Dougal G Mcculloch

List of Publications by Year
in descending order

224	6,275	81434	100535
papers	citations	41 h-index	70 g-index

225	225	225	7492
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Neutron diffraction discriminates between models for the nanoarchitecture of graphene sheets in glassy carbon. Journal of Non-Crystalline Solids, 2021, 554, 120610.	1.5	9
2	Room-Temperature Negative Differential Resistance in Amorphous Carbon: The Role of Electron Trapping Defects at Device Interfaces. IEEE Transactions on Electron Devices, 2021, 68, 720-725.	1.6	2
3	ITO-free silver-doped DMD structures: HiPIMS transparent-conductive nano-composite coatings for electrochromic applications. Solar Energy Materials and Solar Cells, 2021, 231, 111268.	3.0	9
4	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
5	New measurement of melting and thermal conductivity of iron close to outer core conditions. Geoscience Frontiers, 2020, 11, 565-568.	4.3	24
6	Changes in oriented graphitic carbon properties upon exposure to atomic hydrogen. Diamond and Related Materials, 2020, 101, 107612.	1.8	1
7	Investigation of Room Temperature Formation of the Ultraâ€Hard Nanocarbons Diamond and Lonsdaleite. Small, 2020, 16, e2004695.	5.2	11
8	Unifying the optical and electrical properties of amorphous carbon: application to hopping photoconductivity and memristance. Journal of Applied Physics, 2020, 128, 215109.	1.1	2
9	Electroformed, Selfâ€Connected Tin Oxide Nanoparticle Networks for Electronic Reservoir Computing. Advanced Electronic Materials, 2020, 6, 2000081.	2.6	10
10	The mechanical response of glassy carbon recovered from high pressure. Journal of Applied Physics, 2020, 127, .	1.1	6
11	Extending the Debye scattering equation for diffraction from a cylindrically averaged group of atoms: detecting molecular orientation at an interface. Acta Crystallographica Section A: Foundations and Advances, 2020, 76, 468-473.	0.0	1
12	The composition, structure and properties of four different glassy carbons. Journal of Non-Crystalline Solids, 2019, 522, 119561.	1.5	18
13	In situ analysis of the structural transformation of glassy carbon under compression at room temperature. Physical Review B, 2019, 99, .	1.1	21
14	Light-gated amorphous carbon memristors with indium-free transparent electrodes. Carbon, 2019, 152, 59-65.	5.4	15
15	Temperature sensitivity and short-term memory in electroforming-free low power carbon memristors. Applied Physics Letters, 2019, 114, .	1.5	7
16	Tin oxide artificial synapses for low power temporal information processing. Nanotechnology, 2019, 30, 325201.	1.3	8
17	Conducting carbon films with covalent binding sites for biomolecule attachment. Journal of Applied Physics, 2019, 125, .	1.1	4
18	Theory of momentum-resolved phonon spectroscopy in the electron microscope. Physical Review B, 2019, 99, .	1.1	20

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19	The shear-driven transformation mechanism from glassy carbon to hexagonal diamond. Carbon, 2019, 142, 475-481.	5.4	22
20	Hard magnetic properties in nanoflake van der Waals Fe3GeTe2. Nature Communications, 2018, 9, 1554.	5.8	272
21	Resistive switching and transport characteristics of an all-carbon memristor. Carbon, 2018, 136, 280-285.	5.4	34
22	Sensory gating in bilayer amorphous carbon memristors. Nanoscale, 2018, 10, 20272-20278.	2.8	10
23	Graphitization of Glassy Carbon after Compression at Room Temperature. Physical Review Letters, 2018, 120, 215701.	2.9	50
24	Non-volatile and volatile memory behaviour in oxygenated amorphous carbon electrochemical metallisation devices. Applied Physics Letters, 2018, 112, .	1.5	12
25	Smoothening of wrinkles in CVD-grown hexagonal boron nitride films. Nanoscale, 2018, 10, 16243-16251.	2.8	15
26	Observation and characterization of memristive silver filaments in amorphous zinc-tin-oxide. MRS Communications, 2018, 8, 1104-1110.	0.8	2
27	Nanoscale momentum-resolved vibrational spectroscopy. Science Advances, 2018, 4, eaar7495.	4.7	111
28	Codeposition of amorphous zinc tin oxide using high power impulse magnetron sputtering: characterisation and doping. Semiconductor Science and Technology, 2017, 32, 045013.	1.0	2
29	Energetic deposition, measurement and simulation of graphitic contacts to 6H-SiC. Microelectronics Reliability, 2017, 71, 82-85.	0.9	0
30	Graphene Films Prepared Using Energetic Physical Vapor Deposition. MRS Advances, 2017, 2, 117-122.	0.5	0
31	Theoretical and experimental investigation of point defects in cubic boron nitride. MRS Advances, 2017, 2, 1545-1550.	0.5	3
32	Synaptic plasticity and oscillation at zinc tin oxide/silver oxide interfaces. Journal of Applied Physics, 2017, 121, .	1.1	6
33	Evolution of target condition in reactive HiPIMS as a function of duty cycle: An opportunity for refractive index grading. Journal of Applied Physics, 2017, 121, .	1.1	24
34	Influence of point defects on the near edge structure of hexagonal boron nitride. Physical Review B, 2017, 96, .	1.1	59
35	Synthesis of multi-layer graphene films on silica using physical vapour deposition. Carbon, 2017, 123, 683-687.	5.4	7
36	Relationship between microstructure and electronic properties of energetically deposited zinc tin oxide. Applied Physics Express, 2016, 9, 065501.	1.1	3

