

Katayun Barmak

List of Publications by Year in descending order

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250
papers

7,630
citations

46918

47
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71532

76
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254
all docs

254
docs citations

254
times ranked

6480
citing authors

#	ARTICLE	IF	CITATIONS
1	Simulation of Hubbard model physics in WSe ₂ /WS ₂ moiré superlattices. Nature, 2020, 579, 353-358.	13.7	511
2	On the relationship of high coercivity and L10 ordered phase in CoPt and FePt thin films. Journal of Applied Physics, 1999, 86, 4527-4533.	1.1	313
3	Advancements in the treatment and processing of electronic waste with sustainability: a review of metal extraction and recovery technologies. Green Chemistry, 2019, 21, 919-936.	4.6	248
4	Deterministic coupling of site-controlled quantum emitters in monolayer WSe ₂ to plasmonic nanocavities. Nature Nanotechnology, 2018, 13, 1137-1142.	15.6	198
5	On the relationship of magnetocrystalline anisotropy and stoichiometry in epitaxial L10 CoPt (001) and FePt (001) thin films. Journal of Applied Physics, 2005, 98, 033904.	1.1	190
6	Investigating the thermodynamics and kinetics of thin film reactions by differential scanning calorimetry. Journal Physics D: Applied Physics, 1997, 30, 3167-3186.	1.3	172
7	Surface and grain-boundary scattering in nanometric Cu films. Physical Review B, 2010, 81, .	1.1	172
8	The relationship between deposition conditions, the beta to alpha phase transformation, and stress relaxation in tantalum thin films. Journal of Applied Physics, 1992, 72, 4918-4924.	1.1	162
9	Approaching the Intrinsic Limit in Transition Metal Diselenides via Point Defect Control. Nano Letters, 2019, 19, 4371-4379.	4.5	161
10	Experimental evidence for nucleation during thin film reactions. Applied Physics Letters, 1989, 55, 852-854.	1.5	121
11	Scalable, Dry-Fabrication of a Wide-Angle Plasmonic Selective Absorber for High-Efficiency Solar-Thermal Energy Conversion. Advanced Materials, 2017, 29, 1702156.	11.1	119
12	Infrared Interlayer Exciton Emission in $\text{MoS}_2/\text{MoS}_2$ Heterostructures. Physical Review Letters, 2019, 123, 247402.	11.1	119
13	Reactive phase formation in sputter-deposited Ni/Al multilayer thin films. Journal of Materials Research, 1997, 12, 133-146.	1.2	112
14	On the use of alloying elements for Cu interconnect applications. Journal of Vacuum Science & Technology B, 2006, 24, 2485.	1.3	109
15	The early stages of solid-state reactions in Ni/Al multilayer films. Journal of Applied Physics, 1996, 80, 6689-6698.	1.1	103
16	Dominant role of grain boundary scattering in the resistivity of nanometric Cu films. Physical Review B, 2009, 79, .	1.1	98
17	Grain growth and the puzzle of its stagnation in thin films: The curious tale of a tail and an ear. Progress in Materials Science, 2013, 58, 987-1055.	16.0	96
18	Phase, grain structure, stress, and resistivity of sputter-deposited tungsten films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2011, 29, .	0.9	93

