Dmitry Shtansky

List of Publications by Year
in descending order

202	5,389	87723 38	149479 56
papers	citations	h-index	g-index

204	204	204	4273
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Self-propagating high-temperature synthesis of advanced materials and coatings. International Materials Reviews, 2017, 62, 203-239.	9.4	271
2	Self-healing plasma electrolytic oxidation coatings doped with benzotriazole loaded halloysite nanotubes on AM50 magnesium alloy. Corrosion Science, 2016, 111, 753-769.	3.0	172
3	High-strength aluminum-based composites reinforced with BN, AlB2 and AlN particles fabricated via reactive spark plasma sintering of Al-BN powder mixtures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 681, 1-9.	2.6	93
4	Boron Nitride Nanoparticles with a Petal-Like Surface as Anticancer Drug-Delivery Systems. ACS Applied Materials & Interfaces, 2015, 7, 17217-17225.	4.0	87
5	Hard tribological Tiâ€“Bâ€“N, Tiâ€“Crâ€“Bâ€“N, Tiâ€“Siâ€“Bâ€“N and Tiâ€“Alâ€“Siâ€“Bâ€“N coatings. Surface and Coatings Technology, 2005, 200, 208-212.	2.2	86
6	Design, characterization and testing of Ti-based multicomponent coatings for load-bearing medical applications. Biomaterials, 2005, 26, 2909-2924.	5.7	81
7	Fabrication, characterization, and mechanical properties of spark plasma sintered Alâ€“BN nanoparticle composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 642, 104-112.	2.6	81
8	Structure and tribological properties of MoCN-Ag coatings in the temperature range of 25â€“700 Â°C. Applied Surface Science, 2013, 273, 408-414.	3.1	80
9	PHASE TRANSFORMATION IN Fe-Mo-C AND Fe-W-C STEELSâ€”I. THE STRUCTURAL EVOLUTION DURING TEMPERING AT 700Â°C. Acta Materialia, 1997, 45, 2861-2878.	3.8	78
10	Fabrication and application of BN nanoparticles, nanosheets and their nanohybrids. Nanoscale, 2018, 10, 17477-17493.	2.8	75
11	Pearlite to austenite transformation in an Feâ€“2.6Crâ€“1C alloy. Acta Materialia, 1999, 47, 2619-2632.	3.8	74
12	Comparative investigation of TiAlC(N), TiCrAlC(N), and CrAlC(N) coatings deposited by sputtering of ĐœĐ¥-phase Ti2â^Cr AlC targets. Surface and Coatings Technology, 2009, 203, 3595-3609.	2.2	71
13	Al-based composites reinforced with AlB2, AlN and BN phases: Experimental and theoretical studies. Materials and Design, 2018, 141, 88-98.	3.3	69
14	Crossâ€Bar SnO₂â€NiO Nanofiberâ€Arrayâ€Based Transparent Photodetectors with High Detectivity. Advanced Electronic Materials, 2020, 6, 1901048.	2.6	68
15	Multicomponent nanostructured films for various tribological applications. International Journal of Refractory Metals and Hard Materials, 2010, 28, 32-39.	1.7	65
16	Structure and tribological properties of WSex, WSex/TiN, WSex/TiCN and WSex/TiSiN coatings. Surface and Coatings Technology, 2004, 183, 328-336.	2.2	63
17	Comparative investigation of structure, mechanical properties, and oxidation resistance of Mo-Si-B and Mo-Al-Si-B coatings. Corrosion Science, 2017, 123, 319-327.	3.0	61
18	Comparative study of electrochemical and impact wear behavior of TiCN, TiSiCN, TiCrSiCN, and TiAlSiCN coatings. Surface and Coatings Technology, 2013, 216, 273-281.	2.2	57

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19	Multifunctional biocompatible nanostructured coatings for load-bearing implants. Surface and Coatings Technology, 2006, 201, 4111-4118.	2.2	56
20	Thermal stability and oxidation resistance of Tiâ€“Bâ€“N, Tiâ€“Crâ€“Bâ€“N, Tiâ€“Siâ€“Bâ€“N and Tiâ€“Alâ€“Siâ€“Bâ€“N films. Surface and Coatings Technology, 2007, 201, 6143-6147.	2.2	56
21	Structure and physical-mechanical properties of nanostructured thin films. Physics of the Solid State, 2003, 45, 1177-1184.	0.2	55
22	Characterization of nanostructured multiphase Tiâ€“Alâ€“Bâ€“N thin films with extremely small grain size. Surface and Coatings Technology, 2001, 148, 206-215.	2.2	54
