932.	1.8	4
4054	Nano-Scratch Response of Diamond-Like Carbon Film Deposited by Pulsed Direct Current Magnetron Sputtering. International Journal of Surface Engineering and Interdisciplinary Materials Science, 2020, 8, 19-37.	0.2	1
4055	A Comprehensive Study about the Role of Crosslink Density on the Tribological Behavior of DLC Coated Rubber. Materials, 2020, 13, 5460.	1.3	6
4056	A comparative study of the mechanical and tribological properties of intermittently and continuously grown multilayer diamond films on RB-SiC. Diamond and Related Materials, 2020, 110, 108140.	1.8	5
4057	The effect of nitrogen concentration on N-doped diamond-like carbon films prepared by plasma-electrolytic method. Inorganic and Nano-Metal Chemistry, 2021, 51, 1686-1696.	0.9	1
4058	Comparison of Carbon Thin Films with Low Secondary Electron Yield Deposited in Neon and Argon. Coatings, 2020, 10, 884.	1.2	10
4059	Structural Analysis of Boron- and Nitrogen-Doped Amorphous Carbon Films from Bio-Product. Key Engineering Materials, 0, 860, 190-195.	0.4	2
4060	Electrical Characterization of N- and B- Doped Amorphous Carbon Film from Palmyra Sugar. Key Engineering Materials, 0, 860, 196-201.	0.4	3
4061	Influence of DLC Coatings Deposited by PECVD Technology on the Wear Resistance of Carbide End Mills and Surface Roughness of AlCuMg2 and 41Cr4 Workpieces. Coatings, 2020, 10, 1038.	1.2	13
4062	Interfacial Mechanical Strength Enhancement for High-Performance ZnS Thin-Film Anodes. ACS Applied Materials & Interfaces, 2020, 12, 51344-51356.	4.0	16

#	Article	IF	Citations
4063	Multi-attribute optimization of diamond-like carbon thin films. AIP Conference Proceedings, 2020, , .	0.3	3
4064	Lessening coke formation and boosting gasoline yield by incorporating scrap tire pyrolysis oil in the cracking conditions of an FCC unit. Energy Conversion and Management, 2020, 224, 113327.	4.4	13
4065	Effect of Thickness on Tribological Behavior of Hydrogen Free Diamond-like Carbon Coating. Coatings, 2020, 10, 243.	1.2	10
4066	Laser-induced graphitized periodic surface structure formed on tetrahedral amorphous carbon films. Diamond and Related Materials, 2020, 107, 107909.	1.8	6
4067	Effects of reaction parameters on the deoxygenation of soybean oil for the sustainable production of hydrocarbons. Environmental Progress and Sustainable Energy, 2020, 39, e13450.	1.3	14
4068	Influence of Sintered Low-Alloy Steel Microstructure on the DLC Coating Characteristics. Transactions of the Indian Institute of Metals, 2020, 73, 1123-1130.	0.7	2
4069	Fabrication of bio-inspired deterministic surfaces by photochemical machining for tribological applications. Tribology International, 2020, 150, 106341.	3.0	11
4070	Perovskite-type SrTiO3 thin film preparation and field emission properties. Vacuum, 2020, 178, 109466.	1.6	8
4071	Regulation of dielectric loss by different exposed crystal facets in graphite-coated titanium carbide nanocomposites. Ceramics International, 2020, 46, 18339-18346.	2.3	19
4072	Mechanism of chlorine treatment in the resistivity stabilization of high-performance AZO/i-ZnO composite transparent conductive layer. Ceramics International, 2020, 46, 20819-20829.	2.3	2
4073	Amorphous carbon having higher catalytic activity toward oxygen reduction reaction: Quinone and carboxy groups introduced onto its surface. Diamond and Related Materials, 2020, 107, 107900.	1.8	7
4074	Impact of pressure on carbon films by PECVD toward high deposition rates and high stability as metallic bipolar plate for PEMFCs. International Journal of Hydrogen Energy, 2020, 45, 16277-16286.	3.8	40
4075	Effects of Pyrolysis Conditions and Feedstocks on the Properties and Gasification Reactivity of Charcoal from Woodchips. Energy & Fuels, 2020, 34, 8353-8365.	2.5	36
4076	o-C240: a new sp3-dominated allotrope of carbon. Journal of Physics Condensed Matter, 2020, 32, 395401.	0.7	12
4077	Transformations of Propane and Its Mixture with Methane in the Presence of Water in Dielectric-Barrier Discharge. Petroleum Chemistry, 2020, 60, 380-383.	0.4	0
4078	Structure evolution during deposition and thermal annealing of amorphous carbon ultrathin films investigated by molecular dynamics simulations. Scientific Reports, 2020, 10, 8089.	1.6	19
4079	Structure and properties of different elements doped diamond-like carbon on micro-arc oxidation coated AZ31B Mg alloy. Diamond and Related Materials, 2020, 106, 107832.	1.8	16
4080	Origin of optical bandgap fluctuations in graphene oxide. European Physical Journal B, 2020, 93, 1.	0.6	11

#	Article	IF	Citations
4081	The Effects of Magnetic Field on the Properties of Diamond-Like Carbon Films Produced by High-Density Helicon Wave Plasma. IEEE Transactions on Plasma Science, 2020, 48, 2431-2436.	0.6	2
4082	Formation of Q-carbon by adjusting sp3 content in diamond-like carbon films and laser energy density of pulsed laser annealing. Carbon, 2020, 167, 504-511.	5.4	22
4083	The structure and properties of amorphous diamond-like carbon films deposited by helicon wave plasma chemical vapor deposition. Thin Solid Films, 2020, 709, 138167.	0.8	6
4084	Effect of electrical discharge power on mechanical properties of N-DLC films deposited by atmospheric DBD plasma. Superlattices and Microstructures, 2020, 145, 106633.	1.4	3
4085	Carbon resistive probe memory designed for ultra-high storage density. Nanotechnology, 2020, 31, 385204.	1.3	2
4086	Constitutive relations for plasticity of amorphous carbon. JPhys Materials, 2020, 3, 035005.	1.8	4
4087	Enhanced high-frequency microwave absorption in core-shell nanocapsules with atomic-scale oxygen substitutions. Journal of Applied Physics, 2020, 127, .	1.1	7
4088	Biological responses at the interface of Ti-doped diamond-like carbon surfaces for indoor environment application. Environmental Science and Pollution Research, 2020, 27, 31120-31129.	2.7	6
4089	High power impulse magnetron sputtering of diamond-like carbon coatings. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, .	0.9	12
4090	Electrodeposition and biocompatibility of palladium and phosphorus doped amorphous hydrogenated carbon films. Chemical Physics, 2020, 537, 110857.	0.9	9
4091	Improved Thermal Resistance and Electrical Conductivity of a Boron-Doped DLC Film Using RF-PECVD. Frontiers in Materials, 2020, 7, .	1.2	5
4092	A strategy to construct long-range fullerene-like nanostructure in amorphous carbon film with improved toughness and carrying capacity. Journal Physics D: Applied Physics, 2020, 53, 335205.	1.3	14
4093	Laser structuring of hydrogenated DLC scaffolds: Raman spectroscopy and nanotribology. Diamond and Related Materials, 2020, 108, 107787.	1.8	6
4094	A Comprehensive Numerical Study on Friction Reduction and Wear Resistance by Surface Coating on Cam/Tappet Pairs under Different Conditions. Coatings, 2020, 10, 485.	1.2	7
4095	Controlling Cu Migration on Resistive Switching, Artificial Synapse, and Glucose/Saliva Detection by Using an Optimized AlO_x Interfacial Layer in a-CO_x-Based Conductive Bridge Random Access Memory. ACS Omega, 2020, 5, 7032-7043.	1.6	30
4096	Revealing the corrosion resistance of amorphous carbon films under heat shock via annealing. Diamond and Related Materials, 2020, 102, 107692.	1.8	7
4097	Effects of adding hydrocarbon gas to a high-power impulse magnetron sputtering system on the properties of diamond-like carbon films. Thin Solid Films, 2020, 701, 137924.	0.8	8
4098	Sub-micron structuring/texturing of diamond-like carbon-coated replication masters with a femtosecond laser. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	1.1	14

#	Article	IF	Citations
4099	Role of nitrogenated carbon in tuning Pt-CeOx based anode catalysts for higher performance of hydrogen-powered fuel cells. Applied Surface Science, 2020, 515, 146054.	3.1	6
4100	Hydrothermal synthesized magnesium silicate hydroxide/graphene nanocomposites in a MgO-SiO2-graphite-H2O alkaline system and its application in anti-wear additive toward infinitesimal wear. Tribology International, 2020, 148, 106313.	3.0	15
4101	Recent progress in high-performance photo-detectors enabled by the pulsed laser deposition technology. Journal of Materials Chemistry C, 2020, 8, 4988-5014.	2.7	18
4102	Diamond-Graphene Composite Nanostructures. Nano Letters, 2020, 20, 3611-3619.	4.5	54
4103	Assessment of coke deposits on lamellar metal-modified MFI zeolites in ethylene transformation to aromatic liquids. Applied Catalysis A: General, 2020, 595, 117510.	2.2	11
4104	Bonding States of Hydrogen in Plasma-Deposited Hydrocarbon Films. Journal of Carbon Research, 2020, 6, 3.	1.4	4
4105	A Strategy for Alleviating Micro Arcing during HiPIMS Deposition of DLC Coatings. Materials, 2020, 13, 1038.	1.3	6
4106	Refinement of Sustainable Polybutylene Adipate Terephthalate (PBAT) with Amorphous Hydrogenated Carbon Films (a-C:H) Revealing Film Instabilities Influenced by a Thickness-Dependent Change of sp2/sp3 Ratio. Materials, 2020, 13, 1077.	1.3	9
4107	Experimental Approach to Physicochemical Hydrogen Processes on Cosmic Ice Dust. Journal of the Physical Society of Japan, 2020, 89, 051015.	0.7	6
4108	Effect of helium incorporation on plasma parameters and characteristic properties of hydrogen free carbon films deposited using DC magnetron sputtering. Journal of Applied Physics, 2020, 127, .	1.1	3
4109	Thermionic Vacuum Arcâ€"A Versatile Technology for Thin Film Deposition and Its Applications. Coatings, 2020, 10, 211.	1.2	28
4110	Past Achievements and Future Challenges in the Development of Infrared Antireflective and Protective Coatings. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 2000149.	0.8	8
4111	Structure and optical properties of diamond like carbon films containing aluminium and alumina. Applied Surface Science, 2020, 529, 147040.	3.1	11
4112	Fabrication of (a-nc) boron carbide thin films via chemical vapor deposition using ortho-carborane. Journal of Asian Ceramic Societies, 2020, 8, 327-335.	1.0	4
4113	Influence of RF power and CH4 flow rate on properties of diamond-like carbon films deposited by PECVD technique. Radiation Physics and Chemistry, 2020, 176, 109073.	1.4	6
4114	Thermo-optical properties of hydrogenated amorphous carbon and nitrogen-modified carbon layers from in situ ellipsometric studies. Journal of Materials Research and Technology, 2020, 9, 1698-1707.	2.6	7
4115	Production and properties of a charging-up â€œFreeâ€•THGEM with DLC coating. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 966, 163868.	0.7	7
4116	Low Friction at the Nanoscale of Hydrogenated Fullerene-Like Carbon Films. Coatings, 2020, 10, 643.	1.2	2

#	Article	IF	Citations
4117	Synthesis of hard diamond-like carbon films by double-pulse high-power impulse magnetron sputtering. Diamond and Related Materials, 2020, 108, 107996.	1.8	12
4118	Effect of Cr Atom Plasma Emission Intensity on the Characteristics of Cr-DLC Films Deposited by Pulsed-DC Magnetron Sputtering. Coatings, 2020, 10, 608.	1.2	3
4119	Potential molecular semiconductor devices: cyclo-C_n (n = 10 and 14) with higher stabilities and aromaticities than acknowledged cyclo-C₁₈. Physical Chemistry Chemical Physics, 2020, 22, 4823-4831.	1.3	31
4120	Diamond-Like Carbon Thin Film Electrodes for Microfluidic Bioelectrochemical Sensing Platforms. Analytical Chemistry, 2020, 92, 3650-3657.	3.2	19
4121	Interfacial shear strength of opaque resin/carbon fiber based on mapping from energy dispersive Xâ€ray spectroscopy. Polymer Composites, 2020, 41, 2134-2144.	2.3	7
4122	Mechanical and Tribological Properties of NbTi-NX and NbTi-N12-CH Coatings Prepared Using Radio Frequency Magnetron Sputtering and Their Application for Micro-drills. Journal of Materials Engineering and Performance, 2020, 29, 259-277.	1.2	3
4123	Effect of nitrogen concentrations on optical, structural and mechanical properties of self organized a-C:N films. Ceramics International, 2020, 46, 13743-13751.	2.3	3
4124	Diamond Like Carbon Films Containing Si: Structure and Nonlinear Optical Properties. Materials, 2020, 13, 1003.	1.3	67
4125	Isothermal oxidation behavior of YAl3C3 at 900â€“1300â€¯Â°C in air. Journal of the European Ceramic Society, 2020, 40, 2870-2877.	2.8	3
4126	Barrier coating and plasmonic effect by using diamond-like carbon and silver nanoparticles on quantum dots sensitize solar cells. Semiconductor Science and Technology, 2020, 35, 045019.	1.0	3
4127	Nanocomposite films of a-C:H/Bi made using a toroidal planar hollow cathode. FlatChem, 2020, 20, 100160.	2.8	0
4128	Comparative study on effects of Ni ion implantation on amorphous carbon (a-C) coating and tetrahedral amorphous carbon (ta-C) coating. Nuclear Instruments & Methods in Physics Research B, 2020, 467, 1-8.	0.6	7
4129	The influence of hydrogen concentration in amorphous carbon films on mechanical properties and fluorine penetration: a density functional theory and ab initio molecular dynamics study. RSC Advances, 2020, 10, 6822-6830.	1.7	8
4130	Magnesium isotopes of the bulk solar wind from Genesis diamondâ€like carbon films. Meteoritics and Planetary Science, 2020, 55, 352-375.	0.7	12
4131	Magnetism and spintronics in amorphous/diamond-like carbon. , 2020, , 47-73.		0
4132	Electron swarm parameters in C₂H₂, C₂H₄ and C₂H₆: measurements and kinetic calculations. Plasma Sources Science and Technology, 2020, 29, 045009.	1.3	8
4133	Ultrathin Membranes: A New Opportunity for Ultrafast and Efficient Separation. Advanced Materials Technologies, 2020, 5, 1901069.	3.0	37
4134	Spark discharge-generated soot: Varying nanostructure and reactivity against oxidation with molecular oxygen by synthesis conditions. Journal of Aerosol Science, 2020, 143, 105530.	1.8	13

#	Article	IF	Citations
4135	Organics preserved in anhydrous interplanetary dust particles: Pristine or not?. Meteoritics and Planetary Science, 2020, 55, 1320-1348.	0.7	12
4136	Photoluminescence from carbon structures grown by inductively coupled plasma chemical vapor deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, .	0.9	5
4137	High-Pressure Tetrahedral Amorphous Carbon Synthesized by Compressing Glassy Carbon at Room Temperature. Journal of Physical Chemistry C, 2020, 124, 5489-5494.	1.5	14
4138	Hydrogen-Free Diamond Like Carbon Films with Embedded Cu Nanoparticles: Structure, Composition and Reverse Saturable Absorption Effect. Materials, 2020, 13, 760.	1.3	4
4139	Ultralow-Friction and Ultralow-Wear TiN-Ag Solid Solution Coating in Base Oil. Journal of Physical Chemistry Letters, 2020, 11, 1614-1621.	2.1	19
4140	Automated evaluation of Rockwell adhesion tests for PVD coatings using convolutional neural networks. Surface and Coatings Technology, 2020, 385, 125365.	2.2	22
4141	Amine-Terminated Highly Cross-Linked Polyphosphazene-Functionalized Carbon Nanotube-Reinforced Lignin-Based Electrospun Carbon Nanofibers. ACS Sustainable Chemistry and Engineering, 2020, 8, 1840-1849.	3.2	25
4142	Dissolution susceptibility of glass-like carbon versus crystalline graphite in high-pressure aqueous fluids and implications for the behavior of organic matter in subduction zones. Geochimica Et Cosmochimica Acta, 2020, 273, 383-402.	1.6	19
4143	Effects of carbide forming elements Me on residual stress and mechanical properties of DLC films by molecular dynamics simulation. Materials Today Communications, 2020, 23, 100946.	0.9	7
4144	Effect of Mating Material and Graphitization on Wear of a-C:H Coating in Boundary Base Oil Lubrication. Tribology Letters, 2020, 68, 1.	1.2	32
4145	Tribological behaviors of DLC films in sulfuric acid and sodium hydroxide solutions. Surface and Interface Analysis, 2020, 52, 396-406.	0.8	8
4146	Introduction: carbon and carbon nanomaterials. , 2020, , 23-45.		2
4147	Effect of plasma power on properties of hydrogenated amorphous silicon carbide hardmask films deposited by PECVD. Vacuum, 2020, 174, 109187.	1.6	14
4148	Preparation of Aniline-Based Nitrogen-Containing Diamond-Like Carbon Films with Low Electrical Resistivity. Coatings, 2020, 10, 54.	1.2	8
4149	The growth mechanism of Ge1â^'x-Cx:H films deposited by PECVD method. Diamond and Related Materials, 2020, 103, 107709.	1.8	1
4150	Dependence of Optimum Thickness of Ultrathin Diamond-like Carbon Coatings over Carbon Nanotubes on Geometric Field Enhancement Factor. ACS Applied Electronic Materials, 2020, 2, 84-92.	2.0	5
4151	Deposition of diamond-like carbon films on insulating substrates by plasma source ion implantation. Surface and Coatings Technology, 2020, 385, 125426.	2.2	5
4152	Plasmaâ€Assisted Immobilization of a Phosphonium Salt and Its Use as a Catalyst in the Valorization of CO₂. ChemSusChem, 2020, 13, 1825-1833.	3.6	11

#	Article	IF	Citations
4153	A multifaceted biomimetic interface to improve the longevity of orthopedic implants. Acta Biomaterialia, 2020, 110, 266-279.	4.1	34
4154	Development of Highly Durable Sliding Triboelectric Nanogenerator Using Diamond-Like Carbon Films. Tribology Online, 2020, 15, 89-97.	0.2	12
4155	Applications of Phase Change Materials in Electrical Regime From Conventional Storage Memory to Novel Neuromorphic Computing. IEEE Access, 2020, 8, 76471-76499.	2.6	12
4156	Room and High Temperature Tribological Behaviour of W-DLC Coatings Produced by DCMS and Hybrid DCMS-HiPIMS Configuration. Coatings, 2020, 10, 319.	1.2	38
4157	Local Structure Analysis on Si-Containing DLC Films Based on the Measurement of C K-Edge and Si K-Edge X-ray Absorption Spectra. Coatings, 2020, 10, 330.	1.2	11
4158	The Influence of Preparation Conditions on the Structural Properties and Hardness of Diamond-Like Carbon Films, Prepared by Plasma Source Ion Implantation. Coatings, 2020, 10, 360.	1.2	15
4159	Soft and thick DLC deposited on AISI 316L stainless steel with nitriding as pre-treatment tested in severe wear conditions. Diamond and Related Materials, 2020, 106, 107881.	1.8	13
4160	Enhanced physicochemical and biological properties of C/Cu dual ions implanted medical titanium. Bioactive Materials, 2020, 5, 377-386.	8.6	44
4161	Colorful Diamondâ€Like Carbon Films from Different Micro/Nanostructures. Advanced Optical Materials, 2020, 8, 1902064.	3.6	14
4162	High-performances of Li4Ti5O12 anodes for lithium-ion batteries via modifying the Cu current collector through magnetron sputtering amorphous carbon. Journal of Alloys and Compounds, 2020, 830, 154682.	2.8	14
4163	Atomic-scale insights into the interfacial instability of superlubricity in hydrogenated amorphous carbon films. Science Advances, 2020, 6, eaay1272.	4.7	61
4164	Formation and Destruction of Palladium Carbonyl Nanoclusters in the Pd(II)â€“Clâ€“â€“H+â€“H2Oâ€“CO Systems. Russian Journal of Inorganic Chemistry, 2020, 65, 161-168.	0.3	2
4165	Synthesis and Characterization of Hydrogenated Diamond-Like Carbon (HDLC) Nanocomposite Films with Metal (Ag, Cu) Nanoparticles. Materials, 2020, 13, 1753.	1.3	3
4166	Effect of sp3 Content on Adhesion and Tribological Properties of Non-Hydrogenated DLC Films. Materials, 2020, 13, 1911.	1.3	25
4167	Microstructural and tribological characterization of DLC coatings deposited by plasma enhanced techniques on steel substrates. Surface and Coatings Technology, 2020, 389, 125615.	2.2	35
4168	Probing the lubrication mechanism of multilayered Si-DLC coatings in water and air environments. Diamond and Related Materials, 2020, 105, 107772.	1.8	15
4169	Mechanical Properties of 3D Nanostructures Obtained by Focused Electron/Ion Beam-Induced Deposition: A Review. Micromachines, 2020, 11, 397.	1.4	39
4170	Tailored electrochemical behavior of ta-C film by glancing angle deposition. Applied Surface Science, 2020, 516, 146115.	3.1	9

