

# Gerhard Wilde

## List of Publications by Year in descending order

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351  
papers

10,994  
citations

28274

55  
h-index

51608

86  
g-index

360  
all docs

360  
docs citations

360  
times ranked

7153  
citing authors

#	ARTICLE	IF	CITATIONS
1	Grain boundaries in ultrafine grained materials processed by severe plastic deformation and related phenomena. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 540, 1-12.	5.6	425
2	Bulk tracer diffusion in CoCrFeNi and CoCrFeMnNi high entropy alloys. <i>Acta Materialia</i> , 2018, 146, 211-224.	7.9	295
3	Highly ordered nanostructures with tunable size, shape and properties: A new way to surface nano-patterning using ultra-thin alumina masks. <i>Progress in Materials Science</i> , 2007, 52, 465-539.	32.8	247
4	Ni tracer diffusion in CoCrFeNi and CoCrFeMnNi high entropy alloys. <i>Journal of Alloys and Compounds</i> , 2016, 688, 994-1001.	5.5	222
5	Nanomaterials by severe plastic deformation: review of historical developments and recent advances. <i>Materials Research Letters</i> , 2022, 10, 163-256.	8.7	215
6	Ultra-fast diffusion channels in pure Ni severely deformed by equal-channel angular pressing. <i>Acta Materialia</i> , 2011, 59, 1974-1985.	7.9	213
7	Surface patterning using templates: concept, properties and device applications. <i>Chemical Society Reviews</i> , 2011, 40, 1247-1258.	38.1	190
8	The Innovation Potential of Bulk Nanostructured Materials. <i>Advanced Engineering Materials</i> , 2007, 9, 527-533.	3.5	183
9	Grain boundary width, energy and self-diffusion in nickel: Effect of material purity. <i>Acta Materialia</i> , 2013, 61, 5188-5197.	7.9	161
10	Thermodynamic properties of Pd-based glass-forming alloys. <i>Journal of Non-Crystalline Solids</i> , 1999, 250-252, 577-581.	3.1	145
11	Grain boundary self-diffusion in polycrystalline nickel of different purity levels. <i>Acta Materialia</i> , 2010, 58, 386-395.	7.9	139
12	Al <sub>3</sub> (Sc,Zr)-based precipitates in Al-Mg alloy: Effect of severe deformation. <i>Acta Materialia</i> , 2017, 124, 210-224.	7.9	138
13	Nanomagnonic devices based on the spin-transfer torque. <i>Nature Nanotechnology</i> , 2014, 9, 509-513.	31.5	130
14	Template-Confined Dewetting Process to Surface Nanopatterns: Fabrication, Structural Tunability, and Structure-Related Properties. <i>Advanced Functional Materials</i> , 2011, 21, 2446-2455.	14.9	120
15	Nanocrystallization of amorphous Al <sub>88</sub> Y <sub>7</sub> Fe <sub>5</sub> alloy induced by plastic deformation. <i>Scripta Materialia</i> , 2005, 53, 823-828.	5.2	111
16	High strength and ductile ultrafine-grained Cu-Ag alloy through bimodal grain size, dislocation density and solute distribution. <i>Acta Materialia</i> , 2013, 61, 228-238.	7.9	110
17	Quantitative Measurement of Density in a Shear Band of Metallic Glass Monitored Along its Propagation Direction. <i>Physical Review Letters</i> , 2015, 115, 035501.	7.8	110
18	Salt-Concentration Dependence of the Glass Transition Temperature in PEO-NaI and PEO-LiTFSI Polymer Electrolytes. <i>Macromolecules</i> , 2013, 46, 8580-8588.	4.8	108