23	Antibacterial biocompatible PCL nanofibers modified by COOH-anhydride plasma polymers and gentamicin immobilization. Materials and Design, 2018, 153, 60-70.	3.3	54
24	Synthesis and characterization of Ti-Si-C-N films. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1999, 30, 2439-2447.	1.1	52
25	Structure and properties of CaO- and ZrO2-doped TiCxNy coatings for biomedical applications. Surface and Coatings Technology, 2004, 182, 101-111.	2.2	50
26	Title is missing!. Journal of Materials Synthesis and Processing, 1998, 6, 61-72.	0.3	49
27	A new insight into hard low friction MoCNâ€“Ag coatings intended for applications in wide temperature range. Materials and Design, 2016, 93, 63-72.	3.3	49
28	Plasma-Coated Polycaprolactone Nanofibers with Covalently Bonded Platelet-Rich Plasma Enhance Adhesion and Growth of Human Fibroblasts. Nanomaterials, 2019, 9, 637.	1.9	47
29	Utilization of multiwalled boron nitride nanotubes for the reinforcement of lightweight aluminum ribbons. Nanoscale Research Letters, 2013, 8, 3.	3.1	46
30	Approaches for Controlled Ag⁺ Ion Release: Influence of Surface Topography, Roughness, and Bactericide Content. ACS Applied Materials & Interfaces, 2017, 9, 4259-4271.	4.0	45
31	Carboxyl-anhydride and amine plasma coating of PCL nanofibers to improve their bioactivity. Materials and Design, 2017, 132, 257-265.	3.3	45
32	Multifunctional Tiâ€“(Ca,Zr)â€“(C,N,O,P) films for load-bearing implants. Biomaterials, 2006, 27, 3519-31.	5.7	44
33	Synthesis, structural analysis and in situ transmission electron microscopy mechanical tests on individual aluminum matrix/boron nitride nanotube nanohybrids. Acta Materialia, 2012, 60, 6213-6222.	3.8	44
34	Hard Crâ€“Alâ€“Siâ€“Bâ€“(N) coatings deposited by reactive and non-reactive magnetron sputtering of CrAlSiB target. Applied Surface Science, 2014, 314, 104-111.	3.1	44
35	Structure and properties of multi-component and multilayer TiCrBN/WSex coatings deposited by sputtering of TiCrB and WSe2 targets. Surface and Coatings Technology, 2008, 202, 5953-5961.	2.2	41
36	Effect of nitrogen partial pressure on the structure, physical and mechanical properties of CrB2 and Crâ€“Bâ€“N films. Thin Solid Films, 2009, 517, 2675-2680.	0.8	40

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37	PHASE TRANSFORMATION IN Fe-Mo-C AND Fe-W-C STEELSâ€"II. EUTECTOID REACTION OF M23C6 CARBIDE DECOMPOSITION DURING AUSTENITIZATION. Acta Materialia, 1997, 45, 2879-2895.	3.8	39
38	Comparative investigation of Tiâ€"Siâ€"N films magnetron sputtered using Ti5Si3+Ti and Ti5Si3+TiN targets. Surface and Coatings Technology, 2004, 182, 204-214.	2.2	39
39	Modification of polytetrafluoroethylene implants by depositing TiCaPCON films with and without stem cells. Surface and Coatings Technology, 2011, 206, 1188-1195.	2.2	39
40	Comparative investigation of Al- and Cr-doped TiSiCN coatings. Surface and Coatings Technology, 2011, 205, 4640-4648.	2.2	39
41	Nanostructured titanium alloys and multicomponent bioactive films: Mechanical behavior at indentation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 570, 51-62.	2.6	39
42	Toward bioactive yet antibacterial surfaces. Colloids and Surfaces B: Biointerfaces, 2015, 135, 158-165.	2.5	39
43	Mechanisms of friction and wear reduction by h-BN nanosheet and spherical W nanoparticle additives to base oil: Experimental study and molecular dynamics simulation. Tribology International, 2020, 151, 106493.	3.0	39
44	(Ni,Cu)/hexagonal BN nanohybrids â€" New efficient catalysts for methanol steam reforming and carbon monoxide oxidation. Chemical Engineering Journal, 2020, 395, 125109.	6.6	39
45	Localized deformation of multicomponent thin films. Thin Solid Films, 2002, 420-421, 330-337.	0.8	37