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37	Nanocrystalline hexagonal diamond formed from glassy carbon. Scientific Reports, 2016, 6, 37232.	1.6	66
38	Memristor and selector devices fabricated from HfO2â˜'xNx. Applied Physics Letters, 2016, 108, .	1.5	30
39	Pulsed external magnetic fields increase the deposition rate in reactive HiPIMS while preserving stoichiometry: An application to amorphous HfO2. Journal of Applied Physics, 2016, 120, .	1.1	9
40	Mixed-mode high-power impulse magnetron sputter deposition of tetrahedral amorphous carbon with pulse-length control of ionization. Journal of Applied Physics, 2016, 119, .	1.1	33
41	Duty cycle control in reactive high-power impulse magnetron sputtering of hafnium and niobium. Journal Physics D: Applied Physics, 2016, 49, 245201.	1.3	12
42	Rectifying electrical contacts to n-type 6Hâ€“SiC formed from energetically deposited carbon. Carbon, 2016, 102, 141-144.	5.4	21
43	Carbon evolution during vacuum heat treatment of High Speed Steel. Vacuum, 2016, 124, 85-88.	1.6	21
44	The mechanical properties of energetically deposited non-crystalline carbon thin films. Carbon, 2016, 98, 391-396.	5.4	5
45	Optimizing HiPIMS pressure for deposition of high-k (k = 18.3) amorphous HfO2. Applied Surface Science, 2016, 365, 336-341.	3.1	9
46	Probing the Atomic Structures of Synthetic Monolayer and Bilayer Hexagonal Boron Nitride Using Electron Microscopy. Applied Microscopy, 2016, 46, 217-226.	0.8	3
47	Graphitic Schottky Contacts to Si formed by Energetic Deposition. Materials Research Society Symposia Proceedings, 2015, 1786, 51-56.	0.1	5
48	Influence of nitrogen-related defects on optical and electrical behaviour in HfO2â˜'xNx deposited by high-power impulse magnetron sputtering. Applied Physics Letters, 2015, 107, .	1.5	11
49	Effect of Schottky gate type and channel defects on the stability of transparent ZnO MESFETs. Semiconductor Science and Technology, 2015, 30, 024008.	1.0	11
50	Co-deposition of band-gap tuned Zn_{1â˜'x}Mg_xO using high impulse power- and dc-magnetron sputtering. Journal Physics D: Applied Physics, 2015, 48, 135301.	1.3	8
51	Microstructural and tribological characterisation of a nitriding/TiAlN PVD coating duplex treatment applied to M2 High Speed Steel tools. Surface and Coatings Technology, 2015, 272, 403-408.	2.2	55
52	The role of pulse length in target poisoning during reactive HiPIMS: application to amorphous HfO₂. Plasma Sources Science and Technology, 2015, 24, 035015.	1.3	35
53	Structural characterisation of energetically deposited Zn 1â˜'x Mg x O films. Journal of Crystal Growth, 2015, 412, 116-121.	0.7	0
54	Multilayered graphene films prepared at moderate temperatures using energetic physical vapour deposition. Carbon, 2015, 94, 378-385.	5.4	11