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19	Density changes in shear bands of a metallic glass determined by correlative analytical transmission electron microscopy. <i>Ultramicroscopy</i> , 2014, 142, 1-9.	1.9	108
20	Thermodynamic properties of Pd <sub>40</sub> Ni <sub>40</sub> P <sub>20</sub> in the glassy, liquid, and crystalline states. <i>Applied Physics Letters</i> , 1994, 65, 397-399.	3.3	105
21	The competing crystalline and amorphous solid solutions in the Ag-Cu system. <i>Acta Materialia</i> , 2002, 50, 475-488.	7.9	100
22	Radioactive isotopes reveal a non sluggish kinetics of grain boundary diffusion in high entropy alloys. <i>Scientific Reports</i> , 2017, 7, 12293.	3.3	100
23	Calorimetric, thermomechanical, and rheological characterizations of bulk glass-forming Pd <sub>40</sub> Ni <sub>40</sub> P <sub>20</sub> . <i>Journal of Applied Physics</i> , 2000, 87, 1141-1152.	2.5	99
24	Bulk liquid undercooling and nucleation in gold. <i>Acta Materialia</i> , 2006, 54, 4759-4769.	7.9	95
25	Synthesis of bulk nanostructured Ni, Ti and Zr by repeated cold-rolling. <i>Scripta Materialia</i> , 2005, 52, 577-582.	5.2	92
26	Glass formation versus nanocrystallization in AN Al <sub>92</sub> Sm <sub>8</sub> alloy. <i>Scripta Materialia</i> , 1999, 40, 779-783.	5.2	91
27	Tracer Measurements of Atomic Diffusion inside Shear Bands of a Bulk Metallic Glass. <i>Physical Review Letters</i> , 2011, 107, 235503.	7.8	91
28	Nucleation Barriers for the Liquid-To-Crystal Transition in Ni: Experiment and Simulation. <i>Physical Review Letters</i> , 2011, 107, 145701.	7.8	85
29	Non-equilibrium intermixing and phase transformation in severely deformed Al/Ni multilayers. <i>Scripta Materialia</i> , 2007, 56, 181-184.	5.2	83
30	Nano- and micro-scale free volume in ultrafine grained Cu-1wt.%Pb alloy deformed by equal channel angular pressing. <i>Acta Materialia</i> , 2009, 57, 5706-5717.	7.9	83
31	Origin of stress overshoot in amorphous solids. <i>Mechanics of Materials</i> , 2015, 81, 72-83.	3.2	81
32	Magnetic properties and magnetocaloric effect in TmZnAl and TmAgAl compounds. <i>Journal of Alloys and Compounds</i> , 2016, 656, 635-639.	5.5	80
33	Critical-point wetting at the metastable chemical binodal in undercooled Fe-Cu alloys. <i>Acta Materialia</i> , 1999, 47, 3009-3021.	7.9	79
34	Plasticity and Grain Boundary Diffusion at Small Grain Sizes. <i>Advanced Engineering Materials</i> , 2010, 12, 758-764.	3.5	79
35	Concentration-dependent atomic mobilities in FCC CoCrFeMnNi high-entropy alloys. <i>Acta Materialia</i> , 2019, 166, 357-370.	7.9	74
36	Shear modulus and compliance in the range of the dynamic glass transition for metallic glasses. <i>European Physical Journal B</i> , 1998, 5, 1-5.	1.5	73