46	Comparison of Different Approaches to Surface Functionalization of Biodegradable Polycaprolactone Scaffolds. Nanomaterials, 2019, 9, 1769.	1.9	37
47	Crystallography and structural evolution of cubic boron nitride films during bias sputter deposition. Acta Materialia, 2000, 48, 3745-3759.	3.8	36
48	Multifunctional nanostructured films. Russian Chemical Reviews, 2007, 76, 463-470.	2.5	36
49	Decomposition of martensite by discontinuous-like precipitation reaction in an Feâ€"17Crâ€"0.5C alloy. Acta Materialia, 2000, 48, 969-983.	3.8	35
50	Hard tribological Tiâ€"Crâ€"Bâ€"N coatings with enhanced thermal stability, corrosion- and oxidation resistance. Surface and Coatings Technology, 2007, 202, 861-865.	2.2	35
51	Ta-doped multifunctional bioactive nanostructured films. Surface and Coatings Technology, 2008, 202, 3615-3624.	2.2	35
52	Influence of carbon chemical bonding on the tribological behavior of sputtered nanocomposite TiBC/a-C coatings. Thin Solid Films, 2010, 518, 5546-5552.	0.8	35
53	Fabrication and characteristics of melt-spun Al ribbons reinforced with nano/micro-BN phases. Acta Materialia, 2013, 61, 7604-7615.	3.8	35
54	Immobilization of Platelet-Rich Plasma onto COOH Plasma-Coated PCL Nanofibers Boost Viability and Proliferation of Human Mesenchymal Stem Cells. Polymers, 2017, 9, 736.	2.0	35

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55	Boron nitride nanotube growth via boron oxide assisted chemical vapor transport-deposition process using LiNO3 as a promoter. Nano Research, 2015, 8, 2063-2072.	5.8	34
56	Ag(Pt) nanoparticles-decorated bioactive yet antibacterial Ca- and P-doped TiO2 coatings produced by plasma electrolytic oxidation and ion implantation. Applied Surface Science, 2020, 516, 146068.	3.1	34
57	Structure and Properties of Tiâ€“Bâ€“N, Tiâ€“Crâ€“Bâ€“(N), and Crâ€“Bâ€“(N) Coatings Deposited by Magnetron Sputtering of Targets Prepared by Self-Propagating High-Temperature Synthesis. Physics of the Solid State, 2005, 47, 252.	0.2	33
58	Multifunctional nanostructured coatings: Formation, structure, and the uniformity of measuring their mechanical and tribological properties. Russian Metallurgy (Metally), 2010, 2010, 917-935.	0.1	33
59	Si-doped multifunctional bioactive nanostructured films. Surface and Coatings Technology, 2010, 205, 728-739.	2.2	33
60	Spark plasma sintered Al-based composites reinforced with BN nanosheets exfoliated under ball milling in ethylene glycol. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 745, 74-81.	2.6	33
61	Characteristics and in vitro response of thin hydroxyapatiteâ€“titania films produced by plasma electrolytic oxidation of Ti alloys in electrolytes with particle additions. RSC Advances, 2016, 6, 12688-12698.	1.7	32
62	Microstructure, mechanical, and tribological properties of Ag-free and Ag-doped VCN coatings. Surface and Coatings Technology, 2017, 331, 77-84.	2.2	32
63	Tribological behavior and self-healing functionality of TiNbCN-Ag coatings in wide temperature range. Applied Surface Science, 2017, 396, 110-120.	3.1	32
64	A new combined approach to metal-ceramic implants with controllable surface topography, chemistry, blind porosity, and wettability. Surface and Coatings Technology, 2012, 208, 14-23.	2.2	30
65	Pristine and Antibiotic-Loaded Nanosheets/Nanoneedles-Based Boron Nitride Films as a Promising Platform to Suppress Bacterial and Fungal Infections. ACS Applied Materials & Interfaces, 2020, 12, 42485-42498.	4.0	30
66	Nonwetting and optical properties of BN nanosheet films. Surface Innovations, 2013, 1, 32-39.	1.4	29
67	Comparative Study of Sliding, Scratching, and Impact-Loading Behavior of Hard CrB2 and Crâ€“Bâ€“N Films. Tribology Letters, 2016, 63, 1.	1.2	29
68	Synthesis and Characterization of Folate Conjugated Boron Nitride Nanocarriers for Targeted Drug Delivery. Journal of Physical Chemistry C, 2017, 121, 28096-28105.	1.5	29
