

Jeff De Hosson

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

645
papers

17,309
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66
h-index

101
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684
ext. papers

18,761
ext. citations

4.1
avg, IF

7
L-index

#	Paper	IF	Citations
645	Plasticity in small-sized metallic systems: Intrinsic versus extrinsic size effect. <i>Progress in Materials Science</i> , 2011 , 56, 654-724	42.2	1272
644	Analysis of coaxial laser cladding processing conditions. <i>Surface and Coatings Technology</i> , 2005 , 197, 127-136	4.4	306
643	Nanostructure and properties of TiC/a-C:H composite coatings. <i>Acta Materialia</i> , 2005 , 53, 4505-4521	8.4	242
642	Effects of size on the mechanical response of metallic glasses investigated through in situ TEM bending and compression experiments. <i>Acta Materialia</i> , 2010 , 58, 189-200	8.4	226
641	Electron diffraction and high-resolution transmission electron microscopy of the high temperature crystal structures of GexSb2Te3+x (x=1,2,3) phase change material. <i>Journal of Applied Physics</i> , 2002 , 92, 3584-3590	2.5	207
640	Secondary phases in AlxCoCrFeNi high-entropy alloys: An in-situ TEM heating study and thermodynamic appraisal. <i>Acta Materialia</i> , 2017 , 131, 206-220	8.4	194
639	Functionally graded materials produced by laser cladding. <i>Acta Materialia</i> , 2000 , 48, 2617-2624	8.4	187
638	Oxidation-induced crack healing in Ti3AlC2 ceramics. <i>Scripta Materialia</i> , 2008 , 58, 13-16	5.6	176
637	In situ transmission electron microscopy study of the crystallization of Ge2Sb2Te5. <i>Journal of Applied Physics</i> , 2004 , 95, 924-932	2.5	172
636	Incipient plasticity during nanoindentation at grain boundaries in body-centered cubic metals. <i>Acta Materialia</i> , 2005 , 53, 4665-4676	8.4	155
635	Reactive wetting of liquid metals on ceramic substrates. <i>Acta Materialia</i> , 1996 , 44, 421-426	8.4	144
634	Ti3SiC2: A damage tolerant ceramic studied with nano-indentations and transmission electron microscopy. <i>Acta Materialia</i> , 2003 , 51, 2859-2872	8.4	141
633	Grinding of WC/Co hardmetals. <i>Wear</i> , 2001 , 248, 187-196	3.5	135
632	Effect of surface roughness on magnetic domain wall thickness, domain size, and coercivity. <i>Journal of Applied Physics</i> , 2001 , 89, 1325-1330	2.5	132
631	Intrinsic and extrinsic size effects in the deformation of metallic glass nanopillars. <i>Acta Materialia</i> , 2012 , 60, 889-898	8.4	131
630	Effects of solute Mg on grain boundary and dislocation dynamics during nanoindentation of AlMg thin films. <i>Acta Materialia</i> , 2004 , 52, 5783-5790	8.4	131
629	The evolution of microstructure in a laser clad TiB/Ti composite coating. <i>Acta Materialia</i> , 2003 , 51, 831-845	8.4	128

628	Optical properties of gold films and the Casimir force. <i>Physical Review B</i> , 2008 , 77,	3.3	126
627	Thick Co-based coating on cast iron by side laser cladding: Analysis of processing conditions and coating properties. <i>Surface and Coatings Technology</i> , 2007 , 201, 5875-5883	4.4	126
626	Microstructural control of TiC/a-C nanocomposite coatings with pulsed magnetron sputtering. <i>Acta Materialia</i> , 2008 , 56, 696-709	8.4	119
625	Interfaces within strain gradient plasticity: Theory and experiments. <i>Acta Materialia</i> , 2006 , 54, 5077-5085	8.4	118
624	SiCp/Ti6Al4V functionally graded materials produced by laser melt injection. <i>Acta Materialia</i> , 2002 , 50, 2035-2051	8.4	112
623	Sliding wear resistance of metal matrix composite layers prepared by high power laser. <i>Surface and Coatings Technology</i> , 2005 , 197, 303-315	4.4	110
622	Stress analysis and microstructure of PVD monolayer TiN and multilayer TiN/(Ti,Al)N coatings. <i>Thin Solid Films</i> , 2003 , 429, 179-189	2.2	106
621	Investigation on the formation of tungsten carbide in tungsten-containing diamond like carbon coatings. <i>Surface and Coatings Technology</i> , 2003 , 162, 288-293	4.4	104
620	Nanostructured TiC/a-C coatings for low friction and wear resistant applications. <i>Surface and Coatings Technology</i> , 2005 , 198, 44-50	4.4	104
619	Laser-induced periodic surface structures: Fingerprints of light localization. <i>Physical Review B</i> , 2012 , 85,	3.3	101
618	Dilution effects in laser cladding of NiCrBSiC hardfacing alloys. <i>Materials Letters</i> , 2012 , 84, 69-72	3.3	100
617	Mechanical properties of attapulgite clay reinforced polyurethane shape-memory nanocomposites. <i>European Polymer Journal</i> , 2009 , 45, 1904-1911	5.2	98
616	Enhanced strain in functional nanoporous gold with a dual microscopic length scale structure. <i>ACS Nano</i> , 2012 , 6, 3734-44	16.7	97
615	Wetting on rough surfaces. <i>Acta Materialia</i> , 2001 , 49, 3533-3538	8.4	95
614	An electron microscopy appraisal of tensile fracture in metallic glasses. <i>Acta Materialia</i> , 2008 , 56, 1762-1773	7.3	94
613	Relation between microstructure and adhesion of hot dip galvanized zinc coatings on dual phase steel. <i>Acta Materialia</i> , 2012 , 60, 2973-2981	8.4	90
612	State of residual stress in laser-deposited ceramic composite coatings on aluminum alloys. <i>Acta Materialia</i> , 2007 , 55, 1203-1214	8.4	89
611	Metallic muscles at work: high rate actuation in nanoporous gold/polyaniline composites. <i>ACS Nano</i> , 2013 , 7, 4299-306	16.7	86

610	In situ TEM nanoindentation and dislocation-grain boundary interactions: a tribute to David Brandon. <i>Journal of Materials Science</i> , 2006 , 41, 7704-7719	4.3	86
609	On the evolution of surface roughness during deformation of polycrystalline aluminum alloys. <i>Acta Materialia</i> , 2005 , 53, 4043-4050	8.4	86
608	Additive Manufacturing of High-Entropy Alloys by Laser Processing. <i>Jom</i> , 2016 , 68, 1810-1818	2.1	86
607	Supramolecular route to well-ordered metal nanofoams. <i>ACS Nano</i> , 2011 , 5, 6339-48	16.7	85
606	Microstructure and wear studies of laser clad Al-Si/SiC(p) composite coatings. <i>Surface and Coatings Technology</i> , 2007 , 201, 9497-9505	4.4	85
605	Carbon nanotubes encapsulating superconducting single-crystalline tin nanowires. <i>Nano Letters</i> , 2006 , 6, 1131-5	11.5	85
604	On the specific surface area of nanoporous materials. <i>Acta Materialia</i> , 2011 , 59, 7488-7497	8.4	84
603	Laser melt injection in aluminum alloys: on the role of the oxide skin. <i>Acta Materialia</i> , 2000 , 48, 4225-4233	3.4	84
602	Reaction layers around SiC particles in Ti: an electron microscopy study. <i>Acta Materialia</i> , 1999 , 47, 3105-3116	3.16	83
601	Influence of random roughness on the Casimir force at small separations. <i>Physical Review B</i> , 2008 , 77,	3.3	82
600	Deformation and failure mechanism of nano-composite coatings under nano-indentation. <i>Surface and Coatings Technology</i> , 2006 , 200, 6718-6726	4.4	82
599	Nanosized metal clusters: Challenges and opportunities. <i>Jom</i> , 2004 , 56, 40-45	2.1	81
598	Thermo-mechanical properties of polystyrene-based shape memory nanocomposites. <i>Journal of Materials Chemistry</i> , 2010 , 20, 3442		76
597	Intrinsic size effects in the mechanical response of taper-free nanopillars of metallic glass. <i>Physical Review B</i> , 2011 , 83,	3.3	76
596	High entropy alloys: Key issues under passionate debate. <i>Scripta Materialia</i> , 2020 , 188, 54-58	5.6	75
595	High temperature healing of Ti ₂ AlC: On the origin of inhomogeneous oxide scale. <i>Scripta Materialia</i> , 2011 , 65, 135-138	5.6	74
594	On the crystallization of thin films composed of Sb _{3.6} Te with Ge for rewritable data storage. <i>Journal of Applied Physics</i> , 2004 , 95, 4714-4721	2.5	73
593	Local Stress States and Microstructural Damage Response Associated with Deformation Twins in Hexagonal Close Packed Metals. <i>Crystals</i> , 2018 , 8, 1	2.3	73

592	Strengthening mechanisms in high entropy alloys: Fundamental issues. <i>Scripta Materialia</i> , 2020 , 187, 148-156	5.6	72
591	Nanoporous silver as electrochemical actuator. <i>Scripta Materialia</i> , 2013 , 69, 195-198	5.6	72
590	Properties and characterization of multilayers of carbides and diamond-like carbon. <i>Surface and Coatings Technology</i> , 2001 , 142-144, 707-713	4.4	72
589	Influence of surface roughness on the wetting angle. <i>Journal of Materials Research</i> , 1995 , 10, 1984-1992	2.5	72
588	Atomic structure of stoichiometric and non-stoichiometric grain boundaries in A3B compounds with L12 structure. <i>Acta Metallurgica</i> , 1988 , 36, 2729-2741		72
587	Influence of roughness on capillary forces between hydrophilic surfaces. <i>Physical Review E</i> , 2008 , 78, 031606	2.4	71
586	Smallest 90° domains in epitaxial ferroelectric films. <i>Applied Physics Letters</i> , 2007 , 91, 112901	3.4	70
585	Gas-phase synthesis of magnesium nanoparticles: A high-resolution transmission electron microscopy study. <i>Applied Physics Letters</i> , 2006 , 89, 161914	3.4	70
584	Detection of grain-boundary resistance to slip transfer using nanoindentation. <i>Materials Letters</i> , 2005 , 59, 3192-3195	3.3	70
583	Microstructural characterization of AISI 431 martensitic stainless steel laser-deposited coatings. <i>Journal of Materials Science</i> , 2011 , 46, 3405-3414	4.3	69
582	BCC-FCC interfacial effects on plasticity and strengthening mechanisms in high entropy alloys. <i>Acta Materialia</i> , 2018 , 157, 83-95	8.4	68
581	Influence of atomic force microscope tip-sample interaction on the study of scaling behavior. <i>Applied Physics Letters</i> , 1997 , 71, 1347-1349	3.4	68
580	Hybrid Polyamide/Silica Nanocomposites: Synthesis and Mechanical Testing. <i>Macromolecular Materials and Engineering</i> , 2002 , 287, 106-110	3.9	68
579	Microstructure and properties of laser clad coatings studied by orientation imaging microscopy. <i>Acta Materialia</i> , 2010 , 58, 6763-6772	8.4	66
578	Residual stress analysis in Co-based laser clad layers by laboratory X-rays and synchrotron diffraction techniques. <i>Surface and Coatings Technology</i> , 2006 , 201, 533-542	4.4	66
577	Interaction between lattice dislocations and grain boundaries in f.c.c. and ordered compounds: A computer simulation. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1991 , 64, 951-969		66
576	The mechanical properties and the deformation microstructures of the C15 Laves phase Cr ₂ Nb at high temperatures. <i>Acta Materialia</i> , 2007 , 55, 1873-1884	8.4	65
575	Tribological and mechanical properties of high power laser surface-treated metallic glasses. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007 , 471, 155-164	5.3	65

574	Effects of crystal structure and grain orientation on the roughness of deformed polycrystalline metals. <i>Acta Materialia</i> , 2006 , 54, 2813-2821	8.4	65
573	Five-fold branched Si particles in laser clad AlSi functionally graded materials. <i>Acta Materialia</i> , 2001 , 49, 561-571	8.4	64
572	Microstructural characterization of laser nitrided titanium. <i>Scripta Metallurgica Et Materialia</i> , 1995 , 33, 567-573		64
571	Advanced TiC/a-C:H nanocomposite coatings deposited by magnetron sputtering. <i>Journal of the European Ceramic Society</i> , 2006 , 26, 565-570	6	61
570	Influence of deposition parameters on the structure and mechanical properties of nanocomposite coatings. <i>Surface and Coatings Technology</i> , 2006 , 201, 590-598	4.4	61
569	Epitaxial TbMnO ₃ thin films on SrTiO ₃ substrates: a structural study. <i>Journal of Physics Condensed Matter</i> , 2009 , 21, 182001	1.8	60
568	Deformation mechanisms in TiN/(Ti,Al)N multilayers under depth-sensing indentation. <i>Acta Materialia</i> , 2006 , 54, 1857-1862	8.4	60
567	Failure mechanisms of closed-cell aluminum foam under monotonic and cyclic loading. <i>Acta Materialia</i> , 2006 , 54, 4465-4472	8.4	60
566	Wear and friction performance of PTFE filled epoxy composites with a high concentration of SiO ₂ particles. <i>Wear</i> , 2015 , 322-323, 171-180	3.5	56
565	Ni-toughened nc-TiN/a-SiN _x nanocomposite thin films. <i>Surface and Coatings Technology</i> , 2005 , 200, 1530-1534	4.1	56
564	Tribological behavior of W-DLC coated rubber seals. <i>Surface and Coatings Technology</i> , 2008 , 202, 1869-1875	4.7	55
563	Nanosized iron clusters investigated with in situ transmission electron microscopy. <i>Applied Physics Letters</i> , 2003 , 82, 197-199	3.4	55
562	TEM characterization of a Cr/Ti/TiC graded interlayer for magnetron-sputtered TiC/a-C:H nanocomposite coatings. <i>Acta Materialia</i> , 2005 , 53, 3925-3934	8.4	55
561	Magnetic and structural properties of Co nanocluster thin films. <i>Physical Review B</i> , 2005 , 71,	3.3	54
560	Superlattice intrinsic stacking faults in δ precipitates. <i>Scripta Metallurgica</i> , 1985 , 19, 1123-1128		54
559	The effect of cladding speed on phase constitution and properties of AISI 431 stainless steel laser deposited coatings. <i>Surface and Coatings Technology</i> , 2011 , 205, 5235-5239	4.4	53
558	Vortex pinning by natural defects in thin films of YBa ₂ Cu ₃ O _{7-δ} . <i>Superconductor Science and Technology</i> , 2002 , 15, 395-404	3.1	53
557	Ultra-high temperature ablation behavior of Ti ₂ AlC ceramics under an oxyacetylene flame. <i>Journal of the European Ceramic Society</i> , 2011 , 31, 855-862	6	52