#	Article	IF	Citations
4171	Effect of metal coating material on field emission of vertically grown layered MoS2 nanosheets. Vacuum, 2020, 177, 109386.	1.6	7
4172	Study of the methane flow influence in the micro-tribology behavior of DLC coatings deposited by PECVD: a Raman analysis. Carbon Letters, 2021, 31, 47-56.	3.3	9
4173	Fracture behavior of single-crystal silicon microstructure coated with stepwise bias-graded a-C:H film. Surface and Coatings Technology, 2021, 405, 126559.	2.2	8
4174	Diamond-like carbon films and their superlubricity. , 2021, , 215-230.		4
4175	Tribo-induced interfacial nanostructures stimulating superlubricity in amorphous carbon films. , 2021, , 289-307.		0
4176	Superlubricity in carbon nanostructural films: from mechanisms to modulating strategies. , 2021, , 309-332.		2
4177	Superlubricity with nonaqueous liquid. , 2021, , 379-403.		3
4178	Tribological properties of V2O5 studied via reactive molecular dynamics simulations. Tribology International, 2021, 154, 106750.	3.0	6
4179	Temperature-Induced Chemical Changes in Lubricant Automotive Oils Evaluated Using Raman Spectroscopy. Applied Spectroscopy, 2021, 75, 145-155.	1.2	1
4180	A tailored pulsed substrate bias voltage deposited (a-C: Nb) thin-film coating on GTD-450 stainless steel: Enhancing mechanical and corrosion protection characteristics. Chemical Engineering Journal, 2021, 404, 126490.	6.6	20
4181	Designing multilayer diamond like carbon coatings for improved mechanical properties. Journal of Materials Science and Technology, 2021, 65, 108-117.	5.6	25
4182	Tribological Behavior of Surfaces Obtained by Turning in Sintered Self-Lubricating Composites. Tribology Transactions, 2021, 64, 143-156.	1.1	3
4183	Frictional behaviors of diamond-like carbon films under water lubrication: A molecular dynamics study. Tribology International, 2021, 153, 106609.	3.0	33
4184	Effects of nitrogen incorporation on N-doped DLC thin film electrodes fabricated by dielectric barrier discharge plasma: Structural evolution and electrochemical performances. Journal of Alloys and Compounds, 2021, 853, 157298.	2.8	20
4185	The effect of elevated reactant temperatures on soot nanostructures in a coflow diffusion ethylene flame. Proceedings of the Combustion Institute, 2021, 38, 2525-2532.	2.4	19
4186	Tibial implant fixation in TKA worth a revision?â€"how to avoid stress-shielding even for stiff metallic implants. Computer Methods in Biomechanics and Biomedical Engineering, 2021, 24, 320-332.	0.9	7
4187	Characterization of Hydrogen-Free and Hydrogenated DLC Films. , 2021, , 55-69.		0
4188	Prominent wear resistance of a superlattice composite multilayered WC-enhanced a-C film under boundary lubrication conditions in aviation lubricant. Ceramics International, 2021, 47, 5730-5738.	2.3	3

#	Article	IF	Citations
4189	Controllable synthesis and friction reduction of ZnFe2O4@C microspheres with diverse core-shell architectures. Tribology International, 2021, 153, 106614.	3.0	13
4190	Development of mass sensitive sensor platform based on plasma polymerization technique: Quartz tuning fork as transducer. Applied Surface Science, 2021, 540, 148360.	3.1	8
4191	High temperature nanomechanical and nanotribological behavior of sub-5â€¯nm nitrogen-doped carbon overcoat films. Applied Surface Science, 2021, 535, 147662.	3.1	6
4192	A DFT investigation of the electronic, optical, and thermoelectric properties of pentadiamond. Chemical Physics Letters, 2021, 763, 138210.	1.2	24
4193	Synergetic effects of surface texturing and solid lubricants to tailor friction and wear â€“ A review. Tribology International, 2021, 155, 106792.	3.0	268
4194	Nanoindentation of Amorphous Carbon: a combined experimental and simulation approach. Acta Materialia, 2021, 203, 116485.	3.8	23
4195	Effects of substrate bias voltage on structure and internal stress of amorphous carbon films on Î³-Fe substrate: Molecular dynamics simulation. Computational Materials Science, 2021, 188, 110206.	1.4	6
4196	Raman maps reveal heterogeneous hydrogenation on carbon materials. Journal of Raman Spectroscopy, 2021, 52, 516-524.	1.2	7
4197	Improvement of mechanical and tribological performances of carbon nanostructure films by cryogenic treatment. Tribology International, 2021, 156, 106819.	3.0	0
4198	The effect of vacuum annealing on the structure and properties of the electrically conductive a-CN coating. Vacuum, 2021, 184, 109919.	1.6	10
4199	Improvement of running-in process of tetrahedral amorphous carbon film sliding against Si3N4 under humid air by O2 plasma post-irradiation. Applied Surface Science, 2021, 538, 147957.	3.1	6
4200	High-temperature friction behavior of amorphous carbon coating in glass molding process. Friction, 2021, 9, 1648-1659.	3.4	18
4201	Interfacial effects on anticorrosive and tribological properties of electrodeposited amorphous carbon film on AA2024-T3 aluminum alloys using ethanol as carbon source. Surfaces and Interfaces, 2021, 22, 100847.	1.5	2
4202	Quantification of the carbon bonding state in amorphous carbon materials: A comparison between EELS and NEXAFS measurements. Carbon, 2021, 173, 557-564.	5.4	23
4203	A mild approach to bimetallic ZIF-derived porous carbons as highly efficient oxygen reduction electrocatalysts. International Journal of Hydrogen Energy, 2021, 46, 6188-6196.	3.8	5
4204	Resonant Raman scattering of anthraceneâ€based carbons in the secondary carbonization stage. Journal of Raman Spectroscopy, 2021, 52, 670-677.	1.2	5
4205	2D Allotrope of Carbon for Selfâ€Powered, Flexible, and Transparent Optoelectronics. Advanced Optical Materials, 2021, 9, 2001551.	3.6	7
4206	Electrodeposition of B, Ni coâ€doped diamondâ€like carbon films on AZ91D magnesium alloy: Corrosion and wear resistance. Materials and Corrosion - Werkstoffe Und Korrosion, 2021, 72, 912-924.	0.8	4

#	Article	IF	Citations
4207	Black phosphorus quantum dots: A new-type of water-based high-efficiency lubricant additive. Friction, 2021, 9, 1528-1542.	3.4	24
4208	In-depth distribution of elements and chemical bonds in the surface region of calcium-doped diamond-like carbon films. Applied Surface Science, 2021, 539, 148250.	3.1	5
4209	Improvement of drilling performance by overcoating diamond-like carbon films on diamond-coated drills for carbon fiber reinforced plastics processing. Vacuum, 2021, 183, 109755.	1.6	17
4210	Friction and wear of borided AISI O1 steel with carbon nanomaterial deposit. Materials Letters, 2021, 282, 128798.	1.3	5
4211	Amorphous state of sp² solid carbon. Fullerenes Nanotubes and Carbon Nanostructures, 2021, 29, 107-113.	1.0	17
4212	TCAD Investigation of Differently Doped DLC Passivation for Large-Area High-Power Diodes. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 2155-2162.	3.7	3
4213	Hybrid Metamodelâ€"NSGA-IIIâ€"EDAS based Optimal Design of Thin Film Coatings. Computers, Materials and Continua, 2021, 66, 1771-1784.	1.5	7
4214	Study of variable range hopping conduction mechanism in nanocrystalline carbon thin films deposited by modified anodic jet carbon arc technique: application to light-dependent resistors. Journal of Materials Science: Materials in Electronics, 2021, 32, 2535-2546.	1.1	17
4215	Synthesis of Diamond-like Carbon as a Dielectric Platform for Graphene Field Effect Transistors. ACS Applied Nano Materials, 2021, 4, 1385-1393.	2.4	7
4216	Polymer nanofabrication and plasma processing. , 2021, , 69-100.		0
4217	Hydrogenated Amorphous Carbon Films from Palmyra Sugar. Journal of Renewable Materials, 2021, 9, 1087-1098.	1.1	5
4218	Properties and Classification of Diamond-Like Carbon Films. Materials, 2021, 14, 315.	1.3	85
4219	High-temperature tribological properties of diamond-like carbon films: A review. Reviews on Advanced Materials Science, 2021, 60, 276-292.	1.4	33
4220	Laser engineering of carbon materials for optoelectronic applications. , 2021, , 293-321.		1
4221	The rise of carbon materials for field emission. Journal of Materials Chemistry C, 2021, 9, 2620-2659.	2.7	28
4222	Effect of Water Adsorption on the Frictional Properties of Hydrogenated Amorphous Carbon Films in Various Relative Humidities. Langmuir, 2021, 37, 1012-1024.	1.6	8
4223	On the physicochemical origin of nanoscale friction: the polarizability and electronegativity relationship tailoring nanotribology. Physical Chemistry Chemical Physics, 2021, 23, 2873-2884.	1.3	4
4224	Progress on Diamane and Diamanoid Thin Film Pressureless Synthesis. Journal of Carbon Research, 2021, 7, 9.	1.4	11

#	Article	IF	Citations
4225	Comparing the Influence of Residual Stress on Composite Materials Made of Polyhydroxybutyrate (PHB) and Amorphous Hydrogenated Carbon (a-C:H) Layers: Differences Caused by Single Side and Full Substrate Film Attachment during Plasma Coating. Polymers, 2021, 13, 184.	2.0	3
4226	Wear and Corrosion Resistance of a-C:H:SiOx Coating on Medical 316L Stainless Steel. Journal of Materials Engineering and Performance, 2021, 30, 1099-1109.	1.2	11
4227	Electrochemical Deposition of DLC Films Embedded with Crystalline Graphite and Multilayer Graphene. Journal of Electronic Materials, 2021, 50, 1552-1557.	1.0	5
4228	<i>In-situ</i> diagnosis of Ar/CH₄ helicon wave plasma for synthesis of carbon nanomaterials. Wuli Xuebao/Acta Physica Sinica, 2021, 70, 097201.	0.2	2
4229	Influences of target power and pulse width on the growth of diamond-like/graphite-like carbon coatings deposited by high power impulse magnetron sputtering. Diamond and Related Materials, 2021, 111, 108232.	1.8	12
4230	Surface modification of Co-Cr-Mo alloy by plasma assisted CVD. Materials Today: Proceedings, 2021, 42, 2896-2900.	0.9	4
4231	Improving Aluminum Ultraviolet Plasmonic Activity through a 1 nm ta-C Film. ACS Applied Materials & Interfaces, 2021, 13, 7672-7679.	4.0	5
4232	Study of Undoped Nanocrystalline Diamond Films Grown by Microwave Plasma-Assisted Chemical Vapor Deposition. Semiconductors, 2021, 55, 66-75.	0.2	2
4233	A molecular dynamics study of the oxidation mechanism, nanostructure evolution, and friction characteristics of ultrathin amorphous carbon films in vacuum and oxygen atmosphere. Scientific Reports, 2021, 11, 3914.	1.6	7
4234	Structural and Mechanical Properties of a-BCN Films Prepared by an Arc-Sputtering Hybrid Process. Materials, 2021, 14, 719.	1.3	6
4235	Combined Use of Surface Texturing, Plasma Nitriding and DLC Coating on Tool Steel. Coatings, 2021, 11, 201.	1.2	11
4236	The Coma Dust of Comet C/2013 US₁₀ (Catalina): A Window into Carbon in the Solar System. Planetary Science Journal, 2021, 2, 25.	1.5	13
4237	Design of a Class of New sp ² â€“ sp ³ Carbons Constructed by Graphite and Diamond Building Blocks. Chinese Physics Letters, 2021, 38, 028102.	1.3	15
4238	Secondary ion mass spectrometry and atomic force microscopy analysis of silver-doped diamond-like carbon films on titanium alloy (Ti6Al4V) for possible biomedical application. Thin Solid Films, 2021, 719, 138487.	0.8	8
4239	Dual-purpose surface functionalization of Ti-6Al-7Nb involving oxygen plasma treatment and Si-DLC or chitosan-based coatings. Materials Science and Engineering C, 2021, 121, 111848.	3.8	7
4240	On the Origin of Reduced Cytotoxicity of Germanium-Doped Diamond-Like Carbon: Role of Top Surface Composition and Bonding. Nanomaterials, 2021, 11, 567.	1.9	5
4241	Evaluation of the surface fatigue behavior of amorphous carbon coatings through cyclic nanoindentation. Surface and Coatings Technology, 2021, 407, 126769.	2.2	38
4242	Effect of Soft X-ray Irradiation on Film Properties of a Hydrogenated Si-Containing DLC Film. Materials, 2021, 14, 924.	1.3	5

#	Article	IF	Citations
4243	Tailored Hydrogen-Free Carbon Films by Tuning the sp²/sp³ Configuration. ACS Applied Electronic Materials, 2021, 3, 1771-1779.	2.0	12
4244	In situ Tribo-Fluorination for Oil-Less Hermetic Compressor Applications. Frontiers in Mechanical Engineering, 2021, 7, .	0.8	1
4245	Realization of a Novel Morphing Surface Using Additive Manufacturing and Its Active Control in Friction. Journal of Tribology, 2021, 143, .	1.0	14
4246	EFFECTS OF PULSE WIDTH ON CORROSION BEHAVIOR OF DIAMOND-LIKE CARBON COATINGS PREPARED ON THE SURFACE OF HIGH NITROGEN NICKEL-FREE STAINLESS STEEL. Surface Review and Letters, 2021, 28, 2150032.	0.5	6
4247	Tribological behaviors of DLC films with hierarchical surface textures under water lubrication: A molecular dynamic simulation. Journal of Micromechanics and Molecular Physics, 2021, 06, 2150005.	0.7	6
4248	Nanotextured Mold Surface with DLC Coating for Reduction in Residual Ceramic Particles. Langmuir, 2021, 37, 3563-3574.	1.6	16
4249	Laser Surface Texturing to Realize Micro-grids on DLC Coating: Effect of Marking Speed, Power, and Loop Cycle. International Journal of Precision Engineering and Manufacturing, 2021, 22, 745-758.	1.1	7
4250	How Hydrogen and Oxygen Vapor Affect the Tribochemistry of Silicon- and Oxygen-Containing Hydrogenated Amorphous Carbon under Low-Friction Conditions: A Study Combining X-ray Absorption Spectromicroscopy and Data Science Methods. ACS Applied Materials & Interfaces, 2021, 13, 12610-12621.	4.0	7
4251	Spectroscopic investigation of thermally induced structural evolution of a-C:H:Si film. Applied Surface Science, 2021, 541, 148413.	3.1	15
4252	Effect of nitrogen plasma treatment on the hydrophilicity of polycrystalline diamond films with micron-scale grains. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	1.1	0
4253	Classification of DLC films for cell proliferation based on optical constants. Diamond and Related Materials, 2021, 113, 108266.	1.8	10
4254	Structure characterization and antibacterial properties of Ag-DLC films fabricated by dual-targets HiPIMS. Surface and Coatings Technology, 2021, 410, 126967.	2.2	19
4255	Recent Progress on Wearâ€Resistant Materials: Designs, Properties, and Applications. Advanced Science, 2021, 8, e2003739.	5.6	199
4256	The impact of H2 and N2 on the material properties and secondary electron yield of sputtered amorphous carbon films for anti-multipacting applications. Applied Surface Science, 2021, 542, 148552.	3.1	6
4257	Formation and Destruction of Platinum Carbonyl [Pt(CO)2]n. Russian Journal of Inorganic Chemistry, 2021, 66, 348-353.	0.3	2
4258	Oxygen doping effect on wettability of diamond-like carbon films. Materials Research Express, 2021, 8, 035601.	0.8	7
4259	Microstructure, mechanical and tribological properties of graphite-like carbon coatings doped with tantalum. Applied Surface Science, 2021, 542, 148404.	3.1	14
4260	Development of a new diamond-like carbon surface treatment method with electric discharge for short running-in and friction reduction. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2022, 236, 1020-1030.	1.0	8

#	Article	IF	Citations
4261	Study of diamond like carbon coatings formed by pulsed hydrocarbon ions irradiations over different substrate materials using plasma focus device. Plasma Research Express, 2021, 3, 025007.	0.4	0
4262	Anomalous characteristics of nanostructured hydrogenated carbon thin films. Materials Chemistry and Physics, 2021, 262, 124316.	2.0	3
4263	Thermal Conductivity Enhancement in Ion-Irradiated Hydrogenated Amorphous Carbon Films. Nano Letters, 2021, 21, 3935-3940.	4.5	11
4264	High temperature nanomechanical properties of sub-5â€‰nm nitrogen doped diamond-like carbon using nanoindentation and finite element analysis. Journal of Applied Physics, 2021, 129, .	1.1	4
4265	Deposition of DLC films on the inner wall of U-type pipes by hollow cathode PECVD. Diamond and Related Materials, 2021, 114, 108308.	1.8	20
4266	Epitaxial growth of cubic WC (001) on MgO(001). Journal of Alloys and Compounds, 2021, 860, 158403.	2.8	7
4267	Atomic structure of carbon clusters laser-produced diamond-like carbon films. Diamond and Related Materials, 2021, 114, 108334.	1.8	2
4268	Effect of Energy and Temperature on Tetrahedral Amorphous Carbon Coatings Deposited by Filtered Laser-Arc. Materials, 2021, 14, 2176.	1.3	22
4269	Effect of bias voltage on the microstructure and properties of Nb-DLC films prepared by a hybrid sputtering system. Journal of Alloys and Compounds, 2021, 861, 158505.	2.8	25
4270	Tunable Synthesis of Predominant Semi-Ionic and Covalent Fluorine Bonding States on a Graphene Surface. Nanomaterials, 2021, 11, 942.	1.9	8
4271	GROWTH RATE OF DIAMOND-LIKE COATINGS SYNTHESIZED IN RF DISCHARGE AT VARIOUS RATIOS OF THE CONCENTRATIONS OF Ar AND C6H6. , 2021, , 109-112.		0
4272	Development of DLC-Coated Solid SiAlON/TiN Ceramic End Mills for Nickel Alloy Machining: Problems and Prospects. Coatings, 2021, 11, 532.	1.2	53
4273	Recent advances in the mechanical durability of superamphiphobic surfaces: A review. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2021, 235, 2474-2499.	1.0	7
4274	A critical review on self-lubricating ceramic-composite cutting tools. Ceramics International, 2021, 47, 20745-20767.	2.3	55
4275	On the adhesion of diamondâ€‐like carbon coatings deposited by lowâ€‐pressure plasma on 316L stainless steel. Surface and Interface Analysis, 2021, 53, 658-671.	0.8	9
4276	Synthesis of Multilayered DLC Films with Wear Resistance and Antiseizure Properties. Materials, 2021, 14, 2300.	1.3	1
4277	Interrelation of Elasticity and Thermal Bath in Nanotube Cantilevers. Physical Review Letters, 2021, 126, 175502.	2.9	9
4278	SEM and XPS Study of Cr6+ Removal from Wastewater via Reduction and Adsorption by Hierarchically Structured Carbon Composite in Neutral Media. Journal of Inorganic and Organometallic Polymers and Materials, 2021, 31, 3624-3635.	1.9	10

