Jeff De Hosson

List of Publications by Year
in descending order

672 papers	20,364 citations	10979 71 h-index	23514 111 g-index
684 all docs	684 docs citations	684 times ranked	14687 citing authors

#	Article	IF	Citations
1	Plasticity in small-sized metallic systems: Intrinsic versus extrinsic size effect. Progress in Materials Science, 2011, 56, 654-724.	16.0	1,508
2	Analysis of coaxial laser cladding processing conditions. Surface and Coatings Technology, 2005, 197, 127-136.	2.2	363
3	Secondary phases in AlxCoCrFeNi high-entropy alloys: An in-situ TEM heating study and thermodynamic appraisal. Acta Materialia, 2017, 131, 206-220.	3.8	292
4	Nanostructure and properties of TiC/a-C:H composite coatings. Acta Materialia, 2005, 53, 4505-4521.	3.8	264
5	Effects of size on the mechanical response of metallic glasses investigated through in situ TEM bending and compression experiments. Acta Materialia, 2010, 58, 189-200.	3.8	246
6	Electron diffraction and high-resolution transmission electron microscopy of the high temperature crystal structures of GexSb2Te3+x (x=1,2,3) phase change material. Journal of Applied Physics, 2002, 92, 3584-3590.	1.1	229
7	Functionally graded materials produced by laser cladding. Acta Materialia, 2000, 48, 2617-2624.	3.8	214
8	Oxidation-induced crack healing in Ti3AlC2 ceramics. Scripta Materialia, 2008, 58, 13-16.	2.6	198
9	In situtransmission electron microscopy study of the crystallization of Ge2Sb2Te5. Journal of Applied Physics, 2004, 95, 924-932.	1.1	187
10	Incipient plasticity during nanoindentation at grain boundaries in body-centered cubic metals. Acta Materialia, 2005, 53, 4665-4676.	3.8	181
11	Thick Co-based coating on cast iron by side laser cladding: Analysis of processing conditions and coating properties. Surface and Coatings Technology, 2007, 201, 5875-5883.	2.2	170
12	Ti3SiC2: A damage tolerant ceramic studied with nano-indentations and transmission electron microscopy. Acta Materialia, 2003, 51, 2859-2872.	3.8	165
13	Reactive wetting of liquid metals on ceramic substrates. Acta Materialia, 1996, 44, 421-426.	3.8	163
14	Grinding of WCâ€“Co hardmetals. Wear, 2001, 248, 187-196.	1.5	157
15	Effect of surface roughness on magnetic domain wall thickness, domain size, and coercivity. Journal of Applied Physics, 2001, 89, 1325-1330.	1.1	152
16	The evolution of microstructure in a laser clad TiBâ€“Ti composite coating. Acta Materialia, 2003, 51, 831-845.	3.8	149
17	Intrinsic and extrinsic size effects in the deformation of metallic glass nanopillars. Acta Materialia, 2012, 60, 889-898.	3.8	144
18	Effects of solute Mg on grain boundary and dislocation dynamics during nanoindentation of Alâ€“Mg thin films. Acta Materialia, 2004, 52, 5783-5790.	3.8	141

