

Magnus Odn

List of Publications by Citations

Source: <https://exaly.com/author-pdf/3490188/magnus-oden-publications-by-citations.pdf>

Version: 2024-04-25

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

226
papers

6,840
citations

47
h-index

71
g-index

229
ext. papers

7,505
ext. citations

4
avg, IF

5.83
L-index

#	Paper	IF	Citations
226	Mechanical properties and machining performance of Ti _{1-x} Al _x N-coated cutting tools. <i>Surface and Coatings Technology</i> , 2005 , 191, 384-392	4.4	412
225	Thermal stability of arc evaporated high aluminum-content Ti _{1-x} Al _x N thin films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2002 , 20, 1815-1823	2.9	278
224	Nanoindentation studies of single-crystal (001)-, (011)-, and (111)-oriented TiN layers on MgO. <i>Journal of Applied Physics</i> , 1996 , 80, 6725-6733	2.5	216
223	Nanostructure formation during deposition of TiN _{0.5} SiN _x nanomultilayer films by reactive dual magnetron sputtering. <i>Journal of Applied Physics</i> , 2005 , 97, 114327	2.5	136
222	Evolution of the residual stress state in a duplex stainless steel during loading. <i>Acta Materialia</i> , 1999 , 47, 2669-2684	8.4	136
221	Interface structure in superhard TiN-SiN nanolaminates and nanocomposites: Film growth experiments and ab initio calculations. <i>Physical Review B</i> , 2007 , 75,	3.3	125
220	Growth of single-crystal CrN on MgO(001): Effects of low-energy ion-irradiation on surface morphological evolution and physical properties. <i>Journal of Applied Physics</i> , 2002 , 91, 3589-3597	2.5	111
219	Ab initio elastic tensor of cubic Ti _{0.5} Al _{0.5} N alloys: Dependence of elastic constants on size and shape of the supercell model and their convergence. <i>Physical Review B</i> , 2012 , 85,	3.3	99
218	Microstructure, stress and mechanical properties of arc-evaporated Cr _{0.5} N coatings. <i>Thin Solid Films</i> , 2001 , 385, 190-197	2.2	97
217	Strain and texture analysis of coatings using high-energy x-rays. <i>Journal of Applied Physics</i> , 2003 , 94, 6972-6982	2.7	95
216	Significant elastic anisotropy in Ti _{1-x} Al _x N alloys. <i>Applied Physics Letters</i> , 2010 , 97, 231902	3.4	91
215	Microstructure and mechanical behavior of arc-evaporated Cr _{0.5} N coatings. <i>Surface and Coatings Technology</i> , 1999 , 114, 39-51	4.4	87
214	Strain evolution during spinodal decomposition of TiAlN thin films. <i>Thin Solid Films</i> , 2012 , 520, 5542-5549	2.2	81
213	Epitaxial NaCl structure TaN _x (001): Electronic transport properties, elastic modulus, and hardness versus N/Ta ratio. <i>Journal of Applied Physics</i> , 2001 , 90, 2879-2885	2.5	80
212	Microwave assisted combustion synthesis of nanocrystalline yttria and its powder characteristics. <i>Powder Technology</i> , 2009 , 191, 309-314	5.2	79
211	Improving thermal stability of hard coating films via a concept of multicomponent alloying. <i>Applied Physics Letters</i> , 2011 , 99, 091903	3.4	78
210	Immobilization of lipase from <i>Mucor miehei</i> and <i>Rhizopus oryzae</i> into mesoporous silica--the effect of varied particle size and morphology. <i>Colloids and Surfaces B: Biointerfaces</i> , 2012 , 100, 22-30	6	75

209	Thermally enhanced mechanical properties of arc evaporated Ti _{0.34} Al _{0.66} N/TiN multilayer coatings. <i>Journal of Applied Physics</i> , 2010 , 108, 044312	2.5	75
208	Combustion synthesis of Y ₂ O ₃ and Yb ₂ O ₃ . <i>Journal of Materials Processing Technology</i> , 2008 , 208, 415-423	3.3	72
207	Thermal stability, microstructure and mechanical properties of Ti _{1-x} Zr _x N thin films. <i>Thin Solid Films</i> , 2008 , 516, 6421-6431	2.2	71
206	Mechanical and thermal stability of TiN/NbN superlattice thin films. <i>Surface and Coatings Technology</i> , 2000 , 133-134, 227-233	4.4	71
205	Load sharing between austenite and ferrite in a duplex stainless steel during cyclic loading. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2000 , 31, 1557-1570	2.3	70
204	Thermal decomposition products in arc evaporated TiAlN/TiN multilayers. <i>Applied Physics Letters</i> , 2008 , 93, 143110	3.4	69
203	Phase Stability and Elasticity of TiAlN. <i>Materials</i> , 2011 , 4, 1599-1618	3.5	64
202	Layer formation by resputtering in TiSi ₂ hard coatings during large scale cathodic arc deposition. <i>Surface and Coatings Technology</i> , 2011 , 205, 3923-3930	4.4	64
201	Rapid synthesis of SBA-15 rods with variable lengths, widths, and tunable large pores. <i>Langmuir</i> , 2011 , 27, 4994-9	4	63
200	Epitaxial stabilization of cubic-SiN _x in TiN/SiN _x multilayers. <i>Applied Physics Letters</i> , 2006 , 88, 191902	3.4	63
199	Load Partitioning and Strain-Induced Martensite Formation during Tensile Loading of a Metastable Austenitic Stainless Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2009 , 40, 1039-1048	2.3	61
198	Fabrication of transparent yttria by HIP and the glass-encapsulation method. <i>Journal of the European Ceramic Society</i> , 2009 , 29, 311-316	6	58
197	Magnetron sputtered WC films with C ₆₀ as carbon source. <i>Thin Solid Films</i> , 2003 , 444, 29-37	2.2	58
196	Growth and physical properties of epitaxial metastable cubic TaN(001). <i>Applied Physics Letters</i> , 1999 , 75, 3808-3810	3.4	58
195	Spinodal decomposition of Ti _{0.33} Al _{0.67} N thin films studied by atom probe tomography. <i>Thin Solid Films</i> , 2012 , 520, 4362-4368	2.2	57
194	Pressure enhancement of the isostructural cubic decomposition in Ti _{1-x} Al _x N. <i>Applied Physics Letters</i> , 2009 , 95, 181906	3.4	57
193	Machining performance and decomposition of TiAlN/TiN multilayer coated metal cutting inserts. <i>Surface and Coatings Technology</i> , 2011 , 205, 4005-4010	4.4	56
192	Stepwise transformation behavior of the strain-induced martensitic transformation in a metastable stainless steel. <i>Scripta Materialia</i> , 2007 , 56, 213-216	5.6	56