#	Article	IF	Citations
4279	Biocoatings and additives as promising candidates for ultralow friction systems. Green Chemistry Letters and Reviews, 2021, 14, 358-381.	2.1	8
4280	Feature-Rich Geometric and Electronic Properties of Carbon Nanoscrolls. Nanomaterials, 2021, 11, 1372.	1.9	2
4281	Cold RF oxygen plasma treatment of graphene oxide films. Journal of Materials Science: Materials in Electronics, 2021, 32, 15718-15731.	1.1	7
4282	Mechanical properties and adhesion behavior of amorphous carbon films with bias voltage controlled TixCy interlayers on Ti6Al4V. Diamond and Related Materials, 2021, 115, 108361.	1.8	7
4283	Diamond-Like Carbon (DLC) Coatings: Classification, Properties, and Applications. Applied Sciences (Switzerland), 2021, 11, 4445.	1.3	71
4284	Extraction and transport of low-energy Ar ion beams with a broad cross-section. Vacuum, 2021, 187, 110067.	1.6	2
4285	In-situ growing amorphous carbon film with attractive mechanical and tribological adaptability on PEEK via continuous plasma-induced process. Vacuum, 2021, 187, 110147.	1.6	7
4286	The Materials Science Foundation Supporting the Microfabrication of Reliable Polyimideâ€“Metal Neuroelectronic Interfaces. Advanced Materials Technologies, 2021, 6, 2100149.	3.0	10
4287	Effect of annealing treatment on the tribological performance of hydrogenated amorphous diamond coatings doped with nitrogen. Ceramics International, 2021, 47, 13423-13431.	2.3	9
4288	Ion-Enhanced Etching Characteristics of sp2-Rich Hydrogenated Amorphous Carbons in CF4 Plasmas and O2 Plasmas. Materials, 2021, 14, 2941.	1.3	5
4289	Development of livestock poultry waste based Ni-Co/S green nanocomposite catalysts: a facile one-pot in situ solvothermal method for alkaline methanol oxidation and super capacitor applications. Ionics, 2021, 27, 3587-3603.	1.2	7
4290	Fabrication and Characterization of Hydrophobic Porous Metallic Membranes for High Temperature Applications. Processes, 2021, 9, 809.	1.3	3
4291	Adhesion Studies of CrC/a-C:H Coatings Deposited with Anode Assisted Reactive Magnetron Sputtering Combined with DC-Pulsed Plasma Enhanced Chemical Vapor Deposition. Materials, 2021, 14, 2954.	1.3	4
4292	Study of catalyst deactivation during 1,3-butanediol dehydration to produce butadiene. Microporous and Mesoporous Materials, 2021, 320, 111066.	2.2	9
4293	Universal temperature corrections to the conductivity of niobium-carbon nanocomposites. Physica B: Condensed Matter, 2021, 610, 412860.	1.3	0
4294	Investigation of carbon ionization in HiPIMS discharge with a hollow cathode magnetron. Plasma Sources Science and Technology, 0, , .	1.3	3
4295	Effect of substrate bias on the properties of DLC films created using a combined vacuum arc. Bulletin of Materials Science, 2021, 44, 1.	0.8	5
4296	Effect of long carbon bombardment step on the adhesion of thick amorphous carbon coating deposited by cathodic arc evaporation. Diamond and Related Materials, 2021, 116, 108434.	1.8	4

#	Article	IF	Citations
4297	Substrate Impact on MR Characteristics of Carbon Nano Films Explored via AFM and Raman Analysis. Materials, 2021, 14, 3649.	1.3	2
4298	Thermal stability and diffusion characteristics of ultrathin amorphous carbon films grown on crystalline and nitrogenated silicon substrates by filtered cathodic vacuum arc deposition. Scientific Reports, 2021, 11, 13106.	1.6	4
4299	Microstructure, erosion and tribological behaviour of thick DLC coatings by the filtered cathodic vacuum arc combined with a high-voltage pulse power. Materials Research Express, 2021, 8, 066405.	0.8	6
4300	The effective reduction of graphene oxide films using RF oxygen plasma treatment. Vacuum, 2021, 188, 110158.	1.6	14
4301	Plasma Supported Deposition of Amorphous Hydrogenated Carbon (a-C:H) on Polyamide 6: Determining Interlayer Completion and Dehydrogenation Effects during Layer Growth. Polymers, 2021, 13, 1886.	2.0	5
4302	Structure and Characterization of TiC/GLC Multilayered Films with Various Bilayers Periods. Coatings, 2021, 11, 787.	1.2	0
4303	Influence of a DLC coating topography in the piston ring/cylinder liner tribological performance. Journal of Manufacturing Processes, 2021, 66, 483-493.	2.8	10
4304	Single-step metal-catalyzed synthesis of hybrid planar grapheneâ€“orbicular graphitic carbon structures using an amorphous carbon thin film as a precursor. Applied Surface Science, 2021, 552, 149018.	3.1	4
4305	First-principles study of structural and opto-electronic characteristics of ultra-thin amorphous carbon films. Chinese Physics B, 2022, 31, 016102.	0.7	1
4306	Boron-doping effects on local structures of semiconducting ultrananocrystalline diamond/hydrogenated amorphous carbon composite thin films fabricated via coaxial arc plasma: an x-ray absorption spectroscopic study. Semiconductor Science and Technology, 2021, 36, 085001.	1.0	0
4307	Current Status and Future Developments of Micromegas Detectors for Physics and Applications. Applied Sciences (Switzerland), 2021, 11, 5362.	1.3	8
4308	Characterization of Ultra-Thin Diamond-Like Carbon Films by SEM/EDX. Coatings, 2021, 11, 729.	1.2	6
4309	Friction performance and corrosion resistance of MoS2/DLC composite films deposited by magnetron sputtering. Results in Physics, 2021, 25, 104278.	2.0	18
4310	Probing trans-polyacetylene segments in a diamond film by tip-enhanced Raman spectroscopy. Diamond and Related Materials, 2021, 116, 108415.	1.8	8
4311	Anticorrosion of DLC coating in acid solutions. Applied Surface Science, 2021, 552, 149373.	3.1	16
4312	TEM Structure, Nanomechanical Property, and Adhesive Force of Magnetron-Sputtered Cr-DLC Coating on a Nitrided Ti₆Al₄V Alloy. Journal of Physical Chemistry C, 2021, 125, 16733-16745.	1.5	12
4313	Insights into Superlow Friction and Instability of Hydrogenated Amorphous Carbon/Fluid Nanocomposite Interface. ACS Applied Materials & Interfaces, 2021, 13, 35173-35186.	4.0	17
4314	Comparison between Ar+CH4 cathode and anode coupling chemical vapor depositions of hydrogenated amorphous carbon films. Thin Solid Films, 2021, 729, 138701.	0.8	5

#	Article	IF	Citations
4315	Nanostructure wrinkle thin films on flexible substrate: Tunable optical properties. Materials Today: Proceedings, 2022, 49, 1401-1407.	0.9	3
4316	The influence of corrosion on diamond-like carbon topography and friction at the nanoscale. Carbon, 2021, 179, 590-599.	5.4	9
4317	Can a-C:H-Sputtered Coatings Be Extended to Orthodontics?. Coatings, 2021, 11, 832.	1.2	3
4318	Effects of diffused hydrogen atoms on thermomechanical properties and contact behavior of a diamond-like carbon film. Journal of Applied Physics, 2021, 130, .	1.1	1
4319	Laser Processing of Hard and Ultra-Hard Materials for Micro-Machining and Surface Engineering Applications. Micromachines, 2021, 12, 895.	1.4	22
4320	A critical review on surface modifications mitigating dairy fouling. Comprehensive Reviews in Food Science and Food Safety, 2021, 20, 4324-4366.	5.9	9
4321	Understanding Nanoscale Plasticity by Quantitative In Situ Conductive Nanoindentation. Advanced Engineering Materials, 2021, 23, 2001494.	1.6	11
4322	The Growth Behavior of Amorphous Hydrogenated Carbon a-C:H Layers on Industrial Polycarbonatesâ€"A Weak Interlayer and a Distinct Dehydrogenation Zone. Journal of Carbon Research, 2021, 7, 59.	1.4	1
4323	Tuning the Interference Color with PECVD Prepared DLC Thickness. Korean Journal of Materials Research, 2021, 31, 403-408.	0.1	0
4324	Effect of thermodynamic parameters on properties of silicon-carbon films prepared by radio-frequency plasma-enhanced chemical vapor deposition for anti-reflective and photo-luminescent coatings. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2021, 39, 042203.	0.6	1
4325	Graphene-like carbon nanosheet/copper composite with combined performance designed by pyrolyzing trimesic acid@copper formate. Journal of Materials Research and Technology, 2021, 13, 111-120.	2.6	1
4326	Chromium coatings from trivalent chromium plating baths: Characterization and cathodic delamination behaviour. Corrosion Science, 2021, 187, 109525.	3.0	14
4327	Concurrent synthesis and boron-doping of amorphous carbon films by focused ion beam-assisted chemical vapor deposition. Thin Solid Films, 2021, 730, 138704.	0.8	3
4328	Effects of Substrate Bias Voltage on Structure of Diamond-Like Carbon Films on AISI 316L Stainless Steel: A Molecular Dynamics Simulation Study. Materials, 2021, 14, 4925.	1.3	5
4329	Diamond-Like Carbon (DLC) Coatings for Automobile Applications. , 0, , .		3
4330	Mechanical and Compositional Implications of Gallium Ion Milling on Epoxy Resin. Polymers, 2021, 13, 2640.	2.0	6
4331	Effects of annealing treatment on tribological behavior of tungsten-doped diamond-like carbon film under lubrication (Part 2): Tribological behavior under MoDTC lubrication. Friction, 2022, 10, 1061-1077.	3.4	4
4332	Carbon stoichiometry and mechanical properties of high entropy carbides. Acta Materialia, 2021, 215, 117051.	3.8	28

#	Article	IF	Citations
4333	Coatability of diamond-like carbon on 316L stainless steel printed by binder jetting. Additive Manufacturing, 2021, 44, 102064.	1.7	4
4334	Discovery of carbon-based strongest and hardest amorphous material. National Science Review, 2022, 9, nwab140.	4.6	49
4335	An alternative approach to the tribological analysis of Si-doped DLC coatings deposited with different bias voltages using Raman spectroscopy mapping. Emergent Materials, 2021, 4, 1595-1604.	3.2	7
4336	Characterization of ta-C film on micro arc oxidation coated titanium alloy in simulated seawater. Diamond and Related Materials, 2021, 117, 108483.	1.8	10
4337	High-Capacity CuSi₂P₃-Based Semisolid Anolyte for Redox Flow Batteries. ACS Applied Materials & Interfaces, 2021, 13, 40552-40561.	4.0	7
4338	Molecular dynamics study of the frictional behaviors of diamond-like carbon films. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	1.1	7
4339	Cr/GLC multilayered coating in simulated deep-sea environment: Corrosion behavior and growth defect evolution. Corrosion Science, 2021, 188, 109528.	3.0	25
4340	Etching characteristics of hydrogenated amorphous carbon with different sp 2 /sp 3 hybridization ratios in CF 4 /O 2 plasmas. Plasma Processes and Polymers, 2021, 18, 2100075.	1.6	5
4341	Technology of increasing the surface strength of optical elements by means of carbon nanostructures coating. Welding International, 2021, 35, 117-120.	0.3	0
4342	Gaussian Process Regression for Materials and Molecules. Chemical Reviews, 2021, 121, 10073-10141.	23.0	384
4343	The Structure and Properties of Bilayer Carbon Films with Various Layer Thickness. Materials Performance and Characterization, 2021, 10, 585-593.	0.2	0
4344	Interaction between alkali metals and diamond: Etching and charge states of NV centers. Carbon, 2021, 182, 585-592.	5.4	4
4345	In-situ growth of MAX phase coatings on carbonised wood and their terahertz shielding properties. Journal of Advanced Ceramics, 2021, 10, 1291-1298.	8.9	15
4346	A Comprehensive Review on Raman Spectroscopy Applications. Chemosensors, 2021, 9, 262.	1.8	96
4347	Tribological properties of Mo-S-C coating deposited by pulsed d.c. magnetron sputtering. Wear, 2021, 480-481, 203939.	1.5	3
4348	The influence of Cr and Ni doping on the microstructure of oxygen containing diamond-like carbon films. Vacuum, 2021, 191, 110351.	1.6	6
4349	Carbon Nanostructures, Nanolayers, and Their Composites. Nanomaterials, 2021, 11, 2368.	1.9	36
4350	Superlow Friction of a-C:H Coatings in Vacuum: Passivation Regimes and Structural Characterization of the Sliding Interfaces. Coatings, 2021, 11, 1069.	1.2	14

#	Article	IF	Citations
4351	Anti-reflection for monocrystalline silicon from diamond-like carbon films deposited by magnetron sputtering. Materials Research Express, 2021, 8, 096402.	0.8	4
4352	Effect of Microwave Treatment in a High Pressure Microwave Reactor on Graphene Oxide Reduction Processâ€"TEM, XRD, Raman, IR and Surface Electron Spectroscopic Studies. Materials, 2021, 14, 5728.	1.3	7
4353	Effect of nitrogen doping on the microstructure and thermal stability of diamond-like carbon coatings containing silicon and oxygen. Surface and Coatings Technology, 2021, 421, 127479.	2.2	8
4354	DLC-Coated Ferroelectric Membranes as Vascular Patches: Physico-Chemical Properties and Biocompatibility. Membranes, 2021, 11, 690.	1.4	6
4355	Improved wear imbalance with multilayered nanocomposite nanocrystalline Cu and tetrahedral amorphous carbon coating. Ceramics International, 2021, 47, 25664-25673.	2.3	8
4356	Experimental and theoretical study of a magnetron DC-PECVD acetylene discharge: Identification of the deposition precursors and film growth mechanisms. Surface and Coatings Technology, 2021, 421, 127472.	2.2	3
4357	Stress- and Time-Dependent Formation of Self-Lubricating In Situ Carbon (SLIC) Films on Catalytically-Active Noble Alloys. Jom, 2021, 73, 3658-3667.	0.9	4
4358	Characterization of sp2/sp3 hybridization ratios of hydrogenated amorphous carbon films deposited in C2H2 inductively coupled plasmas. Surface and Coatings Technology, 2021, 422, 127514.	2.2	10
4359	Effects of laser annealing on polymer sheets using a laser-diode with a wavelength of 408â€‰nm. Molecular Crystals and Liquid Crystals, 0, , 1-7.	0.4	1
4360	The Microstructure and Properties of Carbon Thin Films on Nanobainitic Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 5066-5078.	1.1	2
4361	Nanoscale Surface Compositions and Structures of Plasma-Modified Poly(ethylene terephthalate) Thin Films. Journal of Physical Chemistry C, 2021, 125, 20658-20669.	1.5	5
4362	Dynamic contact behavior of graphite-like carbon films on ductile substrate under nano/micro-scale impact. Surface and Coatings Technology, 2021, 422, 127515.	2.2	2
4363	Structure and properties of ta-C films prepared by vacuum cathodic arc with an unbalanced external electromagnetic field. Ceramics International, 2022, 48, 111-119.	2.3	6
4364	Narrow-gap, semiconducting, superhard amorphous carbon with high toughness, derived from C60 fullerene. Cell Reports Physical Science, 2021, 2, 100575.	2.8	18
4365	Microstructural evolution of sandwiched Cr interlayer in Cu/Cr/diamond subjected to heat treatment. Thin Solid Films, 2021, 736, 138911.	0.8	8
4366	High-speed deposition of graphite-like carbon film by Ar/C6H6 surface-wave plasma with high-voltage pulse biasing. Vacuum, 2021, 192, 110429.	1.6	1
4367	Research on Ti-GLC/TiCN/TiN composite multilayer coating with ultra-low friction coefficient in various environments. Surfaces and Interfaces, 2021, 26, 101426.	1.5	3
4368	Membranes with tunable graphene morphology prepared via StÃ¶ber method for high rejection of azo dyes. Journal of Environmental Chemical Engineering, 2021, 9, 106069.	3.3	9

#	Article	IF	Citations
4369	Nanomechanical properties and thermal stability of Alâ€“N-co-doped DLC films prepared by filtered cathodic vacuum arc deposition. Surface and Coatings Technology, 2021, 424, 127655.	2.2	11
4370	Formation of wear-resistant graphite/diamond-like carbon nanocomposite coatings on Ti using accelerated C60-ions. Surface and Coatings Technology, 2021, 424, 127670.	2.2	6
4371	Protective properties of hydrogenated diamond-like carbon coatings against electrostatic discharge damage. Thin Solid Films, 2021, 736, 138912.	0.8	9
4372	Effect of carbon chain length of chlorinated carboxylic acids on morphology of the carbon films electrodeposited from aqueous solutions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 626, 126943.	2.3	3
4373	Effect of alternating a-C:H multilayer full coating on fracture behavior of single-crystal silicon-based microstructure in tensile and toughness tests. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 827, 142054.	2.6	5
4374	Deposition of diamond-like carbon coatings: Conventional to non-conventional approaches for emerging markets. Ceramics International, 2021, 47, 28075-28085.	2.3	32
4375	Microstructures, mechanical properties and tribological behaviors of amorphous carbon coatings in-situ grown on polycarbonate surfaces. Applied Surface Science, 2021, 563, 150309.	3.1	11
4376	Effects of silicon doping on the chemical bonding states and properties of nitrogen-doped diamond-like carbon films by plasma-enhanced chemical vapor deposition. Thin Solid Films, 2021, 736, 138923.	0.8	10
4377	The property of adhesion and biocompatibility of silicon and fluorine doped diamond-like carbon films. Diamond and Related Materials, 2021, 119, 108558.	1.8	6
4378	Improvement of corrosion resistance and biocompatibility of 316L stainless steel for joint replacement application by Ti-doped and Ti-interlayered DLC films. Surface and Coatings Technology, 2021, 425, 127734.	2.2	24
4379	Tribological behaviors of oxygen-doped carbon coatings deposited by ion-irradiation-assisted growth. Surface and Coatings Technology, 2021, 425, 127689.	2.2	1
4380	Progress and challenges in using sustainable carbon anodes in rechargeable metal-ion batteries. Progress in Energy and Combustion Science, 2021, 87, 100929.	15.8	52
4381	Water barrier performance of additively manufactured polymers coated with diamond-like carbon films. Diamond and Related Materials, 2021, 119, 108541.	1.8	5
4382	Structural, mechanical, and tribological properties of GLC film on a nitrided layer prepared in a glow-discharge plasma nitriding system. Vacuum, 2021, 193, 110543.	1.6	12
4383	Structure and mechanical properties of reactive and non-reactive sputter deposited WC based coatings. Journal of Alloys and Compounds, 2021, 885, 161129.	2.8	11
4384	Behavior and interaction of boundary lubricating additives on steel and DLC-coated steel surfaces. Tribology International, 2021, 164, 107199.	3.0	17
4385	Graphene nanocrystallites induced short run-in period with low electric power at current-carrying sliding interface. Applied Surface Science, 2021, 568, 150902.	3.1	3
4386	Structural and dosimetric study of sub-kGy neutron-irradiated graphitic media. Radiation Physics and Chemistry, 2021, 189, 109709.	1.4	2

#	Article	IF	Citations
4387	Microstructure evolution and wettability regulation of air-exposed hydrogen-free diamond-like carbon films. Diamond and Related Materials, 2021, 120, 108609.	1.8	9
4388	The new tailored nanoporous carbons from the common polypody (Polypodium vulgare): The role of textural properties for enhanced CO2 adsorption. Chemical Engineering Journal, 2022, 429, 131751.	6.6	45
4389	Computational study on the effects of mechanical constraint on the performance of silicon nanosheets as anode materials for lithium-ion batteries. , 2022, , 95-118.		1
4390	Nano-scale coating wear measurement by introducing Raman-sensing underlayer. Journal of Materials Science and Technology, 2022, 96, 285-294.	5.6	9
4391	Quantifying low fluence ion implants in diamond-like carbon film by secondary ion mass spectrometry by understanding matrix effects. Journal of Analytical Atomic Spectrometry, 2021, 36, 194-209.	1.6	3
4393	Raman Spectroscopy Characterization of Carbon Materials: From Graphene to All-carbon Heterostructures. , 2021, , 317-346.		2
4394	Tribological Properties of Ti-Doped Diamond-Like Carbon Coatings Under Boundary Lubrication With ZDDP. Journal of Tribology, 2021, 143, .	1.0	2
4395	Graphitic Encapsulation and Electronic Shielding of Metal Nanoparticles to Achieve Metalâ€“Carbon Interfacial Superlubricity. ACS Applied Materials & Interfaces, 2021, 13, 3397-3407.	4.0	20
4396	Creation of pure non-crystalline diamond nanostructures via room-temperature ion irradiation and subsequent thermal annealing. Nanoscale Advances, 2021, 3, 4156-4165.	2.2	1
4402	Interaction of Low-Energy Ions and Hydrocarbon Radicals with Carbon Surfaces. Springer Series in Chemical Physics, 2005, , 249-285.	0.2	4
4403	The Mineralogy of Interstellar and Circumstellar Dust. Lecture Notes in Physics, 2003, , 121-170.	0.3	49
4404	DLC Films in Mechanical and Manufacturing Industry. , 2008, , 469-483.		1
4405	Laser Processing of Tribological DLC Films: An Overview. , 2008, , 571-590.		3
4406	Fullerene-like Carbon Nitride: A New Carbon-based Tribological Coating. , 2008, , 620-653.		11
4407	Hard DLC Growth and Inclusion in Nanostructured Wear-protective Coatings. , 2008, , 263-281.		4
4409	Reverse Hallâ€“Petch Effect in Ultra Nanocrystalline Diamond. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2009, , 171-179.	0.1	3
4410	Characterization of Soot. Green Energy and Technology, 2013, , 333-362.	0.4	16
4411	Growth Mechanism of Carbon Nanowalls. , 2010, , 81-116.		1