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37	Phase transitions as a tool for tailoring magnetostriction in intrinsic Fe-Ga composites. <i>Acta Materialia</i> , 2017, 130, 229-239.	7.9	71
38	Glass formation and primary nanocrystallization in Al-base metallic glasses. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001, 301, 12-17.	5.6	70
39	Primary crystallization in amorphous Al-based alloys. <i>Journal of Non-Crystalline Solids</i> , 2003, 317, 52-61.	3.1	69
40	Interfacial diffusion in Cu with a gradient nanostructured surface layer. <i>Acta Materialia</i> , 2010, 58, 2376-2386.	7.9	69
41	Hypercooling of completely miscible alloys. <i>Applied Physics Letters</i> , 1996, 69, 2995-2997.	3.3	66
42	Transition between periodic and quasiperiodic structures in Al-Ni-Co. <i>Journal of Alloys and Compounds</i> , 1998, 280, 215-230.	5.5	66
43	Electronic and Magnetic Properties of Monodispersed FePt Nanoparticles. <i>Advanced Materials</i> , 2002, 14, 24-27.	21.0	66
44	Two-phase equilibrium in small alloy particles. <i>Scripta Materialia</i> , 2004, 51, 813-818.	5.2	66
45	Ultrathin Alumina Membranes for Surface Nanopatterning in Fabricating Quantum-Sized Nanodots. <i>Small</i> , 2010, 6, 695-699.	10.0	66
46	Highly ordered CdS nanoparticle arrays on silicon substrates and photoluminescence properties. <i>Applied Physics Letters</i> , 2005, 86, 103106.	3.3	65
47	Excellent magnetocaloric properties in RE <sub>2</sub> Cu <sub>2</sub> Cd (RE = Dy and Tm) compounds and its composite materials. <i>Scientific Reports</i> , 2016, 6, 34192.	3.3	65
48	Experimental study of particle incorporation during dendritic solidification. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2000, 283, 25-37.	5.6	63
49	Magnetic and magnetocaloric properties of the ternary cadmium based intermetallic compounds of Gd <sub>2</sub> Cu <sub>2</sub> Cd and Er <sub>2</sub> Cu <sub>2</sub> Cd. <i>Journal of Alloys and Compounds</i> , 2017, 692, 665-669.	5.5	63
50	Nonequilibrium solidification of hypercooled Co-Pd melts. <i>Journal of Applied Physics</i> , 1998, 83, 3028-3034.	2.5	61
51	Magnetic properties and magnetocaloric effect in ternary REAgAl (RE = Er and Ho) intermetallic compounds. <i>Journal of Alloys and Compounds</i> , 2015, 619, 12-15.	5.5	61
52	Study of relaxation and crystallization kinetics of NiTi made amorphous by repeated cold rolling. <i>Acta Materialia</i> , 2010, 58, 6637-6648.	7.9	60
53	Shear banding in metallic glasses described by alignments of Eshelby quadrupoles. <i>Physical Review B</i> , 2017, 95, .	3.2	60
54	Nanocrystallization in a shear band: An <i>in situ</i> investigation. <i>Applied Physics Letters</i> , 2011, 98, .	3.3	59