#	ARTICLE	IF	CITATIONS
19	Annealing behavior of Cu and dilute Cu-alloy films: Precipitation, grain growth, and resistivity. <i>Journal of Applied Physics</i> , 2003, 94, 1605-1616.	1.1	92
20	Calorimetric studies of the A1 to L10 transformation in FePt and CoPt thin films. <i>Applied Physics Letters</i> , 2002, 80, 4268-4270.	1.5	90
21	Inspired by nature: investigating tetraenaite for permanent magnet applications. <i>Journal of Physics Condensed Matter</i> , 2014, 26, 064213.	0.7	86
22	Electron mean free path of tungsten and the electrical resistivity of epitaxial (110) tungsten films. <i>Physical Review B</i> , 2012, 86, .	1.1	79
23	Formation of boride layers at the Fe-10% Cr alloy-boron interface. <i>Journal of Alloys and Compounds</i> , 2005, 398, 113-122.	2.8	73
24	A Commentary on: "Reaction Kinetics in Processes of Nucleation and Growth". <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2010, 41, 2711-2775.	1.1	68
25	Surface and grain boundary scattering in nanometric Cu thin films: A quantitative analysis including twin boundaries. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2014, 32, .	0.9	68
26	Electrodeposited NiAl particle composite coatings. <i>Thin Solid Films</i> , 1997, 307, 133-140.	0.8	67
27	Phase formation sequence for the reaction of multilayer thin films of Nb/Al. <i>Journal of Applied Physics</i> , 1990, 67, 7313-7322.	1.1	64
28	Grain boundary energy and grain growth in Al films: Comparison of experiments and simulations. <i>Scripta Materialia</i> , 2006, 54, 1059-1063.	2.6	63
29	Grain growth and ordering kinetics in CoPt thin films. <i>Journal of Applied Physics</i> , 1996, 79, 5330.	1.1	60
30	Via Method for Lithography Free Contact and Preservation of 2D Materials. <i>Nano Letters</i> , 2018, 18, 1416-1420.	4.5	59
31	Resistivity size effect in epitaxial Ru(0001) layers. <i>Journal of Applied Physics</i> , 2018, 124, .	1.1	59
32	A methodology for automated quantitative microstructural analysis of transmission electron micrographs. <i>Journal of Applied Physics</i> , 1998, 84, 5843-5854.	1.1	58
33	Calorimetric studies of the A1 to L10 transformation in binary FePt thin films with compositions in the range of 47.5-54.4at.% Fe. <i>Journal of Applied Physics</i> , 2005, 97, 024902.	1.1	55
34	Capturing the complex physics behind universal grain size distributions in thin metallic films. <i>Acta Materialia</i> , 2014, 64, 72-77.	3.8	55
35	Impact of heterogeneous boundary nucleation on transformation kinetics and microstructure. <i>Acta Materialia</i> , 1997, 45, 1153-1166.	3.8	52
36	Calorimetric studies of the A1 to L10 transformation in FePt and related ternary alloy thin films. <i>Journal of Applied Physics</i> , 2004, 95, 7486-7488.	1.1	52

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37	Time-temperature-transformation diagrams for the A1 to L10 phase transformation in FePt and FeCuPt thin films. Journal of Applied Physics, 2007, 101, 014905.	1.1	52
38	Failure of semiclassical models to describe resistivity of nanometric, polycrystalline tungsten films. Journal of Applied Physics, 2014, 115, .	1.1	52
39	Intrinsic magnetic properties of L1 FeNi obtained from meteorite NWA 6259. Journal of Applied Physics, 2015, 117, .	1.1	52
40	A comparison of texture results obtained using precession electron diffraction and neutron diffraction methods at diminishing length scales in ordered bimetallic nanolamellar composites. Scripta Materialia, 2012, 67, 336-339.	2.6	51
41	Visible-Light Photochemical Activity of Heterostructured Core-Shell Materials Composed of Selected Ternary Titanates and Ferrites Coated by TiO ₂ . ACS Applied Materials & Interfaces, 2013, 5, 5064-5071.	4.0	51
42	Structure of the moiré exciton captured by imaging its electron and hole. Nature, 2022, 603, 247-252.	13.7	51
43	Title is missing!. Journal of Materials Science, 1998, 33, 639-645.	1.7	50
44	Characterization of single and discretely-stepped electro-composite coatings of nickel-alumina. Journal of Materials Science, 1999, 34, 3203-3211.	1.7	50
45	Dissociation of dilute immiscible copper alloy thin films. Journal of Applied Physics, 2000, 87, 2204-2214.	1.1	50
46	Fabrication and characterization of reactive multilayer films and foils. , 2014, , 160-243.		49
47	Diffusivity Reveals Three Distinct Phases of Interlayer Excitons in MoSe_2 Heterobilayers. Physical Review Letters, 2021, 126, 106804.	2.9	49
48	Enhanced Superconductivity in Monolayer Td-MoTe_2 . Nano Letters, 2021, 21, 2505-2511.	4.5	49
49	Interdiffusion in bilayer CoPt/Co films: potential for tailoring the magnetic exchange spring. Journal of Magnetism and Magnetic Materials, 2001, 233, 257-273.	1.0	48
50	Thin film reaction kinetics of niobium/aluminum multilayers. Journal of Applied Physics, 1992, 72, 1341-1349.	1.1	46
51	Effect of alloy composition on the thermodynamic and kinetic parameters of the A1 to L10 transformation in FePt, FeNiPt, and FeCuPt films. Journal of Applied Physics, 2007, 102, 024912.	1.1	46
52	X-ray diffraction for characterizing metallic films. , 2014, , 3-38.		46
53	De Magnete et Meteorite: Cosmically Motivated Materials. IEEE Magnetism Letters, 2014, 5, 1-4.	0.6	44
54	Grain Boundary Character Distribution of Nanocrystalline Cu Thin Films Using Stereological Analysis of Transmission Electron Microscope Orientation Maps. Microscopy and Microanalysis, 2013, 19, 111-119.	0.2	43