#	Article	IF	Citations
4412	Laser-Induced Surface Acoustic Waves for Material Testing. , 2019, , 171-234.		4
4413	Nanostructured Catalysts for the Electrochemical Reduction of CO2. Nanostructure Science and Technology, 2017, , 337-373.	0.1	4
4414	Design and Analytical Studies of a DLC Thin-Film Piezoresistive Pressure Microsensor. Communications in Computer and Information Science, 2017, , 433-443.	0.4	4
4415	Amorphous Thin Film Deposition. Springer Handbooks, 2019, , 1293-1332.	0.3	3
4416	The Mineralogy of Interstellar and Circumstellar Dust in Galaxies. Lecture Notes in Physics, 2010, , 143-201.	0.3	25
4417	Ï€-Conjugated Systems with Coenzyme PQQ, Polyanilines or Quinonediimines, and Sumanene. , 2015, , 51-109.		3
4418	Overview of Amorphous Carbon Films. Springer Theses, 2017, , 29-37.	0.0	2
4419	Thin films on silicon. , 2020, , 133-213.		4
4420	Cathodic Arc Evaporation and its Applications to Thin-Film Synthesis. , 2006, , 383-410.		2
4421	Nonuniform transitions of heavy-ion irradiated a-C:H films: Structure and antiwear property degradation analysis. Carbon, 2019, 146, 200-209.	5.4	10
4422	Tailoring hardness and electrochemical performance of TC4 coated Cu/a-C thin coating with introducing second metal Zr. Corrosion Science, 2020, 172, 108713.	3.0	25
4423	The frequency of pulsed DC sputtering power introducing the graphitization and the durability improvement of amorphous carbon films for metallic bipolar plates in proton exchange membrane fuel cells. Journal of Power Sources, 2020, 466, 228346.	4.0	21
4424	Plasma Nanotechnology for Controlling Chemical and Physical Properties of Organosilicon Nanocoatings. Materials Today Communications, 2020, 24, 101234.	0.9	5
4425	Synchrotron-based spectroscopic analysis of diamond-like carbon films from different source gases. Radiation Physics and Chemistry, 2020, 173, 108944.	1.4	9
4426	Multiscale Surface Microtexture Analysis of CuNPs@a-C:H Thin Films. Industrial & Engineering Chemistry Research, 2020, 59, 22520-22532.	1.8	7
4427	Trends in Carbon, Oxygen, and Nitrogen Core in the X-ray Absorption Spectroscopy of Carbon Nanomaterials: A Guide for the Perplexed. Journal of Physical Chemistry C, 2021, 125, 973-988.	1.5	30
4428	Superlow Wear Realizable Tribofilms from Lubricant Oil Containing Hydrothermally Synthesized Magnesium Silicate Hydroxide/Carbon Coreâ€“Shell Nanoplates. Langmuir, 2021, 37, 240-248.	1.6	7
4429	Friction Control by Deformation Mode in Nanopatterned Amorphous Carbon. Nano Letters, 2021, 21, 107-113.	4.5	5

#	Article	IF	Citations
4430	The circumstellar envelope of the C-rich post-AGB star HDÂ56126. Astronomy and Astrophysics, 2003, 402, 211-228.	2.1	52
4431	Application of phase-change materials in memory taxonomy. Science and Technology of Advanced Materials, 2017, 18, 406-429.	2.8	29
4432	Study of electric susceptibility, electrical resistivity and energy loss functions of carbonâ€“nickel composite films at different annealing temperatures. Physica Scripta, 2015, 90, 115802.	1.2	14
4433	External magnetic field guiding in HiPIMS to control sp³ fraction of tetrahedral amorphous carbon films. Journal Physics D: Applied Physics, 2021, 54, 045002.	1.3	10
4434	Effect of nitrogen in the properties of diamond-like carbon (DLC) coating on Ti₆Al₄V substrate. Materials Research Express, 2020, 7, 065601.	0.8	15
4435	Evidence of hydrogen termination at grain boundaries in ultrananocrystalline diamond/hydrogenated amorphous carbon composite thin films synthesized via coaxial arc plasma. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2020, 38, 062803.	0.6	1
4436	SEM and Raman studies of CNT films on porous Si. Proceedings of SPIE, 2017, , .	0.8	1
4437	SIMS Analysis of Carbon-Containing Materials: Content of Carbon Atoms in sp2 and sp3 Hybridization States. Technical Physics Letters, 2020, 46, 290-294.	0.2	4
4438	EFFECTS OF ELECTRODE DISTANCE ON MECHANICAL AND TRIBOLOGICAL PROPERTIES OF HYDROGENATED DLC FILMS DEPOSITED BY DC-PULSE PECVD. Surface Review and Letters, 2021, 28, 2050045.	0.5	3
4439	Effects of thin hard film deposition on fatigue strength of AA7075-T6. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 0, , 095440622098050.	1.1	11
4440	Time-Resolved Luminescence Properties of Laser-Fabricated Nano-diamonds. Nanoscale Research Letters, 2020, 15, 168.	3.1	2
4441	Plasma Polymer Films. , 2010, , 481-527.		1
4442	Diamond Coatings: TheIndustrial Perspective. , 2010, , 305-368.		1
4443	Deposition of Amorphous Carbon Thin Films by Pulsed RF Plasma CVD. Journal of Chemical Engineering of Japan, 2005, 38, 593-599.	0.3	5
4444	Deposition of Amorphous Hydrogenated Carbon Coatings by Plasma Jet. Acta Physica Polonica A, 2008, 113, 1063-1066.	0.2	3
4445	Formation and Characterization of Carbon and Nickel Oxide/Carbon Composites for Supercapacitors. Acta Physica Polonica A, 2011, 119, 253-255.	0.2	13
4446	Properties of Ultra Fast Deposited Diamond-Like Hydrogenated Carbon Films. Acta Physica Polonica A, 2011, 120, 156-162.	0.2	2
4447	Different Wavelength Laser Irradiation of Amorphous Carbon. Acta Physica Polonica A, 2011, 120, 26-29.	0.2	3

#	Article	IF	Citations
4448	Electron Beam Induced Modification of Polymer-Like Carbon Coatings. Acta Physica Polonica A, 2013, 123, 871-873.	0.2	2
4449	Temperature Dependent Variations of Properties of Polymer-Like Carbon Coatings Treated with High Energy Electrons. Acta Physica Polonica A, 2015, 128, 915-918.	0.2	1
4450	Evaluation of Friction Coefficient and Adhesion Properties of Silicon Carbon Nitride Films Prepared by HWCVD. Acta Physica Polonica A, 2017, 131, 463-467.	0.2	2
4451	Production of fluorescent nano-diamonds through femtosecond pulsed laser ablation. Optical Materials Express, 2019, 9, 4734.	1.6	17
4452	Expanded Graphite and Its Composites. , 2019, , .		3
4453	Conductive Nanorods in DLC Films Caused by Carbon Transformation. Ukrainian Journal of Physics, 2017, 62, 526-532.	0.1	3
4454	Synthesis of Carbon Nanomaterials in Flames. Eurasian Chemico-Technological Journal, 2015, 13, 5.	0.3	3
4455	Synthesis of Superhydrophobic Carbon Surface during Combustion Propane. Eurasian Chemico-Technological Journal, 2015, 14, 19.	0.3	13
4456	Analyse of Tribological Properties of Layers Created by Plasma Nitriding + DLC. Manufacturing Technology, 2018, 18, 379-386.	0.2	3
4457	Friction and Wear of Diamond Like Carbon (DLC) Coatings -A Review. Recent Patents on Mechanical Engineering, 2011, 4, 55-78.	0.2	1
4458	Influence of nitrogen on the tribological properties of a-C:H layers on the polycarbonate substrates. Processing and Application of Ceramics, 2008, 2, 69-73.	0.4	3
4459	Beneficial effect of multi-wall carbon nanotubes on the graphitization of polyacrylonitrile (PAN) coating. Processing and Application of Ceramics, 2010, 4, 59-62.	0.4	3
4460	Friction Characteristics of Amorphous Carbon Films on Rubber Deposited by Cold Atmospheric Pressure Plasma. Tribology Online, 2012, 7, 234-241.	0.2	1
4461	Demonstration of Wear Monitoring of Amorphous Carbon Films with Epoxy Resin Underlayer Containing Phosphor. Tribology Online, 2013, 8, 265-271.	0.2	2
4462	In situ measurement of contact area in coated surfaces. WIT Transactions on Engineering Sciences, 2007, , .	0.0	4
4463	Electron Emission Properties of Single Field Emitter Covered with Diamond-Like Carbon (DLC) Film Prepared by Electro-Deposition in Methanol. Journal of the Vacuum Society of Japan, 2009, 52, 176-178.	0.3	4
4464	Observation of Carbon Film Growth in Methanol Solution and Substrate Interfaces. Journal of the Vacuum Society of Japan, 2014, 57, 185-188.	0.3	1
4465	Laser Surface Engineering for Tribology. , 2017, , 661-687.		5

#	Article	IF	Citations
4468	Effect of Molybdenum Content on Mechanical and Tribological Properties of Diamond-Like Carbon Coatings over Titanium Î²-21S Alloy. Journal of Carbon Research, 2021, 7, 1.	1.4	5
4469	Comparative Study of Tribomechanical Properties of HiPIMS with Positive Pulses DLC Coatings on Different Tools Steels. Coatings, 2021, 11, 28.	1.2	16
4470	ELECTRICAL PROPERTIES OF PHOSPHORUS INCORPORATED TETRAHEDRAL AMORPHOUS CARBON FILMS. Jinshu Xuebao/Acta Metallurgica Sinica, 2010, 2010, 201-205.	0.3	2
4471	Spectroscopic Characterization of Boron Doped Tetrahedral Amorphous Carbon. Wuji Cailiao Xuebao/Journal of Inorganic Materials, 2008, 23, 180-184.	0.6	1
4472	Superhard C_{1-x-y}N_xZr_y Composite Films Prepared by Pulsed Bias Arc Ion Plating. Wuji Cailiao Xuebao/Journal of Inorganic Materials, 2010, 25, 517-521.	0.6	1
4473	Progress in Materials Used for Solidly Mounted Film Bulk Acoustic Resonators. Wuji Cailiao Xuebao/Journal of Inorganic Materials, 2011, 25, 1233-1241.	0.6	1
4474	Effect of Annealing Temperature on the Structure and Tribological Property of a-C:H Film. Wuji Cailiao Xuebao/Journal of Inorganic Materials, 2011, 26, 209-213.	0.6	3
4475	Influence of torch power and Ar/C₂H₂ratio on structure of amorphous carbon films. Lithuanian Journal of Physics, 2009, 49, 97-103.	0.1	1
4476	Articulating Biomaterials. Advances in Chemical and Materials Engineering Book Series, 2015, , 218-267.	0.2	2
4477	Development of Highly Conductive and Corrosion-Resistant Cr-Diamond-like Carbon Films. Journal of the Korean Ceramic Society, 2019, 56, 317-324.	1.1	3
4478	Improved Hemolytic Performance of Blood Pump with Fluorine-Doped Hydrogenated Amorphous Carbon Coating. Advances in Chemical Engineering and Science, 2013, 03, 10-16.	0.2	2
4479	The Effect of Nitrogen Gas Flow Rate on the Cr-Containing DLC (Diamond-Like Carbon) Coating by AEGD Hybrid-CVD Coating Process. Advances in Materials Physics and Chemistry, 2017, 07, 198-211.	0.3	1
4480	Influence of Wettability and Mechanical Properties on Tribological Performance of DLC Coatings under Water Lubrication. Journal of Surface Engineered Materials and Advanced Technology, 2015, 05, 110-123.	0.2	3
4481	Electro-Optical Properties of Carbon Nanotubes Obtained by High Density Plasma Chemical Vapor Deposition. Materials Sciences and Applications, 2011, 02, 381-389.	0.3	4
4482	Improvement of Thermal Stability and Tribological Performance of Diamond-Like Carbon Composite Thin Films. Materials Sciences and Applications, 2013, 04, 630-636.	0.3	12
4483	Effects of Fluorine and Silicon Incorporation on Tribological Performance of Diamond-Like Carbon Films. Materials Sciences and Applications, 2019, 10, 170-185.	0.3	3
4484	Doped Amorphous Carbon Films Prepared by Liquid Phase Electrodeposition. Open Journal of Synthesis Theory and Applications, 2014, 03, 5-13.	1.3	1
4485	Analysis of Characteristics of DLC Coating Thin Film in Tungsten Carbide for Production of Medical Thermal-Infrared Lenses. Transactions on Electrical and Electronic Materials, 2014, 15, 344-347.	1.0	1

#	Article	IF	Citations
4486	Influence of plasma condition on carbon nanotube growth by rf-PECVD. Nano-Micro Letters, 2010, 2, 37.	14.4	1
4487	GENESIS AND STABILITY OF TRIBOLAYERS IN SOLID LUBRICATION: CASE OF PAIR DLC-STAINLESS STEEL. , 0, , .		1
4488	THE EFFECT OF MeC NANOPARTICLES ON THE MICROMECHANICAL AND TRIBOLOGICAL PROPERTIES OF CARBON COMPOSITE COATINGS. Tribologia, 2018, 280, 157-163.	0.0	2
4489	Tribological Properties of Fluorinated Amorphous Carbon Thin Films. , 0, , .		3
4491	DLC Coatings in Oil and Gas Production. Journal of Coating Science and Technology, 2014, 1, 59-68.	0.3	12
4492	Effects of preparation temperature of SiC intermediate layers on the hemocompatibility of SiC/F-DLC composite film. Wuli Xuebao/Acta Physica Sinica, 2014, 63, 185204.	0.2	1
4493	Molecular Dynamics Simulation of Chemical Vapor Deposition of Amorphous Carbon: Dependence on H/C Ratio of Source Gas. Japanese Journal of Applied Physics, 2011, 50, 01AB01.	0.8	1
4494	Plasma Deposition of Diamond-Like Carbon. Japanese Journal of Applied Physics, 2011, 50, 01AF01.	0.8	38
4495	Mass Density as Basis Parameter on Mechanical Properties under Diamond-Like Carbon Prepared in Wide Range of Conditions Using Variety of Methods. Japanese Journal of Applied Physics, 2011, 50, 01AF11.	0.8	2
4496	Diamond-like Carbon Films Deposited at Room Temperature on Flexible Plastics Substrates for Antireflection Coating. Japanese Journal of Applied Physics, 2011, 50, 035802.	0.8	5
4497	Optical and Electrical Properties of Nitrogen-Doped Diamond-Like Carbon Films Prepared by a Bipolar-Type Plasma-Based Ion Implantation. Japanese Journal of Applied Physics, 2012, 51, 01AC04.	0.8	4
4498	Characteristics of Diamond-Like Carbon Films Deposited on Polymer Dental Materials. Japanese Journal of Applied Physics, 2012, 51, 090128.	0.8	6
4499	The Structure and Bonding State for Fullerene-Like Carbon Nitride Films with High Hardness Formed by Electron Cyclotron Resonance Plasma Sputtering. Japanese Journal of Applied Physics, 2012, 51, 125602.	0.8	5
4500	Production of CH(A²Î”) radicals from the dissociative excitation reaction of C₂H₂with microwave discharge flow of Ar. Japanese Journal of Applied Physics, 2015, 54, 06GA04.	0.8	1
4501	Effects of deposition rate and ion bombardment on properties of a-C:H films deposited by H-assisted plasma CVD method. Japanese Journal of Applied Physics, 2016, 55, 01AA11.	0.8	9
4502	Optical properties of amorphous carbon determined by reflection electron energy loss spectroscopy spectra. Physical Chemistry Chemical Physics, 2021, 23, 25335-25346.	1.3	12
4503	Solid Solutions in Films of Ternary Carbides and Nitrides of Groups IVâ€“VI Transition Metals: Structure and Properties (Review). Journal of Superhard Materials, 2021, 43, 231-247.	0.5	2
4504	On the Breakdown Voltage Temperature Dependence of High-Voltage Power Diode Passivated with Diamond-Like Carbon. , 2021, , .		0

#	Article	IF	Citations
4505	Effect of Carbon Configuration on Mechanical, Friction and Wear Behavior of Nitrogen-Doped Diamond-Like Carbon Films for Magnetic Storage Applications. Tribology Letters, 2021, 69, 1.	1.2	6
4506	Tribological Properties and Corrosion Resistance Properties of NbN/TiN Multilayer, TiNb-N_X Single-Layer and Coatings that are Doped with Carbon. Key Engineering Materials, 0, 901, 208-218.	0.4	0
4507	Substrate Dependent Charge Transfer Kinetics at the Solid/Liquid Interface of Carbonâ€Based Electrodes with Potential Application for Organic Naâ€Ion Batteries. Israel Journal of Chemistry, 2022, 62, .	1.0	4
4508	DLC-Based Coatings Obtained by Low-Frequency Plasma-Enhanced Chemical Vapor Deposition (LFPECVD) in Cyclohexane, Principle and Examples. Coatings, 2021, 11, 1225.	1.2	7
4509	Enhancement of the ion flux to the substrate by high voltage biasing in an electron cyclotron resonance plasma and its application to high-speed deposition of conductive carbon film. Japanese Journal of Applied Physics, 0, , .	0.8	0
4510	Wear properties of carbon-rich tungsten carbide films. Wear, 2022, 488-489, 204146.	1.5	5
4511	Effect of Cu doping on the secondary electron yield of carbon films on Ag-plated aluminum alloy. Chinese Physics B, 0, , .	0.7	1
4512	Thermomechanical properties and frictional contact behavior of oxygen doped DLC film through molecular dynamics simulation. Diamond and Related Materials, 2021, 120, 108653.	1.8	6
4513	Enhancing technological prospect of nanostructured bainitic steels by the control of thermal stability of austenite. Materials and Design, 2021, 211, 110143.	3.3	16
4514	Deposition of carbon films by direct ion beam. Lithuanian Journal of Physics, 2004, 44, 389-398.	0.1	0
4515	Sliding Wear of Non-Hydrogenated Diamond-Like Carbon Coatings Against Al, Cu and Ti. , 2005, , .		1
4516	Metal-containing diamond-like nanocomposite temperature sensors. Journal of Advanced Science, 2005, 17, 64-67.	0.1	0
4517	How to achieve superlow friction with DLC films?. Journal of Advanced Science, 2005, 17, 55-63.	0.1	0
4518	Synthesis and Characterization of Carbynoid Structures in Cluster-Assembled Carbon Films. , 2005, , 15-36.		0
4519	Carbon-Based Materials by Pulsed Laser Deposition. , 2006, , 75-104.		1
4520	Improved Carbon Materials for Nanomanufacturing Applications. , 2006, , 281-312.		0
4521	Tribological Characteristics of Ultra-thin DLC Films Prepared by Filtered Cathodic Vacuum Arc. Transactions of the Materials Research Society of Japan, 2007, 32, 523-526.	0.2	0
4522	Deposition of Homogeneous Amorphous Carbon Film at High Growth Rates by Vacuum Arc Deposition. Journal of the Japan Society for Precision Engineering, 2007, 73, 470-474.	0.0	1