191	Microstructural evolution during tempering of arc-evaporated CrN coatings. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2000 , 18, 121-130	2.9	55
190	Cluster formation at the Si/liquid interface in Sr and Na modified AlBi alloys. <i>Scripta Materialia</i> , 2016 , 117, 16-19	5.6	55
189	In situ X-ray scattering study of the cubic to hexagonal transformation of AlN in Ti _{1-x} Al _x N. <i>Acta Materialia</i> , 2014 , 73, 205-214	8.4	53
188	The effects on pore size and particle morphology of heptane additions to the synthesis of mesoporous silica SBA-15. <i>Microporous and Mesoporous Materials</i> , 2010 , 133, 66-74	5.3	53
187	Characterization of the Induced Plastic Zone in a Single Crystal TiN(001) Film by Nanoindentation and Transmission Electron Microscopy. <i>Journal of Materials Research</i> , 1997 , 12, 2134-2142	2.5	53
186	In situ small-angle x-ray scattering study of nanostructure evolution during decomposition of arc evaporated TiAlN coatings. <i>Applied Physics Letters</i> , 2009 , 94, 053114	3.4	52
185	The effects of bias voltage and annealing on the microstructure and residual stress of arc-evaporated CrN coatings. <i>Surface and Coatings Technology</i> , 1999 , 120-121, 272-276	4.4	52
184	Grinding Effects on Surface Integrity and Mechanical Strength of WC-Co Cemented Carbides. <i>Procedia CIRP</i> , 2014 , 13, 257-263	1.8	51
183	Shape engineering vs organic modification of inorganic nanoparticles as a tool for enhancing cellular internalization. <i>Nanoscale Research Letters</i> , 2012 , 7, 358	5	51
182	Microstructure evolution during the isostructural decomposition of TiAlN combined in-situ small angle x-ray scattering and phase field study. <i>Journal of Applied Physics</i> , 2013 , 113, 213518	2.5	50
181	Influence of elastic and plastic anisotropy on the flow behavior in a duplex stainless steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2002 , 33, 57-71	2.3	50
180	Effects of Ti alloying of AlCrN coatings on thermal stability and oxidation resistance. <i>Thin Solid Films</i> , 2013 , 534, 394-402	2.2	49
179	Effect of laser hardening on the fatigue strength and fracture of a BMn steel. <i>International Journal of Fatigue</i> , 1998 , 20, 389-398	5	47
178	Load partitioning between single bulk grains in a two-phase duplex stainless steel during tensile loading. <i>Acta Materialia</i> , 2010 , 58, 734-744	8.4	46
177	Thermomechanical properties of copper-carbon nanofibre composites prepared by spark plasma sintering and hot pressing. <i>Composites Science and Technology</i> , 2010 , 70, 2263-2268	8.6	46
176	Growth and characterization of TiN/SiN(001) superlattice films. <i>Journal of Materials Research</i> , 2007 , 22, 3255-3264	2.5	44
175	Shape engineering boosts antibacterial activity of chitosan coated mesoporous silica nanoparticle doped with silver: a mechanistic investigation. <i>Journal of Materials Chemistry B</i> , 2016 , 4, 3292-3304	7.3	44
174	Tuning hardness and fracture resistance of ZrN/Zr _{0.63} Al _{0.37} N nanoscale multilayers by stress-induced transformation toughening. <i>Acta Materialia</i> , 2015 , 89, 22-31	8.4	43