#	Article	IF	Citations
19	Dilution effects in laser cladding of Niâ€“Crâ€“Bâ€“Siâ€“C hardfacing alloys. Materials Letters, 2012, 84, 69-72.	1.3	140
20	Optical properties of gold films and the Casimir force. Physical Review B, 2008, 77, .	1.1	136
21	Microstructural control of TiC/a-C nanocomposite coatings with pulsed magnetron sputtering. Acta Materialia, 2008, 56, 696-709.	3.8	135
22	Interfaces within strain gradient plasticity: Theory and experiments. Acta Materialia, 2006, 54, 5077-5085.	3.8	133
23	SiCp/Ti6Al4V functionally graded materials produced by laser melt injection. Acta Materialia, 2002, 50, 2035-2051.	3.8	132
24	Strengthening mechanisms in high entropy alloys: Fundamental issues. Scripta Materialia, 2020, 187, 148-156.	2.6	131
25	Sliding wear resistance of metal matrix composite layers prepared by high power laser. Surface and Coatings Technology, 2005, 197, 303-315.	2.2	124
26	Laser-induced periodic surface structures: Fingerprints of light localization. Physical Review B, 2012, 85, .	1.1	122
27	Additive Manufacturing of High-Entropy Alloys by Laser Processing. Jom, 2016, 68, 1810-1818.	0.9	122
28	High entropy alloys: Key issues under passionate debate. Scripta Materialia, 2020, 188, 54-58.	2.6	122
29	Stress analysis and microstructure of PVD monolayer TiN and multilayer TiN/(Ti,Al)N coatings. Thin Solid Films, 2003, 429, 179-189.	0.8	116
30	Nanostructured TiC/a-C coatings for low friction and wear resistant applications. Surface and Coatings Technology, 2005, 198, 44-50.	2.2	114
31	BCC-FCC interfacial effects on plasticity and strengthening mechanisms in high entropy alloys. Acta Materialia, 2018, 157, 83-95.	3.8	113
32	State of residual stress in laser-deposited ceramic composite coatings on aluminum alloys. Acta Materialia, 2007, 55, 1203-1214.	3.8	110
33	Wetting on rough surfaces. Acta Materialia, 2001, 49, 3533-3538.	3.8	109
34	Enhanced Strain in Functional Nanoporous Gold with a Dual Microscopic Length Scale Structure. ACS Nano, 2012, 6, 3734-3744.	7.3	109
35	Mechanical properties of attapulgite clay reinforced polyurethane shape-memory nanocomposites. European Polymer Journal, 2009, 45, 1904-1911.	2.6	108
36	Relation between microstructure and adhesion of hot dip galvanized zinc coatings on dual phase steel. Acta Materialia, 2012, 60, 2973-2981.	3.8	106

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37	Investigation on the formation of tungsten carbide in tungsten-containing diamond like carbon coatings. Surface and Coatings Technology, 2003, 162, 288-293.	2.2	105
38	On the specific surface area of nanoporous materials. Acta Materialia, 2011, 59, 7488-7497.	3.8	104
39	Laser melt injection in aluminum alloys: on the role of the oxide skin. Acta Materialia, 2000, 48, 4225-4233.	3.8	103
40	On the evolution of surface roughness during deformation of polycrystalline aluminum alloys. Acta Materialia, 2005, 53, 4043-4050.	3.8	103
41	An electron microscopy appraisal of tensile fracture in metallic glasses. Acta Materialia, 2008, 56, 1762-1773.	3.8	103
42	In situ TEM nanoindentation and dislocation-grain boundary interactions: a tribute to David Brandon. Journal of Materials Science, 2006, 41, 7704-7719.	1.7	101
43	Microstructure and wear studies of laser clad Al-Si/SiC(p) composite coatings. Surface and Coatings Technology, 2007, 201, 9497-9505.	2.2	101
44	Metallic Muscles at Work: High Rate Actuation in Nanoporous Gold/Polyaniline Composites. ACS Nano, 2013, 7, 4299-4306.	7.3	100
45	Influence of random roughness on the Casimir force at small separations. Physical Review B, 2008, 77, .	1.1	99
46	Supramolecular Route to Well-Ordered Metal Nanofoams. ACS Nano, 2011, 5, 6339-6348.	7.3	94
47	Reaction layers around SiC particles in Ti: an electron microscopy study. Acta Materialia, 1999, 47, 3105-3116.	3.8	92
48	Deformation and failure mechanism of nano-composite coatings under nano-indentation. Surface and Coatings Technology, 2006, 200, 6718-6726.	2.2	91
49	The mechanical properties and the deformation microstructures of the C15 Laves phase Cr2Nb at high temperatures. Acta Materialia, 2007, 55, 1873-1884.	3.8	88
50	Microstructural characterization of AISI 431 martensitic stainless steel laser-deposited coatings. Journal of Materials Science, 2011, 46, 3405-3414.	1.7	87
51	Carbon Nanotubes Encapsulating Superconducting Single-Crystalline Tin Nanowires. Nano Letters, 2006, 6, 1131-1135.	4.5	86
52	Thermo-mechanical properties of polystyrene-based shape memory nanocomposites. Journal of Materials Chemistry, 2010, 20, 3442.	6.7	86
53	Nanoporous silver as electrochemical actuator. Scripta Materialia, 2013, 69, 195-198.	2.6	86
54	High temperature healing of Ti2AlC: On the origin of inhomogeneous oxide scale. Scripta Materialia, 2011, 65, 135-138.	2.6	85