#	Article	IF	Citations
4524	ANALYSIS OF CLUSTER DIMENSION AND MORPHOLOGY OF ROOM TEMPERATURE GROWN NANOCARBON USING CATHODIC ARC AND ITS INFLUENCE ON FIELD ASSISTED ELECTRON EMISSION. International Journal on Intelligent Electronic Systems, 2008, 2, 27-32.	0.1	0
4525	Biomaterials Using Plasma Immersion Ion Implantation and Deposition Surface Modification of. , 2008, , 573-631.		0
4526	Friction between Diamond-Like Carbon (DLC) Filmsâ€"a Molecular Dynamics Study. , 2009, , 554-555.		0
4527	Effect of the Prepared Process on Tribological Properties of Multi-Layer Elastomeric DLC Monolayer. , 2009, , 602-605.		0
4529	DLC Coatings by PI3D: Low-Voltage Å¾ersus High-Voltage Biasing. Acta Physica Polonica A, 2009, 115, 1146-1148.	0.2	1
4530	Problem-Solving Methods in Tribology with Surface-Specific Techniques. , 2009, , 351-388.		0
4531	Characterization of Tribological Properties of DLC Films Prepared by Different Deposition Method. Journal of the Korean Ceramic Society, 2009, 46, 497-504.	1.1	0
4532	Composition, microstructure and properties of C-N-V films prepared by pulsed bias arc ion plating. Wuli Xuebao/Acta Physica Sinica, 2010, 59, 4296.	0.2	1
4533	Thermal stability of glow discharge polymer coatings on glass microspheres. Wuli Xuebao/Acta Physica Sinica, 2010, 59, 8005.	0.2	1
4534	Infrared Spectroscopy of Amorphous Carbon Film Deposition Process using Acetylene Plasma. Hyomen Kagaku, 2010, 31, 400-404.	0.0	0
4535	Observation of Plasma Chemical Vapor Deposition Process of Amorphous Carbon Film. Hyomen Kagaku, 2010, 31, 156-161.	0.0	0
4536	High-Density Radio-Frequency Plasma Sources Produced by Capacitive Discharge with Various Methods for Thin-Film Preparation. IEEJ Transactions on Fundamentals and Materials, 2010, 130, 865-870.	0.2	0
4538	The Fundamentals of Hard andSuperhard Nanocompositesand Heterostructures. , 2010, , 13-46.		0
4539	Toughness and Toughening of Hard Nanocomposite Coatings. , 2010, , 99-145.		1
4540	The Industrial Perspective. , 2010, , 357-425.		0
4541	Using Nanomechanicsto Optimize Coatingsfor Cutting Tools. , 2010, , 217-256.		0
4542	Diamond Like Carbon Coating on WC Core Pin for Injection Molding of Zirconia Optical Ferrule. Korean Journal of Materials Research, 2010, 20, 570-574.	0.1	1
4543	First principles studies of nitrogen doped tetrahedral amorphous carbon. Wuli Xuebao/Acta Physica Sinica, 2011, 60, 027104.	0.2	4

#	Article	IF	Citations
4544	Hydrogenated Amorphous Carbon Films Prepared by Filtered Vacuum Arc Method with Various C₂H₂Pressures. Japanese Journal of Applied Physics, 2011, 50, 01AH01.	0.8	0
4545	Removal of Diamond-Like Carbon Film by Oxygen-Dominated Plasma Beam Converted from Filtered Carbon-Cathodic Arc. Japanese Journal of Applied Physics, 2011, 50, 01AF12.	0.8	0
4546	Oxidation Behavior of Glucose on Platinized Diamond-like Carbon Film Electrode. Wuji Cailiao Xuebao/Journal of Inorganic Materials, 2011, 25, 1325-1329.	0.6	0
4547	Slider with Integrated Microactuator (SLIM) for Second Stage Actuation in Hard Disk Drives. Microtechnology and MEMS, 2011, , 423-440.	0.2	0
4548	Wear test and Raman analysis of diamond-like carbon films prepared by bipolar-type plasma based ion implantation. Transactions of the Materials Research Society of Japan, 2011, 36, 333-336.	0.2	0
4549	Effects of DC Substrate Bias Power Sources and Reactant Gas Ratio on Synthesis and Tribological Properties of Ternary B-C-N Coatings. Journal of the Korean Institute of Surface Engineering, 2011, 44, 60-67.	0.1	0
4550	Enhanced Capacitance of Porous Carbon Electrodes through Deposition of Small Amounts of NiO. Acta Physica Polonica A, 2011, 120, 66-69.	0.2	0
4551	Characteristic of DLC Thin Film Fabricated by FVAS Method on Tungsten Carbide. Journal of the Korean Institute of Electrical and Electronic Material Engineers, 2011, 24, 812-816.	0.0	0
4553	Preparation and properties of graphite-like carbon films fabricated by unbalanced magnetron sputtering. Wuli Xuebao/Acta Physica Sinica, 2012, 61, 056103.	0.2	1
4555	Synthesis of transparent diamond-like carbon film on the glass by radio-frequency plasma enhanced chemical vapor deposition. Journal of the Korean Crystal Growth and Crystal Technology, 2012, 22, 190-193.	0.3	4
4556	Characterization of Plate Wear and Printing Quality of Concave Polymer Printing Plate Prepared by Diamond-Like Carbon Deposition Conditions. Korean Journal of Materials Research, 2012, 22, 552-561.	0.1	0
4557	Advanced Solid Lubricant Technology Improve Engine Performance. Lecture Notes in Electrical Engineering, 2013, , 839-849.	0.3	1
4559	Nano/Micro-Tribological Properties of MEMS/NEMS Materials. , 2013, , 215-229.		0
4560	Mechanical Properties of Composite SiNx/DLC Films Prepared by Filtered Cathodic Arc of Graphite Incorporated with RF Sputtering of Silicon Nitride. Materials Sciences and Applications, 2013, 04, 564-571.	0.3	0
4561	Hard Graphite-Like Carbon Coatings. , 2013, , 1615-1619.		0
4562	Self-Lubricating Hard/Ultra-Hard Coatings. , 2013, , 3018-3025.		0
4563	Diamond and Diamond-Like Carbon. Carbon Materials, 2013, , 29-47.	0.2	0
4564	Absorbance Control of Liquids Employing Transmission Sub-wavelength DLC Diffraction Grating. NATO Science for Peace and Security Series B: Physics and Biophysics, 2013, , 203-212.	0.2	1

#	Article	IF	Citations
4565	Fabrication of a-CN_{<i>x</i>} films by RF-plasma decomposition of BrCN. Transactions of the Materials Research Society of Japan, 2013, 38, 677-680.	0.2	0
4567	Study of diamond-like coatings by IR-spectral ellipsometry and Raman spectroscopy. Nauka I Obrazovanie, 2013, 13, .	0.1	0
4570	Large-scale synthesis of the carbon coils using stainless steel substrate. Journal of the Korean Crystal Growth and Crystal Technology, 2013, 23, 296-301.	0.3	0
4572	Effect of deposition temperature on growth, structure and mechanical properties of diamond-like carbon films co-doped by titanium and silicon. Wuli Xuebao/Acta Physica Sinica, 2014, 63, 028104.	0.2	1
4573	The Molecular Dynamics Simulation on the Diamond-Like Carbon Films. Material Sciences, 2014, 04, 145-151.	0.0	0
4574	Numerical Analysis on Substrate-Incident Carbon Flux in Low-Pressure Radio-Frequency CH₄ Plasmas for Deposition of Diamond-Like Carbon Films. IEEJ Transactions on Fundamentals and Materials, 2014, 134, 53-59.	0.2	0
4575	Plasma Enhanced-Chemical Vapour Deposition of Scuff-Resistant Hydrogenated Amorphous Carbon Coatings on C100 Steel. Journal of Surface Engineered Materials and Advanced Technology, 2014, 04, 131-139.	0.2	0
4576	Organic Dust, Synthesis by Stars. , 2014, , 1-3.		0
4579	Study of surface modification and contact angle by electrospun PVdF-HFP membrane with DLC coating. Journal of the Korean Crystal Growth and Crystal Technology, 2014, 24, 33-40.	0.3	0
4580	Effect of acid pretreatment of the plated substrate on the hardness of the carbon plating film formed by using a molten salt electrochemical process. WIT Transactions on the Built Environment, 2014, , .	0.0	0
4581	Experimental Methods: Lasers, Targets and Detectors. Springer Theses, 2015, , 33-52.	0.0	0
4582	Correlation of Mechanical Properties with Surface Morphology of Diamond-Like Carbon Films Deposited By Plasma Enhanced Chemical Vapour Deposition Technique. International Journal of Innovative Research in Science, Engineering and Technology, 2014, 3, 15510-15517.	0.4	0
4583	Introduction to Carbon Materials. , 2015, , 3-14.		2
4585	TRIBOLOGICAL STUDY OF SELF-LUBRICATING COMPOSITES WITH HEXAGONAL BORON NITRIDE AND GRAPHITE AS SOLID LUBRICANTS. , 0, , .		1
4586	ASSESSMENT OF MULTIFUNCTIONAL COATING ADHESION: COMPARISON BETWEEN INDENTATION AND SCRATCH TESTS. , 0, , .		0
4587	EVALUATION OF TRIBOELECTRICITY IN DIAMOND-LIKE COATINGS CONTAINING SILVER NANOPARTICLES USING AFM AND KPFM. , 0, , .		0
4588	Heat Resistant Properties of Some Elements-Incorporated Diamond-Like Carbon Films and Their Trial Applications for Micro End Mill Coatings. Materials Sciences and Applications, 2015, 06, 9-15.	0.3	0
4589	Customized Coating Systems for Products with Added Value from Development to High-Volume Production. , 2015, , 81-89.		0

#	Article	IF	Citations
4590	Organic Dust, Synthesis by Stars. , 2015, , 1787-1789.		0
4591	Deposition Process and Its Surface Reactions of an Amorphous Carbon Film. Journal of the Institute of Electrical Engineers of Japan, 2015, 135, 139-141.	0.0	0
4592	Structural, Optical and Electrical Properties of Chemical Vapour Deposited Nitrogen Doped Diamond Like Carbon Films. Physical Science International Journal, 2015, 6, 103-111.	0.3	0
4593	Introduction: Overview of Plasma Processing Used for Synthesis of Carbon Films and Carbon Nanostructures. Journal of the Institute of Electrical Engineers of Japan, 2015, 135, 136-138.	0.0	0
4594	DLC Coating Technology and Future Trend. Journal of the Japan Society for Technology of Plasticity, 2015, 56, 196-200.	0.0	0
4595	Field Electron Emission from Nanomaterials. , 2015, , 1-23.		0
4596	Evaluation of doped amorphous carbon coatings for hydrophobic applications in aerospace. Canadian Aeronautics and Space Journal, 0, , 1-12.	0.1	0
4597	Effect of Hydrodynamic Condition on the Electrochemical Behavior of Various Metals in 3.5 wt% NaCl Solution. Corrosion Science and Technology, 2015, 14, 218-225.	0.2	0
4598	Characteristics of Sputtering Carbon Films for the Improvement of Physical Properties in Carbon Fiber. Journal of the Korean Institute of Electrical and Electronic Material Engineers, 2015, 28, 694-697.	0.0	0
4599	Studying nanocomposite films with matrix-forming carbon by kelvin probe force microscopy. Diagnostics Resource and Mechanics of Materials and Structures, 0, , 104-113.	0.1	0
4600	Analiza wÅ‚aÅ›ciwoÅ›ci tribologicznych powÅ‚ok a-C:H:SiOx wytwarzanych metodÄ… RF PACVD. InÅ»ynieria MateriaÅ‚owa, 2015, 1, 123-128.	0.2	0
4601	Field Electron Emission from Nanomaterials. , 2016, , 1169-1191.		0
4602	A Molecular Dynamics Simulation Study of the Influence of Different Deposited Particle on the Properties of Hydrogenated Amorphous Carbon Films. Advances in Condensed Matter Physics, 2016, 05, 9-15.	0.1	0
4603	WEAR OF Si OR B DOPED AMORPHOUS CARBON COATINGS. Tribologia, 2016, 268, 55-67.	0.0	0
4604	Studies of thermal stability of a-C:H:Si coatings produced by radio-frequency plasma assisted chemical vapour deposition (RF-PACVD) method. InÅ»ynieria MateriaÅ‚owa, 2016, 1, 32-37.	0.2	1
4605	High-Power Impulse Magnetron Sputtering (HiPIMS). , 2016, , 588-602.		0
4606	Deposition and Characterization of Multilayer DLC/BN Films. Materials Sciences and Applications, 2017, 08, 738-745.	0.3	1
4607	Overcoat Fabrication and Characterization. Springer Theses, 2017, , 39-52.	0.0	0

#	Article	IF	Citations
4609	Adhesion evaluation of nanostructured coatings on titanium alloy for biomedical applications. , 2017, , .		0
4610	Main Allotropes of Carbon. Advances in Chemical and Materials Engineering Book Series, 2017, , 185-213.	0.2	3
4611	Comparison of the structure and topography of selected low friction thin films. Journal of Achievements in Materials and Manufacturing Engineering, 2017, 1, 21-25.	0.2	0
4612	Carbon-Base (Diamondlike and Diamond) Coatings. , 2017, , 571-582.		1
4613	Solid Lubricants. , 2017, , 191-206.		1
4614	Application of radio frequency inductively coupled plasma in chemical vapor deposition process of diamond-like carbon films for modification of properties of deposited films. Materials Science-Poland, 2017, 36, 80-85.	0.4	2
4615	Articulating Biomaterials. , 2018, , 859-910.		0
4616	Spectroscopy of Interstellar Carbonaceous Dust. Astrophysics and Space Science Library, 2018, , 159-171.	1.0	1
4617	Modeling the electrostatic field localization in nanostructures based on DLC films using the tunneling microscopy methods. , 2018, , .		2
4618	On stabilization of field emission and increase in the current density of planar nanostructures with DLC films. , 2018, , .		2
4619	ADAPTIVE COATINGS a-C/MoS2. Tribologia, 2018, 278, 51-56.	0.0	1
4620	ProtecciÃ³n de acero para instrumentos quirÃºrgicos con recubrimientos duros en base carbono tipo DLC. Revista Materia, 2018, 23, .	0.1	0
4621	Tribological study of low friction DLC:Ti and MoS2 thin films. Journal of Achievements in Materials and Manufacturing Engineering, 2018, 1, 13-18.	0.2	0
4622	Deposition of Hydrophilic Amorphous Carbon Film with Ether as a Source Molecule and Analysis of its Deposition Reaction. IEEJ Transactions on Fundamentals and Materials, 2018, 138, 538-543.	0.2	0
4623	Application of Reduced Graphene Oxide (rGO) for Stability of Perovskite Solar Cells. Carbon Nanostructures, 2019, , 203-229.	0.1	0
4625	Deposition and Thermal Stability of DLC/Si-N Composite Films Synthesized Using a Sputtering-PBII Hybrid System. Materials Sciences and Applications, 2019, 10, 746-755.	0.3	1
4626	Chemical structure analysis of diamond-like carbon by Raman spectroscopy. Tanso, 2019, 2019, 14-25.	0.1	2
4627	Tribological performance and corrosion behavior of aluminum alloy protected by Cr-doped diamond-like carbon thin film. International Journal of Materials Research, 2019, 110, 447-453.	0.1	0

#	Article	IF	Citations
4628	FAILURE OF DIAMOND-LIKE CARBON (DLC) COATINGS IN AUTOMOBILE ENGINES â€“ A REVIEW. Proceedings on Engineering Sciences, 2019, 1, 171-180.	0.2	1
4629	The effects of deposition potential on the optical, morphological and mechanical properties of DLC films produced by electrochemical deposition technique at low voltages. Materials Science-Poland, 2019, 37, 166-172.	0.4	0
4630	Study of a-C:H thin films deposited by Plasma Immersion Ion Implantation for mechanical and tribological applications. Nanoscale Reports, 2019, 2, 24-32.	0.5	0
4631	Germanium window with highly durable diamond-like carbon coating for infrared camera of automobile. , 2019, , .		0
4632	Carbon-titanium based multilayer nanostructures obtained by TVA method. , 2019, , .		2
4633	Low inner stress nano-diamond and C60 incorporated diamond-like carbon films prepared by magnetron sputtering. , 2019, , .		0
4634	Thickness distribution peculiarities of DLS â€“films obtained by method of pulse laser precipitation. Science Intensive Technologies in Mechanical Engineering, 2020, 2020, 35-40.	0.1	0
4635	Growth mechanism analysis and controlled synthesis of diamond-like carbon. Tanso, 2020, 2020, 80-91.	0.1	0
4636	Effect of focused nanosecond laser pulse irradiation on microtribological properties of diamond-like films. Quantum Electronics, 2020, 50, 750-755.	0.3	0
4637	Synthesis of nano-diamond-like carbon for protective optical window coating applications. Bulletin of Materials Science, 2021, 44, 1.	0.8	3
4638	Salivary pH Effect on Orthodontic Appliances: In Vitro Study of the SS/DLC System. Coatings, 2021, 11, 1302.	1.2	6
4639	Nanoindentation-induced deformation behaviors of tetrahedral amorphous carbon film deposited by cathodic vacuum arc with different substrate bias voltages. Applied Surface Science, 2022, 576, 151741.	3.1	14
4640	Corrosion Resistance and Hydrophobic Properties of Gradient Coatings Based on Carbon and Alloying Elements. Lecture Notes in Networks and Systems, 2020, , 74-83.	0.5	1
4641	Synthesis of fluorocarbon nanofilms on titanium using high-power KrF laser radiation. Quantum Electronics, 2020, 50, 1173-1178.	0.3	2
4642	Frictional properties of electron beam-deposited a-C:Si films. Diamond and Related Materials, 2020, 110, 108150.	1.8	3
4643	Ð¡ÑƒÐ¿ÐµÑ€Ð³Ð¸Ð´Ñ€Ð¾Ñ„Ð¾Ð±Ð½Ñ‹Ðµ Ð¼Ð°Ñ‚ÐµÑ€Ð¸Ð°Ð»Ñ‹ Ð¸ Ð¿Ð¾ÐºÑ€Ñ‹Ñ‚Ð¸Ñ Ð¾Ñ‚ Ð¾Ð±Ð¼ÐµÑ€Ð·Ð°Ð½Ð¸Ñ. Goronie I Plazmochimiã		0
4644	Polymerization Mechanism of Nitrogen-Containing Heteroaromatic Compound Under High-Pressure and High-Temperature Conditions. Journal of Physical Chemistry A, 2021, 125, 376-386.	1.1	0
4645	Impact of Ir modification on the durability of FeNC catalysts under start-up and shutdown cycle conditions. Journal of Materials Chemistry A, 2022, 10, 6038-6053.	5.2	7

#	Article	IF	Citations
4646	Influence of spark plasma sintering conditions on microstructure, carbon contamination, and transmittance of CaF2 ceramics. Journal of the European Ceramic Society, 2022, 42, 245-257.	2.8	18
4647	New in situ low-friction technology for diamond-like carbon coatings using surface discharge treatment in ambient air. Tribology International, 2022, 165, 107306.	3.0	22
4648	Promotional effects of defects on Ni/HAP catalyst for carbon resistance and durability during dry reforming of methane. Fuel, 2022, 310, 122363.	3.4	24
4649	Synthesis of nanostructure diamond-like carbon thin films by atmospheric pressure plasma jet. AIP Conference Proceedings, 2020, , .	0.3	1
4650	Using Textured-DLC Coating to Improve the Wear Resistance of Stainless Steel Plate Under Dust-Containing Lubricant Condition. International Journal of Automation Technology, 2020, 14, 99-108.	0.5	0
4651	First principles study of the atomic and electronic structure in graphene-fullerene hybrid systems. Letters on Materials, 2020, 10, 365-370.	0.2	3
4653	Wear comparison of critical dimension-atomic force microscopy tips. Journal of Micro/Nanolithography, MEMS, and MOEMS, 2020, 19, 1.	1.0	2
4654	Influence of gradient interlayer thickness on corrosion and tribological behavior of Ti-containing multilayer graphite-like carbon films. Wear, 2022, 488-489, 204177.	1.5	2
4655	Si-DLC films deposited by a novel method equipped with a co-potential auxiliary cathode for anti-corrosion and anti-wear application. Journal of Materials Science and Technology, 2022, 109, 114-128.	5.6	15
4656	Sub-100-nm periodic nanostructure formation induced by short-range surface plasmon polaritons excited with few-cycle laser pulses. Journal of Applied Physics, 2021, 130, .	1.1	7
4657	Modeling of high power impulse magnetron sputtering discharges with graphite target. Plasma Sources Science and Technology, 2021, 30, 115017.	1.3	6
4658	Cubic Octa-Carbon: Quantum-Chemical Design of Molecular Structure and Potential Way of Its Synthesis from Cubane. International Journal of Molecular Sciences, 2021, 22, 12067.	1.8	0
4659	Mechanical Properties of Carbon Thin Films. , 2004, , 185-196.		1
4660	Amorphous Hydrogenated Carbon Nanofilm. , 2008, , 967-984.		0
4661	Physical vapor deposition using a coaxial ion acceleration method. Review of Scientific Instruments, 2020, 91, 095109.	0.6	0
4662	The Tribological Behavior of the DLC-Coated Engine Surfaces Lubricated with Oils with Nanoadditives. , 0, , .		0
4663	Thermal expansion of continuous random networks of carbon. Journal of Non-Crystalline Solids, 2022, 576, 121260.	1.5	0
4664	Understanding the DLC film â€“ Polyamide 12 substrate interrelation during pulsed laser deposition. Applied Surface Science, 2022, 576, 151872.	3.1	6