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55	Sintering prevention and phase transformation of FePt nanoparticles. Journal of Magnetism and Magnetic Materials, 2004, 284, 336-341.	1.0	42
56	Re-evaluation of the impact of ternary additions of Ni and Cu on the A1 to L10 transformation in FePt films. Journal of Applied Physics, 2011, 109, 123916.	1.1	42
57	Interfacial orientation and misorientation relationships in nanolamellar Cu/Nb composites using transmission-electron-microscope-based orientation and phase mapping. Acta Materialia, 2014, 64, 333-344.	3.8	42
58	Thermodynamic and kinetic parameters of the chemical order-disorder transformation in L10 FeNi (tetraenaite). Acta Materialia, 2016, 103, 608-615.	3.8	42
59	Optical absorption of interlayer excitons in transition-metal dichalcogenide heterostructures. Science, 2022, 376, 406-410.	6.0	42
60	Classical size effect in oxide-encapsulated Cu thin films: Impact of grain boundaries versus surfaces on resistivity. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2008, 26, 605-609.	0.9	38
61	Effect of downscaling nano-copper interconnects on the microstructure revealed by high resolution TEM-orientation-mapping. Nanotechnology, 2012, 23, 135702.	1.3	37
62	Role of stress relief in the hexagonal-close-packed to face-centered-cubic phase transformation in cobalt thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1993, 11, 1435-1440.	0.9	36
63	Extreme value analysis of tail departure from log-normality in experimental and simulated grain size distributions. Acta Materialia, 2013, 61, 5595-5604.	3.8	36
64	Resistivity scaling and electron surface scattering in epitaxial Co(0001) layers. Journal of Applied Physics, 2019, 125, .	1.1	36
65	A1 to L1 ₀ Transformation in FePt Films With Ternary Alloying Additions of Ag and Au. IEEE Transactions on Magnetics, 2010, 46, 1773-1776.	1.2	35
66	Critical events, entropy, and the grain boundary character distribution. Physical Review B, 2011, 83, .	1.1	35
67	Stoichiometry-anisotropy connections in epitaxial L10 FePt(001) films. Journal of Applied Physics, 2004, 95, 7501-7503.	1.1	34
68	High contrast hollow-cone dark field transmission electron microscopy for nanocrystalline grain size quantification. Micron, 2010, 41, 177-182.	1.1	34
69	The five-parameter grain boundary character distribution of nanocrystalline tungsten. Scripta Materialia, 2013, 69, 413-416.	2.6	34
70	Granular L10 FePt:X (X = Ag, B, C, SiOx, TaOx) thin films for heat assisted magnetic recording. European Physical Journal B, 2013, 86, 1.	0.6	33
71	Simulation of electrical conduction in thin polycrystalline metallic films: Impact of microstructure. Journal of Applied Physics, 2013, 114, .	1.1	33
72	On the potential of tungsten as next-generation semiconductor interconnects. Electronic Materials Letters, 2017, 13, 449-456.	1.0	33