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55	Detection of grain-boundary resistance to slip transfer using nanoindentation. Materials Letters, 2005, 59, 3192-3195.	1.3	84
56	Residual stress analysis in Co-based laser clad layers by laboratory X-rays and synchrotron diffraction techniques. Surface and Coatings Technology, 2006, 201, 533-542.	2.2	84
57	Nanosized metal clusters: Challenges and opportunities. Jom, 2004, 56, 40-45.	0.9	83
58	Intrinsic size effects in the mechanical response of taper-free nanopillars of metallic glass. Physical Review B, 2011, 83, .	1.1	83
59	Microstructure and properties of laser clad coatings studied by orientation imaging microscopy. Acta Materialia, 2010, 58, 6763-6772.	3.8	82
60	On the crystallization of thin films composed of Sb3.6Te with Ge for rewritable data storage. Journal of Applied Physics, 2004, 95, 4714-4721.	1.1	81
61	Effects of crystal structure and grain orientation on the roughness of deformed polycrystalline metals. Acta Materialia, 2006, 54, 2813-2821.	3.8	81
62	Smallest 90Â° domains in epitaxial ferroelectric films. Applied Physics Letters, 2007, 91, .	1.5	81
63	Local Stress States and Microstructural Damage Response Associated with Deformation Twins in Hexagonal Close Packed Metals. Crystals, 2018, 8, 1.	1.0	81
64	Influence of roughness on capillary forces between hydrophilic surfaces. Physical Review E, 2008, 78, 031606.	0.8	80
65	Atomic structure of stoichiometric and non-stoichiometric grain boundaries in A3B compounds with L12 structure. Acta Metallurgica, 1988, 36, 2729-2741.	2.1	79
66	Influence of surface roughness on the wetting angle. Journal of Materials Research, 1995, 10, 1984-1992.	1.2	79
67	Interaction between lattice dislocations and grain boundaries in f.c.c. and ordered compounds: A computer simulation. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1991, 64, 951-969.	0.7	75
68	Hybrid Polyamide/Silica Nanocomposites: Synthesis and Mechanical Testing. Macromolecular Materials and Engineering, 2002, 287, 106-110.	1.7	75
69	Gas-phase synthesis of magnesium nanoparticles: A high-resolution transmission electron microscopy study. Applied Physics Letters, 2006, 89, 161914.	1.5	75
70	Properties and characterization of multilayers of carbides and diamond-like carbon. Surface and Coatings Technology, 2001, 142-144, 707-713.	2.2	74
71	Tribological and mechanical properties of high power laser surface-treated metallic glasses. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 471, 155-164.	2.6	73
72	Microstructural characterization of laser nitrided titanium. Scripta Metallurgica Et Materialia, 1995, 33, 567-573.	1.0	72