#	Article	IF	Citations
4665	Nbâ€“Crâ€“C coated titanium as bipolar plates for proton exchange membrane fuel cells. Journal of Power Sources, 2022, 520, 230797.	4.0	19
4666	Shear-induced interfacial reconfiguration governing superlubricity of MoS2-Ag film enabled by diamond-like carbon. Applied Surface Science, 2022, 578, 152068.	3.1	18
4667	Tribological behaviour of W-S-C coated ceramics in a vacuum environment. Tribology International, 2022, 167, 107375.	3.0	3
4668	Synthesis of paracrystalline diamond. Nature, 2021, 599, 605-610.	13.7	70
4669	Carbon cryogel preparation and characterization. Diamond and Related Materials, 2022, 121, 108727.	1.8	5
4670	One-Pot Synthesis of a Highly Active and Stable Ni-Embedded Hydroxyapatite Catalyst for Syngas Production via Dry Reforming of Methane. Energy & Fuels, 2021, 35, 19568-19580.	2.5	15
4671	Ultrahard bulk amorphous carbon from collapsed fullerene. Nature, 2021, 599, 599-604.	13.7	99
4672	Effects of Ti Doping on Structure and Internal Stress of Amorphous Carbon Films on the Î³-Fe Substrate: Molecular Dynamics Simulation. Langmuir, 2021, 37, 14072-14080.	1.6	7
4673	Polyethylene glycol derived carbon quantum dots nanofluids: An excellent lubricant for diamond-like carbon film/bearing steel contact. Friction, 2022, 10, 1393-1404.	3.4	15
4674	Phonon Bottleneck in Temperature-Dependent Hot Carrier Relaxation in Graphene Oxide. Journal of Physical Chemistry C, 2021, 125, 26583-26589.	1.5	4
4675	The sp2-sp3 transition and shear slipping dominating the compressive deformation of diamond-like carbon. Journal of Non-Crystalline Solids, 2022, 577, 121318.	1.5	6
4676	Fabrication and applications of the optical diamond-like carbon films: a review. Journal of Materials Science, 2022, 57, 3971-3992.	1.7	7
4677	Nitrogen doped graphene with diamond-like bonds achieves unprecedented energy density at high power in a symmetric sustainable supercapacitor. Energy and Environmental Science, 2022, 15, 740-748.	15.6	51
4678	Preparation and characterization of diamond-like carbon (DLC) film on 316L stainless steel by microwave plasma chemical vapor deposition (MPCVD). Diamond and Related Materials, 2022, 122, 108820.	1.8	11
4679	Deconvolution process approach in Raman spectra of DLC coating to determine the sp3 hybridization content using the ID/IG ratio in relation to the quantification determined by X-ray photoelectron spectroscopy. Diamond and Related Materials, 2022, 122, 108818.	1.8	24
4680	Annealing effects on the properties of hydrogenated diamond-like carbon films doped with silicon and nitrogen. Diamond and Related Materials, 2022, 122, 108809.	1.8	2
4681	The effects of Cr and B doping on the mechanical properties and tribological behavior of multi-layered hydrogenated diamond-like carbon films. Surface and Coatings Technology, 2022, 431, 127977.	2.2	16
4682	IGNITION AND PROPERTIES OF RF CAPACITIVE DISCHARGE IN ACETYLENE. , 2019, , 135-140.		3

#	Article	IF	Citations
4683	The Effect of the Substrate Spatial Orientation on The Properties of Amorphous Carbon Coatings Deposited from Pulse Plasma Flows. , 2020, , .		1
4684	Diamond-like Carbon Coating in Improving the Perfomance of II-VI Devices. , 2020, , .		1
4685	Composition, Structure and Properties of CrAlN-DLC Hard Composite Films Deposited by Arc Ion Plating. Wuji Cailiao Xuebao/Journal of Inorganic Materials, 2022, 37, 764.	0.6	1
4686	Effects of annealing treatment on tribological behaviour of tungstenâ€doped diamondâ€like carbon film under lubrication (Part 1): Chemical composition, mechanical properties and tribological behaviour under base oil. Lubrication Science, 0, , .	0.9	0
4687	Effect of the Si/Ti Ratio on the Structure and Mechanical Properties of Plasma-Enhanced Magnetron SputteredÂTiSiCN Coatings. Journal of Materials Engineering and Performance, 2022, 31, 3621-3630.	1.2	2
4689	Ion energy-induced nanoclustering structure in a-C:H film for achieving robust superlubricity in vacuum. Friction, 2022, 10, 1967-1984.	3.4	12
4690	Investigation of the Effect of Hydrogen Gas as Raw Material for DLC Film Preparation. Materials Transactions, 2022, 63, 351-356.	0.4	0
4691	Deposition phenomena of diamond-like carbon coating on inner surface of circular metal tube by nanopulse plasma chemical vapor deposition. Diamond and Related Materials, 2022, 121, 108749.	1.8	3
4692	Influence of hydrogen gas flow ratio on the properties of silicon- and nitrogen-doped diamond-like carbon films by plasma-enhanced chemical vapor deposition. Diamond and Related Materials, 2022, 123, 108878.	1.8	5
4693	Friction and wear characterization of LIPSS and TiN / DLC variants. Applied Surface Science, 2022, 584, 152654.	3.1	4
4694	Structure and Characterization of Vacuum Arc Deposited Carbon Filmsâ€"A Critical Overview. Coatings, 2022, 12, 109.	1.2	8
4695	Growth and treatment of hydrogenated amorphous carbon nanoparticles in a lowâ€pressure plasma. Plasma Processes and Polymers, 2022, 19, .	1.6	3
4696	Protective Properties of Diamond-like Carbon on Alumite against Electrostatic Discharge Damage. Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan, 2022, 73, 53-57.	0.1	0
4697	Fretting tribological performance of DLC, TiAlN and DLC/TiAlN coatings deposited on carburized 18CrNi4A steel. Surface Topography: Metrology and Properties, 2022, 10, 015009.	0.9	1
4698	Indentation and abrasion in glass products: Lessons learned and yet to be learned. International Journal of Applied Glass Science, 2022, 13, 308-337.	1.0	15
4699	Rapid and Easy Assessment of Friction and Load-Bearing Capacity in Thin Coatings. Electronics (Switzerland), 2022, 11, 296.	1.8	4
4700	Mechanical and Tribological Properties of NbAl, NbAlN, and NbAlN-CH Coatings Deposited using Various Niobium Target Currents and Acetylene Flow Rates. Journal of Materials Engineering and Performance, 2022, 31, 3594-3610.	1.2	2
4701	Comparative study on the structural make-up and mechanical behavior of silicon and silver doped amorphous carbon films. Silicon, 0, , 1.	1.8	7

#	Article	IF	Citations
4702	Distribution of Clusters Formed by sp2- and sp3-Bonds in a Carbon Diamond-like Thin Film. Technical Physics, 2021, 66, 643-647.	0.2	0
4703	Vacuum-Freeze Drying Assist for the Fabrication of a Nickel-Aluminium Catalyst and Its Effects on the Structure-Reactivity in the Catalytic Dry Reforming of Methane. Bulletin of the Chemical Society of Japan, 2022, 95, 759-767.	2.0	0
4704	The mystery of unidentified infrared emission bands. Astrophysics and Space Science, 2022, 367, 16.	0.5	13
4705	Structural Properties and Composition of Graphite-Like Carbon Films Obtained by Pulsed Laser Deposition. Technical Physics, 2021, 66, 580-587.	0.2	1
4706	Well-adhered hydrogenated amorphous carbon thin films on ferrous alloy using silicon-containing interlayers at low temperatures. Vacuum, 2022, 199, 110923.	1.6	3
4707	Microstructure, mechanical, and wettability properties of Al-doped diamond-like films deposited using a hybrid deposition technique: Bias voltage effects. Diamond and Related Materials, 2022, 123, 108861.	1.8	15
4708	Design of a novel superhydrophobic F&Si-DLC film on the internal surface of 304SS pipes. Diamond and Related Materials, 2022, 123, 108852.	1.8	7
4709	Effects of annealing temperature on the mechanical, optical, and electrical properties of hydrogenated, nitrogen-doped diamond-like carbon films. Thin Solid Films, 2022, 745, 139100.	0.8	7
4710	Oxidation behavior, microstructure and mechanism of YAl3C3 at 1500ÂÂ°C in air up to 30 hours. Vacuum, 2022, 198, 110890.	1.6	2
4711	Friction behaviors of DLC films in an oxygen environment: An atomistic understanding from ReaxFF simulations. Tribology International, 2022, 168, 107448.	3.0	15
4713	Bipolar highâ€power impulse magnetron sputtering synthesis of highâ€entropy carbides. Journal of the American Ceramic Society, 2022, 105, 3862-3873.	1.9	2
4714	Subâ€Zero Temperature Sensor Based on Laserâ€Written Carbon. Advanced Electronic Materials, 0, , 2101252.	2.6	2
4715	Ð'Ð¿Ð»Ð¸Ð² Ð£Ð- Ñ‚Ð° Î³-Ð¾Ð¿Ñ€Ð¾Ð¼Ñ–Ð½ÑŽÐ²Ð½Ñ•Ð½Ð° Ð¾Ð¿Ñ‚Ð¸Ñ‡Ð½Ñ– Ñ‚Ð° ÑÑ‚Ñ€ÑƒÐºÑ‚ÑƒÑ€Ð½Ñ– Ð²Ð»Ð°ÑÑ‚Ð¸Ð²Ð¾ÑÑ‚Ñ–		
4716	Tailoring sheet resistance through laser fluence and study of the critical impact of a V-shaped plasma plume on the properties of PLD-deposited DLC films for micro-pattern gaseous detector applications. Diamond and Related Materials, 2022, 124, 108909.	1.8	3
4717	The Effectiveness of Diamond-like Carbon a-C:H:Si Coatings in Increasing the Cutting Capability of Radius End Mills When Machining Heat-Resistant Nickel Alloys. Coatings, 2022, 12, 206.	1.2	8
4718	Modification Methods of Diamond like Carbon Coating and the Performance in Machining Applications: A Review. Coatings, 2022, 12, 224.	1.2	17
4719	Influence of bias patterns on the tribological properties of highly hydrogenated PVD a-C:H films. Surface and Coatings Technology, 2022, 442, 128234.	2.2	4
4720	Optimizing mechanical and tribological properties of DLC/Cr3C2-NiCr duplex coating via tailoring interlayer thickness. Surface and Coatings Technology, 2022, 434, 128198.	2.2	16

#	Article	IF	Citations
4721	NiSe₂ Nanoparticles Encapsulated in N-Doped Carbon Matrix Derived from a One-Dimensional Ni-MOF: An Efficient and Sustained Electrocatalyst for Hydrogen Evolution Reaction. Inorganic Chemistry, 2022, 61, 2835-2845.	1.9	22
4722	Optimizing mechanical properties in single-layered and multi-layered amorphous carbon coatings. Diamond and Related Materials, 2022, 123, 108843.	1.8	2
4723	Rare-earth modified amorphous carbon films: Effects of erbium and gadolinium on the structural evolution and mechanical properties. Diamond and Related Materials, 2022, 123, 108898.	1.8	1
4724	Thermal properties of carbyne nanostructures. Results in Physics, 2022, 34, 105311.	2.0	4
4725	Effect of the post-heating temperatures on the microstructure, mechanical and electrical properties of silicon nitride thin films. Ceramics International, 2022, 48, 9188-9196.	2.3	7
4727	Evolution of graphene oxide (GO)-based nanohybrid materials with diverse compositions: an overview. RSC Advances, 2022, 12, 5686-5719.	1.7	27
4728	Carbon Nanomaterial-Carbon Fiber Hybrid Composite for Lightweight Structural Composites in the Aerospace Industry: Synthesis, Processing, and Properties. , 2022, , 445-470.		4
4729	Improving Tribological Performance of Piston Ring Steel Substrates by DLC/Nano-crystalline Diamond Coating. Arabian Journal for Science and Engineering, 2022, 47, 15441-15453.	1.7	2
4730	Bio-Tribology and Corrosion Behaviors of a Si- and N-Incorporated Diamond-like Carbon Film: A New Class of Protective Film for Ti6Al4V Artificial Implants. ACS Biomaterials Science and Engineering, 2022, 8, 1166-1180.	2.6	7
4731	Nanomaterials for application in wound Healing: current state-of-the-art and future perspectives. Journal of Polymer Research, 2022, 29, 1.	1.2	40
4732	Features of obtaining diamond-like coatings by pulsed laser deposition. Welding International, 2022, 36, 176-180.	0.3	0
4733	Preparation of boron doped diamond-like carbon films in a low-pressure high-density plasma in RF ICP-CVD. Materials Today: Proceedings, 2022, 62, 5105-5109.	0.9	1
4734	Ultra-high-rate deposition of diamond-like carbon films using Ar/C₂H₂ plasma jet CVD in combination with substrate-stage discharge. Japanese Journal of Applied Physics, 2022, 61, SI1001.	0.8	4
4735	Investigation of the Damage Mechanism of CrN and Diamond-Like Carbon Coatings on Precipitation-Hardened and Duplex-Treated X42Cr13/W Tool Steel by 3D Scratch Testing. Journal of Materials Engineering and Performance, 2022, 31, 7830-7842.	1.2	8
4736	Simulations of novel compact separator for extracting specific reactive ions from large plasma source. Japanese Journal of Applied Physics, 0, , .	0.8	1
4737	A Review of Binderless Polycrystalline Diamonds: Focus on the High-Pressureâ€“High-Temperature Sintering Process. Materials, 2022, 15, 2198.	1.3	11
4738	Duplex Surface Modification of 304-L SS Substrates by an Electron-Beam Treatment and Subsequent Deposition of Diamond-like Carbon Coatings. Coatings, 2022, 12, 401.	1.2	5
4739	Periodic Nanostructure Formation Induced by Short-range Surface Plasmon Polaritons Excited with Few-cycle Laser Pulses. IEEJ Transactions on Electronics, Information and Systems, 2022, 142, 454-459.	0.1	0

#	Article	IF	Citations
4740	Temperature dependent erosion and Raman analyses of arc-deposited H free thick DLC coating on Cr/CrN coated plasma nitrided steel. Surface and Coatings Technology, 2022, 436, 128308.	2.2	11
4741	Flame Synthesis of Functional Carbon Nanoparticles. , 0, , 1.		5
4742	Absorption spectra and mechanical properties of C : F nanocoatings deposited from laser plasma onto leucosapphire surface. Quantum Electronics, 2022, 52, 376-381.	0.3	1
4743	Hierarchical Carbon Nanocone-Silica Metamaterials: Implications for White Light Photoluminescence. ACS Applied Nano Materials, 2022, 5, 4787-4800.	2.4	6
4744	Spectroscopic analyses of structural alterations in diamond-like carbon films deposited on zirconia substrates. Diamond and Related Materials, 2022, 124, 108937.	1.8	3
4745	Improving the robustness of Micromegas detector with resistive DLC anode for the upgrade of the TPC readout chambers of the MPD experiment at the NICA collider. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2022, 1031, 166528.	0.7	1
4746	A novel resistive anode using a germanium film for Micromegas detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2022, 1031, 166595.	0.7	9
4747	Effects of racetrack magnetic field strength on structure and properties of amorphous carbon coatings deposited by HiPIMS using deep oscillation pulses. Surface and Coatings Technology, 2022, 438, 128417.	2.2	6
4748	Surface treatment of biopolymer films Polylactic acid and Polyhydroxybutyrat with angular changing oxygen plasma â€' More than just gradual purification. Surfaces and Interfaces, 2022, 30, 101856.	1.5	3
4749	Recent progress on carbon-based composites in multidimensional applications. Composites Part A: Applied Science and Manufacturing, 2022, 157, 106906.	3.8	48
4750	On the breakdown voltage temperature dependence of high-voltage power diodes passivated with diamond-like carbon. Solid-State Electronics, 2022, 193, 108284.	0.8	2
4751	Room temperature NO2 sensing performance of a-C-decorated TeO2 nanowires. Sensors and Actuators B: Chemical, 2022, 363, 131853.	4.0	12
4752	Investigation of Structure Modification of Underlying SiCOH Low-k Dielectrics with Subsequent Hardmask Deposition Process Conditions. Science of Advanced Materials, 2021, 13, 2185-2193.	0.1	0
4753	Relationship of Morphology and Chemical Composition of the Surface of Doped Diamond-Like Coatings with the Friction Coefficient. Journal of Friction and Wear, 2021, 42, 438-446.	0.1	0
4754	Measurements of Ortho-to-para Nuclear Spin Conversion of H₂ on Low-temperature Carbonaceous Grain Analogs: Diamond-like Carbon and Graphite. Astrophysical Journal, 2021, 923, 71.	1.6	5
4755	Raman area- and thermal-mapping studies of faceted nano-crystalline Î±-Fe₂O₃ thin films deposited by spray pyrolysis. Canadian Journal of Chemistry, 2022, 100, 507-511.	0.6	2
4756	Impact of Methanol Concentration on Properties of Ultra-Nanocrystalline Diamond Films Grown by Hot-Filament Chemical Vapour Deposition. Materials, 2022, 15, 5.	1.3	0
4757	Enhancement of sp3 C Fraction in Diamond-like Carbon Coatings by Cryogenic Treatment. Coatings, 2022, 12, 42.	1.2	9

#	Article	IF	Citations
4758	Fast Orbital-Free Full-Potential Calculations for Large Nano Objects: C, Al and Ti. Applied Nano, 2021, 2, 359-367.	0.9	0
4759	Mechanically robust nitrogen-rich plasma polymers: Biofunctional interfaces for surface engineering of biomedical implants. Materials Today Advances, 2021, 12, 100188.	2.5	13
4760	Influence of High-Energy C60 Ions on the Structure and Bonds of Carbon Coatings. Journal of Surface Investigation, 2021, 15, S112-S119.	0.1	0
4761	Recent Advancements in Wear-Resistant Coatings Prepared by PVD Methods. Advances in Chemical and Materials Engineering Book Series, 2022, , 174-195.	0.2	0
4762	Influence of Deposition Temperature on the Electrical and Electrochemical Properties of Carbon-Based Coatings for Metallic Bipolar Plates, Prepared by Cathodic Arc Evaporation. Advances in Materials Physics and Chemistry, 2022, 12, 47-57.	0.3	0
4763	Adhesion and corrosion of Alâ€“N doped diamond-like carbon films synthesized by filtered cathodic vacuum arc deposition. Ceramics International, 2022, 48, 20743-20759.	2.3	9
4764	High-Temperature Oxidation Resistance and Tribological Properties of Al2O3/ta-C Coating. Coatings, 2022, 12, 547.	1.2	2
4765	SiOC films on C/C composite prepared by chemical vapor deposition with hexamethyldisilazane precursor. Ceramics International, 2022, 48, 20887-20894.	2.3	7
4766	Immobilization and Characterization of L-Asparaginase over Carbon Xerogels. BioTech, 2022, 11, 10.	1.3	4
4767	Contact size effects on the friction and wear of amorphous carbon films. Applied Surface Science Advances, 2022, 9, 100248.	2.9	5
4777	Unusual High Hardness and Load-Dependent Mechanical Characteristics of Hydrogenated Carbonâ€“Nitrogen Hybrid Films. ACS Applied Materials & Interfaces, 2022, 14, 20220-20229.	4.0	3
4778	Production of Second-Generation Diesel: Effects of Catalyst Passivation on the Deoxygenation of Oleic Acid. SSRN Electronic Journal, 0, , .	0.4	0
4779	Electrochemical Behavior and Surface Conductivity of C/TiC Nanocomposite Coating on Titanium for PEMFC Bipolar Plate. Metals, 2022, 12, 771.	1.0	10
4780	Nanosynthesis by atmospheric arc discharges excited with pulsed-DC power: a review. Nanotechnology, 2022, 33, 342001.	1.3	2
4781	Synchrotron-based spectroscopic study of plasma generated amorphous hydrogenated carbon films (a-C:H) post-functionalized using photochemically active ruthenium-polypyridyl complexes. Journal of Electron Spectroscopy and Related Phenomena, 2022, 257, 147204.	0.8	0
4782	Improvement of corrosion resistance and mechanical properties of chrome plating by diamond-like carbon coating with different silicon-based interlayers. Materials Research Express, 2022, 9, 055604.	0.8	7
4783	Studies on Wear of a Milling Chuck for a Production Line of Specialized Elements Used in Lockstitch Machines. Materials, 2022, 15, 3402.	1.3	0
4784	Surface morphology and chemical microstructure of glow discharge polymer films prepared by plasma enhanced chemical vapor deposition at various Ar/H2 ratios. Vacuum, 2022, , 111142.	1.6	2