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73	Crystallographic anisotropy of the resistivity size effect in single crystal tungsten nanowires. <i>Scientific Reports</i> , 2013, 3, 2591.	1.6	32
74	Issues associated with the analysis and acquisition of thin-film grain size data. <i>Materials Letters</i> , 1999, 41, 296-302.	1.3	31
75	Granular L1 FePt-B and FePt-B-Ag (001) thin films for heat assisted magnetic recording. <i>Journal of Applied Physics</i> , 2012, 111, .	1.1	31
76	Topologically close-packed phases: Deposition and formation mechanism of metastable $\hat{1}^2$ -W in thin films. <i>Acta Materialia</i> , 2016, 104, 223-227.	3.8	31
77	Differential scanning calorimetry studies of the effect of Cu on the A1 to L10 transformation in FePt thin films. <i>Scripta Materialia</i> , 2005, 53, 423-428.	2.6	30
78	Grain growth in ultrathin films of CoPt and FePt. <i>Journal of Materials Research</i> , 1999, 14, 3263-3270.	1.2	29
79	Epitaxial metals for interconnects beyond Cu. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2020, 38, .	0.9	29
80	Two-dimensional profiling of shallow junctions in Si metal-oxide-semiconductor structures using scanning tunneling spectroscopy and transmission electron microscopy. <i>Journal of Applied Physics</i> , 1996, 79, 2115-2121.	1.1	28
81	Discovery of process-induced tetragonality in equiatomic ferromagnetic FeNi. <i>Acta Materialia</i> , 2016, 116, 263-269.	3.8	28
82	Calorimetric determination of NiAl ₃ -growth kinetics in sputter-deposited Ni/Al diffusion couples. <i>Journal of Alloys and Compounds</i> , 1997, 257, 211-214.	2.8	27
83	Metastable and equilibrium phase formation in sputter-deposited Ti/Al multilayer thin films. <i>Journal of Applied Physics</i> , 2002, 91, 9575.	1.1	27
84	Resistivity and surface scattering of (0001) single crystal ruthenium thin films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2019, 37, .	0.9	27
85	Structure of electrodeposited graded composite coatings of Ni-Al ₂ O ₃ . <i>Journal of Microscopy</i> , 1997, 185, 265-274.	0.8	26
86	Evidence of a two-stage reaction mechanism in sputter deposited Nb/Al multilayer thin-films studied by in situ synchrotron X-ray diffraction. <i>Materials Letters</i> , 1999, 39, 268-273.	1.3	25
87	Effect of annealing on magnetic exchange coupling in CoPt/Co bilayer thin films. <i>Journal of Applied Physics</i> , 2000, 87, 6140-6142.	1.1	25
88	Electrically tunable quantum confinement of neutral excitons. <i>Nature</i> , 2022, 606, 298-304.	13.7	25
89	Impact of short-range repulsive interactions between nuclei on the evolution of a phase transformation. <i>Journal of Chemical Physics</i> , 2001, 114, 915.	1.2	24
90	Interaction of iron-chromium alloys containing 10 and 25 mass% chromium with liquid aluminium Part II Formation of intermetallic compounds. <i>Journal of Materials Science</i> , 2004, 39, 4219-4230.	1.7	24