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73	Epitaxial TbMnO₃thin films on SrTiO₃substrates: a structural study. Journal of Physics Condensed Matter, 2009, 21, 182001.	0.7	71
74	Five-fold branched Si particles in laser clad AlSi functionally graded materials. Acta Materialia, 2001, 49, 561-571.	3.8	69
75	Size dependent plasticity and damage response in multiphase body centered cubic high entropy alloys. Acta Materialia, 2018, 150, 104-116.	3.8	69
76	Influence of atomic force microscope tipâ€“sample interaction on the study of scaling behavior. Applied Physics Letters, 1997, 71, 1347-1349.	1.5	68
77	Failure mechanisms of closed-cell aluminum foam under monotonic and cyclic loading. Acta Materialia, 2006, 54, 4465-4472.	3.8	68
78	The effect of cladding speed on phase constitution and properties of AISI 431 stainless steel laser deposited coatings. Surface and Coatings Technology, 2011, 205, 5235-5239.	2.2	68
79	Influence of deposition parameters on the structure and mechanical properties of nanocomposite coatings. Surface and Coatings Technology, 2006, 201, 590-598.	2.2	67
80	Tribological behavior of W-DLC coated rubber seals. Surface and Coatings Technology, 2008, 202, 1869-1875.	2.2	67
81	Wear and friction performance of PTFE filled epoxy composites with a high concentration of SiO2 particles. Wear, 2015, 322-323, 171-180.	1.5	67
82	Grain boundary segregation and precipitation in aluminium alloys. Scripta Materialia, 2001, 44, 281-286.	2.6	66
83	Advanced TiC/a-C:H nanocomposite coatings deposited by magnetron sputtering. Journal of the European Ceramic Society, 2006, 26, 565-570.	2.8	66
84	On the geometry of coating layers formed by overlap. Surface and Coatings Technology, 2014, 242, 54-61.	2.2	65
85	Three-dimensional micron-porous graphene foams for lightweight current collectors of lithium-sulfur batteries. Carbon, 2019, 144, 713-723.	5.4	65
86	Ni-toughened nc-TiN/a-SiNx nanocomposite thin films. Surface and Coatings Technology, 2005, 200, 1530-1534.	2.2	64
87	Ultra-high temperature ablation behavior of Ti2AlC ceramics under an oxyacetylene flame. Journal of the European Ceramic Society, 2011, 31, 855-862.	2.8	64
88	Effects of the Alloy Composition on Phase Constitution and Properties of Laser Deposited Ni-Cr-B-Si Coatings. Physics Procedia, 2013, 41, 302-311.	1.2	64
89	Oxide-scale growth on Cr2AlC ceramic and its consequence for self-healing. Scripta Materialia, 2013, 69, 203-206.	2.6	64
90	Deformation mechanisms in TiN/(Ti,Al)N multilayers under depth-sensing indentation. Acta Materialia, 2006, 54, 1857-1862.	3.8	62

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91	TEM characterization of a Cr/Ti/TiC graded interlayer for magnetron-sputtered TiC/a-C:H nanocomposite coatings. Acta Materialia, 2005, 53, 3925-3934.	3.8	61
92	Very high-cycle fatigue failure in micron-scale polycrystalline silicon films: Effects of environment and surface oxide thickness. Journal of Applied Physics, 2007, 101, 013515.	1.1	60
93	Nanosized iron clusters investigated with in situ transmission electron microscopy. Applied Physics Letters, 2003, 82, 197-199.	1.5	59
94	In-situ microscopy investigation of failure mechanisms in Al/SiCp metal matrix composite produced by laser embedding. Scripta Materialia, 2000, 42, 589-595.	2.6	58
95	Microstructure, mechanical properties and cutting performance of superhard (Ti,Si,Al)N nanocomposite films grown by d.c. reactive magnetron sputtering. Surface and Coatings Technology, 2004, 177-178, 459-468.	2.2	58
96	Electron Microscopy Characterization of Ni-Cr-B-Si-C Laser Deposited Coatings. Microscopy and Microanalysis, 2013, 19, 120-131.	0.2	58
97	Early stages of oxidation of Ti3AlC2 ceramics. Materials Chemistry and Physics, 2008, 112, 762-768.	2.0	57
98	The Prediction of Coating Geometry from Main Processing Parameters in Laser Cladding. Physics Procedia, 2014, 56, 220-227.	1.2	57
99	Superlattice intrinsic stacking faults in Î³â€² precipitates. Scripta Metallurgica, 1985, 19, 1123-1128.	1.2	56
100	Deformation and reconstruction mechanisms in coarse-grained superplastic Alâ€“Mg alloys. Acta Materialia, 2006, 54, 3827-3833.	3.8	56
101	Microstructure and Phase Formation in a Rapidly Solidified Laser-Deposited Ni-Cr-B-Si-C Hardfacing Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 878-892.	1.1	56
102	Vortex pinning by natural defects in thin films of YBa2Cu3O7âˆ'Î´. Superconductor Science and Technology, 2002, 15, 395-404.	1.8	55
103	Magnetic and structural properties of Co nanocluster thin films. Physical Review B, 2005, 71, .	1.1	55
104	Molecule-by-Molecule Writing Using a Focused Electron Beam. ACS Nano, 2012, 6, 10076-10081.	7.3	55
105	On the deposition and properties of DLC protective coatings on elastomers: A critical review. Surface and Coatings Technology, 2014, 258, 677-690.	2.2	54
106	In-situ strain observation in high power laser cladding. Surface and Coatings Technology, 2009, 203, 3189-3196.	2.2	53
107	Reversible strain by physisorption in nanoporous gold. Applied Physics Letters, 2011, 99, .	1.5	53
108	Fine-tuning the feature size of nanoporous silver. CrystEngComm, 2012, 14, 5402.	1.3	53