556	Very high-cycle fatigue failure in micron-scale polycrystalline silicon films: Effects of environment and surface oxide thickness. <i>Journal of Applied Physics</i> , 2007 , 101, 013515	2.5	52
555	Microstructure, mechanical properties and cutting performance of superhard (Ti,Si,Al)N nanocomposite films grown by d.c. reactive magnetron sputtering. <i>Surface and Coatings Technology</i> , 2004 , 177-178, 459-468	4.4	52
554	Size dependent plasticity and damage response in multiphase body centered cubic high entropy alloys. <i>Acta Materialia</i> , 2018 , 150, 104-116	8.4	50
553	Early stages of oxidation of Ti3AlC2 ceramics. <i>Materials Chemistry and Physics</i> , 2008 , 112, 762-768	4.4	49
552	Grain boundary segregation and precipitation in aluminium alloys. <i>Scripta Materialia</i> , 2001 , 44, 281-286	5.6	49
551	Effects of the Alloy Composition on Phase Constitution and Properties of Laser Deposited Ni-Cr-B-Si Coatings. <i>Physics Procedia</i> , 2013 , 41, 302-311		48
550	Molecule-by-molecule writing using a focused electron beam. <i>ACS Nano</i> , 2012 , 6, 10076-81	16.7	48
549	Fine-tuning the feature size of nanoporous silver. <i>CrystEngComm</i> , 2012 , 14, 5402	3.3	48
548	The influence of strain-induced damage on the mechanical response of open-cell aluminum foam. <i>Acta Materialia</i> , 2008 , 56, 609-618	8.4	48
547	Magnetron reactively sputtered Ti-DLC coatings on HNBR rubber: The influence of substrate bias. <i>Surface and Coatings Technology</i> , 2008 , 202, 4939-4944	4.4	48
546	Determination of the crystal structure of icosahedral Al-Cu-Li. <i>Physical Review B</i> , 1988 , 38, 1681-1685	3.3	48
545	On the optimum resolution of transmission-electron backscattered diffraction (t-EBSD). <i>Ultramicroscopy</i> , 2016 , 160, 256-264	3.1	47
544	Reversible strain by physisorption in nanoporous gold. <i>Applied Physics Letters</i> , 2011 , 99, 083104	3.4	47
543	On the geometry of coating layers formed by overlap. <i>Surface and Coatings Technology</i> , 2014 , 242, 54-61	4.4	46
542	Coalescence aspects of cobalt nanoparticles during in situ high-temperature annealing. <i>Journal of Applied Physics</i> , 2006 , 99, 024307	2.5	46
541	In-situ microscopy investigation of failure mechanisms in Al/SiCp metal matrix composite produced by laser embedding. <i>Scripta Materialia</i> , 2000 , 42, 589-595	5.6	46
540	A comparison between different theories predicting the stacking fault energy from extended nodes. <i>Scripta Metallurgica</i> , 1980 , 14, 285-288		46
539	Oxide-scale growth on Cr2AlC ceramic and its consequence for self-healing. <i>Scripta Materialia</i> , 2013 , 69, 203-206	5.6	45

538	TEM study of the initial oxide scales of Ti ₂ AlC. <i>Acta Materialia</i> , 2011 , 59, 5216-5223	8.4	45
537	Influence of capping layers on the crystallization of doped Sb _x Te fast-growth phase-change films. <i>Journal of Applied Physics</i> , 2006 , 100, 123511	2.5	45
536	Deformation and reconstruction mechanisms in coarse-grained superplastic AlMg alloys. <i>Acta Materialia</i> , 2006 , 54, 3827-3833	8.4	45
535	Magnetic versus structural properties of Co nanocluster thin films: A magnetic force microscopy study. <i>Applied Physics Letters</i> , 2004 , 84, 556-558	3.4	44
534	Multiscale modeling of charge-induced deformation of nanoporous gold structures. <i>Journal of the Mechanics and Physics of Solids</i> , 2014 , 66, 1-15	5	43
533	The Prediction of Coating Geometry from Main Processing Parameters in Laser Cladding. <i>Physics Procedia</i> , 2014 , 56, 220-227		43
532	Adhesion improvement of hydrogenated diamond-like carbon thin films by pre-deposition plasma treatment of rubber substrate. <i>Surface and Coatings Technology</i> , 2009 , 203, 1964-1970	4.4	43
531	Nanoscale domain evolution in thin films of multiferroic TbMnO ₃ . <i>Physical Review B</i> , 2009 , 80,	3.3	43
530	Pull-in characteristics of electromechanical switches in the presence of Casimir forces: Influence of self-affine surface roughness. <i>Physical Review B</i> , 2005 , 72,	3.3	43
529	Three-dimensional micron-porous graphene foams for lightweight current collectors of lithium-sulfur batteries. <i>Carbon</i> , 2019 , 144, 713-723	10.4	43
528	Modification of Cu surface with picosecond laser pulses. <i>Applied Surface Science</i> , 2014 , 303, 118-124	6.7	42
527	On the deposition and properties of DLC protective coatings on elastomers: A critical review. <i>Surface and Coatings Technology</i> , 2014 , 258, 677-690	4.4	42
526	Fracture and microstructure of open cell aluminum foam. <i>Journal of Materials Science</i> , 2005 , 40, 5813-5819		41
525	Actuating and sensing properties of nanoporous gold. <i>Journal of Nanoscience and Nanotechnology</i> , 2012 , 12, 4951-5	1.3	40
524	Laser engineered surfaces from glass forming alloy powder precursors: Microstructure and wear. <i>Surface and Coatings Technology</i> , 2009 , 203, 1833-1843	4.4	40
523	In-situ strain observation in high power laser cladding. <i>Surface and Coatings Technology</i> , 2009 , 203, 3189-3196	4.4	40
522	Incipient plasticity in metallic thin films. <i>Applied Physics Letters</i> , 2007 , 90, 181924	3.4	40
521	Interface fracture behavior of zinc coatings on steel: Experiments and finite element calculations. <i>Surface and Coatings Technology</i> , 2006 , 201, 4311-4316	4.4	40

520	The fcc-bcc crystallographic orientation relationship in Al _x CoCrFeNi high-entropy alloys. <i>Materials Letters</i> , 2016 , 176, 29-32	3.3	40
519	Pressure and temperature induced electrical resistance change in nano-carbon/epoxy composites. <i>Composites Science and Technology</i> , 2015 , 115, 1-8	8.6	39
518	On the microstructure of tungsten disulfide films alloyed with carbon and nitrogen. <i>Thin Solid Films</i> , 2005 , 484, 389-395	2.2	39
517	Elimination of Start/Stop defects in laser cladding. <i>Surface and Coatings Technology</i> , 2012 , 206, 2403-2409	4.4	38
516	Electron microscopy characterization of Ni-Cr-B-Si-C laser deposited coatings. <i>Microscopy and Microanalysis</i> , 2013 , 19, 120-31	0.5	38
515	Thermodynamic calculations for liquid alloys with an application to sodium-caesium. <i>Journal of Physics F: Metal Physics</i> , 1980 , 10, 1681-1692		38
514	Influence of surface roughness on the adhesion of elastic films. <i>Physical Review E</i> , 2003 , 67, 021604	2.4	37
513	Effect of process parameters on mechanical and tribological performance of pulsed-DC sputtered TiC/a-C:H nanocomposite films. <i>Surface and Coatings Technology</i> , 2010 , 205, 2633-2642	4.4	36
512	Influence of hardness and roughness on the tribological performance of TiC/a-C nanocomposite coatings. <i>Surface and Coatings Technology</i> , 2010 , 205, 2624-2632	4.4	36
511	Breakdown of the Coulomb friction law in TiC/a-C:H nanocomposite coatings. <i>Journal of Applied Physics</i> , 2006 , 100, 114309	2.5	36
510	Fracture of open- and closed-cell metal foams. <i>Journal of Materials Science</i> , 2005 , 40, 5821-5828	4.3	36
509	Mechanical strength of highly porous ceramics. <i>Physical Review B</i> , 1991 , 43, 3794-3796	3.3	36
508	Toughening mechanism for NiCrBSiC laser deposited coatings. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 582, 305-315	5.3	35
507	On the localized surface plasmon resonance modes in nanoporous gold films. <i>Journal of Applied Physics</i> , 2014 , 115, 044308	2.5	35
506	HRTEM study of Co ₇ W ₆ and its typical defect structure. <i>Acta Materialia</i> , 2000 , 48, 2703-2712	8.4	35
505	On the surface topography of ultrashort laser pulse treated steel surfaces. <i>Applied Surface Science</i> , 2011 , 258, 1555-1560	6.7	34
504	Influence of random roughness on the adhesion between metal surfaces due to capillary condensation. <i>Applied Physics Letters</i> , 2007 , 91, 101905	3.4	34
503	Transition from Casimir to van der Waals force between macroscopic bodies. <i>Applied Physics Letters</i> , 2008 , 93, 121912	3.4	33

502	The interaction of He with a $12 \langle 111 \rangle \{110\}$ edge dislocation in W and Mo. <i>Solid State Communications</i> , 1976 , 18, 479-482	1.6	33
501	Advances in transmission electron microscopy: in situ straining and in situ compression experiments on metallic glasses. <i>Microscopy Research and Technique</i> , 2009 , 72, 250-60	2.8	32
500	Polarity-dependent reversible resistance switching in GeSbTe phase-change thin films. <i>Applied Physics Letters</i> , 2007 , 91, 152103	3.4	32
499	Influence of energetic ion bombardment on W-C:H coatings deposited with W and WC targets. <i>Surface and Coatings Technology</i> , 2005 , 200, 1142-1146	4.4	32
498	X-ray measurement of residual stresses in laser surface melted Ti-6Al-4V alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1996 , 208, 143-147	5.3	32
497	Microstructural characterization of Co-based coating deposited by low power pulse laser cladding. <i>Journal of Materials Science</i> , 2013 , 48, 2714-2723	4.3	31
496	Microstructural design of hardfacing NiCrBSi alloys. <i>Acta Materialia</i> , 2013 , 61, 6061-6070	8.4	31
495	Microstructure and Phase Formation in a Rapidly Solidified Laser-Deposited Ni-Cr-B-Si-C Hardfacing Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2014 , 45, 878-892	2.3	31
494	Monodomain strained ferroelectric PbTiO ₃ thin films: Phase transition and critical thickness study. <i>Physical Review B</i> , 2008 , 78,	3.3	31
493	Temperature rise due to fast-moving dislocations. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 2001 , 81, 1099-1120		31
492	Metal/ceramic interfaces studied with high-resolution transmission electron microscopy. <i>Acta Materialia</i> , 1999 , 47, 4077-4092	8.4	31
491	In situ nuclear magnetic resonance investigation of deformation-generated vacancies in aluminum. <i>Physical Review B</i> , 1995 , 52, 125-133	3.3	31
490	Binding of helium to metallic impurities in tungsten; experiments and computer simulations. <i>Journal of Nuclear Materials</i> , 1985 , 127, 56-66	3.3	31
489	Size effects on plasticity in high-entropy alloys. <i>Journal of Materials Research</i> , 2018 , 33, 3055-3076	2.5	30
488	Influence of dielectric properties on van der Waals/Casimir forces in solid-liquid systems. <i>Physical Review B</i> , 2009 , 79,	3.3	30
487	Growth of nanocomposite films: From dynamic roughening to dynamic smoothening. <i>Acta Materialia</i> , 2009 , 57, 5156-5164	8.4	30
486	Roughness of microspheres for force measurements. <i>Langmuir</i> , 2008 , 24, 7528-31	4	30
485	Measurement of dispersive forces between evaporated metal surfaces in the range below 100nm. <i>Applied Physics Letters</i> , 2008 , 92, 054101	3.4	30