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91	Microstructure evolution during solid state reactions of Nb/Al multilayers. <i>Acta Materialia</i> , 2001, 49, 2813-2826.	3.8	23
92	Title is missing!. <i>Journal of Materials Science</i> , 2003, 38, 3249-3255.	1.7	23
93	Texture of Cu and dilute binary Cu-alloy films: impact of annealing and solute content. <i>Materials Science in Semiconductor Processing</i> , 2003, 6, 175-184.	1.9	23
94	Intrinsic Properties of Fe-Substituted $L1_0$ Magnets. <i>IEEE Transactions on Magnetism</i> , 2013, 49, 5194-5198.	1.2	23
95	Crystallization of amorphous CoSi alloys. <i>Journal of Applied Physics</i> , 1992, 72, 3423-3430.	1.1	22
96	A new model for grain boundary diffusion and nucleation in thin film reactions. <i>Acta Metallurgica Et Materialia</i> , 1994, 42, 2905-2911.	1.9	22
97	The grain boundary character distribution of highly twinned nanocrystalline thin film aluminum compared to bulk microcrystalline aluminum. <i>Journal of Materials Science</i> , 2017, 52, 9819-9833.	1.7	22
98	Transformation of topologically close-packed $\sqrt{2}$ -W to body-centered cubic $\sqrt{3}$ -W: Comparison of experiments and computations. <i>Journal of Chemical Physics</i> , 2017, 147, 152709.	1.2	22
99	Bilayer WSe ₂ as a natural platform for interlayer exciton condensates in the strong coupling limit. <i>Nature Nanotechnology</i> , 2022, 17, 577-582.	15.6	22
100	Low-magnification Quantitative X-ray Mapping of Grain-boundary Segregation in Aluminum-4 wt.% Copper by Analytical Electron Microscopy. <i>Microscopy and Microanalysis</i> , 1999, 5, 254-266.	0.2	21
101	Quantitative analysis of spatial distribution of nucleation sites: microstructural implications. <i>Acta Materialia</i> , 1999, 47, 435-445.	3.8	20
102	Texture and resistivity of dilute binary Cu(Al), Cu(In), Cu(Ti), Cu(Nb), Cu(Ir), and Cu(W) alloy thin films. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2002, 20, 2314.	1.6	20
103	The Orientation Distributions of Lines, Surfaces, and Interfaces around Three-Phase Boundaries in Solid Oxide Fuel Cell Cathodes. <i>Journal of the American Ceramic Society</i> , 2011, 94, 4045-4051.	1.9	20
104	Experimental measurements of the heats of formation of Fe ₃ Pt, FePt, and FePt ₃ using differential scanning calorimetry. <i>Journal of Applied Physics</i> , 2011, 110, 013903.	1.1	20
105	The A1 to L1 ₀ transformation in FePt and FeCuPt thin films: Determination of isothermal transformation kinetics from nonisothermal measurements. <i>Journal of Applied Physics</i> , 2006, 99, 08G901.	1.1	19
106	Atomistic simulations of grain boundary energies in tungsten. <i>Materials Letters</i> , 2017, 186, 116-118.	1.3	19
107	Free Trions with Near-Unity Quantum Yield in Monolayer MoSe ₂ . <i>ACS Nano</i> , 2022, 16, 140-147.	7.3	19
108	The Early Stages of Solid-State Reactions in Ti/Al Multilayer Films. <i>Materials Research Society Symposia Proceedings</i> , 1995, 398, 245.	0.1	18

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109	Interfacial composition and microstructure of Fe/ ₃ O/ ₄ magnetic tunnel junctions. IEEE Transactions on Magnetics, 2003, 39, 2806-2808.	1.2	18
110	Towards a Statistical Theory of Texture Evolution in Polycrystals. SIAM Journal of Scientific Computing, 2008, 30, 3150-3169.	1.3	18
111	Comparison of crystal orientation mapping-based and image-based measurement of grain size and grain size distribution in a thin aluminum film. Acta Materialia, 2014, 79, 138-145.	3.8	18
112	Evolution of grain structure in thin film reactions. Journal of Electronic Materials, 1997, 26, 1009-1020.	1.0	17
113	Interfacial interaction of solid nickel with liquid bismuth and Bi-based alloys. Journal of Alloys and Compounds, 2005, 389, 61-74.	2.8	17
114	Interdiffusion in nanometric Fe/Ni multilayer films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, .	0.9	17
115	Kinetics of first-order phase transitions with correlated nuclei. Physical Review E, 2017, 95, 022121.	0.8	17
116	Formation of the first phase in sputter-deposited Nb/Al multilayer thin films. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1998, 77, 167-185.	0.8	16
117	The A1 to L10 transformation in FePt films with ternary alloying additions of Mg, V, Mn, and B. Journal of Applied Physics, 2011, 109, 07B739.	1.1	16
118	Copper oxide catalyst supported on niobium oxide for CO oxidation at low temperatures. Catalysis Communications, 2017, 97, 42-46.	1.6	16
119	Effect of an Interfacial Ti Layer on the Formation of CoSi ₂ on Si. Materials Research Society Symposia Proceedings, 1991, 238, 575.	0.1	15
120	Impact of boundary nucleation on product grain size distribution. Journal of Materials Research, 1997, 12, 1501-1507.	1.2	15
121	Ferromagnetic exchange-spring nanocomposites of Al + L1/ ₀ CoPt. IEEE Transactions on Magnetics, 2002, 38, 2799-2801.	1.2	15
122	A Commentary on: "Reaction Kinetics in Processes of Nucleation and Growth". Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2018, 49, 3616-3680.	1.0	15
123	Microstructure Evolution During Solid-State Reactions in Polycrystalline Nb/Al and Ti/Ai Multilayer Thin-Films. Materials Research Society Symposia Proceedings, 1999, 562, 159.	0.1	14
124	Nb/Al and Nb/Al(Cu) multilayer thin films: the enthalpy of formation of NbAl ₃ . Thermochemica Acta, 2000, 348, 53-59.	1.2	14
125	Interfacial interaction of solid cobalt with liquid Pb-free Sn-Bi-In-Zn-Sb soldering alloys. Journal of Materials Science, 2009, 44, 5960-5979.	1.7	14
126	Grain Growth and the Puzzle of its Stagnation in Thin Films a Detailed Comparison of Experiments and Simulations. Materials Science Forum, 0, 715-716, 473-479.	0.3	14