173	Influence of plasma nitriding on fatigue strength and fracture of a B-Mn steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1998 , 242, 181-194	5.3	43
172	Decomposition and phase transformation in TiCrAlN thin coatings. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2012 , 30, 061506	2.9	41
171	Deformation structures under indentations in TiN/NbN single-crystal multilayers deposited by magnetron sputtering at different bombarding ion energies. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 2002 , 82, 1983-1992		40
170	Lattice Vibrations Change the Solid Solubility of an Alloy at High Temperatures. <i>Physical Review Letters</i> , 2016 , 117, 205502	7.4	39
169	Comparison of segregations formed in unmodified and Sr-modified AlBi alloys studied by atom probe tomography and transmission electron microscopy. <i>Journal of Alloys and Compounds</i> , 2014 , 611, 410-421	5.7	39
168	Pressure and temperature effects on the decomposition of arc evaporated Ti _{0.6} Al _{0.4} N coatings in continuous turning. <i>Surface and Coatings Technology</i> , 2012 , 209, 203-207	4.4	39
167	Microstructure-property relationships in arc-evaporated CrN coatings. <i>Thin Solid Films</i> , 2000 , 377-378, 407-412	2.2	39
166	X-ray photoelectron spectroscopy studies of Ti _{1-x} Al _x N (0 ≤ x ≤ 0.83) high-temperature oxidation: The crucial role of Al concentration. <i>Surface and Coatings Technology</i> , 2019 , 374, 923-934	4.4	37
165	Vibrational free energy and phase stability of paramagnetic and antiferromagnetic CrN from ab initio molecular dynamics. <i>Physical Review B</i> , 2014 , 89,	3.3	37
164	Systematic ab initio investigation of the elastic modulus in quaternary transition metal nitride alloys and their coherent multilayers. <i>Acta Materialia</i> , 2017 , 127, 124-132	8.4	36
163	Tuning the shape of mesoporous silica particles by alterations in parameter space: from rods to platelets. <i>Langmuir</i> , 2013 , 29, 13551-61	4	35
162	Influence of synthesis temperature on morphology of SBA-16 mesoporous materials with a three-dimensional pore system. <i>Microporous and Mesoporous Materials</i> , 2010 , 129, 106-111	5.3	35
161	Phase-field modelling of spinodal decomposition in TiAlN including the effect of metal vacancies. <i>Scripta Materialia</i> , 2015 , 95, 42-45	5.6	33
160	Extended studies of degradation mechanisms in the refractory lining of a rotary kiln for iron ore pellet production. <i>Journal of the European Ceramic Society</i> , 2012 , 32, 1519-1528	6	32
159	Temperature-dependent elastic properties of Ti _{1-x} Al _x N alloys. <i>Applied Physics Letters</i> , 2015 , 107, 231901	3.4	32
158	Age hardening in arc-evaporated ZrAlN thin films. <i>Scripta Materialia</i> , 2010 , 62, 739-741	5.6	32
157	Deformation behaviour of a prestrained duplex stainless steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2002 , 337, 25-38	5.3	32
156	Mesoporous silica and carbon based catalysts for esterification and biodiesel fabrication: The effect of matrix surface composition and porosity. <i>Applied Catalysis A: General</i> , 2017 , 533, 49-58	5.1	31

155	Targeted delivery of a novel anticancer compound anisomelic acid using chitosan-coated porous silica nanorods for enhancing the apoptotic effect. <i>Biomaterials Science</i> , 2015 , 3, 103-11	7.4	31
154	High temperature phase evolution of Bolivian kaolinitic illitic clays heated to 1250°C. <i>Applied Clay Science</i> , 2014 , 101, 100-105	5.2	31
153	High pressure and high temperature stabilization of cubic AlN in Ti _{0.60} Al _{0.40} N. <i>Journal of Applied Physics</i> , 2013 , 113, 053515	2.5	31
152	Surface directed spinodal decomposition at TiAlN/TiN interfaces. <i>Journal of Applied Physics</i> , 2013 , 113, 114305	2.5	31
151	Residual Stresses in a Nickel-Based Superalloy Introduced by Turning. <i>Materials Science Forum</i> , 2002 , 404-407, 173-178	0.4	30
150	Impact of nitrogen vacancies on the high temperature behavior of (Ti _{1-x} Al _x)N _y alloys. <i>Acta Materialia</i> , 2016 , 119, 218-228	8.4	29
149	Annealing of Thermally Sprayed Ti ₂ AlC Coatings. <i>International Journal of Applied Ceramic Technology</i> , 2011 , 8, 74-84	2	28
148	Synthesis and characterization of large mesoporous silica SBA-15 sheets with ordered accessible 18 nm pores. <i>Materials Letters</i> , 2009 , 63, 2129-2131	3.3	28
147	Thermal stability and mechanical properties of arc evaporated ZrN/ZrAlN multilayers. <i>Thin Solid Films</i> , 2010 , 519, 694-699	2.2	28
146	Microstructure evolution and age hardening in (Ti,Si)(C,N) thin films deposited by cathodic arc evaporation. <i>Thin Solid Films</i> , 2010 , 519, 1397-1403	2.2	28
145	Growth and thermal stability of TiN/ZrAlN: Effect of internal interfaces. <i>Acta Materialia</i> , 2016 , 121, 396-406	4.6	28
144	Propylsulfonic acid functionalized mesoporous silica catalysts for esterification of fatty acids. <i>Journal of Molecular Catalysis A</i> , 2015 , 410, 253-259		27
143	Enhanced thermal stability and fracture toughness of TiAlN coatings by Cr, Nb and V-alloying. <i>Surface and Coatings Technology</i> , 2018 , 342, 85-93	4.4	27
142	Nanofibrillated Cellulose-Based Electrolyte and Electrode for Paper-Based Supercapacitors. <i>Advanced Sustainable Systems</i> , 2018 , 2, 1700121	5.9	27
141	Nanolabyrinthine ZrAlN thin films by self-organization of interwoven single-crystal cubic and hexagonal phases. <i>APL Materials</i> , 2013 , 1, 022105	5.7	27
140	The Reactivity of Ti ₂ AlC and Ti ₃ SiC ₂ with SiC Fibers and Powders up to Temperatures of 1550°C. <i>Journal of the American Ceramic Society</i> , 2011 , 94, 1737-1743	3.8	27
139	X-ray diffraction determination of residual stresses in functionally graded WC ₁₆ Co composites. <i>International Journal of Refractory Metals and Hard Materials</i> , 2004 , 22, 177-184	4.1	27
138	Intergranular strains and plastic deformation of an austenitic stainless steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2002 , 334, 215-222	5.3	27