484	Some aspects of nanocrystalline nickel and zinc ferrites processed using microemulsion technique. <i>Materials Science and Technology</i> , 2003 , 19, 1617-1621	1.5	30
483	Metal-ceramic interfaces in laser coated aluminium alloys. <i>Acta Metallurgica Et Materialia</i> , 1994 , 42, 1155-1162		30
482	The coherent phase diagram of Cu-Ni-Zn. <i>Acta Metallurgica</i> , 1980 , 28, 1339-1347		30
481	Influence of powder particle injection velocity on the microstructure of Al ₂ Si/SiCp coatings produced by laser cladding. <i>Surface and Coatings Technology</i> , 2009 , 204, 285-290	4.4	29
480	High-speed dislocations in high strain-rate deformations. <i>Computational Materials Science</i> , 2001 , 20, 19-27		29
479	Atomic force microscopy imaging of transition metal layered compounds: A two-dimensional sticklip system. <i>Applied Physics Letters</i> , 1995 , 67, 347-349	3.4	29
478	Microstructure of reaction zone in WCp/duplex stainless steels matrix composites processing by laser melt injection. <i>Surface and Coatings Technology</i> , 2008 , 202, 2113-2120	4.4	28
477	Protrusion formation and surface porosity development on thermally annealed helium implanted copper. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2004 , 217, 262-275	1.2	28
476	Structural properties of Au and Ag nanoclusters embedded in MgO. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2002 , 191, 442-446	1.2	28
475	High-resolution transmission electron microscopy imaging of misfit-dislocation networks at Cu-MgO and Cu-MnO interfaces. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1999 , 79, 2083-2101		28
474	Optical absorption in TiN _x O _y -compounds. <i>Journal of Applied Physics</i> , 1987 , 61, 4606-4611	2.5	28
473	Metallic muscles and beyond: nanofoams at work. <i>Journal of Materials Science</i> , 2016 , 51, 615-634	4.3	27
472	Healing performance of Ti ₂ AlC ceramic studied with in situ microcantilever bending. <i>Journal of the European Ceramic Society</i> , 2013 , 33, 383-391	6	27
471	Electrochromic artificial muscles based on nanoporous metal-polymer composites. <i>Applied Physics Letters</i> , 2013 , 103, 193101	3.4	27
470	Influence of Surface Roughness on the Transfer Film Formation and Frictional Behavior of TiC/a-C Nanocomposite Coatings. <i>Tribology Letters</i> , 2011 , 41, 97-101	2.8	27
469	Microstresses and microstructure in thick cobalt-based laser deposited coatings. <i>Surface and Coatings Technology</i> , 2007 , 201, 6363-6371	4.4	27
468	Wear resistance of WCp/Duplex Stainless Steel metal matrix composite layers prepared by laser melt injection. <i>Surface and Coatings Technology</i> , 2008 , 202, 4758-4765	4.4	27
467	Roughness effects on magnetic properties of thin films. <i>Physica B: Condensed Matter</i> , 2000 , 283, 199-202	8	27

466	Interactions between lattice dislocations and grain boundaries in Ni ₃ Al investigated by means of in situ TEM and computer modelling experiments. <i>Acta Metallurgica Et Materialia</i> , 1992 , 40, 2511-2521		27
465	Nucleation of helium precipitates in nickel observed by HDS. <i>Journal of Nuclear Materials</i> , 1984 , 122, 560-564	3.3	27
464	Investigations on the structure of liquid Na-Cs alloys. <i>Physica B: Physics of Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics</i> , 1979 , 97, 338-364		27
463	Focused helium and neon ion beam induced etching for advanced extreme ultraviolet lithography mask repair. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2014 , 32, 021602	1.3	26
462	Flexible diamond-like carbon films on rubber: On the origin of self-acting segmentation and film flexibility. <i>Acta Materialia</i> , 2012 , 60, 5526-5535	8.4	26
461	Tunable self-organization of nanocomposite multilayers. <i>Applied Physics Letters</i> , 2010 , 96, 073103	3.4	26
460	Nanoscale deformation mechanism of TiC/a-C nanocomposite thin films. <i>Journal of Applied Physics</i> , 2009 , 105, 114314	2.5	26
459	A modified blister test to study the adhesion of thin coatings based on local helium ion implantation. <i>Thin Solid Films</i> , 2005 , 471, 170-176	2.2	26
458	Growth front roughening of room-temperature deposited copper nanocluster films. <i>Applied Physics Letters</i> , 2002 , 81, 1089-1091	3.4	26
457	Atomic structure of (111) twist grain boundaries in f.c.c metals. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1990 , 61, 305-327		26
456	Direct synthesis of metal nanoparticles with tunable porosity. <i>Journal of Materials Chemistry</i> , 2012 , 22, 4588		25
455	Flexible protective diamond-like carbon film on rubber. <i>Scripta Materialia</i> , 2010 , 63, 649-652	5.6	25
454	A methodology to determine anisotropy effects in non-cubic coatings. <i>Surface and Coatings Technology</i> , 2007 , 201, 6911-6916	4.4	25
453	The Influence of Cell Shape Anisotropy on the Tensile Behavior of Open Cell Aluminum Foam. <i>Advanced Engineering Materials</i> , 2008 , 10, 877-881	3.5	25
452	Influence of electron beam exposure on crystallization of phase-change materials. <i>Journal of Applied Physics</i> , 2007 , 101, 053529	2.5	25
451	On the effects of thermomechanical processing on failure mode in precipitation-hardened aluminium alloys. <i>Journal of Materials Science</i> , 2002 , 37, 5065-5073	4.3	25
450	Stacking faults in the Co ₇ W ₆ isomorph of the η phase. <i>Scripta Materialia</i> , 2001 , 45, 333-340	5.6	25
449	Influence of spring stiffness and anisotropy on stick-slip atomic force microscopy imaging. <i>Journal of Applied Physics</i> , 1996 , 80, 623-632	2.5	25

448	Redistribution of implanted noble gas atoms by self-interstitials in molybdenum and nickel. <i>Nuclear Instruments & Methods in Physics Research</i> , 1983 , 209-210, 1055-1061		25
447	Pt/ZrO Prepared by Atomic Trapping: An Efficient Catalyst for the Conversion of Glycerol to Lactic Acid with Concomitant Transfer Hydrogenation of Cyclohexene. <i>ACS Catalysis</i> , 2019 , 9, 9953-9963	13.1	24
446	Structural changes in polytetrafluoroethylene molecular chains upon sliding against steel. <i>Journal of Materials Science</i> , 2014 , 49, 1484-1493	4.3	24
445	Electro-Responsive Polystyrene Shape Memory Polymer Nanocomposites. <i>Nanoscience and Nanotechnology Letters</i> , 2012 , 4, 814-820	0.8	24
444	Aspects of mathematical morphology. <i>Advances in Imaging and Electron Physics</i> , 2003 , 119-194	0.2	24
443	Microstructure and properties of TiB/Ti-6Al-4V coatings produced with laser treatments. <i>Journal of Materials Engineering and Performance</i> , 2004 , 13, 406-412	1.6	24
442	Solution hardening in Al ₂ Zn alloys mean jump distance and activation length of moving dislocations. <i>Acta Metallurgica</i> , 1986 , 34, 1571-1581		24
441	Wear induced hardening of laser processed chromium-carbon steel. <i>Scripta Metallurgica</i> , 1987 , 21, 627-632		24
440	In situ compression study of taper-free metallic glass nanopillars. <i>Applied Physics Letters</i> , 2011 , 98, 233104	0.4	23
439	Determination of the sp ³ C content of a-C films through EELS analysis in the TEM. <i>Surface and Coatings Technology</i> , 2005 , 200, 739-743	4.4	23
438	Metal/ceramic interfaces: a microscopic analysis. <i>Surface and Interface Analysis</i> , 2001 , 31, 637-658	1.5	23
437	Magnesium surface segregation and oxidation in AlMg alloys studied with local probe scanning Auger-scanning electron microscopy. <i>Applied Surface Science</i> , 1999 , 152, 250-258	6.7	23
436	Wetting kinetics of liquid aluminium on an Al ₂ O ₃ surface. <i>Journal of Materials Science</i> , 1995 , 30, 3571-3575	7.5	23
435	On the determination of local residual stress gradients by the slit milling method. <i>Journal of Materials Science</i> , 2015 , 50, 3646-3655	4.3	22
434	Gold complexes for focused-electron-beam-induced deposition. <i>Langmuir</i> , 2014 , 30, 12097-105	4	22
433	Apparently homogeneous but intrinsically intermittent flow of taper-free metallic glass nanopillars. <i>Scripta Materialia</i> , 2012 , 67, 947-950	5.6	22
432	Microstructure and chemical bonding of DLC films deposited on ACM rubber by PACVD. <i>Surface and Coatings Technology</i> , 2011 , 205, S75-S78	4.4	22
431	Formation and stability of rocksalt ZnO nanocrystals in MgO. <i>Applied Physics Letters</i> , 2007 , 91, 201906	3.4	22

430	On the fcc->D019 transformation in CoW alloys. <i>Acta Materialia</i> , 2002 , 50, 4511-4526	8.4	22
429	Diamond and pore structure observed in wood charcoal. <i>Journal of Wood Science</i> , 2001 , 47, 414-416	2.4	22
428	Microstructure and mechanical properties of a laser treated Al alloy. <i>Acta Metallurgica Et Materialia</i> , 1993 , 41, 1989-1998		22
427	Tempering of steel during laser treatment. <i>Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science</i> , 1990 , 21, 987-995		22
426	A versatile model for the prediction of complex geometry in 3D direct laser deposition. <i>Surface and Coatings Technology</i> , 2016 , 307, 292-300	4.4	22
425	Effect of pulse scheme on the microstructural evolution, residual stress state and mechanical performance of resistance spot welded DP1000-GI steel. <i>Science and Technology of Welding and Joining</i> , 2018 , 23, 649-658	3.7	21
424	Flexible diamond-like carbon films on rubber: Friction and the effect of viscoelastic deformation of rubber substrates. <i>Acta Materialia</i> , 2012 , 60, 7216-7225	8.4	21
423	Effect of Ta on the microstructure and hardness of Stellite 6 coating deposited by low power pulse laser treatments. <i>Surface and Coatings Technology</i> , 2012 , 213, 278-284	4.4	21
422	The role of electron-stimulated desorption in focused electron beam induced deposition. <i>Beilstein Journal of Nanotechnology</i> , 2013 , 4, 474-80	3	21
421	Tribological performance of DLC films deposited on ACM rubber by PACVD. <i>Surface and Coatings Technology</i> , 2011 , 205, 4838-4843	4.4	21
420	Strength of submicrometer diameter pillars of metallic glasses investigated with in situ transmission electron microscopy. <i>Philosophical Magazine Letters</i> , 2009 , 89, 633-640	1	21
419	Magnetic and dielectric properties of YbMnO ₃ perovskite thin films. <i>Physical Review B</i> , 2008 , 78,	3.3	21
418	Structure and property evaluation of a vacuum plasma sprayed nanostructured tungstenhafnium carbide bulk composite. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 477, 350-357	5.3	21
417	Formation, growth and dissociation of He bubbles in Al ₂ O ₃ . <i>Nuclear Instruments & Methods in Physics Research B</i> , 2004 , 216, 149-155	1.2	21
416	Interaction between lattice dislocations and grain boundaries in F.C.C. materials. <i>Scripta Metallurgica</i> , 1989 , 23, 1431-1435		21
415	Effect of carbon concentration and argon flow rate on the microstructure and triboperformance of magnetron sputtered WS ₂ /a-C coatings. <i>Surface and Coatings Technology</i> , 2017 , 332, 142-152	4.4	20
414	Recent advances in nanoporous materials for renewable energy resources conversion into fuels. <i>Surface and Coatings Technology</i> , 2018 , 347, 320-336	4.4	20
413	Deposition of SiO ₂ nanoparticles in heat exchanger during combustion of biogas. <i>Applied Energy</i> , 2014 , 113, 1141-1148	10.7	20