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55	Self-assembled V2O5 interconnected microspheres produced in a fish-water electrolyte medium as a high-performance lithium-ion-battery cathode. Nano Research, 2015, 8, 3591-3603.	5.8	27
56	Mechanical Properties of Plasma Immersion Ion Implanted PEEK for Bioactivation of Medical Devices. ACS Applied Materials & Interfaces, 2015, 7, 23029-23040.	4.0	44
57	Synthesis of highly tetrahedral amorphous carbon by mixed-mode HiPIMS sputtering. Journal Physics D: Applied Physics, 2015, 48, 442001.	1.3	25
58	Structural and dielectric properties of energetically deposited hafnium oxide films. Semiconductor Science and Technology, 2014, 29, 125014.	1.0	5
59	Supplementing Cold Plasma with Heat Enables Doping and Nanoâ€Structuring of Metal Oxides. Plasma Processes and Polymers, 2014, 11, 897-902.	1.6	1
60	Energetically deposited nano-composite films of high speed steel and titanium nitride. Surface and Coatings Technology, 2014, 259, 495-499.	2.2	3
61	A combinatorial comparison of DC and high power impulse magnetron sputtered Cr2AlC. Surface and Coatings Technology, 2014, 259, 746-750.	2.2	13
62	Back Cover: Plasma Process. Polym. 9â•2014. Plasma Processes and Polymers, 2014, 11, 904-904.	1.6	0
63	Ohmic and rectifying contacts to n-SiC formed by energetic deposition of carbon. Materials Research Society Symposia Proceedings, 2014, 1693, 87.	0.1	1
64	The microstructure and properties of energetically deposited carbon nitride films. Diamond and Related Materials, 2014, 45, 58-63.	1.8	4
65	Controlled morphogenesis and self-assembly of bismutite nanocrystals into three-dimensional nanostructures and their applications. Journal of Materials Chemistry A, 2014, 2, 2275-2282.	5.2	14
66	Formation of ordered arrays of gold particles by nanoindentation templating. Physica Status Solidi - Rapid Research Letters, 2014, 8, 48-51.	1.2	0
67	Ultraviolet detection from energetically deposited titania films. Applied Physics Letters, 2014, 104, .	1.5	3
68	The Near Edge Structure of Hexagonal Boron Nitride. Microscopy and Microanalysis, 2014, 20, 1053-1059.	0.2	24
69	Optical properties and oxidation of carbonized and cross-linked structures formed in polycarbonate by plasma immersion ion implantation. Nuclear Instruments & Methods in Physics Research B, 2014, 329, 52-63.	0.6	20
70	The microstructure and mechanical properties of TiNNi nanocomposite thin films. Surface and Coatings Technology, 2013, 235, 394-400.	2.2	26
71	Characterization and device applications of ZnO films deposited by high power impulse magnetron sputtering (HiPIMS). Journal Physics D: Applied Physics, 2013, 46, 165105.	1.3	13
72	An energy landscape for carbon network solids. Carbon, 2013, 63, 416-422.	5.4	8