137	Structure, deformation and fracture of arc evaporated ZrBiN hard films. <i>Surface and Coatings Technology</i> , 2014 , 258, 1100-1107	4.4	26
136	Anisotropy effects on microstructure and properties in decomposed arc evaporated Ti _{1-x} Al _x N coatings during metal cutting. <i>Surface and Coatings Technology</i> , 2013 , 235, 181-185	4.4	26
135	Growth of Gd ₂ O ₃ nanoparticles inside mesoporous silica frameworks. <i>Microporous and Mesoporous Materials</i> , 2013 , 168, 221-224	5.3	26
134	In situ x-ray diffraction study of C60 polymerization at high pressure and temperature. <i>Physical Review B</i> , 2002 , 66,	3.3	25
133	Microstructural characterization of alkali metal mediated high temperature reactions in mullite based refractories. <i>Ceramics International</i> , 2010 , 36, 733-740	5.1	24
132	Self-organized anisotropic (Zr _{1-x} Bi _x)N nanocomposites grown by reactive sputter deposition. <i>Acta Materialia</i> , 2015 , 82, 179-189	8.4	23
131	Influence of chemical composition and deposition conditions on microstructure evolution during annealing of arc evaporated ZrAlN thin films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2012 , 30, 031504	2.9	21
130	Comparison between slip-casting and uniaxial pressing for the fabrication of translucent yttria ceramics. <i>Journal of Materials Science</i> , 2008 , 43, 2849-2856	4.3	21
129	Effect of Drying and Dewatering on Yttria Precursors with Transient Morphology. <i>Journal of the American Ceramic Society</i> , 2006 , 89, 3094-3100	3.8	21
128	Comparison of relative permeability, fluid saturation, capillary pressure relations in the modelling of non-aqueous phase liquid infiltration in variably saturated, layered media. <i>Advances in Water Resources</i> , 2006 , 29, 1705-1730	4.7	21
127	Exploring the high entropy alloy concept in (AlTiVNbCr)N. <i>Thin Solid Films</i> , 2017 , 636, 346-352	2.2	20
126	Substrate surface finish effects on scratch resistance and failure mechanisms of TiN-coated hardmetals. <i>Surface and Coatings Technology</i> , 2015 , 265, 174-184	4.4	20
125	Wear behavior of ZrAlN coated cutting tools during turning. <i>Surface and Coatings Technology</i> , 2015 , 282, 180-187	4.4	19
124	Elastic strain evolution and Martensite formation in individual austenite grains during in situ loading of a metastable stainless steel. <i>Materials Letters</i> , 2008 , 62, 338-340	3.3	19
123	Eutectic modification by ternary compound cluster formation in Al-Si alloys. <i>Scientific Reports</i> , 2019 , 9, 5506	4.9	18
122	3D Microstructure Characterization and Analysis of Al-Si Foundry Alloys at Different Length Scales. <i>Microscopy and Microanalysis</i> , 2014 , 20, 956-957	0.5	18
121	Alternative method to precipitation techniques for synthesizing yttrium oxide nanopowder. <i>Powder Technology</i> , 2007 , 177, 77-82	5.2	18
120	Synthesis of homogeneously dispersed cobalt nanoparticles in the pores of functionalized SBA-15 silica. <i>Powder Technology</i> , 2012 , 221, 359-364	5.2	17