412	Nanometer-scale lithography on microscopically clean graphene. <i>Nanotechnology</i> , 2011 , 22, 505303	3.4	20
411	Surface roughening of metal/polymer systems during plastic deformation. <i>Acta Materialia</i> , 2007 , 55, 2757-2764	8.4	20
410	Polarization retention loss in PbTiO ₃ ferroelectric films due to leakage currents. <i>Journal of Applied Physics</i> , 2007 , 102, 084103	2.5	20
409	Electron microscopic study on pyrolysis of CCA (chromium, copper and arsenic oxide)-treated wood. <i>Journal of Analytical and Applied Pyrolysis</i> , 2003 , 68-69, 635-643	6	20
408	EBSP study of reaction zone in SiC/Al metal matrix composite prepared by laser melt injection. <i>Journal of Materials Science</i> , 2001 , 36, 4845-4849	4.3	20
407	A reaction coating on aluminium alloys by laser processing. <i>Scripta Metallurgica Et Materialia</i> , 1993 , 28, 219-224		20
406	Interaction of vacancies with implanted metal atoms in tungsten observed by means of thermal helium desorption spectrometry and perturbed angular correlation measurements. <i>Radiation Effects</i> , 1984 , 84, 131-158		20
405	Microstructural and frictional control of diamond-like carbon films deposited on acrylic rubber by plasma assisted chemical vapor deposition. <i>Thin Solid Films</i> , 2011 , 519, 2213-2217	2.2	19
404	Tribological behavior and thermal stability of TiC _B -C:H nanocomposite coatings. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2006 , 24, 1448-1453	2.9	19
403	Growth front roughening of room-temperature deposited oligomer films. <i>Applied Physics Letters</i> , 2001 , 79, 1801-1803	3.4	19
402	Various regimes of charge-density waves in layered compounds. <i>Physical Review B</i> , 1992 , 46, 2001-2007	3.3	19
401	Oxidation effects during laser cladding of aluminium with SiC/Al powders. <i>Journal of Materials Science</i> , 1990 , 25, 2335-2338	4.3	19
400	Clustering of helium atoms at a edge dislocation in β -Bron. <i>Solid State Communications</i> , 1977 , 24, 193-196	1.6	19
399	Deformation of nanoporous nanopillars by ion beam-induced bending. <i>Journal of Materials Science</i> , 2014 , 49, 5598-5605	4.3	18
398	A new methodology to analyze instabilities in SEM imaging. <i>Microscopy and Microanalysis</i> , 2014 , 20, 1625-1637	3.7	18
397	Capturing the stochastic mechanical behavior of micro and nanopillars. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014 , 597, 89-94	5.3	18
396	On the evolution of nanocluster size distribution in a nanocluster aggregation source. <i>Journal of Applied Physics</i> , 2012 , 111, 124326	2.5	18
395	Fixation of osteochondral fragments in the human knee using Meniscus Arrows. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , 2011 , 19, 183-8	5.5	18

394	Adhesion at Al-hydroxide-polymer interfaces: Influence of chemistry and evidence for microscopic self-pinning. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010 , 527, 5637-5647	5.3	18
393	Substrate influence on the shape of domains in epitaxial PbTiO ₃ thin films. <i>Journal of Applied Physics</i> , 2007 , 102, 104105	2.5	18
392	Mechanism of the structural phase transformations in epitaxial YHx switchable mirrors. <i>Journal of Applied Physics</i> , 2002 , 91, 1901-1909	2.5	18
391	Enhanced wear resistance by compressive strengthening: A novel combination of laser and ion implantation technology. <i>Applied Physics Letters</i> , 1988 , 53, 663-665	3.4	18
390	Dynamical in situ nuclear-magnetic-resonance tensile apparatus. <i>Review of Scientific Instruments</i> , 1983 , 54, 341-345	1.7	18
389	Dislocation dynamics in aluminium and in aluminium-copper alloys: A nuclear magnetic resonance and transmission electron microscopic study. <i>Acta Metallurgica</i> , 1982 , 30, 1523-1536		18
388	An atomic model for the interaction between a <111>{110} edge dislocation and carbon in α -Fe. <i>Solid State Communications</i> , 1975 , 17, 747-750	1.6	18
387	Interatomic potentials for alkali metals. A comparative study. <i>Physica Status Solidi (B): Basic Research</i> , 1978 , 90, 225-232	1.3	18
386	Template-Free Synthesis of Nanoporous Nickel and Alloys as Binder-Free Current Collectors of Li Ion Batteries. <i>ACS Applied Nano Materials</i> , 2018 , 1, 2206-2218	5.6	17
385	TiNi shape memory alloy coated with tungsten: a novel approach for biomedical applications. <i>Journal of Materials Science: Materials in Medicine</i> , 2014 , 25, 1249-55	4.5	17
384	Deformation mechanism of aluminum-magnesium alloys at elevated temperatures. <i>Journal of Materials Science</i> , 2013 , 48, 7399-7408	4.3	17
383	Microstructure and tribological performance of diamond-like carbon films deposited on hydrogenated rubber. <i>Thin Solid Films</i> , 2012 , 524, 218-223	2.2	17
382	On the evolution of film roughness during magnetron sputtering deposition. <i>Journal of Applied Physics</i> , 2010 , 108, 094330	2.5	17
381	A Versatile Route for the Synthesis of Single Crystalline Oxide Nanorods: Growth Behavior and Field Emission Characteristics. <i>Crystal Growth and Design</i> , 2010 , 10, 2585-2590	3.5	17
380	Fundamental and applied aspects of laser surface engineering. <i>International Journal of Materials Research</i> , 2009 , 100, 1343-1360	0.5	17
379	Fracture behavior of low-density replicated aluminum alloy foams. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 496, 376-382	5.3	17
378	Roughness corrections to the Casimir force: The importance of local surface slope. <i>Applied Physics Letters</i> , 2007 , 91, 144108	3.4	17
377	The influence of convection on the homogeneity of laser-applied coatings. <i>Journal of Materials Science</i> , 1991 , 26, 711-714	4.3	17

376	Residual stresses in the surface layer of laser-treated steels. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1993 , 161, 83-89	5.3	17
375	On the nature of the coefficient of friction of diamond-like carbon films deposited on rubber. <i>Journal of Applied Physics</i> , 2012 , 111, 114902	2.5	16
374	Deposition and characterization of hydrogenated diamond-like carbon thin films on rubber seals. <i>Thin Solid Films</i> , 2010 , 518, S42-S45	2.2	16
373	Microstructure and tribological behavior of tungsten-containing diamondlike carbon coated rubbers. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2008 , 26, 1085-1092	2.9	16
372	Adhesion along metal-polymer interfaces during plastic deformation. <i>Journal of Materials Science</i> , 2007 , 42, 3529-3536	4.3	16
371	Formation and dissociation of Zn nanoclusters in MgO. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2004 , 216, 390-395	1.2	16
370	Electron beam induced oxidation of AlMg alloy surfaces. <i>Applied Surface Science</i> , 2002 , 191, 266-272	6.7	16
369	Lead induced intergranular fracture in aluminum alloy AA6262. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003 , 361, 331-337	5.3	16
368	Niobium nanoclusters studied with in situ transmission electron microscopy. <i>Applied Physics Letters</i> , 2003 , 83, 3909-3911	3.4	16
367	Effect of roughness on the conductivity of semiconducting thin films/quantum wells with double rough boundaries. <i>Journal of Applied Physics</i> , 2003 , 93, 320-324	2.5	16
366	A two-dimensional computational methodology for high-speed dislocations in high strain-rate deformation. <i>Computational Materials Science</i> , 2001 , 20, 1-18	3.2	16
365	AlSiC interface structure studied by HREM. <i>Acta Metallurgica Et Materialia</i> , 1992 , 40, S281-S287		16
364	Microstructure of laser treated Al alloys. <i>Acta Metallurgica Et Materialia</i> , 1990 , 38, 2471-2477		16
363	The trapping of helium at a low angle tilt boundary in molybdenum. <i>Journal of Nuclear Materials</i> , 1984 , 125, 298-303	3.3	16
362	On the control of deposition process for enhanced mechanical properties of nc-TiC/a-C:H coatings with DC magnetron sputtering at low or high ion flux. <i>Surface and Coatings Technology</i> , 2014 , 255, 8-14	4.4	15
361	Microstructural characterization of long-period stacking ordered phases in Mg ₉₇ Zn ₁ Y ₂ (at.%) alloy. <i>Microscopy and Microanalysis</i> , 2013 , 19, 1575-80	0.5	15
360	On the dynamic roughening transition in nanocomposite film growth. <i>Applied Physics Letters</i> , 2009 , 95, 223102	3.4	15
359	Scratch test induced shear banding in high power laser remelted metallic glass layers. <i>Journal of Materials Research</i> , 2007 , 22, 460-470	2.5	15

358	Ab initio transmission electron microscopy image simulations of coherent Ag/MgO interfaces. <i>Physical Review B</i> , 2004 , 70,	3.3	15
357	Variation of structure and magnetic properties with thickness of thin Co ₅₉ Fe ₂₆ Ni ₁₅ films. <i>Journal of Magnetism and Magnetic Materials</i> , 2005 , 290-291, 1539-1542	2.8	15
356	Adhesion of polymer coatings studied by laser-induced delamination. <i>Journal of Applied Physics</i> , 2005 , 97, 1235-10	2.5	15
355	Crack Resistance of PVD Coatings: Influence of Surface Treatment Prior to Deposition. <i>Surface Engineering</i> , 2002 , 18, 283-288	2.6	15
354	Influence of misfit and interfacial binding energy on the shape of the oxide precipitates in metals ; Interfaces between Mn ₃ O ₄ precipitates and Pd studied with HRTEM. <i>Acta Materialia</i> , 2000 , 48, 3687-3699	8.4	15
353	Shock wave equation of state of powder material. <i>Journal of Applied Physics</i> , 1994 , 75, 809-813	2.5	15
352	Different types of dislocations in YBa ₂ Cu ₃ O _{7-δ} . <i>Physical Review B</i> , 1994 , 50, 3271-3279	3.3	15
351	On the S/W stoichiometry and triboperformance of WS _x C(H) coatings deposited by magnetron sputtering. <i>Surface and Coatings Technology</i> , 2019 , 365, 41-51	4.4	15
350	On the mechanism of ion-induced bending of nanostructures. <i>Applied Surface Science</i> , 2018 , 446, 151-158.	0.7	14
349	Role of NH ₃ in the Electron-Induced Reactions of Adsorbed and Solid Cisplatin. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 4112-4120	3.8	14
348	Orientation Relationships in Al _{0.7} CoCrFeNi High-Entropy Alloy. <i>Microscopy and Microanalysis</i> , 2017 , 23, 905-915	0.5	14
347	Surface roughness evolution of nanocomposite thin films. <i>Journal of Applied Physics</i> , 2009 , 105, 013523	2.5	14
346	Degradation and recovery of adhesion properties of deformed metal/polymer interfaces studied by laser induced delamination. <i>Progress in Organic Coatings</i> , 2007 , 58, 180-186	4.8	14
345	Influence of stresses and magnetostriction on the soft magnetic behavior of metallic films. <i>Journal of Magnetism and Magnetic Materials</i> , 2006 , 299, 219-224	2.8	14
344	Magnetic force microscopy on cobalt nanocluster films. <i>Applied Surface Science</i> , 2004 , 226, 185-190	6.7	14
343	Nanocavity formation processes in MgO() by light ion (D, He, Li) and heavy ion (Kr, Cu, Au) implantation. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2002 , 191, 610-615	1.2	14
342	Microstructure of nanocrystalline FeZr(N)-films and their soft magnetic properties. <i>Journal of Magnetism and Magnetic Materials</i> , 2002 , 242-245, 180-182	2.8	14
341	Interfacial adhesion of laser clad functionally graded materials. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003 , 342, 192-200	5.3	14

340	Roughening aspects of room temperature vapor deposited oligomer thin films onto Si substrates. <i>Surface Science</i> , 2002 , 507-510, 357-361	1.8	14
339	Enhanced mechanical properties of laser treated Al-Cu alloys: A microstructural analysis. <i>Acta Metallurgica Et Materialia</i> , 1995 , 43, 2649-2656		14
338	Development of residual stress and surface cracks in laser treated low carbon steel. <i>Scripta Metallurgica Et Materialia</i> , 1991 , 25, 779-784		14
337	Atomistic studies of helium trapping in metals. <i>Radiation Effects</i> , 1983 , 78, 25-36		14
336	On the formation of argon-vacancy clusters in copper irradiated with 4 to 6 kV argon ions. <i>Physica Status Solidi A</i> , 1977 , 40, 293-301		14
335	The influence of the surface topography on the magnetization dynamics in soft magnetic thin films. <i>Journal of Applied Physics</i> , 2005 , 97, 013904	2.5	13
334	Controlling the induced anisotropy in soft magnetic films for high-frequency applications. <i>IEEE Transactions on Magnetics</i> , 2002 , 38, 3144-3146	2	13
333	Spinel/metal interfaces in laser coated steels: A transmission electron microscopy study. <i>Acta Metallurgica Et Materialia</i> , 1991 , 39, 2267-2273		13
332	Effects of fluorine implantation on the kinetics of dry oxidation of silicon. <i>Journal of Applied Physics</i> , 1986 , 60, 985-990	2.5	13
331	Superlattice dislocations in Cu ₂ NiZn. <i>Physica Status Solidi A</i> , 1979 , 52, 635-645		13
330	The order-disorder transition in the quasi-binary cross section Cu ₅₀ Ni _{50-x} Zn _x . <i>Scripta Metallurgica</i> , 1981 , 15, 1359-1361		13
329	Measurement of spatial stress gradients near grain boundaries. <i>Scripta Materialia</i> , 2017 , 136, 11-14	5.6	12
328	Phase formation and properties of vanadium-modified NiCrB-SiC laser-deposited coatings. <i>Journal of Materials Science</i> , 2013 , 48, 3315-3326	4.3	12
327	Flexible diamond-like carbon film coated on rubber. <i>Progress in Organic Coatings</i> , 2013 , 76, 1773-1778	4.8	12
326	Influence of Plasma Treatments on the Frictional Performance of Rubbers. <i>Tribology Letters</i> , 2012 , 47, 303-311	2.8	12
325	Fibrous hydroxyapatite-carbon nanotube composites by chemical vapor deposition: In situ fabrication, structural and morphological characterization. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2013 , 178, 457-464	3.1	12
324	Focused electron beam induced processing and the effect of substrate thickness revisited. <i>Nanotechnology</i> , 2013 , 24, 345301	3.4	12
323	Wear mechanisms and friction parameters for sliding wear of micron-scale polysilicon sidewalls. <i>Sensors and Actuators A: Physical</i> , 2010 , 163, 373-382	3.9	12