#	Article	IF	Citations
4785	Tuning the magnetic properties of Fe thin films with RF-sputtered amorphous carbon. Journal of Magnetism and Magnetic Materials, 2022, 557, 169461.	1.0	1
4786	The Optimization of Metal Nitride Coupled Plasmon Waveguide Resonance Sensors Using a Genetic Algorithm for Sensing the Thickness and Refractive Index of Diamond-like Carbon Thin Films. Photonics, 2022, 9, 332.	0.9	1
4787	Growth of diamond-like carbon films with significant nanocrystalline phases in a low-pressure high-density CH4 plasma in ICP-CVD: Effect of negative dc substrate bias. Applied Surface Science, 2022, 596, 153638.	3.1	2
4788	Current status and future potential of wear-resistant coatings and articulating surfaces for hip and knee implants. Materials Today Bio, 2022, 15, 100270.	2.6	27
4789	Graphite nanocrystals coated paper-based electrode for detection of SARS-Cov-2 gene using DNA-functionalized Au@carbon dot coreâ€“shell nanoparticles. Microchemical Journal, 2022, 179, 107585.	2.3	13
4790	Effect of a-C:H:Si interlayers on the mechanical and superlubricious properties of hydrogenated amorphous carbon films. Thin Solid Films, 2022, 753, 139275.	0.8	4
4791	Norbornane derived N-doped sp2 carbon framework as an efficient electrocatalyst for oxygen reduction reaction and hydrogen evolution reaction. Fuel, 2022, 323, 124420.	3.4	5
4792	Study of stress state changes in steel with Ti-TiC-DLC coating under high speed droplet impact. Tribology International, 2022, 173, 107626.	3.0	1
4793	Synthesis and Characterization of Boron Thin Films Using Chemical and Physical Vapor Depositions. Coatings, 2022, 12, 685.	1.2	3
4794	Influencing mechanisms of deposition bias voltage on superlubricious a-C:H films: Key role of nanoclustering structures in controlling structural evolution of transfer film. Carbon, 2022, 196, 499-509.	5.4	9
4795	Electrostatic and tribological properties of hydrogenated diamond-like carbon on anodic aluminium oxide. Surface and Coatings Technology, 2022, , 128530.	2.2	0
4796	The influence of different ratio of Ar and C<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.svg"><mml:mmultiscripts><mml:mrow><mml:mi>H</mml:mi></mml:mrow><mml:mrow><mml:mn>6</mml:mn></mml:mr /><mml:mprescripts /><mml:mrow><mml:mn>6</mml:mn></mml:mrow><mml:none /></mml:mmultiscripts></mml:math> gases and ion bombardment on the growth rate and sp3 bonds content in DLC-coatings synthesized in RF discharge. Physics Letters, Section A: General, Atomic and So	0.9	2
4797	A review on diamond-like carbon-based films for space tribology. Materials Science and Technology, 2022, 38, 1151-1167.	0.8	12
4798	Study of the influence of palladium nanoparticles on the structure of DLC films synthesized on silicon (100) substrates. Diamond and Related Materials, 2022, , 109125.	1.8	3
4799	Effect of ionic strength on amorphous carbon during chemical mechanical planarization. Diamond and Related Materials, 2022, , 109124.	1.8	2
4800	Challenges and coating solutions for wear and corrosion inside Lead Bismuth Eutectic: A review. Surface and Coatings Technology, 2022, 441, 128542.	2.2	33
4801	Analytics for Recovery and Reuse of Solid Wastes from Refineries. Energies, 2022, 15, 4026.	1.6	1
4802	Comparison of TiAlN DLC and PCD Tool Wear in CFRP Drilling. Journal of the Korean Society of Manufacturing Process Engineers, 2022, 21, 77-83.	0.1	1

#	Article	IF	Citations
4803	The effects of dilution gas on nanoparticle growth in atmospheric-pressure acetylene microdischarges. Plasma Science and Technology, 0, , .	0.7	0
4804	Mass Spectrometric Study on Ions and Radicals in Tetramethylsilane Plasma for Si-containing Diamond-Like Carbon Coating. IEEJ Transactions on Fundamentals and Materials, 2022, 142, 269-275.	0.2	0
4805	Effect of the alloying elements in TiN sublayer on the structure and mechanical properties of carbon coatings. Thin Solid Films, 2022, 755, 139324.	0.8	4
4807	Roll-to-Roll Deposition of Thin Graphitic Films and Dependence on Discharge Modes in Radio Frequency Capacitively Coupled Plasma. IEEE Transactions on Plasma Science, 2022, 50, 2126-2137.	0.6	1
4808	Chromiumâ€“Carbon-Based Coatings with Different Types of Nanocomposite Structure Obtained by Magnetron Sputtering and Their Properties. Journal of Friction and Wear, 2022, 43, 40-53.	0.1	0
4809	Deposition of Protective Nanostructured Diamond-Like Carbon Coatings on Aluminum Alloys. Journal of Engineering Physics and Thermophysics, 0, , .	0.2	0
4810	Advantages of Using Triboscopic Imaging: Case Studies on Carbon Coatings in Non-Lubricated Friction Conditions. Materials, 2022, 15, 4317.	1.3	0
4811	Plasmochemical Modification of Crofer 22APU for Intermediate-Temperature Solid Oxide Fuel Cell Interconnects Using RF PA CVD Method. Materials, 2022, 15, 4081.	1.3	1
4812	Inner surface modification of ureteral stent polyurethane tubes based by plasma-enhanced chemical vapor deposition to reduce encrustation and biofilm formation. Biofouling, 0, , 1-11.	0.8	4
4813	Simultaneous deposition of DLC film on the internal surface of multiple pipes. Diamond and Related Materials, 2022, 127, 109187.	1.8	7
4814	Dispersion of Single-Walled Carbon Nanotubes in Ethanolâ€“Cholic Acid Mixtures: Experiments and Molecular Dynamic Simulation. Russian Journal of Physical Chemistry A, 2022, 96, 1142-1147.	0.1	0
4815	Improving the mechanical, tribological, and electrochemical behavior of AISI 304 stainless steel by applying CrN single layer and Cr/CrN multilayer coatings. Wear, 2022, 504-505, 204425.	1.5	14
4816	Tribological behaviour of a multilayer CrN/DLC coating obtained using PVD-MS. Surface Topography: Metrology and Properties, 2022, 10, 024005.	0.9	3
4817	Tribocorrosion properties of plasma nitrided, Ti-DLC coated and duplex surface treated AISI 316L stainless steel. Surface and Coatings Technology, 2022, 441, 128587.	2.2	11
4818	Effect of cryogenic pretreatments on the microstructure and mechanical performance of diamond-like carbon coatings for high-speed alloys. Diamond and Related Materials, 2022, 127, 109189.	1.8	3
4819	Correlation of Cell Proliferation with Surface Properties of Polymer-like Carbon Films of Different Thicknesses Prepared by a Radio-Frequency Plasma CVD Process. Materials, 2022, 15, 4466.	1.3	2
4820	Exploration of a micron and mesoscale steps/slots composite manufacturing technology based on thin-film compensation. Ceramics International, 2022, , .	2.3	0
4821	Influence of nuclear quantum effects on the electronic properties of amorphous carbon. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	7

#	Article	IF	Citations
4822	Effect of N content on the microstructure and tribological properties of TiSiCN composite coatings. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2022, 40, 043407.	0.9	2
4823	Accurate Computational Prediction of Core-Electron Binding Energies in Carbon-Based Materials: A Machine-Learning Model Combining Density-Functional Theory and GW. Chemistry of Materials, 2022, 34, 6240-6254.	3.2	22
4824	Raman spectral analysis of the as-deposited a-C:H films prepared by CH4â€‰+â€‰Ar plasma CVD. MRS Advances, 0, , .	0.5	0
4825	Adaptive (Cr,Al)N+Mo:Sg Coating for Highlyâ€Stressed Contacts under Dry Rollingâ€Sliding Conditions. Tribology International, 2022, 174, 107761.	3.0	6
4826	Thermal stability of the magnetic moment in amorphous carbon thin film - An experimental and ab-initio study. Diamond and Related Materials, 2022, 127, 109200.	1.8	0
4827	Effect of low-pressure deposition on the mechanical and tribological properties of a-C:H films deposited via modified pulsed-DC PECVD with active screen as an additional cathode. Surface and Coatings Technology, 2022, 445, 128716.	2.2	6
4828	Residual stress and tribological behavior of hydrogen-free Al-DLC films prepared by HiPIMS under different bias voltages. Surface and Coatings Technology, 2022, 445, 128713.	2.2	13
4829	Combined experimental and simulative approach for friction loss optimization of DLC coated piston rings. Automotive and Engine Technology, 2022, 7, 283-293.	0.7	4
4830	Reactivity of soot emitted from different hydrocarbon fuels: Effect of nanostructure on oxidation kinetics. Fuel Processing Technology, 2022, 236, 107401.	3.7	14
4831	Tribological Behavior of Diamond-like Carbon Coatings under Boundary Friction: Part I. Structure, Testing Methods, Lubrication by Adsorption Layers. Inorganic Materials: Applied Research, 2022, 13, 893-906.	0.1	7
4832	Influence Of Formation Conditions, Subsequent Annealing and Ion Irradiation on the Properties of Nanostructured Coatings Based on Amorphous Carbon with Gold, Silver and Nitrogen Additives. East European Journal of Physics, 2021, , 124-133.	0.1	0
4833	The dependence of soot particle ice nucleation ability on its volatile content. Environmental Sciences: Processes and Impacts, 2022, 24, 2043-2069.	1.7	4
4835	Nâ€Ðoped sp²/sp³ Carbon Derived from Carbon Dots to Boost the Performance of Ruthenium for Efficient Hydrogen Evolution Reaction. Small Methods, 2022, 6, .	4.6	13
4836	Carbon Nanomaterials-Based Novel Hybrid Platforms for Electrochemical Sensor Applications in Drug Analysis. Critical Reviews in Analytical Chemistry, 0, , 1-16.	1.8	8
4837	Effects of deposition precursors of hydrogenated amorphous carbon films on the plasma etching resistance based on mass spectrometer measurements and machine learning analysis. Vacuum, 2022, 205, 111351.	1.6	4
4838	Adhesion Strength of Amorphous Carbon Films Deposited on a Trench Sidewall. Coatings, 2022, 12, 1220.	1.2	0
4839	Atomic force microscopy and multifractal analysis in diamond-like carbon films. Applied Physics A: Materials Science and Processing, 2022, 128, .	1.1	0
4840	Diamond-like Carbon Coatings in the Biomedical Field: Properties, Applications and Future Development. Coatings, 2022, 12, 1088.	1.2	10

#	Article	IF	Citations
4841	Single layer synthesis of silver nanoparticles with controlled filling fraction and average particle size. Optical Materials, 2022, 132, 112761.	1.7	3
4842	The correlation between external magnetic field and multifractal characteristics of PLD deposited DLC films. Diamond and Related Materials, 2022, 128, 109261.	1.8	2
4843	Effect of tribologically-induced changes in surface termination of silicon-containing diamond-like carbon coatings on the resistance to biomolecule adsorption. Carbon, 2022, 199, 132-140.	5.4	2
4844	Investigation of the Effect of Hydrogen Gas as Raw Material for DLC Film Preparation. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2022, 86, 210-215.	0.2	0
4845	Effect of heat treatment on mechanical property of amorphous carbon films by magnetron sputtering. Diamond and Related Materials, 2022, 129, 109328.	1.8	0
4846	Improvement in corrosion resistance of 316L stainless steel in simulated body fluid mixed with antiplatelet drugs by coating with Ti-doped DLC films for application in biomaterials. Corrosion Science, 2022, 208, 110611.	3.0	10
4847	Effect of deposition temperature on the microstructure and tribological properties of Si-DLC coatings prepared by PECVD. Diamond and Related Materials, 2022, 129, 109345.	1.8	8
4848	Probing the Low Friction Mechanism of Hydrogen-Free Dlc Film in Oxygen and Nitrogen Environments by First-Principles Calculations and Molecular Dynamics Simulation. SSRN Electronic Journal, 0, , .	0.4	0
4849	Diamond-like carbon films for tribological modification of rubber. Nanotechnology Reviews, 2022, 11, 2839-2856.	2.6	5
4850	A Sensing Strategy Based on Aptamers Alkylated with Melphalan and Graphite Nanocrystals in a Bed of Tetrahedral Amorphous Carbon for Electrochemical Detection of Lead Ions in Human Urine. SSRN Electronic Journal, 0, , .	0.4	0
4851	Ion Beam Deposition and Cleaning. Springer Series in Materials Science, 2022, , 407-480.	0.4	1
4852	Characterization of Diamond-like carbon films produced by electron- beam physical vapor deposition. Materials Today: Proceedings, 2022, 67, 995-1000.	0.9	0
4853	Influence of the Inert Gas Pressure on Intrinsic Stress in Diamond-Like Coating Deposited From Vacuum Arc Carbon Plasma. East European Journal of Physics, 2022, , 6-11.	0.1	0
4854	Encapsulation of CNT Films on Silicon Wafer by DLC Synthesized by PECVD for Application as a Thermal Interface Material. Lecture Notes in Mechanical Engineering, 2023, , 95-106.	0.3	0
4855	Comparison of glancing-angle scatterings on different materials in a high aspect ratio plasma etching process using molecular dynamics simulation. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2022, 40, 053007.	0.9	4
4856	UV Sterilization Effects and Osteoblast Proliferation on Amorphous Carbon Films Classified Based on Optical Constants. Bioengineering, 2022, 9, 505.	1.6	1
4857	Multifractal and optical characterization of silver nanoparticles embedded in carbon films prepared in C2H2â€‰+â€‰N2 gas mixtures. European Physical Journal Plus, 2022, 137, .	1.2	4
4858	Study of the influence of a gradient gas flow as an alternative to improve the adhesion of Diamond-Like Carbon film in the wear and corrosion resistance on the nitrided AISI 4340 steel. Surfaces and Interfaces, 2022, , 102352.	1.5	2

#	Article	IF	Citations
4859	Carbon-based coatings for suppression of silica adhesion in geothermal power generation. Tribology International, 2023, 177, 107956.	3.0	6
4860	Improved mechanical and tribological properties of diamond-like carbon films by adjusting pulsed substrate bias. Diamond and Related Materials, 2022, 130, 109402.	1.8	5
4861	Influence of plasma ionization on the elastic modulus and tribology behavior of carbon films deposited by the HiPIMS technique. Ceramics International, 2022, , .	2.3	1
4862	The oxidation state of Ag nanoparticles highly affects the release of Ag ions without compromising the mechanical performance and the safety of amorphous hydrogenated carbon coatings. Diamond and Related Materials, 2022, 130, 109430.	1.8	1
4863	2D (< 10 nm) sp3-C-rich carbon materials, possibly hydrogenated: A review. Carbon Trends, 2022, 9, 100219.	1.4	3
4864	Superior dielectric properties of epoxy-based photoresist thin film nanocomposites with carbon-coated Cu@C nanoparticles. Materials Research Express, 2022, 9, 106301.	0.8	3
4865	Interaction between Diamond and Alkali Metals and its Application to Machining of Diamond. IEEJ Transactions on Electronics, Information and Systems, 2022, 142, 1064-1067.	0.1	0
4866	Effect of doping elements to hydrogen-free amorphous carbon coatings on structure and mechanical properties with special focus on crack resistance. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 857, 144086.	2.6	9
4867	Adhesion, tensile and shear properties of a-C/TiC interface: A first-principles study. Diamond and Related Materials, 2022, 130, 109416.	1.8	5
4868	Effect of Water Adsorption Layers on the Friction Properties of Fluorinated Amorphous Carbon Films in Ambient Air. Langmuir, 2022, 38, 12894-12904.	1.6	1
4869	Evolution of local atomic arrangements in ball-milled graphite. Applied Nanoscience (Switzerland), 2023, 13, 5021-5031.	1.6	2
4870	Effects of Dopants on Scratch Responses of Diamond-Like Carbon Films by Rockwell C Diamond Indenter. Journal of Materials Engineering and Performance, 0, , .	1.2	0
4871	Optimizing diamond-like carbon coatings - From experimental era to artificial intelligence. Ceramics International, 2022, 48, 36000-36011.	2.3	8
4872	Carbon Nanomaterial-Based Lubricants: Review of Recent Developments. Lubricants, 2022, 10, 281.	1.2	21
4873	On Role of Plasma Electrons in CVD Synthesis of Carbon Nanostructures with Addition of Plasma Component of Carbon-Containing Gas. Metallofizika I Noveishie Tekhnologii, 2022, 44, 943-952.	0.2	0
4874	Microstructures, mechanical properties and surface wettability of La-doped diamond-like carbon films deposited by magnetron co-sputtering. Journal of Alloys and Compounds, 2023, 934, 167860.	2.8	4
4875	Studying the thermal resistance of superhydrophobic carbon soot coatings for heat transfer management in cryogenic facilities. Applied Thermal Engineering, 2023, 219, 119590.	3.0	7
4876	Influence of Si atoms on the structure and electronic properties of amorphous DLC films. Journal of Non-Crystalline Solids, 2023, 599, 121956.	1.5	4

#	Article	IF	Citations
4877	Carbon-based nanozymes: Design, catalytic mechanism, and bioapplication. Coordination Chemistry Reviews, 2023, 475, 214896.	9.5	55
4879	Nanocomposites of chalcogenide phase-change materials: from C-doping of thin films to advanced multilayers. Journal of Materials Chemistry C, 2022, 11, 269-284.	2.7	3
4880	Friction dependence on the textured structure of an amorphous carbon surface: A reactive molecular dynamics study. Applied Surface Science, 2023, 610, 155584.	3.1	9
4881	Effect of Gamma Radiation on the Electrochemical Behavior of AISI 8620 Steel Coated with Diamond-Like Carbon. Journal of Materials Engineering and Performance, 2023, 32, 6226-6235.	1.2	1
4882	Single-beam plasma source deposition of carbon thin films. Review of Scientific Instruments, 2022, 93, 113908.	0.6	0
4883	Secondary Structures on the Friction Surface of Diamond-like Coating. Coatings, 2022, 12, 1685.	1.2	2
4884	Oriented sp2 bonded carbon structure of hydrogenated amorphous carbon films. Diamond and Related Materials, 2022, , 109533.	1.8	2
4885	Investigating the effect of bias voltage on the microstructural thermal stability and tribological performance of N-doped hydrogenated diamond-like carbon coatings. Surface and Coatings Technology, 2022, 451, 129064.	2.2	2
4886	Feasibility of wear reduction for soft nanostructured thin film through enhanced elastic recoverability and contact stress relief. Friction, 2023, 11, 1292-1306.	3.4	1
4887	Carbon Layer Formation on Hexagonal Boron Nitride by Plasma Processing in Hydroquinone Aqueous Solution. ACS Applied Materials & Interfaces, 2022, 14, 53413-53420.	4.0	3
4888	Influence of mechanical properties of coating and substrate on wear performance of HDLC and TiN-coated AISI 5140 alloy steel. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 0, , 095440892211324.	1.4	1
4889	Simulated Pressure-temperature Carbon Structure Map obtained through uniaxial compression of Bulk C60. Carbon, 2023, 202, 554-560.	5.4	3
4890	A sensing strategy based on aptamers alkylated with melphalan and graphite nanocrystals in a bed of tetrahedral amorphous carbon for electrochemical detection of lead ions in human urine. Microchemical Journal, 2022, , 108206.	2.3	2
4891	Fretting behaviors of self-mated diamond-like carbon films: The evolution of fretting regime and transfer film. Carbon, 2023, 203, 695-705.	5.4	7
4892	Microstructure, mechanical and tribological properties of Ti doped ta-C films deposited by a hybrid coating system. Diamond and Related Materials, 2023, 131, 109565.	1.8	7
4893	Role of copper in tribological properties of hydrogenated amorphous carbon films in simulated physiological solution. Tribology International, 2023, 179, 108186.	3.0	0
4894	Macroscopic superlubricity enabled by the tribopair of nc-Ag/MoS2 and hydrogenated graphitic-like carbon films under high contact stress. Applied Surface Science, 2023, 611, 155814.	3.1	0
4895	Microstructure and properties of Mo doped DLC nanocomposite films deposited by a hybrid sputtering system. Vacuum, 2023, 208, 111732.	1.6	6