119	Synthesis of a Cu-infiltrated Zr-doped SBA-15 catalyst for CO hydrogenation into methanol and dimethyl ether. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 19139-19149	3.6	17
118	Phase Evaluation in Al ₂ O ₃ Fiber-Reinforced Ti ₂ AlC During Sintering in the 1300°C–1500°C Temperature Range. <i>Journal of the American Ceramic Society</i> , 2011 , 94, 3327-3334	3.8	17
117	Synthesis of hollow silica spheres SBA-16 with large-pore diameter. <i>Materials Letters</i> , 2011 , 65, 1066-1068	3.3	17
116	Characterization of worn TiBi cathodes used for reactive cathodic arc evaporation. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2010 , 28, 347-353	2.9	17
115	Effect of heat treatment of carbon nanofibres on electroless copper deposition. <i>Composites Science and Technology</i> , 2010 , 70, 2269-2275	8.6	17
114	Synthesis and optical properties of Yb _{0.6} Y _{1.4} O ₃ transparent ceramics. <i>Journal of Alloys and Compounds</i> , 2008 , 464, 407-411	5.7	17
113	Comparison of two different precipitation routes leading to Yb doped Y ₂ O ₃ nano-particles. <i>Journal of the European Ceramic Society</i> , 2007 , 27, 1991-1998	6	17
112	Grain-to-Grain Stress Interactions in an Electrodeposited Iron Coating. <i>Advanced Materials</i> , 2005 , 17, 1221-1226	24	17
111	Superhard and superelastic films of polymeric C ₆₀ . <i>Diamond and Related Materials</i> , 2001 , 10, 2044-2048	3.5	17
110	Near-Surface Deformation in an Alumina-Silicon Carbide-Whisker Composite due to Surface Machining. <i>Journal of the American Ceramic Society</i> , 1996 , 79, 2134-2140	3.8	17
109	Time evolution of the CO ₂ hydrogenation to fuels over Cu-Zr-SBA-15 catalysts. <i>Journal of Catalysis</i> , 2018 , 362, 55-64	7.3	16
108	Degradation of Refractory Bricks Used as Thermal Insulation in Rotary Kilns for Iron Ore Pellet Production. <i>International Journal of Applied Ceramic Technology</i> , 2009 , 6, 717-726	2	16
107	Optimization of wear-resistant coating architectures using finite element analysis. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2003 , 21, 332-339	2.9	16
106	Impact of anharmonic effects on the phase stability, thermal transport, and electronic properties of AlN. <i>Physical Review B</i> , 2016 , 94,	3.3	16
105	The production of porous brick material from diatomaceous earth and Brazil nut shell ash. <i>Construction and Building Materials</i> , 2015 , 98, 257-264	6.7	15
104	Formation of block-copolymer-templated mesoporous silica. <i>Journal of Colloid and Interface Science</i> , 2018 , 521, 183-189	9.3	15
103	Improved metal cutting performance with bias-modulated textured Ti _{0.50} Al _{0.50} N multilayers. <i>Surface and Coatings Technology</i> , 2014 , 257, 102-107	4.4	15
102	Grinding-induced metallurgical alterations in the binder phase of WC-Co cemented carbides. <i>Materials Characterization</i> , 2017 , 134, 302-310	3.9	15

101	Thermal stability of wurtzite Zr _{1-x} Al _x N coatings studied by in situ high-energy x-ray diffraction during annealing. <i>Journal of Applied Physics</i> , 2015 , 118, 035309	2.5	15
100	Blind deconvolution of time-of-flight mass spectra from atom probe tomography. <i>Ultramicroscopy</i> , 2013 , 132, 60-4	3.1	15
99	TiSi ₂ thin films grown by reactive arc evaporation from Ti ₃ SiC ₂ cathodes. <i>Journal of Materials Research</i> , 2011 , 26, 874-881	2.5	15
98	Thermal treatment and phase formation in kaolinite and illite based clays from tropical regions of Bolivia. <i>IOP Conference Series: Materials Science and Engineering</i> , 2012 , 31, 012017	0.4	15
97	Phase transformations in nanocomposite ZrAlN thin films during annealing. <i>Journal of Materials Research</i> , 2012 , 27, 1716-1724	2.5	15
96	Influence of Agglomeration on the Transparency of Yttria Ceramics. <i>Journal of the American Ceramic Society</i> , 2008 , 91, 3380-3387	3.8	15
95	Single-pot synthesis of ordered mesoporous silica films with unique controllable morphology. <i>Journal of Colloid and Interface Science</i> , 2014 , 413, 1-7	9.3	14
94	Morphology influence of the oxidation kinetics of carbon nanofibers. <i>Corrosion Science</i> , 2009 , 51, 926-930.8	3.8	14
93	On the stability of mg nanograins to coarsening after repeated melting. <i>Nano Letters</i> , 2009 , 9, 3082-6	11.5	14
92	Hardness profile measurements in functionally graded WC/Co composites. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004 , 382, 141-149	5.3	14
91	Growth, structure, and mechanical properties of transition metal carbide superlattices. <i>Journal of Materials Research</i> , 2001 , 16, 1301-1310	2.5	14
90	A new approach to account for fracture aperture variability when modeling solute transport in fracture networks. <i>Water Resources Research</i> , 2013 , 49, 2241-2252	5.4	13
89	Growth of hard amorphous TiAlSiN thin films by cathodic arc evaporation. <i>Surface and Coatings Technology</i> , 2013 , 235, 376-382	4.4	13
88	Influence of TiSi cathode grain size on the cathodic arc process and resulting TiSi ₂ coatings. <i>Surface and Coatings Technology</i> , 2013 , 235, 637-647	4.4	13
87	Microstructural and Chemical Analysis of AgI Coatings Used as a Solid Lubricant in Electrical Sliding Contacts. <i>Tribology Letters</i> , 2012 , 46, 187-193	2.8	13
86	Growth and characterization of electroless deposited Cu films on carbon nanofibers. <i>Surface and Coatings Technology</i> , 2009 , 203, 3459-3464	4.4	13
85	Regional channelized transport in fractured media with matrix diffusion and linear sorption. <i>Water Resources Research</i> , 2008 , 44,	5.4	13
84	Temperature-dependent elastic properties of binary and multicomponent high-entropy refractory carbides. <i>Materials and Design</i> , 2021 , 204, 109634	8.1	13