322	In situ generation and atomic scale imaging of slip traces with atomic force microscopy. <i>Review of Scientific Instruments</i> , 1997 , 68, 4492-4497	1.7	12
321	Reactive magnetron sputtering deposition and columnar growth of nc-TiC _B -C:H nanocomposite coatings. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2006 , 24, 1441-1447	2.9	12
320	Work of adhesion in laser-induced delamination along polymer-metal interfaces. <i>Journal of Applied Physics</i> , 2007 , 101, 043520	2.5	12
319	Ion bombardment effects on nucleation of sputtered Mo nano-crystals in Mo/B ₄ C/Si multilayers. <i>Surface and Coatings Technology</i> , 2006 , 201, 143-147	4.4	12
318	Superplastic behavior of coarse-grained aluminum alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005 , 410-411, 120-123	5.3	12
317	Structural dynamics of gas-phase molybdenum nanoclusters: A transmission electron microscopy study. <i>Applied Physics Letters</i> , 2005 , 86, 113113	3.4	12
316	The effect of mound roughness on the electrical capacitance of a thin insulating film. <i>Solid State Communications</i> , 2001 , 118, 203-206	1.6	12
315	Characterization of mechanical properties of tungsten carbide/carbon multilayers: Cross-sectional electron microscopy and nanoindentation observations. <i>Journal of Materials Research</i> , 2001 , 16, 2213-2222	2.5	12
314	Surface/interface roughness effects on magneto-electrical properties of thin films. <i>Surface Science</i> , 2002 , 507-510, 541-545	1.8	12
313	Effects of precipitates in Cu upon impact fracture: an ultra-high-vacuum study with local probe Scanning Auger/Electron Microscopy. <i>Acta Materialia</i> , 2000 , 48, 1995-2004	8.4	12
312	Roughness effect on the measurement of interface stress. <i>Acta Materialia</i> , 2000 , 48, 3641-3645	8.4	12
311	Determination of grain boundary geometry using TEM. <i>Journal of Materials Research</i> , 1992 , 7, 1707-1717	2.5	12
310	Surface modification by means of laser melting combined with shot peening: A novel approach. <i>Acta Metallurgica Et Materialia</i> , 1992 , 40, 3317-3324		12
309	Scanning tunneling microscopy imaging of transition-metal dichalcogenides. <i>Applied Physics Letters</i> , 1990 , 56, 2402-2404	3.4	12
308	Solidification structures during laser treatment. <i>Scripta Metallurgica Et Materialia</i> , 1990 , 24, 593-598		12
307	Atomic configuration of a $\frac{1}{2}$ <111> screw dislocation in pure Mo and in Mo containing He interstitials. <i>Physica Status Solidi (B): Basic Research</i> , 1979 , 92, 199-209	1.3	12
306	Instant WS ₂ platelets reorientation of self-adaptive WS ₂ /a-C tribocoating. <i>Materials Letters</i> , 2018 , 229, 64-67	3.3	12
305	Influence of loading rate on the mechanical performance of metallic glass. <i>Journal of Non-Crystalline Solids</i> , 2017 , 470, 160-167	3.9	11

304	Effect of magnesium aluminum silicate glass on the thermal shock resistance of BN matrix composite ceramics. <i>Journal of the American Ceramic Society</i> , 2017 , 100, 2669-2678	3.8	11
303	Size-dependent ion-induced densification of nanoporous gold. <i>Scripta Materialia</i> , 2019 , 164, 17-20	5.6	11
302	Tribological properties of nc-TiC/a-C:H coatings prepared by magnetron sputtering at low and high ion bombardment of the growing film. <i>Surface and Coatings Technology</i> , 2014 , 241, 64-73	4.4	11
301	Nanopillar fabrication with focused ion beam cutting. <i>Microscopy and Microanalysis</i> , 2014 , 20, 1581-4	0.5	11
300	Hollow-cathode activated PECVD for the high-rate deposition of permeation barrier films. <i>Surface and Coatings Technology</i> , 2017 , 314, 155-159	4.4	11
299	Selective functionalization of tailored nanostructures. <i>ACS Nano</i> , 2012 , 6, 9214-20	16.7	11
298	Performance of diamond-like carbon-protected rubber under cyclic friction. II. Influence of substrate viscoelasticity on the friction evolution. <i>Journal of Applied Physics</i> , 2011 , 110, 124907	2.5	11
297	Performance of diamond-like carbon-protected rubber under cyclic friction. I. Influence of substrate viscoelasticity on the depth evolution. <i>Journal of Applied Physics</i> , 2011 , 110, 124906	2.5	11
296	Effect of relative humidity on crack propagation in barrier films for flexible electronics. <i>Journal of Applied Physics</i> , 2012 , 112, 083520	2.5	11
295	Precipitate formation in low-temperature nitrated cold-rolled Fe ₉₄ Ni ₄ Ti ₂ and Fe ₉₃ Ni ₄ Cr ₃ films. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2002 , 33, 3075-3087 ^{2,3}	2.3	11
294	In situ transmission electron microscopy studies on structural dynamics of transition metal nanoclusters. <i>Journal of Materials Research</i> , 2005 , 20, 1785-1791	2.5	11
293	Orientation imaging microscopic observations of in situ deformed ultra low carbon steel. <i>Scripta Materialia</i> , 2001 , 44, 461-466	5.6	11
292	TEM Study of Ti _N and Cr _N Precipitate Formation in Iron Alloys. <i>Physica Status Solidi A</i> , 2000 , 177, 117-125		11
291	Copper implantation defects in MgO observed by positron beam analysis, RBS and X-TEM. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2000 , 166-167, 225-231	1.2	11
290	Mechanical performance of metal-ceramic interfaces produced by laser processing. <i>Journal of Materials Science</i> , 1995 , 3, 107-118		11
289	Glancing angle x-ray diffraction: A different approach. <i>Applied Physics Letters</i> , 1994 , 64, 1585-1587	3.4	11
288	Thermodynamic model of the compaction of powder materials by shock waves. <i>Journal of Applied Physics</i> , 1994 , 75, 203-209	2.5	11
287	The orientation dependence of dislocation slip in NaCl single crystals. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1982 , 46, 451-468		11

286	High Entropy Alloys: Ready to Set Sail?. <i>Metals</i> , 2020 , 10, 194	2.3	10
285	Copper-mediated homogeneous living radical polymerization of acrylamide with waxy potato starch-based macroinitiator. <i>Carbohydrate Polymers</i> , 2018 , 192, 61-68	10.3	10
284	The effect of surface texture on the oxidation behaviour of polycrystalline Fe-Cr. <i>Applied Surface Science</i> , 2018 , 459, 459-467	6.7	10
283	Microscopic characterisation of suspended graphene grown by chemical vapour deposition. <i>Nanoscale</i> , 2013 , 5, 9057-61	7.7	10
282	Formation of Al_2O_3 in reaction coatings produced with lasers. <i>Scripta Materialia</i> , 2001 , 44, 643-649	5.6	10
281	High-resolution transmission electron microscopy study of discontinuously precipitated Ni ₃ Sn. <i>Acta Materialia</i> , 2000 , 48, 4203-4215	8.4	10
280	Ne implantation induced transformation in stainless steel. <i>Acta Metallurgica Et Materialia</i> , 1990 , 38, 2067-2072	10	10
279	Solution hardening in aluminium-magnesium alloys: A nuclear magnetic resonance and transmission electron microscopic study. <i>Acta Metallurgica</i> , 1988 , 36, 865-870	10	10
278	Formation of small vacancy clusters in tungsten around silver and indium impurities studied by PAC and THDS. <i>Hyperfine Interactions</i> , 1983 , 15, 421-424	0.8	10
277	The influence of interatomic potentials on the interaction of He with a $\frac{1}{2}\langle 111 \rangle$ edge dislocation in molybdenum. <i>Physica Status Solidi (B): Basic Research</i> , 1978 , 90, 643-648	1.3	10
276	On the role of the residual stress state in product manufacturing. <i>Materials and Design</i> , 2016 , 105, 375-380	10	10
275	In Situ High-Temperature EBSD and 3D Phase Field Studies of the Austenite-Ferrite Transformation in a Medium Mn Steel. <i>Microscopy and Microanalysis</i> , 2019 , 25, 639-655	0.5	9
274	Tribological Behavior of TiC/a-C:H-Coated and Uncoated Steels Sliding Against PhenolFormaldehyde Composite Reinforced with PTFE and Glass Fibers. <i>Tribology Letters</i> , 2013 , 52, 123-135	2.8	9
273	High throughput deposition of hydrogenated amorphous carbon coatings on rubber with expanding thermal plasma. <i>Surface and Coatings Technology</i> , 2014 , 245, 74-83	4.4	9
272	Direct measurement of intrinsic critical strain and internal strain in barrier films. <i>Journal of Applied Physics</i> , 2011 , 110, 044907	2.5	9
271	Synthesis of ultra-smooth and ultra-low friction DLC based nanocomposite films on rough substrates. <i>Thin Solid Films</i> , 2010 , 519, 1618-1622	2.2	9
270	On the self-pinning character of synchro-Shockley dislocations in a Laves phase during strain rate cyclical compressions. <i>Scripta Materialia</i> , 2008 , 59, 788-791	5.6	9
269	Thermal stability of ultrasoft Fe ₂ r ₂ films. <i>Journal of Physics Condensed Matter</i> , 2003 , 15, 7663-7674	1.8	9

268	Determination of near coincident site lattice orientations in MgO/Cu composite. <i>Journal of Materials Science</i> , 2002 , 37, 2511-2518	4.3	9
267	Evolution of normal stress and surface roughness in buckled thin films. <i>Journal of Applied Physics</i> , 2003 , 93, 893-897	2.5	9
266	Laser penetration spike welding: A microlaser welding technique enabling novel product designs and constructions. <i>Journal of Laser Applications</i> , 2003 , 15, 11-18	2.1	9
265	Influence of roughness on the detachment force of elastic films from self-affine rough surfaces. <i>Journal of Applied Physics</i> , 2003 , 94, 3041-3044	2.5	9
264	Effects of self-affine surface roughness on the adhesion of metal-polymer interfaces. <i>Journal of Materials Science</i> , 2005 , 40, 3503-3508	4.3	9
263	In situ transmission electron microscopy study of the crystallization of fast-growth doped Sb _x Te alloy films. <i>Journal of Materials Research</i> , 2005 , 20, 1825-1835	2.5	9
262	Effects of network morphology on the failure stress of highly porous media. <i>Physical Review B</i> , 2002 , 66,	3.3	9
261	Ultrasoft magnetic films investigated with Lorentz transmission electron microscopy and electron holography. <i>Microscopy and Microanalysis</i> , 2002 , 8, 274-87	0.5	9
260	Metal-Ceramic Interfaces Produced by Laser Melt Injection Processing. <i>Materials and Manufacturing Processes</i> , 1995 , 10, 1285-1294	4.1	9
259	Martensitic transformations in laser processed coatings. <i>Acta Metallurgica Et Materialia</i> , 1993 , 41, 2557-2564		9
258	In situ nuclear-magnetic-resonance study of deformation-induced atomic diffusion in NaCl. <i>Physical Review B</i> , 1991 , 44, 1988-1991	3.3	9
257	Field-ion-microscopy contradiction of the quasicrystal model based on twinning of a cubic crystal. <i>Physical Review B</i> , 1988 , 37, 4261-4264	3.3	9
256	Superlattice dislocations in the L12 ordered structure of Cu ₂ NiZn. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1983 , 47, 193-207		9
255	Computed structure of grain boundaries compared with TEM observations. <i>Surface Science</i> , 1984 , 144, 1-13	1.8	9
254	The quasi-binary cross section in the ternary system CuNiZn. <i>Scripta Metallurgica</i> , 1981 , 15, 1362-1364		9
253	Atomic Configuration of 1/2 {110} Edge Dislocations in Pure V, W, Mo, and Fe and in Fe Containing C Interstitials. <i>Physica Status Solidi (B): Basic Research</i> , 1975 , 71, 595-607	1.3	9
252	Local residual stress measurements on nitride layers. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015 , 636, 476-483	5.3	8
251	Advances in Laser Surface Engineering: Tackling the Cracking Problem in Laser-Deposited Ni-Cr-B-Si-C Alloys. <i>Jom</i> , 2013 , 65, 741-748	2.1	8