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127	On twin density and resistivity of nanometric Cu thin films. <i>Journal of Applied Physics</i> , 2016, 120, .	1.1	14
128	Direct Measurement of the Radiative Pattern of Bright and Dark Excitons and Exciton Complexes in Encapsulated Tungsten Diselenide. <i>Scientific Reports</i> , 2020, 10, 8091.	1.6	14
129	Shedding light on excitonâ€™s nature in monolayer quantum material by optical dispersion measurements. <i>Optics Express</i> , 2019, 27, 37131.	1.7	14
130	An entropy based theory of the grain boundary character distribution. <i>Discrete and Continuous Dynamical Systems</i> , 2011, 30, 427-454.	0.5	14
131	Formation of aC49 TiGe2phase during annealing a coevaporated Ti0.33Ge0.67alloy. <i>Applied Physics Letters</i> , 1993, 62, 3435-3437.	1.5	13
132	Grain boundary diffusion and its effects on the magnetic properties of Co/Cu and Co/Cr thin film bilayers. <i>Journal of Applied Physics</i> , 1994, 75, 5052-5060.	1.1	13
133	Phase transformation kinetics and self-patterning in misfitting thin films. <i>Acta Materialia</i> , 2003, 51, 6415-6427.	3.8	13
134	Robust exchange coupling in bilayer exchange-spring thin films. <i>Journal of Applied Physics</i> , 2003, 93, 7235-7237.	1.1	13
135	Characterization of Pt-Ru binary alloy thin films for work function tuning. <i>IEEE Electron Device Letters</i> , 2006, 27, 542-545.	2.2	13
136	Resistivity in rough metallic thin films: A Monte Carlo study. <i>Journal of Applied Physics</i> , 2012, 112, .	1.1	13
137	Grain size dependence of the twin length fraction in nanocrystalline Cu thin films via transmission electron microscopy based orientation mapping. <i>Journal of Materials Research</i> , 2015, 30, 528-537.	1.2	13
138	TiSi ₂ Formation on Submicron Polysilicon Lines: Role of Line Width and Dopant Concentration. <i>Materials Research Society Symposia Proceedings</i> , 1993, 303, 109.	0.1	12
139	Kinetics of order-disorder transformation of L12 FeNi3 in the Fe-Ni system. <i>Journal of Alloys and Compounds</i> , 2016, 689, 593-598.	2.8	12
140	Evolution of perimeter fraction during a phase transformation. <i>Acta Materialia</i> , 2000, 48, 1181-1186.	3.8	11
141	L1 ₀ FePt: Ordering, Anisotropy Constant and Their Relation to Film Composition. <i>IEEE Transactions on Magnetics</i> , 2013, 49, 3284-3291.	1.2	11
142	L10 phase formation in ternary FePdNi alloys. <i>Journal of Alloys and Compounds</i> , 2015, 648, 845-852.	2.8	11
143	Impact of deposition rate, underlayers, and substrates on Î²-tungsten formation in sputter deposited films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2017, 35, .	0.9	11
144	The CoPt system: a natural exchange spring. <i>Physica B: Condensed Matter</i> , 2003, 327, 190-193.	1.3	10