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73	Changes in the electrical resistance of oriented graphitic carbon films induced by atomic hydrogen. Journal of Materials Chemistry A, 2013, 1, 402-407.	5.2	6
74	Ultraviolet detection from graphitic-C/Zn1âˆ’xMgxO Schottky devices fabricated at moderate temperatures. Applied Physics Letters, 2013, 103, 182101.	1.5	8
75	Stable n-channel metal-semiconductor field effect transistors on ZnO films deposited using a filtered cathodic vacuum arc. Applied Physics Letters, 2012, 101, .	1.5	18
76	The anodized crystalline WO3 nanoporous network with enhanced electrochromic properties. Nanoscale, 2012, 4, 5980.	2.8	164
77	The interface structure of high performance ZnO Schottky diodes. Physica B: Condensed Matter, 2012, 407, 2867-2870.	1.3	6
78	Device quality ZnO grown using a Filtered Cathodic Vacuum Arc. Physica B: Condensed Matter, 2012, 407, 2903-2906.	1.3	7
79	Lattice guiding for sputter deposition of single domain (Sr0.6Ba0.4)Nb2O6ferroelectric thin films. CrystEngComm, 2012, 14, 359-361.	1.3	3
80	Aluminium/aluminium oxide nanocomposites prepared using a filtered cathodic vacuum arc. Surface and Coatings Technology, 2012, 207, 529-534.	2.2	3
81	The near edge structure of cubic boron nitride. Micron, 2012, 43, 43-48.	1.1	19
82	Mechanism for the Amorphisation of Diamond. Advanced Materials, 2012, 24, 2024-2029.	11.1	74
83	A Hydrogen Sensor Based on Graphitic Carbon. IEEE Sensors Journal, 2011, 11, 1913-1916.	2.4	3
84	Controlled surface modification of boron nitride nanotubes. Nanotechnology, 2011, 22, 245301.	1.3	74
85	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
86	Corrosion of AA2024-T3 Part I: Localised corrosion of isolated IM particles. Corrosion Science, 2011, 53, 17-26.	3.0	312
87	Corrosion of AA2024-T3 Part II: Co-operative corrosion. Corrosion Science, 2011, 53, 27-39.	3.0	169
88	Nitriding of high speed steel. International Heat Treatment and Surface Engineering, 2011, 5, 69-72.	0.2	6
89	Facile, size-controlled deposition of highly dispersed gold nanoparticles on nitrogen carbon nanotubes for hydrogen sensing. Sensors and Actuators B: Chemical, 2011, 160, 1034-1042.	4.0	21
90	Engineering titanium and aluminum oxide composites using atomic layer deposition. Journal of Applied Physics, 2011, 110, .	1.1	11

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91	HRMC_1.1: Hybrid Reverse Monte Carlo method with silicon and carbon potentials. Computer Physics Communications, 2011, 182, 542.	3.0	3
92	The influence of deposition rate on the stress and microstructure of AlN films deposited from a filtered cathodic vacuum arc. Thin Solid Films, 2011, 519, 3573-3577.	0.8	8
93	Energetic deposition of carbon in a cathodic vacuum arc with a biased mesh. Journal of Applied Physics, 2011, 109, .	1.1	10
94	The relationship between microstructure and electrical breakdown in cathodic arc deposited hafnium oxide films. Journal of Applied Physics, 2011, 110, 014108.	1.1	2
95	A Hydrogen Gas Sensor Based on Pt/Nanostructured WO3/SiC Schottky Diode. Sensor Letters, 2011, 9, 11-15.	0.4	19
96	SAW Gas Sensors with Metal Oxides Nanoplatelets Layers. Sensor Letters, 2011, 9, 920-924.	0.4	3
97	SAW Gas Sensors with Titania Nanotubes Layers. Sensor Letters, 2011, 9, 925-928.	0.4	2
98	Gas Sensing Properties of Interconnected ZnO Nanowires. Sensor Letters, 2011, 9, 929-935.	0.4	10
99	Investigation of nitrogen mass transfer within an industrial plasma nitriding system I: The role of surface deposits. Surface and Coatings Technology, 2010, 204, 1145-1150.	2.2	72
100	Investigation of nitrogen mass transfer within an industrial plasma nitriding system II: Application of a biased screen. Surface and Coatings Technology, 2010, 204, 1151-1157.	2.2	35
101	The effect of deposition energy on the microstructure and mechanical properties of high speed steel films prepared using a filtered cathodic vacuum arc. Surface and Coatings Technology, 2010, 204, 3552-3558.	2.2	5
102	Energetic deposition of carbon clusters with preferred orientation using a new mixed mode cathodic arc â€“ Sputtering process. Carbon, 2010, 48, 918-921.	5.4	20
103	Synthesis of Nanostructured Tungsten Oxide Thin Films: A Simple, Controllable, Inexpensive, Aqueous Solâ^'Gel Method. Crystal Growth and Design, 2010, 10, 430-439.	1.4	164
104	Uniformly Dispersed Ptâ^'Ni Nanoparticles on Nitrogen-Doped Carbon Nanotubes for Hydrogen Sensing. Journal of Physical Chemistry C, 2010, 114, 238-242.	1.5	53
105	Stable pit formation on AA2024-T3 in a NaCl environment. Corrosion Science, 2010, 52, 90-103.	3.0	181
106	Co-operative corrosion phenomena. Corrosion Science, 2010, 52, 665-668.	3.0	42
107	Highly dispersed gold nanoparticles on nitrogen doped carbon nanotubes for hydrogen sensing. , 2010, , .		0
108	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