83	Solid state formation of Ti ₄ AlN ₃ in cathodic arc deposited (Ti _{1-x} Al _x)N _y alloys. <i>Acta Materialia</i> , 2017 , 129, 268-277	8.4	12
82	Mechanical strength of ground WC-Co cemented carbides after coating deposition. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 689, 72-77	5.3	12
81	Effects of nitrogen vacancies on phase stability and mechanical properties of arc deposited (Ti _{0.52} Al _{0.48})N _y (y Surface and Coatings Technology, 2017 , 330, 77-86	4.4	12
80	Impact of the morphological and chemical properties of copper-zirconium-SBA-15 catalysts on the conversion and selectivity in carbon dioxide hydrogenation. <i>Journal of Colloid and Interface Science</i> , 2019 , 546, 163-173	9.3	12
79	Microstructure and thermal stability of arc-evaporated Cr ₂ N coatings. <i>Philosophical Magazine</i> , 2004 , 84, 611-630	1.6	12
78	Contact damage resistance of TiN-coated hardmetals: Beneficial effects associated with substrate grinding. <i>Surface and Coatings Technology</i> , 2015 , 275, 133-141	4.4	11
77	High temperature phase decomposition in Ti _x Zr _y Al _z N. <i>AIP Advances</i> , 2014 , 4, 127147	1.5	11
76	Enhanced thermal stability and mechanical properties of nitrogen deficient titanium aluminum nitride (Ti _{0.54} Al _{0.46} N _y) thin films by tuning the applied negative bias voltage. <i>Journal of Applied Physics</i> , 2017 , 122, 065301	2.5	10
75	Anomalous epitaxial stability of (001) interfaces in ZrN/SiN _x multilayers. <i>APL Materials</i> , 2014 , 2, 046106	5.7	10
74	Arc deposition of TiSiCN thin films from binary and ternary cathodes [Comparing sources of C. <i>Surface and Coatings Technology</i> , 2012 , 213, 145-154	4.4	10
73	Microstructure evolution of Ti ₃ SiC ₂ compound cathodes during reactive cathodic arc evaporation. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2011 , 29, 031601	2.9	10
72	Reverse Martensitic Transformation and Resulting Microstructure in a Cold Rolled Metastable Austenitic Stainless Steel. <i>Steel Research International</i> , 2008 , 79, 433-439	1.6	10
71	From well-test data to input to stochastic continuum models: effect of the variable support scale of the hydraulic data. <i>Hydrogeology Journal</i> , 2006 , 14, 1409-1422	3.1	10
70	Residual stress in clinched joints of metals. <i>Applied Physics A: Materials Science and Processing</i> , 2002 , 74, s1440-s1442	2.6	10
69	Non-equilibrium vacancy formation energies in metastable alloys [A case study of Ti _{0.5} Al _{0.5} N. <i>Materials and Design</i> , 2017 , 114, 484-493	8.1	9
68	Self-organized nanostructuring in Zr _{0.69} Al _{0.31} N thin films studied by atom probe tomography. <i>Thin Solid Films</i> , 2016 , 615, 233-238	2.2	9
67	Morphology and microstructure evolution of Ti-50 at.% Al cathodes during cathodic arc deposition of Ti-Al-N coatings. <i>Journal of Applied Physics</i> , 2017 , 121, 245309	2.5	9
66	Auto-organizing ZrAlN/ZrAlTiN/TiN multilayers. <i>Thin Solid Films</i> , 2012 , 520, 6451-6454	2.2	9

65	Coherency strain engineered decomposition of unstable multilayer alloys for improved thermal stability. <i>Journal of Applied Physics</i> , 2013 , 114, 244303	2.5	9
64	Characterization of DLC coatings over nitrided stainless steel with and without nitriding pre-treatment using annealing cycles. <i>Journal of Materials Research and Technology</i> , 2019 , 8, 1653-1662	5.5	9
63	Temperature induced superhard CrB ₂ coatings with preferred (001) orientation deposited by DC magnetron sputtering technique. <i>Surface and Coatings Technology</i> , 2017 , 322, 134-140	4.4	8
62	Special quasirandom structure method in application for advanced properties of alloys: A study on Ti _{0.5} Al _{0.5} N and TiN/Ti _{0.5} Al _{0.5} N multilayer. <i>Computational Materials Science</i> , 2015 , 103, 194-199	3.2	8
61	High Si content TiSiN films with superior oxidation resistance. <i>Surface and Coatings Technology</i> , 2020 , 398, 126087	4.4	8
60	Effects of decomposition route and microstructure on h-AlN formation rate in TiCrAlN alloys. <i>Journal of Alloys and Compounds</i> , 2017 , 691, 1024-1032	5.7	8
59	Electrochemically deposited nickel membranes; process-microstructure-property relationships. <i>Surface and Coatings Technology</i> , 2003 , 172, 79-89	4.4	8
58	Microstructural influence of the thermal behavior of arc deposited TiAlN coatings with high aluminum content. <i>Journal of Alloys and Compounds</i> , 2021 , 854, 157205	5.7	8
57	Discharge state transition and cathode fall thickness evolution during chromium HiPIMS discharge. <i>Physics of Plasmas</i> , 2017 , 24, 083507	2.1	7
56	Synthesis of nanocrystalline yttria through in-situ sulphated-combustion technique. <i>Journal of the Ceramic Society of Japan</i> , 2009 , 117, 1065-1068	1	7
55	RHEED studies during growth of TiN/SiN _x /TiN trilayers on MgO(001). <i>Surface Science</i> , 2007 , 601, 2352-2356	3.5	7
54	The effect of nitrogen vacancies on initial wear in arc deposited (Ti _{0.52} ,Al _{0.48})N _y (y = 0.5, 1, 1.5). <i>Surface and Coatings Technology</i> , 2019 , 358, 452-460	4.4	7
53	High temperature thermodynamics of spinodal decomposition in arc deposited Ti _x Nb _y Al _z N coatings. <i>Materials and Design</i> , 2018 , 150, 165-170	8.1	6
52	Influence of microstructure and mechanical properties on the tribological behavior of reactive arc deposited Zr-Si-N coatings at room and high temperature. <i>Surface and Coatings Technology</i> , 2016 , 304, 393-400	4.4	6
51	Industry-relevant magnetron sputtering and cathodic arc ultra-high vacuum deposition system for in situ x-ray diffraction studies of thin film growth using high energy synchrotron radiation. <i>Review of Scientific Instruments</i> , 2015 , 86, 095113	1.7	6
50	Deformation structures under indentations in TiN/NbN single-crystal multilayers deposited by magnetron sputtering at different bombarding ion energies		6
49	Thermal and mechanical stability of wurtzite-ZrAlN/cubic-TiN and wurtzite-ZrAlN/cubic-ZrN multilayers. <i>Surface and Coatings Technology</i> , 2017 , 324, 328-337	4.4	5
48	Dislocation structure and microstrain evolution during spinodal decomposition of reactive magnetron sputtered heteroepitaxial c-(Ti _{0.37} ,Al _{0.63})N/c-TiN films grown on MgO(001) and (111) substrates. <i>Journal of Applied Physics</i> , 2019 , 125, 105301	2.5	5