69	Temperature-dependent structural transformation and friction behavior of nanocomposite VCN-(Ag) coatings. Materials and Design, 2018, 160, 964-973.	3.3	29
70	Optimization of PVD Parameters for the Deposition of Ultrahard Tiâ€“Siâ€“Bâ€“N Coatings. Journal of Materials Synthesis and Processing, 1999, 7, 187-193.	0.3	28
71	Adhesion, friction, and deformation characteristics of Ti-(Ca,Zr)-(C,N,O,P) coatings for orthopedic and dental implants. Physics of the Solid State, 2006, 48, 1301-1308.	0.2	28
72	Hollow spherical and nanosheet-base BN nanoparticles as perspective additives to oil lubricants: Correlation between large-scale friction behavior and in situ TEM compression testing. Ceramics International, 2018, 44, 6801-6809.	2.3	28

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73	Microstructure evolution during AlSi10Mg molten alloy/BN microflake interactions in metal matrix composites obtained through 3D printing. Journal of Alloys and Compounds, 2021, 859, 157765.	2.8	28
74	Effect of BN Nanoparticles Loaded with Doxorubicin on Tumor Cells with Multiple Drug Resistance. ACS Applied Materials & Interfaces, 2017, 9, 32498-32508.	4.0	27
75	Synergistic and long-lasting antibacterial effect of antibiotic-loaded TiCaPCON-Ag films against pathogenic bacteria and fungi. Materials Science and Engineering C, 2018, 90, 289-299.	3.8	27
76	Grafting of carboxyl groups using CO2/C2H4/Ar pulsed plasma: Theoretical modeling and XPS derivatization. Applied Surface Science, 2018, 435, 1220-1227.	3.1	27
77	High-Temperature Magnetism as a Probe for Structural and Compositional Uniformity in Ligand-Capped Magnetite Nanoparticles. Journal of Physical Chemistry C, 2014, 118, 28322-28329.	1.5	26
78	Structure and properties of Crâ€“Alâ€“Siâ€“B coatings produced by pulsed electrospark deposition on a nickel alloy. Surface and Coatings Technology, 2016, 285, 278-288.	2.2	26
79	Comparative study of Ti-C-Ni-Al, Ti-C-Ni-Fe, and Ti-C-Ni-Al/Ti-C-Ni-Fe coatings produced by magnetron sputtering, electro-spark deposition, and a combined two-step process. Ceramics International, 2018, 44, 7637-7646.	2.3	26
80	Hexagonal BN- and BNO-supported Au and Pt nanocatalysts in carbon monoxide oxidation and carbon dioxide hydrogenation reactions. Applied Catalysis B: Environmental, 2022, 303, 120891.	10.8	26
81	Crystallography and interface boundary structure of pearlite with M7C3 carbide lamellae. Acta Materialia, 1999, 47, 1105-1115.	3.8	25
82	ICP assisted sputter deposition of TiC/CaO nanocomposite films. Surface and Coatings Technology, 2004, 188-189, 735-740.	2.2	25
83	Self-propagating high-temperature synthesis of ceramic materials based on the M n + 1AX n phases in the Ti-Cr-Al-C system. Russian Journal of Non-Ferrous Metals, 2009, 50, 151-159.	0.2	25
84	Nanostructured Ti-Cr-B-N and Ti-Cr-Si-C-N coatings for hard-alloy cutting tools. Russian Journal of Non-Ferrous Metals, 2011, 52, 311-318.	0.2	25
85	Ag- and Cu-doped multifunctional bioactive nanostructured TiCaPCON films. Applied Surface Science, 2013, 285, 331-343.	3.1	25
86	A comparative study of microstructure, oxidation resistance, mechanical, and tribological properties of coatings in Moâ€“Bâ€“(N), Crâ€“Bâ€“(N) and Tiâ€“Bâ€“(N) systems. Physics of Metals and Metallography, 2017, 118, 1136-1146.	0.3	25
87	Effect of carbamide concentration on electrodeposition and tribological properties of Al 2 O 3 nanoparticle reinforced nickel nanocomposite coatings. Tribology International, 2018, 117, 68-77.	3.0	25
88	Mechanism of nucleation and growth of cubic boron nitride thin films. Science and Technology of Advanced Materials, 2000, 1, 219-225.	2.8	24