250	Comments on microstructural evolution during high-temperature oxidation of Ti ₂ AlC ceramics. <i>Scripta Materialia</i> , 2011 , 65, 930-932	5.6	8
249	Influence of strain on the electronic structure of the TbMnO ₃ /SrTiO ₃ epitaxial interface. <i>Applied Physics Letters</i> , 2011 , 99, 222902	3.4	8
248	Growth rate determination through automated TEM image analysis: crystallization studies of doped SbTe phase-change thin films. <i>Microscopy and Microanalysis</i> , 2010 , 16, 291-9	0.5	8
247	Nanoscale deformation in TiC _B -C multilayered nanocomposite coatings. <i>Applied Physics Letters</i> , 2008 , 92, 241913	3.4	8
246	TEM Characterization of W-O-N Coatings. <i>Microscopy and Microanalysis</i> , 2008 , 14, 27-30	0.5	8
245	In situ observations of crack propagation mechanisms along interfaces between confined polymer layers and glass. <i>Applied Physics Letters</i> , 2006 , 88, 061912	3.4	8
244	Self-affine roughness effects on the contact area between elastic bodies. <i>Journal of Applied Physics</i> , 2003 , 93, 898-902	2.5	8
243	Subnanometer three-dimensional atom-probe investigation of segregation at MgO/Cu ceramic/metal heterophase interfaces. <i>Ultramicroscopy</i> , 2001 , 89, 203-13	3.1	8
242	Electron beam induced oxidation of surfaces of Ni ₃ Al-base alloys. <i>Surface Science</i> , 2001 , 476, L267-L272	1.8	8
241	Mound surface roughness effects on the thermal capacitance of thin films. <i>Journal of Applied Physics</i> , 2001 , 89, 6130-6134	2.5	8
240	Residual stress fields in sol-gel-derived thin TiO ₂ layers. <i>Journal of Materials Research</i> , 1999 , 14, 1896-1903	3	8
239	Analyses of small facets imaged with scanning-probe microscopy. <i>Journal of Applied Physics</i> , 1999 , 86, 3661-3669	2.5	8
238	A study of shallow and deep damage in Cu and Al after self-implantation. <i>Radiation Effects</i> , 1983 , 71, 289-314		8
237	Clustering phenomena of implants in tungsten observed with THDS. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1985 , 6, 517-524	1.2	8
236	Superlattice dislocations on {111} and {001} in superalloys. <i>Scripta Metallurgica</i> , 1985 , 19, 105-110		8
235	Thermodynamic calculations for the liquid systems Na ⁺ K ⁺ , K ⁺ Cs and Li ⁺ Pb. <i>Physica B: Physics of Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics</i> , 1982 , 114, 59-66		8
234	Smectite clay pillared with copper complexed polyhedral oligosilsesquioxane for adsorption of chloridazon and its metabolites. <i>Environmental Science: Nano</i> , 2020 , 7, 424-436	7.1	8
233	On the fabrication of micro- and nano-sized objects: the role of interstitial clusters. <i>Journal of Materials Science</i> , 2018 , 53, 7822-7833	4.3	7

232	Interphase boundary motion elucidated through in-situ high temperature electron back-scatter diffraction. <i>Materials and Design</i> , 2017 , 132, 138-147	8.1	7
231	Laser surface treatment for enhanced titanium to carbon fiber-reinforced polymer adhesion. <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> , 2017 , 39, 2917-2924	2	7
230	Dynamic smoothing of nanocomposite films. <i>Applied Physics Letters</i> , 2010 , 96, 151910	3.4	7
229	Charging effects during focused electron beam induced deposition of silicon oxide. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2011 , 29, 06FD01	1.3	7
228	A quantitative analysis of surface deformation by stick/slip atomic force microscopy. <i>Journal of Applied Physics</i> , 1997 , 82, 3763-3770	2.5	7
227	Effects of tensile and compressive in-plane stress fields on adhesion in laser induced delamination experiments. <i>Journal of Applied Physics</i> , 2008 , 103, 103523	2.5	7
226	Electron microscopic study on catalytic carbonization of biomass carbon: I. carbonization of wood charcoal at high temperature by al-triisopropoxide. <i>Molecular Crystals and Liquid Crystals</i> , 2002 , 386, 33-38	0.5	7
225	Scratch hardness and wear performance of laser-melted steels: Effects of anisotropy. <i>Wear</i> , 1989 , 132, 59-75	3.5	7
224	Local structural variations near twins in YBa ₂ Cu ₃ O _{7-δ} . <i>Physical Review B</i> , 1990 , 41, 9502-9505	3.3	7
223	The relationship between hardness and laser treatment of hypo-eutectoid steels. <i>Scripta Metallurgica</i> , 1987 , 21, 1737-1742		7
222	Enhanced wear properties of steel: A combination of ion implantation metallurgy and laser metallurgy. <i>Acta Metallurgica</i> , 1988 , 36, 3123-3130		7
221	Mechanical properties of the ordering alloy Cu ₂ NiZn. <i>Acta Metallurgica</i> , 1982 , 30, 1537-1547		7
220	Diffusion drift paths in the core region of an edge dislocation. <i>Physica Status Solidi (B): Basic Research</i> , 1975 , 69, 417-428	1.3	7
219	The infrared spectra of several rare-earth formates. <i>Journal of Inorganic and Nuclear Chemistry</i> , 1975 , 37, 2350-2351		7
218	The i.r. spectra of several rare-earth formates. <i>Spectrochimica Acta Part A: Molecular Spectroscopy</i> , 1976 , 32, 1155-1157		7
217	Evolution of microstructure and properties in laser cladding of a Ni-Cr-B-Si hardfacing alloy 2011 ,		7
216	Using X-Ray Scattering to Elucidate the Microstructural Instability of 3D Bicontinuous Nanoporous Metal Scaffolds for Use in an Aperiodic 3D Tricontinuous Conductor-Insulator-Conductor Nanocapacitor. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 11721-11731	9.5	7
215	Self-healing of a pre-notched WS ₂ /a-C coating. <i>Materials Research Letters</i> , 2019 , 7, 103-109	7.4	7

214	Concentrated Multi-nozzle Electrospinning. <i>Fibers and Polymers</i> , 2019 , 20, 1180-1186	2	6
213	Formation of metal F bonds during frictional sliding: Influence of water and applied load. <i>Applied Surface Science</i> , 2016 , 368, 427-434	6.7	6
212	Enhanced efficiency of self-healing of Cr ₂ AlC. <i>Materials Letters</i> , 2018 , 227, 51-54	3.3	6
211	Selective functionalization of patterned glass surfaces. <i>Journal of Materials Chemistry B</i> , 2014 , 2, 2606-2615	6.15	6
210	In situ bending of layered compounds: The role of anisotropy in Ti ₂ AlC microcantilevers. <i>Scripta Materialia</i> , 2014 , 89, 21-24	5.6	6
209	Formation of Nanoporous Gold Studied by Transmission Electron Backscatter Diffraction. <i>Microscopy and Microanalysis</i> , 2015 , 21, 1387-1397	0.5	6
208	Texture development in direct powder deposition. <i>Journal of Laser Applications</i> , 2017 , 29, 042007	2.1	6
207	Atomistic modelling of charge-induced deformation of gold nanowires. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2013 , 21, 055024	2	6
206	Magnetic microstructure of YFe ₁₁ Ti aggregates. <i>Journal of Alloys and Compounds</i> , 2009 , 487, 11-17	5.7	6
205	On the composition analysis of nc-TiC/a-C : H nanocomposite coatings. <i>Journal Physics D: Applied Physics</i> , 2008 , 41, 085402	3	6
204	Nonlinearities in composition dependence of structure parameters and magnetic properties of nanocrystalline fcc/bcc-mixed Co _{1-x} Ni _x Fe thin films. <i>Journal of Applied Physics</i> , 2008 , 103, 07E738	2.5	6
203	Tailoring of misfit along interfaces between Zn _x Mn _{3-x} O ₄ and Ag. <i>Acta Materialia</i> , 2004 , 52, 5845-5851	8.4	6
202	Structural effects due to the incorporation of Ar atoms in the lattice of ZrO ₂ thin films prepared by ion beam assisted deposition. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2002 , 194, 333-345	1.2	6
201	Analysis of Gibbsian segregation at heterophase interfaces using analytical transmission electron microscopy: a novel approach. <i>Acta Materialia</i> , 2002 , 50, 223-235	8.4	6
200	A Subnanoscale Investigation of Sb Segregation at MnO/Ag Ceramic/Metal Interfaces. <i>Journal of Materials Science</i> , 2001 , 9, 199-211		6
199	Identification of planar defects in D019 phases using high-resolution transmission electron microscopy. <i>Philosophical Magazine Letters</i> , 2001 , 81, 697-707	1	6
198	Ultra high vacuum scanning Auger/electron microscopy studies of oxidation and B surface segregation of in situ fractured B-doped Ni ₃ Al alloys. <i>Surface Science</i> , 2001 , 482-485, 254-259	1.8	6
197	Al ₂ O ₃ interface in laser coated aluminium alloys. <i>Scripta Metallurgica Et Materialia</i> , 1995 , 33, 1345-1351		6

196	Laser treatment of aluminium copper alloys: A mechanical enhancement. <i>Scripta Metallurgica Et Materialia</i> , 1994 , 30, 493-498		6
195	Metal-ceramic interfaces in laser coated steels: A transmission electron microscopy study of a mixture of iron and spinel grains. <i>Acta Metallurgica Et Materialia</i> , 1992 , 40, S139-S142		6
194	Interactions between lattice dislocations and grain boundaries in L12 ordered compounds investigated by in situ transmission electron microscopy and computer modelling experiments. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1993 , 164, 415-420	5.3	6
193	Dependence of surface residual stress on laser power and laser scan velocity. <i>Scripta Metallurgica Et Materialia</i> , 1991 , 25, 2007-2010		6
192	Characterization of superlattice dislocations in Cu ₂ NiZn by transmission electron microscopy. <i>Scripta Metallurgica</i> , 1979 , 13, 303-306		6
191	The mean free path of mobile dislocations in doped NaCl single crystals measured by N.M.R. between room temperature and 300°C. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1982 , 46, 469-481		6
190	Diffusion drift paths around a <100> edge dislocation in Fe. <i>Solid State Communications</i> , 1975 , 16, 1231-1234		6
189	Low-temperature solid-state growth of three-dimensional bicontinuous nanoporous graphene with tunable porosity for lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 11405-11415	13	6
188	Defect ferromagnetism in SnO:Zn hierarchical nanostructures: correlation between structural, electronic and magnetic properties.. <i>RSC Advances</i> , 2019 , 9, 4082-4091	3.7	5
187	Product shape change by internal stresses. <i>Materials and Design</i> , 2018 , 157, 492-500	8.1	5
186	Influence of load on the dry frictional performance of alkyl acrylate copolymer elastomers coated with diamond-like carbon films. <i>Journal of Applied Physics</i> , 2015 , 118, 175302	2.5	5
185	Local delamination on heavily deformed polymer-metal interfaces: evidence from microscopy. <i>Journal of Materials Science</i> , 2014 , 49, 691-700	4.3	5
184	Piezoelectric properties of PbTiO ₃ thin films characterized with piezoresponse force and high resolution transmission electron microscopy. <i>Journal of Applied Physics</i> , 2009 , 105, 064106	2.5	5
183	On the quantification of unbound hydrogen in diamond-like carbon-based thin films. <i>Scripta Materialia</i> , 2009 , 61, 320-323	5.6	5
182	Pulsed DC sputtered DLC based nanocomposite films: controlling growth dynamics, microstructure and frictional properties. <i>Materials Technology</i> , 2011 , 26, 15-19	2.1	5
181	Growth of fractal structures in flames with silicon admixture. <i>Europhysics Letters</i> , 2012 , 98, 66005	1.6	5
180	Piezoresponse force microscopy of ferroelectric thin films: Frequency dependence of phase imaging. <i>Journal of Applied Physics</i> , 2008 , 103, 114109	2.5	5
179	FCC/BCC competition and enhancement of saturation magnetization in nanocrystalline Co-Ni-Fe films. <i>JETP Letters</i> , 2007 , 85, 212-215	1.2	5

178	Fracture Behavior of Metal Foam Made of Recycled MMC by the Melt Route. <i>Materials Transactions</i> , 2006 , 47, 2219-2222	1.3	5
177	Linear growth of thin films under the influence of stress. <i>Applied Physics Letters</i> , 2001 , 78, 3044-3046	3.4	5
176	Correlated roughness effects on electrical conductivity of quantum wires. <i>Journal of Applied Physics</i> , 2001 , 89, 8002-8005	2.5	5
175	Study of polymer/metal coating under stress using positron annihilation spectroscopy. <i>Acta Materialia</i> , 2000 , 48, 4743-4747	8.4	5
174	Microstructure and properties of giant magnetoresistive granular Au ₈₀ Co ₂₀ alloys. <i>Journal of Applied Physics</i> , 2001 , 89, 3381-3387	2.5	5
173	Surface sensitivity effects with local probe scanning Auger scanning electron microscopy. <i>Applied Physics Letters</i> , 1999 , 75, 1080-1082	3.4	5
172	Kr incorporation in sputtered amorphous Si layers. <i>Journal of Applied Physics</i> , 1995 , 77, 3467-3478	2.5	5
171	On the Vibrational Entropy of a $\frac{1}{2}$ $\langle 111 \rangle$ {110} Edge Dislocation in B.C.C. Iron. <i>Physica Status Solidi (B): Basic Research</i> , 1978 , 87, 151-161	1.3	5
170	Defect ferromagnetism induced by lower valence cation doping: Li-doped SnO nanoparticles.. <i>RSC Advances</i> , 2020 , 10, 26342-26348	3.7	5
169	Temperature-Adaptive Ultralubricity of a WS ₂ /a-C Nanocomposite Coating: Performance from Room Temperature up to 500 °C. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 28843-28854	9.5	5
168	Micromechanical evaluation of DP1000-GI dual-phase high-strength steel resistance spot weld. <i>Journal of Materials Science</i> , 2019 , 54, 1703-1715	4.3	5
167	Self-healing WS ₂ tribofilms: An in-situ appraisal of mechanisms. <i>Scripta Materialia</i> , 2021 , 204, 114124	5.6	5
166	Effect of Quench Polish Quench Nitriding Temperature on the Microstructure and Wear Resistance of SAF2906 Duplex Stainless Steel. <i>Metals</i> , 2019 , 9, 848	2.3	4
165	In Situ Digital Image Correlation Observations of Laser Forming. <i>Metals</i> , 2020 , 10, 17	2.3	4
164	Bending of nanoporous thin films under ion radiation. <i>Thin Solid Films</i> , 2019 , 688, 137419	2.2	4
163	On the bulk degradation of yttria-stabilized nanocrystalline zirconia dental implant abutments: an electron backscatter diffraction study. <i>Journal of Materials Science: Materials in Medicine</i> , 2017 , 28, 121	4.5	4
162	Effect of surface reactions on steel, Al ₂ O ₃ and Si ₃ N ₄ counterparts on their tribological performance with polytetrafluoroethylene filled composites. <i>Applied Surface Science</i> , 2015 , 331, 482-489	6.7	4
161	Laser-induced periodic surface structures, modeling, experiments, and applications 2014 ,		4