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109	Pt/ZrO₂ Prepared by Atomic Trapping: An Efficient Catalyst for the Conversion of Glycerol to Lactic Acid with Concomitant Transfer Hydrogenation of Cyclohexene. ACS Catalysis, 2019, 9, 9953-9963.	5.5	53
110	A comparison between different theories predicting the stacking fault energy from extended nodes. Scripta Metallurgica, 1980, 14, 285-288.	1.2	52
111	The influence of strain-induced damage on the mechanical response of open-cell aluminum foam. Acta Materialia, 2008, 56, 609-618.	3.8	52
112	TEM study of the initial oxide scales of Ti2AlC. Acta Materialia, 2011, 59, 5216-5223.	3.8	52
113	The fcc-bcc crystallographic orientation relationship in AlxCoCrFeNi high-entropy alloys. Materials Letters, 2016, 176, 29-32.	1.3	52
114	Determination of the crystal structure of icosahedral Al-Cu-Li. Physical Review B, 1988, 38, 1681-1685.	1.1	51
115	Coalescence aspects of cobalt nanoparticles duringin situhigh-temperature annealing. Journal of Applied Physics, 2006, 99, 024307.	1.1	51
116	Adhesion improvement of hydrogenated diamond-like carbon thin films by pre-deposition plasma treatment of rubber substrate. Surface and Coatings Technology, 2009, 203, 1964-1970.	2.2	51
117	On the optimum resolution of transmission-electron backscattered diffraction (t-EBSD). Ultramicroscopy, 2016, 160, 256-264.	0.8	51
118	Fracture of open- and closed-cell metal foams. Journal of Materials Science, 2005, 40, 5821-5828.	1.7	49
119	Interface fracture behavior of zinc coatings on steel: Experiments and finite element calculations. Surface and Coatings Technology, 2006, 201, 4311-4316.	2.2	49
120	Influence of capping layers on the crystallization of doped SbxTe fast-growth phase-change films. Journal of Applied Physics, 2006, 100, 123511.	1.1	49
121	Magnetron reactively sputtered Ti-DLC coatings on HNBR rubber: The influence of substrate bias. Surface and Coatings Technology, 2008, 202, 4939-4944.	2.2	49
122	Modification of Cu surface with picosecond laser pulses. Applied Surface Science, 2014, 303, 118-124.	3.1	49
123	Pressure and temperature induced electrical resistance change in nano-carbon/epoxy composites. Composites Science and Technology, 2015, 115, 1-8.	3.8	49
124	Influence of hardness and roughness on the tribological performance of TiC/a-C nanocomposite coatings. Surface and Coatings Technology, 2010, 205, 2624-2632.	2.2	48
125	Multiscale modeling of charge-induced deformation of nanoporous gold structures. Journal of the Mechanics and Physics of Solids, 2014, 66, 1-15.	2.3	48
126	Fracture and microstructure of open cell aluminum foam. Journal of Materials Science, 2005, 40, 5813-5819.	1.7	47