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109	Oriented graphitic carbon films for hydrogen gas sensors. , 2010, , .		0
110	A Pt/oriented-C hydrogen gas sensor. , 2009, , .		0
111	Effect of crystallographic orientation on the anodic formation of nanoscale pores/tubes in TiO2 films. Applied Surface Science, 2009, 256, 120-123.	3.1	16
112	Hafnium oxide thin films deposited from a filtered cathodic vacuum arc. Applied Physics A: Materials Science and Processing, 2009, 97, 627-633.	1.1	2
113	The stress and microstructure of a-C multilayers deposited using a filtered cathodic vacuum arc and periodic substrate bias. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 2179-2183.	0.8	4
114	Nanoporous TiO2 thin film based conductometric H2 sensor. Thin Solid Films, 2009, 518, 1294-1298.	0.8	51
115	Nanoporous titanium oxide synthesized from anodized Filtered Cathodic Vacuum Arc Ti thin films. Thin Solid Films, 2009, 518, 1180-1184.	0.8	10
116	Quantitative, nanoscale mapping of sp2 percentage and crystal orientation in carbon multilayers. Carbon, 2009, 47, 94-101.	5.4	24
117	The structural phases of non-crystalline carbon prepared by physical vapour deposition. Carbon, 2009, 47, 3263-3270.	5.4	56
118	Microstructural investigation supporting an abrupt stress induced transformation in amorphous carbon films. Journal of Applied Physics, 2009, 105, .	1.1	20
119	Enhancing the hardness of Al/W nanostructured coatings. Journal of Physics Condensed Matter, 2009, 21, 055003.	0.7	1
120	The origin of preferred orientation during carbon film growth. Journal of Physics Condensed Matter, 2009, 21, 225003.	0.7	15
121	Fabrication, Structural Characterization and Testing of a Nanostructured Tin Oxide Gas Sensor. IEEE Sensors Journal, 2009, 9, 563-568.	2.4	18
122	Optically absorbing trilayer films fabricated using a Filtered Cathodic Vacuum Arc. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 1439-1442.	0.8	13
123	Non-chromate deoxidation of AA2024-T3: Sodium bromateâ€“nitric acid (20â€“60Â°C). Applied Surface Science, 2008, 254, 3562-3575.	3.1	17
124	HRMC: Hybrid Reverse Monte Carlo method with silicon and carbon potentials. Computer Physics Communications, 2008, 178, 777-787.	3.0	30
125	Abrupt Stress Induced Transformation in Amorphous Carbon Films with a Highly Conductive Transition Phase. Physical Review Letters, 2008, 100, 176101.	2.9	81
126	The electronic structure of tungsten oxide thin films prepared by pulsed cathodic arc deposition and plasma-assisted pulsed magnetron sputtering. Journal of Physics Condensed Matter, 2008, 20, 175216.	0.7	5

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127	Multilayer alumina and titania optical coatings prepared by atomic layer deposition. , 2008, , .		3
128	Nanostructured SnO₂films prepared from evaporated Sn and their application as gas sensors. Nanotechnology, 2008, 19, 125504.	1.3	43
129	Antireflective trilayer films fabricated using a filtered cathodic vacuum arc. Proceedings of SPIE, 2008, , .	0.8	1
130	Oriented graphene films for use as high-performance thermal and electrical interconnects. Proceedings of SPIE, 2008, , .	0.8	1
131	Positive Magnetisation in Carbon Nanoclusters Produced by High-Repetition-Rate Laser Ablation. Materials Research Society Symposia Proceedings, 2007, 998, 1.	0.1	0
132	Curved-Surface Atomic Modeling of Nanoporous Carbon. Journal of Physical Chemistry C, 2007, 111, 802-812.	1.5	23
133	High-temperature formation of concentric fullerene-like structures within foam-like carbon: Experiment and molecular dynamics simulation. Physical Review B, 2007, 75, .	1.1	54
134	Soft ferromagnetic materials based on iron/carbon multilayers. Physica B: Condensed Matter, 2007, 394, 273-276.	1.3	0
135	Modeling of structure and porosity in amorphous silicon systems using Monte Carlo methods. Journal of Chemical Physics, 2007, 126, 214705.	1.2	19
136	Scaled-up production of multi-walled carbon nanotubes using catalytic chemical vapour deposition. , 2006, , .		0
137	Magnetic ordering and spin-glass behaviour of carbon nanoclusters. , 2006, , .		0
138	The role of energetic ions from plasma in the creation of nanostructured materials and stable polymer surface treatments. Nuclear Instruments & Methods in Physics Research B, 2006, 242, 221-227.	0.6	12
139	Titanium nitride/vanadium nitride alloy coatings: mechanical properties and adhesion characteristics. Surface and Coatings Technology, 2006, 200, 3605-3611.	2.2	64
140	Control of stress and delamination in single and multi-layer carbon thin films prepared by cathodic arc and RF plasma deposition and implantation. Surface and Coatings Technology, 2006, 200, 6405-6408.	2.2	16
141	The effect of plasma immersion ion implantation on the contact pressure and composition of titanium nitride thin films. Surface and Coatings Technology, 2006, 201, 396-400.	2.2	7
142	A fundamental contribution to a study of the active screen plasma nitriding process. BHM-Zeitschrift Fuer Rohstoffe Geotechnik Metallurgie Werkstoffe Maschinen-Und Anlagentechnik, 2006, 151, 441-445.	0.4	10
143	Influence of bias andin situcleaning on through cage (TC) or active screen plasma nitrided (ASPN) steels. Surface Engineering, 2006, 22, 243-247.	1.1	36
144	The microstructure and stability of Alâˆ•AlN multilayered films. Journal of Applied Physics, 2006, 100, 013504.	1.1	6