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55	Grain boundary diffusion in CoCrFeMnNi high entropy alloy: Kinetic hints towards a phase decomposition. <i>Acta Materialia</i> , 2020, 195, 304-316.	7.9	59
56	Structure and cryogenic magnetic properties in Ho <sub>2</sub> BaCuO <sub>5</sub> cuprate. <i>Ceramics International</i> , 2018, 44, 1991-1994.	4.8	58
57	Low field induced large magnetic entropy change in the amorphousized Tm <sub>60</sub> Co <sub>20</sub> Ni <sub>20</sub> ribbon. <i>Journal of Alloys and Compounds</i> , 2018, 733, 40-44.	5.5	57
58	Grain Boundaries and Diffusion Phenomena in Severely Deformed Materials. <i>Materials Transactions</i> , 2019, 60, 1302-1315.	1.2	57
59	Magnetic properties of MnFe <sub>2</sub> O <sub>4</sub> nanoparticles. <i>Journal of Magnetism and Magnetic Materials</i> , 2002, 242-245, 617-620.	2.3	56
60	Impact of micro-alloying on the plasticity of Pd-based bulk metallic glasses. <i>Scripta Materialia</i> , 2016, 111, 119-122.	5.2	56
61	Effect of heat treatment on diffusion, internal friction, microstructure and mechanical properties of ultra-fine-grained nickel severely deformed by equal-channel angular pressing. <i>Acta Materialia</i> , 2015, 82, 11-21.	7.9	55
62	Novel W-based metallic glass with high hardness and wear resistance. <i>Intermetallics</i> , 2014, 47, 6-10.	3.9	54
63	Tracer diffusion in single crystalline CoCrFeNi and CoCrFeMnNi high entropy alloys. <i>Journal of Materials Research</i> , 2018, 33, 3184-3191.	2.6	54
64	The influence of deformation on the medium-range order of a Zr-based bulk metallic glass characterized by variable resolution fluctuation electron microscopy. <i>Acta Materialia</i> , 2019, 171, 275-281.	7.9	54
65	Tracer diffusion in the Ni-CoCrFeMn system: Transition from a dilute solid solution to a high entropy alloy. <i>Scripta Materialia</i> , 2019, 159, 94-98.	5.2	54
66	Undercooling and solidification of atomized liquid droplets. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2002, 326, 144-153.	5.6	52
67	Low Temperature Heat Capacity of a Severely Deformed Metallic Glass. <i>Physical Review Letters</i> , 2014, 112, 135501.	7.8	52
68	Grain size and grain boundary character distribution in ultra-fine grained (ECAP) nickel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 491, 1-7.	5.6	50
69	Cryogenic-temperature-induced transition from shear to dilatational failure in metallic glasses. <i>Acta Materialia</i> , 2014, 77, 248-257.	7.9	50
70	Mechanical alloying via high-pressure torsion of the immiscible Cu <sub>50</sub> Ta <sub>50</sub> system. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 685, 19-30.	5.6	49
71	Undercooling and glass formation in Al-based alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001, 304-306, 159-165.	5.6	48
72	Large reversible magnetocaloric effect in RE <sub>2</sub> Cu <sub>2</sub> In (RE=Er and Tm) and enhanced refrigerant capacity in its composite materials. <i>Journal Physics D: Applied Physics</i> , 2016, 49, 145002.	2.8	48

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73	HRTEM observation of interfacial dislocations at faceted Al–Pb interfaces. Philosophical Magazine Letters, 2004, 84, 673-683.	1.2	46
74	Explosive boiling of a metallic glass superheated by nanosecond pulse laser ablation. Applied Physics Letters, 2015, 106, .	3.3	46
75	Study of the magnetic phase transitions and magnetocaloric effect in Dy <sub>2</sub> Cu <sub>2</sub> In compound. Journal of Alloys and Compounds, 2016, 667, 130-133.	5.5	46
76	Metamagnetic transition and magnetocaloric properties in antiferromagnetic Ho <sub>2</sub> Ni <sub>2</sub> Ga and Tm <sub>2</sub> Ni <sub>2</sub> Ga compounds. Intermetallics, 2018, 94, 17-21.	3.9	46
77	Dislocation formation during deformation-induced synthesis of nanocrystals in amorphous and partially crystalline amorphous Al <sub>88</sub> Y <sub>7</sub> Fe <sub>5</sub> alloy. Scripta Materialia, 2006, 54, 25-29.	5.2	45
78	The impact of particle morphology on the melting characteristics of matrix-embedded Pb nanocrystals. Philosophical Magazine Letters, 2003, 83, 511-523.	1.2	45
79	On the stability limits of the undercooled liquid state of Pd-Ni-P. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1997, 226-228, 434-438.	5.6	43
80	Grain boundary diffusion and grain boundary structures of a Ni-Cr-Fe- alloy: Evidences for grain boundary phase transitions. Acta Materialia, 2020, 195, 501-518.	7.9	43
81	Ligand-controlled and nanoconfinement-boosted luminescence employing Pt and Pd complexes: from color-tunable aggregation-enhanced dual emitters towards self-referenced oxygen reporters. Chemical Science, 2021, 12, 3270-3281.	7.4	43
82	Influence of Crystalline Nanoprecipitates on Shear-Band Propagation in Cu-Zr-Based Metallic Glasses. Physical Review Applied, 2016, 5, .	3.8	42
83	Strain mapping along Al–Pb interfaces. Acta Materialia, 2010, 58, 162-172.	7.9	41
84	Impact of Plastic Deformation and Shear Band Formation on the Boson Heat Capacity Peak of a Bulk Metallic Glass. Physical Review Letters, 2014, 112, 135901.	7.8	41
85	X-ray studies of nanostructured metals processed by severe plastic deformation. Zeitschrift für Kristallographie, Supplement, 2007, 2007, 339-344.	0.5	41
86	Appearance of a hypercooled liquid region for completely miscible alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1997, 226-228, 439-442.	5.6	40
87	Diffusion of Ag and Co in ultrafine-grained Cu-Ti deformed by equal channel angular pressing. Journal of Applied Physics, 2011, 110, .	2.5	40
88	Strain mapping of a triple junction in nanocrystalline Pd. Acta Materialia, 2011, 59, 7380-7387.	7.9	40
89	Shear band relaxation in a deformed bulk metallic glass. Acta Materialia, 2016, 109, 330-340.	7.9	40
90	Melt undercooling and nucleation kinetics. Current Opinion in Solid State and Materials Science, 2016, 20, 3-12.	11.5	40