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127	Pull-in characteristics of electromechanical switches in the presence of Casimir forces: Influence of self-affine surface roughness. Physical Review B, 2005, 72, .	1.1	47
128	Nanoscale domain evolution in thin films of multiferroic<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>TbMnO</mml:mtext></mml:mrow><mml:mn>3</mml:mn></mml	1.1	47
	Physical Review B, 2009, 80, .		
129	Magnetic versus structural properties of Co nanocluster thin films: A magnetic force microscopy study. Applied Physics Letters, 2004, 84, 556-558.	1.5	46
130	Elimination of Start/Stop defects in laser cladding. Surface and Coatings Technology, 2012, 206, 2403-2409.	2.2	46
131	Influence of surface roughness on the adhesion of elastic films. Physical Review E, 2003, 67, 021604.	0.8	45
132	Incipient plasticity in metallic thin films. Applied Physics Letters, 2007, 90, 181924.	1.5	45
133	Actuating and Sensing Properties of Nanoporous Gold. Journal of Nanoscience and Nanotechnology, 2012, 12, 4951-4955.	0.9	45
134	HRTEM study of Co7W6 and its typical defect structure. Acta Materialia, 2000, 48, 2703-2712.	3.8	44
135	Metal/ceramic interfaces: a microscopic analysis. Surface and Interface Analysis, 2001, 31, 637-658.	0.8	44
136	Toughening mechanism for Niâ€“Crâ€“Bâ€“Siâ€“C laser deposited coatings. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 582, 305-315.	2.6	44
137	On the microstructure of tungsten disulfide films alloyed with carbon and nitrogen. Thin Solid Films, 2005, 484, 389-395.	0.8	43
138	On the localized surface plasmon resonance modes in nanoporous gold films. Journal of Applied Physics, 2014, 115, .	1.1	43
139	Microstructural design of hardfacing Niâ€“Crâ€“Bâ€“Siâ€“C alloys. Acta Materialia, 2013, 61, 6061-6070.	3.8	42
140	Breakdown of the Coulomb friction law in TiCâ•a-C:H nanocomposite coatings. Journal of Applied Physics, 2006, 100, 114309.	1.1	41
141	Transition from Casimir to van der Waals force between macroscopic bodies. Applied Physics Letters, 2008, 93, .	1.5	41
142	Laser engineered surfaces from glass forming alloy powder precursors: Microstructure and wear. Surface and Coatings Technology, 2009, 203, 1833-1843.	2.2	41
143	Mechanical strength of highly porous ceramics. Physical Review B, 1991, 43, 3794-3796.	1.1	40
144	Monodomain strained ferroelectric<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>PbTiO</mml:mtext></mml:mrow><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:n	1.1	40
	films: Phase transition and critical thickness study. Physical Review B, 2008, 78, .		

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145	Effect of process parameters on mechanical and tribological performance of pulsed-DC sputtered TiC/a-C:H nanocomposite films. Surface and Coatings Technology, 2010, 205, 2633-2642.	2.2	40
146	Microstructural characterization of Co-based coating deposited by low power pulse laser cladding. Journal of Materials Science, 2013, 48, 2714-2723.	1.7	40
147	Thermodynamic calculations for liquid alloys with an application to sodium-caesium. Journal of Physics F: Metal Physics, 1980, 10, 1681-1692.	1.6	39
148	X-ray measurement of residual stresses in laser surface melted Ti-6Al-4V alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1996, 208, 143-147.	2.6	39
149	Binding of helium to metallic impurities in tungsten; experiments and computer simulations. Journal of Nuclear Materials, 1985, 127, 56-66.	1.3	38
150	In situnuclear magnetic resonance investigation of deformation-generated vacancies in aluminum. Physical Review B, 1995, 52, 125-133.	1.1	38
151	Influence of random roughness on the adhesion between metal surfaces due to capillary condensation. Applied Physics Letters, 2007, 91, .	1.5	38
152	Metalâ€“ceramic interfaces studied with high-resolution transmission electron microscopy. Acta Materialia, 1999, 47, 4077-4092.	3.8	37
153	Temperature rise due to fast-moving dislocations. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 2001, 81, 1099-1120.	0.7	37
154	Measurement of dispersive forces between evaporated metal surfaces in the range below 100nm. Applied Physics Letters, 2008, 92, 054101.	1.5	37
155	On the surface topography of ultrashort laser pulse treated steel surfaces. Applied Surface Science, 2011, 258, 1555-1560.	3.1	37
156	Size effects on plasticity in high-entropy alloys. Journal of Materials Research, 2018, 33, 3055-3076.	1.2	37
157	Polarity-dependent reversible resistance switching in Geâ€“Sbâ€“Te phase-change thin films. Applied Physics Letters, 2007, 91, .	1.5	36
158	Atomic force microscopy imaging of transition metal layered compounds: A twoâ€dimensional stickâ€“slip system. Applied Physics Letters, 1995, 67, 347-349.	1.5	35
159	Microstructure of reaction zone in WCp/duplex stainless steels matrix composites processing by laser melt injection. Surface and Coatings Technology, 2008, 202, 2113-2120.	2.2	35
160	Roughness of Microspheres for Force Measurements. Langmuir, 2008, 24, 7528-7531.	1.6	35
161	Advances in transmission electron microscopy: In situ straining and in situ compression experiments on metallic glasses. Microscopy Research and Technique, 2009, 72, 250-260.	1.2	35
162	Structural changes in polytetrafluoroethylene molecular chains upon sliding against steel. Journal of Materials Science, 2014, 49, 1484-1493.	1.7	35