47	Growth and Functionalization of Particle-Based Mesoporous Silica Films and Their Usage in Catalysis. <i>Nanomaterials</i> , 2019 , 9,	5-4	5
46	Coherency effects on the mixing thermodynamics of cubic Ti _{1-x} Al _x N/TiN(001) multilayers. <i>Physical Review B</i> , 2016 , 93,	3-3	5
45	Low temperature nanocasting of hematite nanoparticles using mesoporous silica molds. <i>Powder Technology</i> , 2012 , 217, 269-273	5-2	5
44	Nanostructuring and coherency strain in multicomponent hard coatings. <i>APL Materials</i> , 2014 , 2, 116104	5-7	5
43	Decomposition routes and strain evolution in arc deposited TiZrAlN coatings. <i>Journal of Alloys and Compounds</i> , 2019 , 779, 261-269	5-7	5
42	Effect of work function and cohesive energy of the constituent phases of Ti-50 at.% Al cathode during arc deposition of Ti-Al-N coatings. <i>Surface and Coatings Technology</i> , 2019 , 357, 393-401	4-4	5
41	Thermal expansion of quaternary nitride coatings. <i>Journal of Physics Condensed Matter</i> , 2018 , 30, 135901	1-8	4
40	Growth and high temperature decomposition of epitaxial metastable wurtzite (Ti _{1-x} Al _x)N(0001) thin films. <i>Thin Solid Films</i> , 2019 , 688, 137414	2-2	4
39	Silica SBA-15 template assisted synthesis of ultrasmall and homogeneously sized copper nanoparticles. <i>Journal of Nanoscience and Nanotechnology</i> , 2011 , 11, 3493-8	1-3	4
38	Mesoporous silica templated zirconia nanoparticles. <i>Journal of Nanoparticle Research</i> , 2011 , 13, 2743-2748	3-8	4
37	Growth of single crystalline dendritic Li ₂ SiO ₃ arrays from LiNO ₃ and mesoporous SiO ₂ . <i>Journal of Solid State Chemistry</i> , 2011 , 184, 1735-1739	3-3	4
36	Sintering, microstructural and mechanical characterization of combustion synthesized Y ₂ O ₃ and Yb ₃₊ -Y ₂ O ₃ . <i>Journal of the Ceramic Society of Japan</i> , 2009 , 117, 1258-1262	1	4
35	Residual Stress Distributions around Clinched Joints. <i>Materials Science Forum</i> , 2002 , 404-407, 617-622	0-4	4
34	Strength, transformation toughening, and fracture dynamics of rocksalt-structure Ti _{1-x} Al _x N(0001.75) alloys. <i>Physical Review Materials</i> , 2020 , 4,	3-2	4
33	Anisotropic High Cycle Fatigue Behaviour of Duplex Stainless Steels: Influence of Microstresses. <i>International Journal of Materials Research</i> , 2002 , 93, 7-11		4
32	Thermally Induced Surface Integrity Changes of Ground WC-Co Hardmetals. <i>Procedia CIRP</i> , 2016 , 45, 91-94	1-8	4
31	The Effect of Cathodic Arc Guiding Magnetic Field on the Growth of (Ti _{0.36} Al _{0.64})N Coatings. <i>Coatings</i> , 2019 , 9, 660	2-9	4
30	Effect of nitrogen vacancies on the growth, dislocation structure, and decomposition of single crystal epitaxial (Ti _{1-x} Al _x)N _y thin films. <i>Acta Materialia</i> , 2021 , 203, 116509	8-4	4