#	Article	IF	Citations
4896	Friction and wear performance of hydrogenated diamond-like coatings with non-metal element complex dopants against alumina in ambient air. Wear, 2023, 514-515, 204571.	1.5	3
4897	A review on multifunctional bioceramic coatings in hip implants for osteointegration enhancement. Applied Surface Science Advances, 2023, 13, 100353.	2.9	5
4898	Effect of C2H2 flow rate and a Ti/TiN/TiCN interlayer on the structure, mechanical and tribological properties of a-C:H films deposited using a hybrid PVD/PECVD process with an anode-layer ion source. Vacuum, 2023, 209, 111753.	1.6	6
4899	Structural characterization of ultrathin diamond-like carbon overcoats for high areal density magnetic recording. Materialia, 2023, 27, 101650.	1.3	3
4900	Impact Abrasive Wear of Cr/W-DLC/DLC Multilayer Films at Various Temperatures. Metals, 2022, 12, 1981.	1.0	3
4901	Machinability Performance Investigation of TiAlN-, DLC-, and CNT-Coated Tools during Turning of Difficult-to-Cut Materials. Journal of Nanomaterials, 2022, 2022, 1-15.	1.5	3
4902	Comparison of mechanical and tribological properties of diamond-like carbon coatings doped with Europium and Gadolinium produced by HiPIMS. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 0, , 095440542211365.	1.5	4
4903	An Economical and Scalable Method to Synthesize Graphitic-Like Films. ACS Omega, 2022, 7, 43548-43558.	1.6	2
4904	Amorphous Carbon Films for Electronic Applications. Advanced Materials, 2023, 35, .	11.1	7
4905	Effect of substrate rotational speed during deposition on the microstructure, mechanical and tribological properties of a-C:Ta coatings. Ceramics International, 2023, 49, 10722-10730.	2.3	2
4906	Ultrastrong conductive in situ composite composed of nanodiamond incoherently embedded in disordered multilayer graphene. Nature Materials, 2023, 22, 42-49.	13.3	28
4907	Recent Development of Dry Metal Forming. International Journal of Precision Engineering and Manufacturing, 2023, 24, 309-324.	1.1	2
4908	Structure and evolution of interstellar carbonaceous dust. Insights from the laboratory. Frontiers in Astronomy and Space Sciences, 0, 9, .	1.1	4
4909	Phase Transformation in Carbon during Mechanical Alloying of Graphite: Experimental and Molecular Dynamic Study. Journal of Materials Engineering and Performance, 0, , .	1.2	0
4910	Influence of substrate composition on size and chemical state of ion beam synthesised Co nanoparticles â€“ Towards fabrication of electrodes for energy devices. Materials Today Communications, 2023, 34, 105235.	0.9	0
4911	Comparative Study on the Scratch and Wear Resistance of Diamond-like Carbon (DLC) Coatings Deposited on X42Cr13 Steel of Different Surface Conditions. Ceramics, 2022, 5, 1207-1224.	1.0	1
4912	Electron drift velocity in acetylene and carbon dioxide determined from rf breakdown curves. Physica Scripta, 0, , .	1.2	1
4913	Diamondâ€like carbon films prepared by a low temperature periodic process for application in ventricular assist devices. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2023, 111, 1048-1058.	1.6	1

#	Article	IF	Citations
4914	Threshold switching behavior generated by the in situ filaments formation in carbon matrix enriched by ultra-small zirconium oxide nanoparticles. Applied Physics A: Materials Science and Processing, 2023, 129, .	1.1	1
4915	Plasma-chemical deposition of diamond-like coatings in capacitively coupled RF plasma in toluene. Journal of Physics: Conference Series, 2022, 2379, 012018.	0.3	0
4916	Unraveling the friction response from selective hydrogenation of textured amorphous carbon surface. Applied Surface Science, 2023, 614, 156246.	3.1	4
4917	A review of plasma-assisted deposition methods for amorphous carbon thin and ultrathin films with a focus on the cathodic vacuum arc technique. Journal of Materials Research, 2023, 38, 586-616.	1.2	1
4918	Surface modification technologies for enhancing the tribological properties of cemented carbides: A review. Tribology International, 2023, 180, 108257.	3.0	14
4919	Effect of N doping on the microstructure and dry etch properties of amorphous carbon deposited with a DC sputtering system. RSC Advances, 2023, 13, 2131-2139.	1.7	2
4920	The Influence of H Content on the Properties of a-C(W):H Coatings. Coatings, 2023, 13, 92.	1.2	3
4921	Aluminum Anodizing in an Aqueous Solution of Formic Acid with Ammonium Heptamolybdate Additive. Journal of the Electrochemical Society, 2023, 170, 013501.	1.3	1
4922	Structural Colors Based on Diamond Metasurface for Information Encryption. Advanced Optical Materials, 2023, 11, .	3.6	8
4923	Influence of modified perylene-3, 4, 9, 10-tetracarboxylate with alkali metals ions as surfactant on the yield of hydrothermal liquid-phase exfoliated graphene sheets. Carbon Letters, 2023, 33, 531-548.	3.3	1
4924	Microstructure, magnetic properties and corrosion resistance of Co-DLC nanocomposite film controlled by substrate temperature. Diamond and Related Materials, 2023, 133, 109673.	1.8	2
4925	Optimised diamond to graphite conversion via a metastable sp1-bonded carbon chain formation under an ultra-short femtosecond (30 fs) laser irradiation. Carbon, 2023, 204, 575-586.	5.4	6
4926	X-ray photoemission electron microscopy observation of wear tracks on hydrogenated amorphous carbon films after ball-on-disk tests. Diamond and Related Materials, 2023, 132, 109682.	1.8	0
4927	Probing the low friction mechanism of hydrogen-free DLC film in oxygen and nitrogen environments by first-principles calculations and molecular dynamics simulation. Surface and Coatings Technology, 2023, 455, 129219.	2.2	11
4928	Effect of silicon-doping on the wide-temperature tribological behavior and lubrication mechanism of WC/a-C film. Wear, 2023, 516-517, 204614.	1.5	2
4929	Surface Morphology, Structural, Photovoltaic and Optoelectronic Properties of Diamond Like Carbon-Copper Nanostructures. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2023, 289, 116271.	1.7	2
4930	Theoretical superlubricity and its friction stability of amorphous carbon film induced by simple surface graphitization. Applied Surface Science, 2023, 615, 156318.	3.1	3
4931	Molecular dynamics simulations of reactive neutral chemistry in an argonâ€methane plasma. Plasma Processes and Polymers, 2023, 20, .	1.6	3

#	Article	IF	Citations
4932	Novel Photonic Applications of Silicon Carbide. Materials, 2023, 16, 1014.	1.3	11
4934	Applications in carbon-based film. , 2023, , 431-457.		1
4935	Wear Mechanism of Superhard Tetrahedral Amorphous Carbon (taâ€C) Coatings for Biomedical Applications. Advanced Materials Interfaces, 2023, 10, .	1.9	5
4936	Oxynitride Amorphous Carbon Layer for Electrically and Thermally Robust Bipolar Resistive Switching. Advanced Electronic Materials, 2023, 9, .	2.6	0
4937	Study on Flake Graphite Cathode Surface Microstructure in Relativistic Magnetrons. IEEE Journal of the Electron Devices Society, 2023, 11, 122-129.	1.2	1
4938	Noncrystalline Carbon Anodes for Advanced Sodiumâ€ion Storage. Small Methods, 2023, 7, .	4.6	13
4939	AnÃ¡lisis comparativo de recubrimientos duros de DLC y TiSiCN frente al desgaste y a la corrosiÃ³n. Revista Materia, 2023, 28, .	0.1	0
4940	Chip-level thermal management in GaN HEMT: Critical review on recent patents and inventions. Microelectronic Engineering, 2023, 273, 111958.	1.1	6
4941	The improvement of diamond-like carbon coatings for tribological and tribo-corrosion applications in automobile engines: an updated review study. International Journal of Advanced Manufacturing Technology, 2023, 126, 2295-2322.	1.5	7
4942	Scratch adhesion evaluation of diamond like carbon coatings with alternate hard and soft multilayers. Wear, 2023, 518-519, 204647.	1.5	0
4943	Hydrogenation of HPHT nanodiamonds and their nanoscale interaction with chitosan. Diamond and Related Materials, 2023, 134, 109754.	1.8	8
4944	Lithium Citrate Triggered Macroscopic Superlubricity with Near-Zero Wear on an Amorphous Carbon Film. ACS Applied Materials & Interfaces, 2023, 15, 19705-19714.	4.0	2
4945	Enabling macroscopic superlubricity in TaC/a-C nanocomposite film by atomic-level Au. Scripta Materialia, 2023, 228, 115329.	2.6	3
4946	Ultra-low friction of ascorbic acid as polyethylene glycol additive in graphite-like carbon film/bearing steel interface. Diamond and Related Materials, 2023, 135, 109882.	1.8	2
4947	Effect of modulation ratio on microstructure and tribological properties of TiAlN/TiAlCN multilayer coatings prepared by multi-excitation source plasma. Vacuum, 2023, 211, 111917.	1.6	3
4948	Fabrication of nanocrystalline diamond capsules by hot-filament chemical vapor deposition for direct-drive inertial confinement fusion experiments. Diamond and Related Materials, 2023, 135, 109896.	1.8	1
4949	Nickel concentration dependent mechanical and tribological properties of subsurface layer of electrodeposited Ni-C nanocomposite thin films. Thin Solid Films, 2023, 773, 139818.	0.8	2
4950	Anti-corrosion and erosion properties of multilayers with diamond-like carbon and silicon films deposited on low-carbon steel. Radiation Physics and Chemistry, 2023, 207, 110868.	1.4	0

#	Article	IF	Citations
4951	Effect of tail time of discharge current on film properties in diamond-like carbon deposition by high-frequency inclusion high-power impulse magnetron sputtering. Diamond and Related Materials, 2023, 135, 109868.	1.8	3
4952	Microstructure evolution and mechanical performance of tetrahedral amorphous carbon coatings with dense droplets during annealing. Materials Chemistry and Physics, 2023, 301, 127697.	2.0	5
4953	The effect law of different hydrostatic pressures on the failure of multilayer Cr/GLC coatings in 3.5Âwt% NaCl solution. Corrosion Science, 2023, 217, 111120.	3.0	5
4954	Utilising H/E to predict fretting wear performance of DLC coating systems. Tribology International, 2023, 185, 108524.	3.0	4
4955	Dependence of piezoresistive behavior upon Cu content in Cu-DLC nanocomposite films. Diamond and Related Materials, 2023, 136, 109935.	1.8	2
4956	Characterization of structural and mechanical properties of DLC films deposited on the surface of minute-scale 3D objects: Comparison of PECVD and FCVA deposition technique. Surface and Coatings Technology, 2023, 460, 129401.	2.2	1
4957	Unraveling electronic fluctuation in passivation hypothesis for ultralow friction in diamond. Tribology International, 2023, 184, 108472.	3.0	2
4958	Pure phase Ni12P5 anchored on N, P-codoped carbon nanosheet: A stable and highly efficient catalyst to reduce toxic organic compounds for continuous-flow application. Applied Surface Science, 2023, 625, 157196.	3.1	3
4959	Silicon wafer as a feasible candidate for tribological characterization of thin coatings under high contact stress?. Wear, 2023, 524-525, 204839.	1.5	2
4961	Fatigue of Light Alloys. , 2023, , 91-115.		0
4962	Operando formation of multiphase heterostructure for achieving macroscale superlubricity with ultra-long lifetime under high contact stress. Materials Today Chemistry, 2023, 28, 101363.	1.7	2
4963	Research progress of spectra and properties of ultrahard carbon materials at high pressure and high temperature. Functional Diamond, 2022, 2, 245-257.	1.7	0
4964	Ultrawide-bandgap semiconductor of carbon-based materials for meta-photonics-heterostructure, lasers, and holographic displays. AAPPS Bulletin, 2023, 33, .	2.7	2
4965	Microstructures and visible-infrared optical properties of diamond-like carbon films deposited by magnetron sputtering. Diamond and Related Materials, 2023, 133, 109724.	1.8	3
4966	A novel BiVO4/DLC heterojunction for efficient photoelectrochemical water splitting. Chemical Engineering Journal, 2023, 459, 141637.	6.6	8
4967	Interaction between diamond and alkali metals and its application to machining of diamond. Electronics and Communications in Japan, 2023, 106, .	0.3	0
4968	Machine learning based modeling of disordered elemental semiconductors: understanding the atomic structure of a-Si and a-C. Semiconductor Science and Technology, 2023, 38, 043001.	1.0	1
4969	Effect of reaming on surface properties of self-lubricating composites. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2023, 45, .	0.8	0

#	Article	IF	Citations
4970	Modification of micro-crystalline graphite and carbon black by acetone, toluene, and phenol. Journal of Chemical Physics, 2023, 158, .	1.2	2
4971	Improvement of the mechanical and tribological behaviors by Ti-C interlayer for diamond-like carbon films on nitrile butadiene rubber. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2023, 290, 116289.	1.7	1
4972	Structural, mechanical and cytotoxic properties of Ta-doped diamond-like carbon films deposited via radio frequence magnetron sputtering on polyether ether ketone. Thin Solid Films, 2023, 769, 139736.	0.8	1
4973	Preparation and Performance of Multilayer Si-B-C-N/Diamond-like Carbon Gradient Films. Materials, 2023, 16, 1665.	1.3	2
4974	Effect of the energy of hydrocarbon ions on diamond-like carbon films deposited on alumina microparticles through repeated pulsed discharge in hollow cathode with methane gas. Journal Physics D: Applied Physics, 2023, 56, 155202.	1.3	0
4976	Combining the good tribological properties with the high adhesion strength of the amorphous carbon films in situ grown on PI. Frontiers in Materials, 0, 10, .	1.2	2
4977	The Effects of Hemisphere Dome Orientation on the Structure of Diamond-like Carbon Film Prepared Using Ion Beam Assisted Deposition. Materials, 2023, 16, 1773.	1.3	1
4978	Growth mechanisms of hBN crystalline nanostructures with rf sputtering deposition: challenges, opportunities, and future perspectives. Physica Scripta, 2023, 98, 042001.	1.2	1
4979	Evolution of the Microstructure, Hybridization, and Internal Stress of Al-Doped Diamond-Like Carbon Coatings: A Molecular Dynamics Simulation. Langmuir, 2023, 39, 3895-3904.	1.6	3
4980	Lubricity of chelated orthoborate-phosphonium ionic liquids on tetrahedral amorphous carbon and steel surfaces. Journal of Molecular Liquids, 2023, 378, 121571.	2.3	4
4981	Effects of gradient structure and modulation period of Ta/TaN/Ta(C,N)/Ta-DLC multilayer coatings prepared by HiPIMS. Surface and Coatings Technology, 2023, 459, 129406.	2.2	2
4982	Quenching of Liquid Carbon on the Surface of a Diamond Substrate. High Temperature, 2022, 60, S248-S254.	0.1	0
4983	Current-carrying friction in carbon coated ball bearing. Friction, 2023, 11, 2008-2020.	3.4	2
4984	Metastable hybridized structure transformation in amorphous carbon films during frictionâ€"A study combining experiments and MD simulation. Friction, 2023, 11, 1708-1723.	3.4	12
4985	Tuning of solid-to-solid structural transitions in amorphous carbon films by optical pumping and chemical modification. APL Materials, 2023, 11, 031106.	2.2	0
4986	Effect of space UV irradiation on the mechanical and tribological properties of Cr and B doped hydrogen-containing diamond-like films. Fullerenes Nanotubes and Carbon Nanostructures, 2023, 31, 513-522.	1.0	2
4987	Structure of carbon nanospheres modified with oxygen-containing groups and halogens. Applied Nanoscience (Switzerland), 2023, 13, 6929-6937.	1.6	2
4988	On the wide range frequency and voltage dependence of electrical features and density of surface states of the Al/(Cu:DLC)/p-Si/Au Schottky diodes (SDs). Journal of Materials Science: Materials in Electronics, 2023, 34, .	1.1	5

#	Article	IF	Citations
4989	Impact of DLC Coating Deposition on the Fatigue Strength of Al-7075-T6 Aluminum Alloy. Journal of Material Science and Technology Research, 0, 10, 12-18.	0.2	0
4990	Influence of the alloying elements on the tribological performance of DLC coatings in different sliding conditions. Wear, 2023, 526-527, 204880.	1.5	5
4991	Effects of Different Silicon Substrates on the Structure and Properties of Deposited Diamondâ€like Carbon Films. Physica Status Solidi (A) Applications and Materials Science, 2023, 220, .	0.8	1
4992	OPTIMIZATION OF DIAMOND-LIKE CARBON COATINGS FOR MECHANICAL AND TRIBOLOGICAL APPLICATIONS. REVIEW. , 2023, , 74-93.		0
4993	Thermal Conductivity of a Two-Dimensional Diamondene Sheet: A Molecular Study. Journal of Physical Chemistry C, 0, , .	1.5	0
4994	Mechanism on heterogeneous transfer film formed by diamond-like carbon film under molybdenum disulfide hybrid polyethylene glycol lubrication. Carbon, 2023, 210, 118030.	5.4	4
4995	The effect of coated diamond-like carbon thin films on polymer tooth based denture: Micro-morphology and fractal feature studies. AIP Advances, 2023, 13, 045119.	0.6	0
4996	Effect of heat treatment on the electrical conductivity of carbonâ€“nitrogen onion nanomaterial based on the interpolyelectrolyte complex lignosulfonateâ€“chitosan. Wood Science and Technology, 0, , .	1.4	1
4997	Effect of Deposition Power on DLC Structure on Alumina in RF-Biased Inductively Coupled Plasma. Springer Proceedings in Physics, 2023, , 44-54.	0.1	0
4998	Temperature dependence of electrical characteristics of metal-carbon nanowall contacts. Materials Chemistry and Physics, 2023, 304, 127805.	2.0	0
5026	Growth and properties of Functionally graded ceramic coatings deposited by grid-assisted magnetron sputtering. , 2023, , 401-432.		0
5034	Hydrogenated amorphous carbon films deposited using plasma enhanced chemical vapor deposition processes. Korean Journal of Chemical Engineering, 2023, 40, 1268-1276.	1.2	0
5051	Method of DLC Deposition on Alumina Powders: Cantilever Beam-type Vibrating Dual-frequency Plasma Fluidized Bed. , 2023, , .		0
5066	Organic Dust, Synthesis by Stars. , 2023, , 2181-2183.		0
5080	Characterization of carbon thin films as an overcoating candidate material for the optics of NewATHENA. , 2023, , .		1
5096	Progress in infrared transparencies under opto electro thermo and mechanical environments. , 2023, 1, .		0
5112	Characterization of Diamond-Like Carbon on WC and H13 Tool Steel to Improve the Wear Resistance of FSW Tool. , 2024, , 294-311.		0
5118	Research on power system de-carbonization technology based on carbon flow analysis. , 2023, , .		0

#	Article	IF	Citations
5136	Carbon-based coatings: Synthesis and applications. , 2023, , .		0
5179	Growth and characterization of nanocluster carbon for vacuum nano electronic applications. AIP Conference Proceedings, 2024, , .	0.3	0
5193	Recent progress and challenges in crystalline graphdiyne. Science China Materials, 2024, 67, 729-751.	3.5	0