89	Toward Stronger Alâ€“BN Nanotube Composite Materials: Insights into Bonding at the Al/BN Interface from First-Principles Calculations. Journal of Physical Chemistry C, 2014, 118, 26894-26901.	1.5	24
90	The Structure and Mechanical Properties of Ti-Si-B Coatings Deposited by DC and Pulsed-DC Unbalanced Magnetron Sputtering. Plasma Processes and Polymers, 2007, 4, S687-S692.	1.6	23

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91	Structure, tribological and electrochemical properties of low friction TiAlSiCN/MoSeC coatings. Applied Surface Science, 2015, 327, 253-261.	3.1	23
92	Structural transformations in TiAlSiCN coatings in the temperature range 900â€“1600 Â°C. Acta Materialia, 2015, 83, 408-418.	3.8	23
93	BN nanoparticle/Ag hybrids with enhanced catalytic activity: theory and experiments. Catalysis Science and Technology, 2018, 8, 1652-1662.	2.1	23
94	Bioactive TiCaPCON-coated PCL nanofibers as a promising material for bone tissue engineering. Applied Surface Science, 2019, 479, 796-802.	3.1	23
95	Two-layer nanocomposite WC/a-C coatings produced by a combination of pulsed arc evaporation and electro-spark deposition in vacuum. Materials and Design, 2019, 167, 107645.	3.3	23
96	Nanoparticle dispersion-strengthened coatings and electrode materials for electrospark deposition. Thin Solid Films, 2006, 515, 1161-1165.	0.8	22
97	High thermal stability of TiAlSiCN coatings with â€œcombâ€•like nanocomposite structure. Surface and Coatings Technology, 2012, 206, 4840-4849.	2.2	22
98	Microstructure and catalytic properties of Fe3O4/BN, Fe3O4(Pt)/BN, and FePt/BN heterogeneous nanomaterials in CO2 hydrogenation reaction: Experimental and theoretical insights. Journal of Catalysis, 2021, 402, 130-142.	3.1	21
99	Crystallography and structural evolution during reverse transformation in an Feâ€“17Crâ€“0.5C tempered martensite. Acta Materialia, 2000, 48, 1679-1689.	3.8	20
100	Metal ion implantation of multiwalled boron nitride nanotubes. Scripta Materialia, 2012, 67, 507-510.	2.6	20
101	Synthesis of boron nitride nanostructures from borates of alkali and alkaline earth metals. Journal of Materials Chemistry A, 2015, 3, 20749-20757.	5.2	20
102	AlÂâ˜ BN interaction in a high-strength lightweight Al/BN metal-matrix composite: Theoretical modelling and experimental verification. Journal of Alloys and Compounds, 2019, 782, 875-880.	2.8	20
103	Structure and properties of nanocomposite Moâ€”Siâ€”Bâ€”(N) coatings. Protection of Metals and Physical Chemistry of Surfaces, 2015, 51, 794-802.	0.3	19
104	Mechanical properties and current-carrying capacity of Al reinforced with graphene/BN nanoribbons: a computational study. Nanoscale, 2016, 8, 20080-20089.	2.8	19
105	Title is missing!. Journal of Materials Synthesis and Processing, 2002, 10, 319-330.	0.3	18
106	Bonding Structure and Mechanical Properties of Tiâ€Bâ€C Coatings. Plasma Processes and Polymers, 2009, 6, S107.	1.6	18
107	Synthetic routes, structure and catalytic activity of Ag/BN nanoparticle hybrids toward CO oxidation reaction. Journal of Catalysis, 2018, 368, 217-227.	3.1	18
108	BN/Ag hybrid nanomaterials with petal-like surfaces as catalysts and antibacterial agents. Beilstein Journal of Nanotechnology, 2018, 9, 250-261.	1.5	18

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109	Antibacterial Performance of TiCaPCON Films Incorporated with Ag, Pt, and Zn: Bactericidal Ions Versus Surface Microgalvanic Interactions. ACS Applied Materials & Interfaces, 2018, 10, 24406-24420.	4.0	18
110	The prospects of nanodispersive powders application in surface engineering technologies. Surface and Coatings Technology, 2004, 180-181, 347-351.	2.2	17
111	Characterization of a hybrid PVD/PACVD system for the deposition of TiC/CaO nanocomposite films by OES and probe measurements. Surface and Coatings Technology, 2004, 188-189, 714-720.	2.2	17