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91	Tracer diffusion in single crystalline CoCrFeNi and CoCrFeMnNi high-entropy alloys: Kinetic hints towards a low-temperature phase instability of the solid-solution?. Scripta Materialia, 2020, 187, 57-62.	5.2	39
92	Glass formation in Al-rich Al $\epsilon$ -Sm alloys during solid state processing at ambient temperature. Journal of Non-Crystalline Solids, 1999, 250-252, 621-625.	3.1	38
93	The size dependence of the diamond-graphite transition. Journal of Physics Condensed Matter, 2000, 12, 5623-5627.	1.8	38
94	Nanocrystallization in Al-rich Metallic Glasses. Advanced Engineering Materials, 2003, 5, 125-130.	3.5	38
95	Transformations in supercooled Pd <sub>40.5</sub> Ni <sub>40.5</sub> P <sub>19</sub> . Scripta Materialia, 2005, 53, 1147-1151.	5.2	38
96	Microstructure and cryogenic magnetic properties in amorphousized RE <sub>57</sub> Cu <sub>25</sub> Al <sub>18</sub> (RE = Ho and Tm) ribbons. Journal of Alloys and Compounds, 2019, 770, 849-853.	5.5	38
97	Amorphization and alloy metastability in undercooled systems. Journal of Non-Crystalline Solids, 2000, 274, 271-281.	3.1	37
98	Specific heat capacity of undercooled magnetic melts. Applied Physics Letters, 1996, 68, 2953-2955.	3.3	36
99	Non-destructive functionalisation for atomic layer deposition of metal oxides on carbon nanotubes: effect of linking agents and defects. Nanoscale, 2015, 7, 3028-3034.	5.6	36
100	Magnetism and magnetocaloric effect in the ternary equiatomic REFeAl (RE = Er and Ho) compounds. Intermetallics, 2015, 65, 61-65.	3.9	35
101	Percolating network of ultrafast transport channels in severely deformed nanocrystalline metals. Journal of Applied Physics, 2009, 106, 063502.	2.5	34
102	Combined volumetric, energetic and microstructural defect analysis of ECAP-processed nickel. Acta Materialia, 2016, 103, 396-406.	7.9	34
103	Zr diffusion in BCC refractory high entropy alloys: A case of "non-sluggish" diffusion behavior. Acta Materialia, 2022, 233, 117970.	7.9	33
104	Diffusionless nature of D0 <sub>3</sub> $\rightarrow$ L1 <sub>2</sub> transition in Fe <sub>3</sub> Ga alloys. Journal of Alloys and Compounds, 2016, 656, 897-902.	5.5	31
105	Synthesis routes for controlling the microstructure in nanostructured Al <sub>88</sub> Y <sub>7</sub> Fe <sub>5</sub> alloys. Journal of Alloys and Compounds, 2007, 434-435, 252-254.	5.5	30
106	Stability aspects of bulk nanostructured metals and composites. Journal of Materials Science, 2007, 42, 1772-1781.	3.7	30
107	Particle size distribution and composition in phase-separated Cu <sub>75</sub> Co <sub>25</sub> alloys under various magnetic fields. Scripta Materialia, 2014, 82, 5-8.	5.2	30
108	Synthesis of nanostructures from amorphous and crystalline phases. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 375-377, 171-177.	5.6	29