29	Thermally induced structural evolution and age-hardening of polycrystalline V _{1-x} MoxN (x=0.4) thin films. <i>Surface and Coatings Technology</i> , 2021 , 405, 126723	4.4	4
28	3D FIB/FESEM tomography of grinding-induced damage in WC-Co cemented carbides. <i>Procedia CIRP</i> , 2020 , 87, 385-390	1.8	3
27	Influence of substrate microstructure and surface finish on cracking and delamination response of TiN-coated cemented carbides. <i>Wear</i> , 2016 , 352-353, 102-111	3.5	3
26	Residual Stress Analysis in Both As-Deposited and Annealed CrN Coatings. <i>Materials Science Forum</i> , 2005 , 490-491, 643-648	0.4	3
25	Spectroscopic investigation on the near-substrate plasma characteristics of chromium HiPIMS in low density discharge mode. <i>Plasma Sources Science and Technology</i> , 2020 , 29, 015013	3.5	3
24	A custom built lathe designed for in operando high-energy x-ray studies at industrially relevant cutting parameters. <i>Review of Scientific Instruments</i> , 2019 , 90, 103901	1.7	2
23	Effects of the cathode grain size and substrate fixture movement on the evolution of arc evaporated Cr-cathodes and Cr-N coating synthesis. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2014 , 32, 021515	2.9	2
22	Synthesis of Ti ₃ SiC ₂ by Reaction of TiC and Si Powders. <i>Ceramic Engineering and Science Proceedings</i> , 2009 , 21-30	0.1	2
21	Evolution of Residual Strains in Metastable Austenitic Stainless Steels and the Accompanying Strain Induced Martensitic Transformation. <i>Materials Science Forum</i> , 2006 , 524-525, 821-826	0.4	2
20	Residual Stress Evolution during Decomposition of Ti(1-x)Al(x)N Coatings Using High-Energy X-Rays. <i>Materials Science Forum</i> , 2006 , 524-525, 619-624	0.4	2
19	Characterisation of residual stress distribution in clinching joints of carbon steel by diffraction methods. <i>Materials Science and Technology</i> , 2003 , 19, 336-342	1.5	2
18	Morphology effects on electrocatalysis of anodic water splitting on nickel (II) oxide. <i>Microporous and Mesoporous Materials</i> , 2022 , 333, 111734	5.3	2
17	A shelf-life study of silica- and carbon-based mesoporous materials. <i>Journal of Industrial and Engineering Chemistry</i> , 2021 , 101, 205-213	6.3	2
16	Influence of Si content on phase stability and mechanical properties of TiAlSiN films grown by AlSi-HiPIMS/Ti-DCMS co-sputtering. <i>Surface and Coatings Technology</i> , 2021 , 127661	4.4	2
15	Free Standing AlN Single Crystal Grown on Pre-Patterned and In Situ Patterned 4H-SiC Substrates. <i>Materials Science Forum</i> , 2010 , 645-648, 1187-1190	0.4	1
14	Preparation and firing of a TiC/Si powder mixture. <i>IOP Conference Series: Materials Science and Engineering</i> , 2009 , 5, 012016	0.4	1
13	Phase Selective Sample Preparation of Al-Si alloys for Atom Probe Tomography. <i>Praktische Metallographie/Practical Metallography</i> , 2019 , 56, 76-90	0.3	1
12	Effect of varying N ₂ pressure on DC arc plasma properties and microstructure of TiAlN coatings. <i>Plasma Sources Science and Technology</i> , 2020 , 29, 095015	3.5	1

11	Thermal degradation of TiN and TiAlN coatings during rapid laser treatment. <i>Surface and Coatings Technology</i> , 2021 , 422, 127517	4.4	1
10	Internal Stress in an Alumina/Silicon Carbide Whisker Composite 1997 , 391-403		1
9	Influence of pulsed-substrate bias duty cycle on the microstructure and defects of cathodic arc-deposited Ti _{1-x} Al _x N coatings. <i>Surface and Coatings Technology</i> , 2021 , 419, 127295	4.4	0
8	Crater wear mechanism of TiAlN coatings during high-speed metal turning. <i>Wear</i> , 2021 , 484-485, 204016	3.5	0
7	Implementation of advanced characterisation techniques for assessment of grinding effects on the surface integrity of WC/Co cemented carbides. <i>Powder Metallurgy</i> , 2018 , 61, 100-105	1.9	
6	Determination of Grain-Orientation-Dependent Stress in Coatings. <i>Solid State Phenomena</i> , 2005 , 105, 107-112	0.4	
5	Micro- and Macrostress Evolution in a Duplex Stainless Steel during Uniaxial Loading. <i>Materials Science Forum</i> , 2000 , 347-349, 603-608	0.4	
4	Internal Stress in an Alumina/Silicon Carbide Whisker Composite. <i>Advances in X-ray Analysis</i> , 1995 , 39, 391-403		
3	Carbon Based Coatings Deposited on Nitrided Stainless Steel: Study of Thermal Degradation. <i>Minerals, Metals and Materials Series</i> , 2017 , 57-66	0.3	
2	Synthesis and Phase Development in the Cr-Al-N System. <i>Ceramic Engineering and Science Proceedings</i> , 1-12	0.1	
1	Complex 3D nanocoral like structures formed by copper nanoparticle aggregation on nanostructured zinc oxide rods. <i>Materials Letters</i> , 2016 , 184, 127-130	3.3	