112	Disperse-strengthening by nanoparticles advanced tribological coatings and electrode materials for their deposition. Surface and Coatings Technology, 2007, 201, 6176-6181.	2.2	17
113	Fabrication method, structure, mechanical, and biological properties of decellularized extracellular matrix for replacement of wide bone tissue defects. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 49, 255-268.	1.5	17
114	Fabrication of Ta-Si-C targets and their utilization for deposition of low friction wear resistant nanocomposite Si-Ta-C-(N) coatings intended for wide temperature range tribological applications. Surface and Coatings Technology, 2019, 359, 342-353.	2.2	17
115	New insights into synthesis of nanocrystalline hexagonal BN. Ceramics International, 2020, 46, 19866-19872.	2.3	17
116	Ag-Doped and Antibiotic-Loaded Hexagonal Boron Nitride Nanoparticles as Promising Carriers to Fight Different Pathogens. ACS Applied Materials & Interfaces, 2021, 13, 23452-23468.	4.0	17
117	Hybrid ICP/sputter deposition of TiC/CaO nanocomposite films for biomedical application. Applied Physics A: Materials Science and Processing, 2006, 82, 503-507.	1.1	16
118	The influence of Si concentrations on the oxidation resistance of Mo-Si-B-(N) coatings. Russian Journal of Non-Ferrous Metals, 2014, 55, 645-651.	0.2	16
119	Structural analysis and atomic simulation of Ag/BN nanoparticle hybrids obtained by Ag ion implantation. Materials and Design, 2016, 98, 167-173.	3.3	16
120	Determination of NH 2 concentration on 3-aminopropyl tri-ethoxy silane layers and cyclopropylamine plasma polymers by liquid-phase derivatization with 5-iodo 2-furaldehyde. Applied Surface Science, 2017, 414, 390-397.	3.1	16
121	TiCaPCON-Supported Pt- and Fe-Based Nanoparticles and Related Antibacterial Activity. ACS Applied Materials & Interfaces, 2019, 11, 28699-28719.	4.0	16
122	The defining role of pH in the green synthesis of plasmonic gold nanoparticles using Citrus limon extract. Gold Bulletin, 2017, 50, 131-136.	1.1	15
123	Electro-spark deposition in vacuum using graphite electrode at different electrode polarities: Peculiarities of microstructure, electrochemical and tribological properties. Applied Surface Science, 2021, 566, 150722.	3.1	15
124	Ti-Cr-B-N coatings prepared by pulsed cathodic-arc evaporation of ceramic TiCrB target produced by SHS. Protection of Metals and Physical Chemistry of Surfaces, 2013, 49, 677-681.	0.3	14
125	Recent progress in the field of multicomponent bioactive nanostructured films. RSC Advances, 2013, 3, 11107.	1.7	14
126	Two approaches to form antibacterial surface: Doping with bactericidal element and drug loading. Applied Surface Science, 2015, 330, 339-350.	3.1	14

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127	Silicon carbide ceramics SHS-produced from mechanoactivated Siâ€“Câ€“B mixtures. International Journal of Self-Propagating High-Temperature Synthesis, 2015, 24, 119-127.	0.2	14
128	Growth of spherical boron oxynitride nanoparticles with smooth and petalled surfaces during a chemical vapour deposition process. CrystEngComm, 2016, 18, 6689-6699.	1.3	14
129	Experimental and Theoretical Study of Doxorubicin Physicochemical Interaction with BN(O) Drug Delivery Nanocarriers. Journal of Physical Chemistry C, 2018, 122, 26409-26418.	1.5	14
130	Comparative investigation of single-layer and multilayer Nb-doped TiC coatings deposited by pulsed vacuum deposition techniques. Surface and Coatings Technology, 2020, 385, 125422.	2.2	14
131	Mechanism and crystallography of ferrite precipitation from cementite in an Fe-Cr-C alloy during austenitization. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1999, 79, 1655-1669.	0.8	13
132	Effect of Al, Si, and Cr on the thermal stability and high-temperature oxidation resistance of coatings based on titanium boronitride. Physics of Metals and Metallography, 2007, 104, 167-174.	0.3	13