160	Microscopic aspects of crack propagation along PET/glass and PET/Al interfaces. <i>International Journal of Solids and Structures</i> , 2006 , 43, 7371-7377	3.1	4
159	On the formation of ultra-fine grained Fe-base alloys via phase transformations. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004 , 367, 176-184	5.3	4
158	Competitive segregation of gallium and indium at heterophase Cu-MnO interfaces studied with transmission electron microscopy. <i>Philosophical Magazine</i> , 2003 , 83, 727-743	1.6	4
157	Effects of topography on the local variation in the magnetization of ultrasoft magnetic films: A Lorentz microscopy study. <i>Philosophical Magazine</i> , 2003 , 83, 2899-2913	1.6	4
156	Direct Observations of Grain Boundary Phenomena during Indentation of Al and Al-Mg Thin Films. <i>Materials Research Society Symposia Proceedings</i> , 2003 , 795, 541		4
155	Adhesion behaviour of CrNx coatings on pre-treated metal substrates studied in situ by PBA and ESEM after annealing. <i>Surface and Coatings Technology</i> , 2005 , 199, 57-65	4.4	4
154	Secondary interface dislocations in internally oxidized MgO/Cu composite. <i>Journal of Materials Science Letters</i> , 2001 , 20, 389-392		4
153	In-situ TEM analysis of the reduction of nanometre-sized Mn3O4 precipitates in a metal matrix. <i>Acta Materialia</i> , 2001 , 49, 765-774	8.4	4
152	Shock wave velocity and shock pressure for low density powders: A novel approach. <i>Applied Physics Letters</i> , 1994 , 64, 933-935	3.4	4
151	Computed structure of near-coherent twin boundaries compared with tem observations. <i>Acta Metallurgica</i> , 1986 , 34, 1051-1057		4
150	Dislocation dynamics in AlMgZn alloys: A nuclear magnetic resonance and transmission electron microscopic study. <i>Journal of Materials Research</i> , 1988 , 3, 645-650	2.5	4
149	On the X-ray Scattering Factor of Metallic Lithium in the Long-Wavelength Limit: The "Solid State Effect". <i>Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences</i> , 1980 , 35, 373-377	1.4	4
148	Electronic states near dislocations in transition metals: An application of quantum chemistry in technology. <i>International Journal of Quantum Chemistry</i> , 1980 , 18, 575-582	2.1	4
147	On the determination of dislocation densities in NaCl single crystals from quadrupolar linewidth measurements. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1982 , 46, 327-344		4
146	Order-strengthening in the ternary alloy Cu2NiZn. <i>Acta Metallurgica</i> , 1982 , 30, 581-588		4
145	Gaining sight after being blind: A tribute to Jing Zhu. <i>Ultramicroscopy</i> , 2018 , 192, 37-49	3.1	4
144	Influence of the applied power on the barrier performance of silicon-containing plasma polymer coatings using a hollow cathode-activated PECVD process. <i>Plasma Processes and Polymers</i> , 2017 , 14, 1700016	3.4	3
143	Compositional modification of Ni-base alloys for laser-deposition technologies 2015 , 137-162		3

142	Calibration-free quantitative surface topography reconstruction in scanning electron microscopy. <i>Ultramicroscopy</i> , 2015 , 148, 31-41	3.1	3
141	Anomalous precipitation hardening in Al-(1 wt%)Cu thin films. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018 , 722, 37-46	5.3	3
140	Response of Ti microstructure in mechanical and laser forming processes. <i>Journal of Materials Science</i> , 2018 , 53, 14713-14728	4.3	3
139	Opportunities from the nanoworld: Gas phase nanoparticles. <i>Journal of Alloys and Compounds</i> , 2008 , 449, 237-241	5.7	3
138	In-situ birefringence microscopy of uniaxially stretched metal/polymer laminate. <i>Surface and Coatings Technology</i> , 2007 , 201, 4633-4639	4.4	3
137	Effects of self-affine surface roughness on the friction coefficient of rubbers in the presence of a liquid interlayer. <i>Journal of Applied Physics</i> , 2004 , 95, 389-392	2.5	3
136	Electron microscopy and positron annihilation study of CdSe nanoclusters embedded in MgO. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2004 , 218, 410-415	1.2	3
135	Quantitative characterization of the growth and morphological evolution of bicrystalline aluminum thin films. <i>Journal of Materials Science</i> , 2005 , 40, 5033-5036	4.3	3
134	Practical Work of Adhesion of Polymer Coatings Studied by Laser Induced Delamination. <i>Materials Research Society Symposia Proceedings</i> , 2005 , 875, 1		3
133	Antimony segregation at copper/manganese-oxide interfaces studied with analytical transmission electron microscopy. <i>Scripta Materialia</i> , 2001 , 45, 169-175	5.6	3
132	Asymmetrical strain distribution in sputtered TiN layers. <i>Thin Solid Films</i> , 2000 , 371, 10-16	2.2	3
131	Reply to comment on Reaction layers around SiC particles in Ti: an electron microscopy study. <i>Scripta Materialia</i> , 2000 , 43, 287-289	5.6	3
130	Fractality aspects during agglomeration of solid-phase-epitaxy Co ₂ Si thin films. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2000 , 18, 2472		3
129	Misfit dislocations at metal-ceramic interfaces. <i>Physica Status Solidi A</i> , 1995 , 149, 95-103		3
128	Microstructure of Cr ₂ O ₃ coatings on steel and the effect of silicon. <i>Journal of Materials Research</i> , 1994 , 9, 142-150	2.5	3
127	Defect profiling of neon-implanted and laser-melted steel by positron annihilation. <i>Surface and Coatings Technology</i> , 1994 , 66, 393-397	4.4	3
126	On the role of dislocations in heavily strained YBa ₂ Cu ₃ O ₇ . <i>Ultramicroscopy</i> , 1994 , 56, 135-143	3.1	3
125	X-ray stress analysis of neon implantation in laser-treated 304 stainless steel. <i>Surface and Coatings Technology</i> , 1991 , 45, 43-51	4.4	3

124	Dislocation dynamics in vanadium: A nuclear magnetic resonance and transmission electron microscopic study. <i>Acta Metallurgica Et Materialia</i> , 1990 , 38, 2479-2484		3
123	The influence of noble gas bubbles on mechanical properties of steel. <i>Scripta Metallurgica Et Materialia</i> , 1991 , 25, 539-542		3
122	Anelastic relaxation in amorphous Pd _{39.5} Ni _{39.5} P ₂₁ . <i>Materials Science and Engineering</i> , 1988 , 97, 541-543		3
121	A study of shallow and deep damage in Cu after implantation of 100 keV Cu and Ag ions. <i>Nuclear Instruments & Methods in Physics Research</i> , 1983 , 209-210, 963-967		3
120	Interaction of self-interstitials with metallic impurities in tungsten observed with THDS. <i>Radiation Effects</i> , 1984 , 85, 103-110		3
119	Interatomic Forces and Structure of Grain Boundaries. <i>Materials Research Society Symposia Proceedings</i> , 1985 , 63, 137		3
118	The electronic states in molybdenum. <i>Physica Status Solidi (B): Basic Research</i> , 1976 , 78, 791-801	1.3	3
117	Thick tool steel coatings with laser cladding. <i>WIT Transactions on Engineering Sciences</i> , 2007 ,	2	3
116	On the Self-Repair of WS ₂ /a-C Tribocoating. <i>Advanced Materials Interfaces</i> , 2020 , 7, 1900938	4.6	3
115	Wear and Failure Mechanism of PTFE/SiO ₂ /Epoxy Composites. <i>Journal of Tribology</i> , 2016 , 138,	1.8	2
114	Structure phases of Fe nanoparticles in vertically aligned multi-walled carbon nanotubes. <i>Journal of Surface Investigation</i> , 2015 , 9, 1044-1055	0.5	2
113	Gas permeation and temperature effects in laser-induced delamination. <i>Progress in Organic Coatings</i> , 2009 , 64, 210-215	4.8	2
112	A statistical physics consideration about the strength of small size metallic glass pillars. <i>Journal of Physics: Conference Series</i> , 2010 , 240, 012156	0.3	2
111	Ion-beam analysis of the structure and composition of nanocomposite nc-TiC/a-C:H coatings. <i>Journal of Surface Investigation</i> , 2007 , 1, 674-678	0.5	2
110	Recovery and recrystallization in the superplastic deformation of AA5182. <i>Materialwissenschaft Und Werkstofftechnik</i> , 2008 , 39, 279-284	0.9	2
109	Formation of CdSe nanoclusters in MgO by ion beam synthesis. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2004 , 216, 121-126	1.2	2
108	Influence of electron flux on the oxidation of Ni ₃ Al surfaces. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2001 , 19, 2581-2585	2.9	2
107	Influence of proximity effects in superconductor/normal metal junctions from mound roughness and film growth mechanisms. <i>Physica C: Superconductivity and Its Applications</i> , 2000 , 330, 99-104	1.3	2

106	Nanostructure and giant magnetoresistive properties of granular systems. <i>Journal of Nanoscience and Nanotechnology</i> , 2001 , 1, 65-73	1.3	2
105	Nano Indentations Studies of WC/C and TiN/(Ti,Al)N Multilayer PVD Coatings Combined with Cross-sectional Electron Microscopy Observations. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 697, 151		2
104	Determination of x-ray elastic constants using an in situ pressing device. <i>Journal of Materials Research</i> , 1998 , 13, 1757-1760	2.5	2
103	Structure-property relations for silicon nitride matrix composites reinforced with pyrolytic carbon pre-coated Hi-Nicalon fibers. <i>Journal of Materials Science</i> , 1999 , 34, 4737-4749	4.3	2
102	Observations of precipitation in a particle-reinforced Al-Cu-Mg alloy with 20% silicon. <i>Scripta Metallurgica Et Materialia</i> , 1995 , 33, 427-432		2
101	The use of Fourier analysis in the representation of computed grain boundary structures. <i>Scripta Metallurgica</i> , 1983 , 17, 1161-1165		2
100	Effects of Cl ⁺ and F ⁺ implantation of oxidation-induced stacking faults in silicon. <i>Journal of Applied Physics</i> , 1984 , 55, 3485-3489	2.5	2
99	Cascade annealing of tungsten implanted with 5 keV noble gas atoms: A computer simulation. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1984 , 2, 710-714	1.2	2
98	Normal coordinate analysis of crystals. <i>Computer Physics Communications</i> , 1975 , 10, 104-116	4.2	2
97	Atomic configuration of a <111> {110} edge dislocation in α -Fe. <i>Solid State Communications</i> , 1975 , 17, 245-248	1.6	2
96	Scattered wave functions of dislocated lattices. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1977 , 63, 174-176	2.3	2
95	Correlated Roughness Effects in the Giant Magnetoresistance of Magnetic Multilayers. <i>Acta Physica Polonica A</i> , 2000 , 97, 495-498	0.6	2
94	EXPERIMENTAL DETERMINATION AND THEORETICAL ANALYSIS OF LOCAL RESIDUAL STRESS AT GRAIN SCALE 2017 ,		2
93	Statistical analysis of SEM image noise 2013 ,		2
92	The influence of processing speed on the properties of laser surface deposits 2015 ,		2
91	Galileo Comes to the Surface!. <i>Nanostructure Science and Technology</i> , 2006 , 1-26	0.9	2
90	Depth Profile Analysis of Thin Oxide Layers on Polycrystalline Fe-Cr. <i>Microscopy and Microanalysis</i> , 2020 , 26, 112-119	0.5	1
89	Gyroid nickel nanostructures from diblock copolymer supramolecules. <i>Journal of Visualized Experiments</i> , 2014 ,	1.6	1