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145	Relationship Between Microstructure, Stress and Hardness in Multilayer Coatings.. Microscopy and Microanalysis, 2005, 11, .	0.2	4
146	Combined nuclear microprobe and TEM study of corrosion pit nucleation by intermetallics in aerospace aluminium alloys. Nuclear Instruments & Methods in Physics Research B, 2005, 231, 457-462.	0.6	15
147	Refinements in the collection of energy filtered diffraction patterns from disordered materials. Ultramicroscopy, 2005, 103, 275-283.	0.8	23
148	Electrical conductivity as a measure of the continuity of titanium and vanadium thin films. Thin Solid Films, 2005, 474, 341-345.	0.8	12
149	Synthesis and in-situ ellipsometric monitoring of Ti/C nanostructured multilayers using a high-current, dual source pulsed cathodic arc. Thin Solid Films, 2005, 482, 133-137.	0.8	18
150	Ab initio studies of amorphous carbon films. Surface and Coatings Technology, 2005, 198, 212-216.	2.2	5
151	The structure and annealing properties of multilayer carbon films. Surface and Coatings Technology, 2005, 198, 217-222.	2.2	13
152	Self-organized carbon nanotubes grown at the grain boundary of iron-nitride. Carbon, 2005, 43, 654-657.	5.4	16
153	Production of amorphous carbon by plasma immersion ion implantation of polymers. Diamond and Related Materials, 2005, 14, 1577-1582.	1.8	23
154	Ion implantation induced phase transformation in carbon and boron nitride thin films. Diamond and Related Materials, 2005, 14, 1395-1401.	1.8	12
155	The structure of disordered carbon solids studied using a hybrid reverse Monte Carlo algorithm. Journal of Physics Condensed Matter, 2005, 17, 2605-2616.	0.7	36
156	Monte Carlo based modeling of carbon nanostructured surfaces. Physical Review B, 2005, 72, .	1.1	12
157	Dark field microscopy for diffraction analysis of amorphous carbon solids. Journal of Non-Crystalline Solids, 2005, 351, 413-417.	1.5	8
158	Characterization of cathodic arc deposited titanium aluminium nitride films prepared using plasma immersion ion implantation. Journal of Physics Condensed Matter, 2005, 17, 2791-2800.	0.7	6
159	Effect of intrinsic stress on preferred orientation in AlN thin films. Journal of Applied Physics, 2004, 95, 2130-2134.	1.1	47
160	Stress relief and texture formation in aluminium nitride by plasma immersion ion implantation. Journal of Physics Condensed Matter, 2004, 16, 1751-1760.	0.7	19
161	Microstructure of an industrial char by diffraction techniques and Reverse Monte Carlo modelling. Carbon, 2004, 42, 2457-2469.	5.4	55
162	Plasma immersion ion implantation of poly(tetrafluoroethylene). Surface and Coatings Technology, 2004, 177-178, 483-488.	2.2	21