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145	Interphase exchange effects in CoPt/Co bilayer thin films. Journal Physics D: Applied Physics, 2004, 37, 2638-2642.	1.3	10
146	Comparison of the Work Function of Pt-Ru Binary Metal Alloys Extracted From MOS Capacitor and Schottky-Barrier-Diode Measurements. IEEE Transactions on Electron Devices, 2007, 54, 807-813.	1.6	10
147	Quantitative Structural Characterization of Catalytically Active TiO ₂ Nanoparticles. ACS Applied Nano Materials, 2019, 2, 6268-6276.	2.4	10
148	Statistics of grain growth: Experiment versus the phase-field-crystal and Mullins models. Materialia, 2019, 6, 100280.	1.3	10
149	Reaction kinetics of phase formation in Nb-Al powder metallurgy processed wire. IEEE Transactions on Magnetics, 1989, 25, 2093-2096.	1.2	9
150	Reactive Phase Formation in Sputter-Deposited Ni/Al Thin Films. Materials Research Society Symposia Proceedings, 1995, 382, 33.	0.1	9
151	An EFTEM and conical dark field investigation of co-sputtered CoPt+Yttria stabilized zirconia thin films. Micron, 1998, 29, 33-41.	1.1	9
152	Texture in Ti/Al and Nb/Al multilayer thin films: Role of Cu. Journal of Materials Research, 2001, 16, 1449-1459.	1.2	9
153	Li-CoPt/Co bilayer ferromagnetic films: interdiffusion, structure and microstructure. Acta Materialia, 2003, 51, 313-323.	3.8	9
154	Light scattering from spin wave excitations in a Co/CoPt exchange spring. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 530-532.	1.0	9
155	Grain growth and void formation in dielectric-encapsulated Cu thin films. Journal of Materials Research, 2008, 23, 2033-2039.	1.2	9
156	Impact Of Surface And Grain Boundary Scattering On The Resistivity Of Nanometric Cu Interconnects. AIP Conference Proceedings, 2010, , .	0.3	9
157	Magnetic properties of metallic thin films. , 2014, , 454-546.		9
158	Towards a gradient flow for microstructure. Atti Della Accademia Nazionale Dei Lincei, Classe Di Scienze Fisiche, Matematiche E Naturali, Rendiconti Lincei Matematica E Applicazioni, 2017, 28, 777-805.	0.3	9
159	Optical dispersion of valley-hybridised coherent excitons with momentum-dependent valley polarisation in monolayer semiconductor. 2D Materials, 2021, 8, 015009.	2.0	9
160	X-ray diffraction from polycrystalline multilayers in grazing-incidence geometry: Measurement of crystallite size depth distribution. Physical Review B, 2005, 72, .	1.1	8
161	Structure formation during deposition of polycrystalline metallic thin films. , 2014, , 67-120.		8
162	Electrodeposition of Epitaxial Co on Ru(0001)/Al ₂ O ₃ (0001). Journal of the Electrochemical Society, 2019, 166, D875-D881.	1.3	8

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163	The effect of oxygen on phase formation in Al/Nb diffusion couples. Journal of Applied Physics, 1990, 67, 3780-3784.	1.1	7
164	Crystallization of coevaporated and ion-irradiated amorphous CoSi ₂ . Journal of Applied Physics, 1993, 74, 4958-4962.	1.1	7
165	Magnetic signature of compositional gradient in exchange-spring bilayer films of CoPt/Co. Journal of Applied Physics, 2001, 89, 7528-7530.	1.1	7
166	UHV/CVD growth of Co on Si(0 0 1) using cobalt carbonyl. Applied Surface Science, 2003, 219, 136-142.	3.1	7
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