88	Tantalum-modified Stellite 6 thick coatings: microstructure and mechanical performance. <i>Journal of Materials Science</i> , 2013 , 48, 140-149	4.3	1
87	Structure Properties of the YFe_{11}Mo Intermetallic Compound. <i>IEEE Transactions on Magnetics</i> , 2013 , 49, 1149-1152	2	1
86	Microstructural characterization of surface damage through ultra-short laser pulses 2014 ,		1
85	In situ Transmission Electron Microscopy on Metals 2012 , 1099-1151		1
84	Localized electronic states near dislocations in transition metals. <i>International Journal of Quantum Chemistry</i> , 2009 , 14, 469-482	2.1	1
83	Jerky-type phenomena at nanocomposite surfaces: The breakdown of the Coulomb friction law. <i>Jom</i> , 2007 , 59, 45-49	2.1	1
82	In-situ TEM Observation of Gold Nanocluster Nucleation, Coarsening and Refining in Au Implanted MgO(100) Foils. <i>AIP Conference Proceedings</i> , 2003 ,	0	1
81	Nanocomposite TiC/a-C coatings: structure and properties. <i>Materials Research Society Symposia Proceedings</i> , 2004 , 843, 161		1
80	In-situ NMR study of dislocation motion in Ca ⁺⁺ -doped NaCl crystals. <i>Solid State Communications</i> , 2004 , 129, 727-731	1.6	1
79	Thermally induced delamination of amorphous hydrogenated carbon coatings monitored by positron beam analysis. <i>Surface and Coatings Technology</i> , 2004 , 180-181, 207-212	4.4	1
78	Nano-porosity in silica reinforced methyltrimethoxysilane coatings studied by positron beam analysis. <i>Composites Science and Technology</i> , 2003 , 63, 1133-1139	8.6	1
77	Analyses of laser and furnace treated sol-gel coatings. <i>Surface Engineering</i> , 1998 , 14, 395-399	2.6	1
76	Twinning mechanisms in laser processed ceramic coatings. <i>Physica Status Solidi A</i> , 1995 , 149, 409-428		1
75	Structure-Property Relationship of Metal-Ceramic Interfaces Produced by Laser Processing. <i>Materials Research Society Symposia Proceedings</i> , 1993 , 319, 21		1
74	Highly pressurized Kr agglomerates in sputtered Si films. <i>Thin Solid Films</i> , 1994 , 241, 12-15	2.2	1
73	Scanning Tunneling Microscopy on Charge Density Waves in Layered Compounds. <i>Materials Research Society Symposia Proceedings</i> , 1992 , 295, 15		1
72	Interaction Between Lattice Dislocations and Grain Boundaries in Ordered Compounds: Theory and Experiment. <i>Materials Research Society Symposia Proceedings</i> , 1990 , 186, 253		1
71	Interaction Between Lattice Dislocations and Grain Boundaries In Ordered Compounds. <i>Materials Research Society Symposia Proceedings</i> , 1990 , 213, 429		1

70	Reduction of the tensile stress state in laser treated materials. <i>Scripta Metallurgica Et Materialia</i> , 1991 , 25, 1719-1724		1
69	In-situ study of deformation-enhanced atomic diffusion in NaCl by nuclear magnetic resonance. <i>Radiation Effects and Defects in Solids</i> , 1991 , 119-121, 771-776	0.9	1
68	Crack initiation in a Ni-base superalloy. <i>Scripta Metallurgica</i> , 1987 , 21, 1481-1486		1
67	Quasi-crystals studied with convergent beam electron diffraction. <i>Materials Science and Engineering</i> , 1988 , 99, 335-337		1
66	Enhanced Wear Resistance by Compressive Strengthening a Novel Combination of Laser and Ion Implantation Technology. <i>Materials Research Society Symposia Proceedings</i> , 1988 , 128, 403		1
65	Effects of vacancies near substitutional implants on trapping and desorption of helium \square simulation. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1985 , 6, 525-532	1.2	1
64	Symmetry and bandstructure. <i>Computer Physics Communications</i> , 1975 , 10, 67-69	4.2	1
63	Remark on Algorithm 475: Visible Surface Plotting Program [J6] \square <i>ACM Transactions on Mathematical Software</i> , 1979 , 5, 521-523	2.3	1
62	Microstructure and Mechanical Properties of Laser Additive Manufactured H13 Tool Steel. <i>Metals</i> , 2022 , 12, 243	2.3	1
61	On the GHz Frequency Response in Nanocrystalline Fe _X N Ultra-Soft Magnetic Films. <i>Materials Research Society Symposia Proceedings</i> , 2002 , 720, 3141		1
60	Advances in transmission electron microscopy: in situ nanoindentation and in situ straining experiments 2008 , 463-464		1
59	Vapour confinement as a strategy to fabricate metal and bimetallic nanostructures. <i>Nanoscale Advances</i> , 2020 , 2, 4251-4260	5.1	1
58	Protective films on complex substrates of thermoplastic and cellular elastomers: Prospective applications to rubber, nylon and cork. <i>Surface and Coatings Technology</i> , 2022 , 128405	4.4	1
57	FIB-etching of polymer/metal laminates and its effect on mechanical performance. <i>Microscopy and Microanalysis</i> , 2014 , 20, 1826-34	0.5	0
56	Influence of metal \square oxide interfaces on L12 ordering in Cu ₃ Pd. <i>Acta Materialia</i> , 2004 , 52, 4651-4658	8.4	0
55	Structure and Giant Magneto-Resistive Properties of Co and CoFe nano-particles in a Au matrix. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 676, 821		0
54	Enhanced electron-beam-induced current contrast of grain boundaries in silicon-on-insulator films. <i>Journal of Applied Physics</i> , 1987 , 61, 5475-5477	2.5	0
53	Evolution of grain structure in deformed metal-polymer laminates. <i>Journal of Materials Science</i> , 2014 , 49, 8335-8342	4.3	

- 52 Formation of chain aggregates in external electric field. *Chemical Physics Letters*, **2013**, 570, 104-108 2.5
- 51 On the YFe₁₁Mo intermetallic characterization. *Microscopy and Microanalysis*, **2013**, 19, 135-136 0.5
- 50 In-situ TEM investigation of deformation behavior of metallic glass pillars. *Materials Research Society Symposia Proceedings*, **2009**, 1185, 106
- 49 Piezoresponse force microscopy characterization of PTO thin films. *Materials Research Society Symposia Proceedings*, **2009**, 1186, 19
- 48 Electron microscopy characterization of W-O multilayers. *Microscopy and Microanalysis*, **2009**, 15, 59-60 0.5
- 47 Reversible Electrical Resistance Switching in GeSbTe Thin Films: An Electrolytic Approach without Amorphous-Crystalline Phase-Change. *Materials Research Society Symposia Proceedings*, **2008**, 1071, 1
- 46 Crystal Growth Rates in Doped Sb_xTe Fast-Growth Phase-Change Films Studied with Transmission Electron Microscopy. *Materials Research Society Symposia Proceedings*, **2008**, 1072, 1
- 45 Determining the mass density of a hydrocarbon matrix in thin-film nanocomposites by ion-beam techniques. *Technical Physics Letters*, **2007**, 33, 919-922 0.7
- 44 Electron Microscopy Characterization of Nanostructured Coatings. *Nanostructure Science and Technology*, **2006**, 143-215 0.9
- 43 In-situ Tensile Testing of SiCp-Al Metal Matrix Composite Produced by Laser Embedding **2006**, 223-228
- 42 Ti-6Al-4V with Laser Embedded SiC Particles: An Electron Microscopy Study **2006**, 36-41
- 41 Widmanstätten Co₃W: HRTEM study of DO₁₉ precipitation in an fcc matrix **2006**, 368-372
- 40 In situ transmission electron microscopy of nano-sized metal clusters. *Materials Research Society Symposia Proceedings*, **2004**, 839, 161
- 39 Time-of-flight atom probe measurements on Ni₃Al and Co₃W. *Ultramicroscopy*, **2003**, 95, 207-13 3.1
- 38 Structural Stability of Nano-Sized Clusters. *Materials Research Society Symposia Proceedings*, **2003**, 791, 1
- 37 Bonding at Metal-Ceramic Interfaces Studied with High Resolution Transmission Electron Microscopy **2005**, 207-220
- 36 Local Probe Scanning Auger-Electron Microscopy Studies of Segregation Effects upon In-Situ Fracture **2005**, 87-92
- 35 Influence of interfacial binding energy and misfit on the shape of the oxide precipitates in metals. *Radiation Effects and Defects in Solids*, **2001**, 156, 19-26 0.9

- 34 Influence of quasi-layer-by-layer roughness on proximity effects in thin film superconducting/normal-metal junctions. *Physica C: Superconductivity and Its Applications*, **2001**, 355, 211-216 1.3
- 33 Determination of the $\Sigma 1$ [211] orientational relationship in a MgO/Cu composite. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2001**, 316, 87-92 5.3
- 32 Microstructure and properties of giant magneto-resistant Au 80 Co 20 , Au 80 Co 10 Fe 10 , Cu 70 Ni 25 Fe 4 Mn and Cu 53 Ni 31 Fe 15 Mn. *Scripta Materialia*, **2001**, 44, 1461-1464 5.6
- 31 Electron beam induced oxidation of Ni₃Al surfaces: electron flux effects. *Surface Science*, **2002**, 507-510, 486-491 1.8
- 30 Quantitative Characterization Of Morphological Evolution In Q = 2 Potts Model Aluminum Thin Films. *Materials Research Society Symposia Proceedings*, **2002**, 749, 1
- 29 Growth Front Roughening of Room Temperature Deposited Oligomer Thin Films. *Materials Research Society Symposia Proceedings*, **2000**, 648, 1
- 28 Influence of Oxidation on Boron Segregation to Grain Boundaries of In-Situ Fractured Ni₃Al Alloys. *Materials Research Society Symposia Proceedings*, **2000**, 654, 3121
- 27 Surface fatigue resistance of tool steel coated with thin brittle PVD layers. *Tribology Series*, **2000**, 38, 139-144
- 26 Stress development and adhesion behavior in thin ceramic coatings monitored by positron annihilation during bending. *Materials Research Society Symposia Proceedings*, **2001**, 695, 1
- 25 HREM Investigation of Al-MgO Interface. *Materials Research Society Symposia Proceedings*, **1993**, 319, 15
- 24 Depth profile and stress measurements on implanted layers. *Radiation Effects and Defects in Solids*, **1994**, 132, 193-201 0.9
- 23 Morphologies and Growth Modes of FeSi and β -FeSi₂ Layers Prepared by Rapid Thermal Annealing. *Materials Research Society Symposia Proceedings*, **1995**, 402, 373
- 22 On the Interactions between Lattice Dislocations and Grain Boundaries in Ordered Compounds. *Materials Research Society Symposia Proceedings*, **1992**, 288, 299
- 21 Field Ion Microscopy of Quasicrystals. *Materials Research Society Symposia Proceedings*, **1989**, 139, 51
- 20 Atomic Structure Calculations of the Interaction Between Lattice Dislocations and Grain Boundaries. *Materials Research Society Symposia Proceedings*, **1990**, 193, 205
- 19 Dislocation Dynamics In B.C.C. Metals: A Nuclear Magnetic Resonance and Transmission Electron Microscopic Study. *Materials Research Society Symposia Proceedings*, **1990**, 209, 311
- 18 Scanning Tunneling Microscopy Imaging of Defects in Layered Compounds. *Materials Research Society Symposia Proceedings*, **1990**, 209, 605
- 17 Imaging the Al-SiC interface region by HREM techniques. *Micron and Microscopica Acta*, **1990**, 21, 281-282

- 16 Dislocation Dynamics Investigated by Means of Nuclear Magnetic Resonance a Complementary new Technique. *Materials Research Society Symposia Proceedings*, **1986**, 82, 303
- 15 Density of oxidation-induced stacking faults in damaged silicon. *Journal of Applied Physics*, **1986**, 60, 1530-1532
- 14 Differences Between the Atomic Structures of Grain Boundaries in Pure F. C. C. Metals and L12 Ordered Compounds. *Materials Research Society Symposia Proceedings*, **1988**, 122, 139
- 13 Computer Generated Structures of Grain Boundaries in L12-Type Ordered Alloys. *Materials Research Society Symposia Proceedings*, **1988**, 122, 145
- 12 A Nuclear Magnetic Resonance and Transmission Electron Microscopic Study of Moving Dislocations in Ternary Al-Base Alloys. *Materials Research Society Symposia Proceedings*, **1988**, 138, 111
- 11 Field ion Microscopy of Quasicrystals. *Materials Research Society Symposia Proceedings*, **1988**, 138, 341
- 10 Enhanced Wear Resistance by Compressive Strengthening a Novel Combination of Laser and Ion Implantation Technology. *Materials Research Society Symposia Proceedings*, **1988**, 140, 147
- 9 Dislocation dynamics in doped NaCl single crystals determined by pulsed NMR between RT and 300°C. *Radiation Effects*, **1983**, 74, 323-328
- 8 Order-Disorder Transitions in Ternary Alloys. *Materials Research Society Symposia Proceedings*, **1983**, 21, 277
- 7 Solution strengthening in Al₂Zn A nuclear magnetic resonance study. *Scripta Metallurgica*, **1985**, 19, 499-504
- 6 Dislocation Motion in Metals Investigated by Means of Pulsed Nuclear Magnetic Resonance. *Materials Research Society Symposia Proceedings*, **1980**, 3, 421
- 5 Nuclear Spin Relaxation Investigations on the Influence of Impurities and Temperature on the Mean Free Path of Mobile Dislocations in NaCl. *Materials Research Society Symposia Proceedings*, **1980**, 3, 481
- 4 Computer simulation study of the entropy of a edge dislocation in B.C.C. iron. *Scripta Metallurgica*, **1978**, 12, 413-416
- 3 Modelling of Temperature Effects in Plastic Deformation 78-84
- 2 Galileo Comes to the Surface! 1-26
- 1 B4C Coated Carbon Fibre Reinforced Si₃N₄ 194-202