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109	Diffusion in Ultrafine Grained Materials. Materials Science Forum, 0, 584-586, 1012-1017.	0.3	29
110	Large-scale highly ordered arrays of freestanding magnetic nanowires. Journal of Materials Chemistry, 2012, 22, 16627.	6.7	29
111	Effect of back pressure during equal-channel angular pressing on deformation-induced porosity in copper. Scripta Materialia, 2013, 68, 925-928.	5.2	29
112	The impact of elastic and plastic strain on relaxation and crystallization of Pd-Ni-P-based bulk metallic glasses. Acta Materialia, 2015, 90, 318-329.	7.9	29
113	Grain boundary engineering parameters for ultrafine grained microstructures: Proof of principles by a systematic composition variation in the Cu-Ni system. Acta Materialia, 2018, 150, 262-272.	7.9	29
114	In situ transmission electron microscopic observations of deformation and fracture processes in nanocrystalline palladium and Pd <sub>90</sub> Au <sub>10</sub> . Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 525, 102-106.	5.6	28
115	Experimental and theoretical study of tracer diffusion in a series of (CoCrFeMn) <sub>100-x</sub> Ni <sub>x</sub> alloys. Acta Materialia, 2020, 194, 236-248.	7.9	28
116	Synthesis of bulk nanostructured materials by repeated cold-rolling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 410-411, 328-331.	5.6	27
117	Shear band dilatation in amorphous alloys. Scripta Materialia, 2017, 127, 54-57.	5.2	27
118	Structure, glass-forming ability, magnetic and cryogenic magneto-caloric properties in the amorphous Ni <sub>30</sub> Co <sub>10</sub> RE <sub>60</sub> (RE=Ho and Tm) ribbons. Journal of Materials Science, 2018, 53, 9816-9822.	3.7	27
119	Phenomenon of ultra-fast tracer diffusion of Co in HCP high entropy alloys. Acta Materialia, 2020, 196, 220-230.	7.9	27
120	Considering the Role of Ion Transport in Diffusion-Dominated Thermal Conductivity. Advanced Energy Materials, 2022, 12, .	19.5	27
121	Effect of recrystallization on diffusion in ultrafine-grained Ni. Acta Materialia, 2014, 69, 314-325.	7.9	26
122	Impact of interstitial carbon on self-diffusion in CoCrFeMnNi high entropy alloys. Scripta Materialia, 2020, 188, 264-268.	5.2	26
123	The static and dynamic specific heat of undercooled metallic liquids. Journal of Non-Crystalline Solids, 2002, 307-310, 853-862.	3.1	25
124	Synthesis of Bulk Nanocrystalline Materials by Repeated Cold Rolling. Advanced Engineering Materials, 2005, 7, 11-15.	3.5	25
125	Phase equilibria and phase diagrams of nanoscaled systems. Journal of Alloys and Compounds, 2007, 434-435, 286-289.	5.5	25
126	Grain boundary diffusion of Fe in ultrafine-grained nanocluster-strengthened ferritic steel. Acta Materialia, 2011, 59, 1346-1353.	7.9	25