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163	The interaction of He with a edge dislocation in W and Mo. Solid State Communications, 1976, 18, 479-482.	0.9	34
164	The coherent phase diagram of Cu-Ni-Zn. Acta Metallurgica, 1980, 28, 1339-1347.	2.1	34
165	Metal-ceramic interfaces in laser coated aluminium alloys. Acta Metallurgica Et Materialia, 1994, 42, 1155-1162.	1.9	34
166	Healing performance of Ti2AlC ceramic studied with in situ microcantilever bending. Journal of the European Ceramic Society, 2013, 33, 383-391.	2.8	34
167	Influence of energetic ion bombardment on W-C:H coatings deposited with W and WC targets. Surface and Coatings Technology, 2005, 200, 1142-1146.	2.2	33
168	Metallic muscles and beyond: nanofoams at work. Journal of Materials Science, 2016, 51, 615-634.	1.7	33
169	Influence of spring stiffness and anisotropy on stickâ€slip atomic force microscopy imaging. Journal of Applied Physics, 1996, 80, 623-632.	1.1	32
170	Roughness effects on magnetic properties of thin films. Physica B: Condensed Matter, 2000, 283, 199-202.	1.3	32
171	Stacking faults in the Co7W6 isomorph of the Î¼ phase. Scripta Materialia, 2001, 45, 333-340.	2.6	32
172	Some aspects of nanocrystalline nickel and zinc ferrites processed using microemulsion technique. Materials Science and Technology, 2003, 19, 1617-1621.	0.8	32
173	Wear resistance of WCp/Duplex Stainless Steel metal matrix composite layers prepared by laser melt injection. Surface and Coatings Technology, 2008, 202, 4758-4765.	2.2	32
174	Influence of powder particle injection velocity on the microstructure of Alâ€“12Si/SiCp coatings produced by laser cladding. Surface and Coatings Technology, 2009, 204, 285-290.	2.2	32
175	Influence of Surface Roughness on the Transfer Film Formation and Frictional Behavior of TiC/a-C Nanocomposite Coatings. Tribology Letters, 2011, 41, 97-101.	1.2	32
176	Magnesium surface segregation and oxidation in Alâ€“Mg alloys studied with local probe scanning Auger-scanning electron microscopy. Applied Surface Science, 1999, 152, 250-258.	3.1	31
177	High-resolution transmission electron microscopy imaging of misfit-dislocation networks at Cu-MgO and Cu-MnO interfaces. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1999, 79, 2083-2101.	0.7	31
178	High-speed dislocations in high strain-rate deformations. Computational Materials Science, 2001, 20, 19-27.	1.4	31
179	Aspects of mathematical morphology. Advances in Imaging and Electron Physics, 2003, , 119-194.	0.1	31
180	Protrusion formation and surface porosity development on thermally annealed helium implanted copper. Nuclear Instruments & Methods in Physics Research B, 2004, 217, 262-275.	0.6	31

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181	Growth of nanocomposite films: From dynamic roughening to dynamic smoothening. Acta Materialia, 2009, 57, 5156-5164.	3.8	31
182	Effect of Ta on the microstructure and hardness of Stellite 6 coating deposited by low power pulse laser treatments. Surface and Coatings Technology, 2012, 213, 278-284.	2.2	31
183	Effect of pulse scheme on the microstructural evolution, residual stress state and mechanical performance of resistance spot welded DP1000-GI steel. Science and Technology of Welding and Joining, 2018, 23, 649-658.	1.5	31
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