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163	Characterization of non-Cr-based deoxidizers on Al alloy 7475-T7651. Surface and Interface Analysis, 2004, 36, 1523-1532.	0.8	12
164	SEM and RBS characterization of a cobalt-based conversion coating process on AA2024-T3 and AA7075-T6. Surface and Interface Analysis, 2004, 36, 1585-1591.	0.8	13
165	Correlation between stress and hardness in pulsed cathodic arc deposited titanium/vanadium nitride alloys. Journal of Physics Condensed Matter, 2004, 16, 7947-7954.	0.7	22
166	Styrene epoxidation over gold supported on different transition metal oxides prepared by homogeneous depositionâ€“precipitation. Catalysis Communications, 2004, 5, 681-685.	1.6	82
167	Mechanisms for the behavior of carbon films during annealing. Physical Review B, 2004, 70, .	1.1	51
168	An ab initio study of structural properties and single vacancy defects in Wurtzite AlN. Journal of Chemical Physics, 2004, 120, 4890-4896.	1.2	31
169	Dark Field Microscopy for Diffraction Analysis of Non Crystalline Materials. Microscopy and Microanalysis, 2004, 10, 800-801.	0.2	0
170	Relation between microstructure and stress in titanium nitride films grown by plasma immersion ion implantation. Journal of Applied Physics, 2003, 93, 4283-4288.	1.1	34
171	Voltage dependence of cluster size in carbon films using plasma immersion ion implantation. Nuclear Instruments & Methods in Physics Research B, 2003, 206, 741-744.	0.6	7
172	Structural analysis of carbonaceous solids using an adapted reverse Monte Carlo algorithm. Carbon, 2003, 41, 2403-2411.	5.4	55
173	Minimisation of intrinsic stress in titanium nitride using a cathodic arc with plasma immersion ion implantation. Surface and Coatings Technology, 2003, 174-175, 76-80.	2.2	35
174	Wannier function analysis of tetrahedral amorphous networks. Diamond and Related Materials, 2003, 12, 2026-2031.	1.8	6
175	Multilayered carbon films for tribological applications. Diamond and Related Materials, 2003, 12, 178-184.	1.8	23
176	Control of stress and microstructure in cathodic arc deposited films. IEEE Transactions on Plasma Science, 2003, 31, 939-944.	0.6	46
177	Multilayer structure, stress reduction and annealing of carbon film.. Materials Research Society Symposia Proceedings, 2003, 791, 1.	0.1	0
178	An Investigation of the Native Oxide of Aluminum Alloy 7475-T7651 Using XPS, AES, TEM, EELS, GDOES and RBS. Surface Review and Letters, 2003, 10, 365-371.	0.5	5
179	Comparison of density-functional, tight-binding, and empirical methods for the simulation of amorphous carbon. Physical Review B, 2002, 65, .	1.1	143
180	Hybrid approach for generating realistic amorphous carbon structure using metropolis and reverse Monte Carlo. Molecular Simulation, 2002, 28, 927-938.	0.9	116

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181	Characterisation of titanium nitride thin films prepared using PVD and a plasma immersion ion implantation system. Nuclear Instruments & Methods in Physics Research B, 2002, 190, 723-727.	0.6	14
182	Plasma-based ion implantation utilising a cathodic arc plasma. Surface and Coatings Technology, 2002, 156, 136-142.	2.2	90
183	Applications of tetrahedral amorphous carbon in limited volatility memory and in field programmable gate arrays. Diamond and Related Materials, 2001, 10, 230-233.	1.8	10
184	Ab initiosimulations of amorphous carbon nitrides. Physical Review B, 2001, 65, .	1.1	27
185	Analysis of nanocrystalline diamond powder by scanning transmission electron microscopy. Journal of Applied Physics, 2001, 89, 6204-6213.	1.1	9
186	Characterization of Amorphous Materials by Electron Diffraction and Atomistic Modeling. Microscopy and Microanalysis, 2000, 6, 329-334.	0.2	14
187	Fullerenes as precursors for nanocapsule formation. Fullerenes, Nanotubes, and Carbon Nanostructures, 2000, 8, 65-76.	0.6	1
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189	Fullerene blacks and cathode deposits derived from plasma arcing of graphite with naphthalene. Fuel, 2000, 79, 47-56.	3.4	14
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