133	Surface modification of TiAlSiCN coatings to improve oxidation protection. Applied Surface Science, 2015, 347, 713-718.	3.1	13
134	Nanostructured BNâ€“Mg composites: features of interface bonding and mechanical properties. Physical Chemistry Chemical Physics, 2016, 18, 965-969.	1.3	12
135	Mechanical properties of decellularized extracellular matrix coated with TiCaPCON film. Biomedical Materials (Bristol), 2017, 12, 035014.	1.7	12
136	Structure and antibacterial properties of Ag-doped micropattern surfaces produced by photolithography method. Colloids and Surfaces B: Biointerfaces, 2019, 173, 719-724.	2.5	12
137	Crystallography and structural evolution of LiNbO₃ and LiNb_{1â^'x}Ta_xO₃ films on sapphire prepared by high-rate thermal plasma spray chemical vapor deposition. Journal of Materials Research, 2001, 16, 2271-2279.	1.2	11
138	Hard Cr-Al-Si-B-(N) coatings with oxidation resistance up to 1200Â°C. Glass Physics and Chemistry, 2011, 37, 411-417.	0.2	11
139	Investigation of the Siâ€“Bâ€“Câ€“N coatings deposited by magnetron sputtering of SiBC targets. Russian Journal of Non-Ferrous Metals, 2015, 56, 540-547.	0.2	11
140	Inkjet printing of silver rainbow colloids for SERS chips with polychromatic sensitivity. RSC Advances, 2016, 6, 15535-15540.	1.7	11
141	Multilayer SiBCN/TiAlSiCN and AlOx/TiAlSiCN coatings with high thermal stability and oxidation resistance. Surface and Coatings Technology, 2017, 319, 277-285.	2.2	11
142	Ultrasharp h-BN Nanocones and the Origin of Their High Mechanical Stiffness and Large Dipole Moment. Journal of Physical Chemistry Letters, 2018, 9, 5086-5091.	2.1	11
143	Polyol Synthesis of Ag/BN Nanohybrids and their Catalytic Stability in CO Oxidation Reaction. ChemCatChem, 2020, 12, 1691-1698.	1.8	11
144	Insight into high temperature performance of magnetron sputtered Si-Ta-C-(N) coatings with an ion-implanted interlayer. Applied Surface Science, 2021, 541, 148526.	3.1	11

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145	Different concepts for creating antibacterial yet biocompatible surfaces: Adding bactericidal element, grafting therapeutic agent through COOH plasma polymer and their combination. Applied Surface Science, 2021, 556, 149751.	3.1	11
146	Biodegradable Nanohybrid Materials as Candidates for Self-Sanitizing Filters Aimed at Protection from SARS-CoV-2 in Public Areas. Molecules, 2022, 27, 1333.	1.7	11
147	On the scratch behaviour of self-lubricating WSe2 films. Wear, 2009, 267, 1909-1914.	1.5	10
148	Influence of Zr and O on the structure and properties of TiC(N) coatings deposited by magnetron sputtering of composite TiC0.5+ZrO2 and (Ti, Zr)C0.5+ZrO2 targets. Surface and Coatings Technology, 2012, 206, 2506-2514.	2.2	10
149	Self-propagating high-temperature synthesis of composite targets based on titanium carbonitride, silicide, and aluminide for ion-plasma deposition of multifunctional coatings. Russian Journal of Non-Ferrous Metals, 2012, 53, 77-84.	0.2	10
150	Elevated-temperature high-strength h-BN-doped Al2014 and Al7075 composites: Experimental and theoretical insights. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 809, 140969.	2.6	10
151	Microstructure and biological properties of titanium dioxide coatings doped with bioactive and bactericidal elements. Applied Surface Science, 2022, 575, 151755.	3.1	10
152	Nanopowder derived Al/h-BN composites with high strength and ductility. Journal of Alloys and Compounds, 2022, 912, 165199.	2.8	10
153	A comparative study of the structure and cytotoxicity of polytetrafluoroethylene after ion etching and ion implantation. Physics of the Solid State, 2011, 53, 638-642.	0.2	9
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