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127	Two-stage rejuvenation and the correlation between rejuvenation behavior and the boson heat capacity peak of a bulk metallic glass. <i>Acta Materialia</i> , 2019, 179, 308-316.	7.9	25
128	Melting entropy of Al-based quasicrystals. <i>Journal of Non-Crystalline Solids</i> , 1999, 250-252, 829-832.	3.1	24
129	Undercoolability of pure Co and Co-based alloys. <i>Journal of Non-Crystalline Solids</i> , 1999, 250-252, 271-276.	3.1	24
130	Ordered arrays of highly oriented single-crystal semiconductor nanoparticles on silicon substrates. <i>Nanotechnology</i> , 2005, 16, 1892-1898.	2.6	24
131	Ultra-Fast Atomic Transport in Severely Deformed Materials—A Pathway to Applications?. <i>Advanced Engineering Materials</i> , 2010, 12, 779-785.	3.5	24
132	Strain mapping in a deformation-twinned nanocrystalline Pd grain. <i>Acta Materialia</i> , 2010, 58, 2610-2620.	7.9	24
133	Defect-induced heat flow and shear modulus relaxation in a metallic glass. <i>Intermetallics</i> , 2014, 44, 106-109.	3.9	24
134	Nucleation barriers for the liquid-to-crystal transition in simple metals: Experiment vs. simulation. <i>European Physical Journal: Special Topics</i> , 2014, 223, 511-526.	2.6	24
135	Magnetism and magnetocaloric effect in the RE <sub>2</sub> CuSi <sub>3</sub> (RE = Dy and Ho) compounds. <i>Journal of Alloys and Compounds</i> , 2017, 702, 546-550.	5.5	24
136	Tracer diffusion in the $\beta$ phase of the CoCrFeMnNi system. <i>Acta Materialia</i> , 2021, 203, 116498.	7.9	24
137	Calorimetric and microstructural analysis of deformation induced crystallization reactions in amorphous Al <sub>88</sub> Y <sub>7</sub> Fe <sub>5</sub> alloy. <i>Journal of Alloys and Compounds</i> , 2007, 434-435, 18-21.	5.5	23
138	Nanocrystallization Reactions in Amorphous Aluminum Alloys. <i>Materials Transactions</i> , 2003, 44, 1982-1992.	1.2	22
139	Effect of annealing on percolating porosity in ultrafine-grained copper produced by equal channel angular pressing. <i>Acta Materialia</i> , 2013, 61, 5477-5486.	7.9	22
140	Relationship between the enthalpies of structural relaxation, crystallization and melting in metallic glass-forming systems. <i>Scripta Materialia</i> , 2019, 166, 6-9.	5.2	22
141	Direct measurement of the slow $\alpha$ -relaxation modes of a metallic liquid near the glass transition. <i>Applied Physics Letters</i> , 2001, 79, 1986-1988.	3.3	21
142	Wet-chemical synthesis and martensitic phase transformation of Au-Cd nanoparticles with near-equiatomic composition. <i>Journal of Alloys and Compounds</i> , 2004, 377, 232-242.	5.5	21
143	The impact of altered interface structures on the melting behaviour of embedded nanoparticles. <i>Scripta Materialia</i> , 2006, 55, 119-122.	5.2	21
144	Sub-micron strain analysis of local stick-slip motion of individual shear bands in a bulk metallic glass. <i>Applied Physics Letters</i> , 2015, 107, .	3.3	21

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145	Magnetic properties and magnetocaloric effect in the aluminide RE NiAl <sub>2</sub> (RE = Ho and Er) compounds. <i>Intermetallics</i> , 2017, 88, 61-64.	3.9	21
146	Cryogenic magnetic properties and magnetocaloric performance in double perovskite Pr <sub>2</sub> NiMnO <sub>6</sub> and Pr <sub>2</sub> CoMnO <sub>6</sub> compounds. <i>Ceramics International</i> , 2018, 44, 20762-20767.	4.8	21
147	High entropy alloy nanocomposites produced by high pressure torsion. <i>Acta Materialia</i> , 2021, 208, 116714.	7.9	21
148	Quantitative measurements of grain boundary excess volume from HAADF-STEM micrographs. <i>Acta Materialia</i> , 2016, 106, 367-373.	7.9	20
149	On the shear-affected zone of shear bands in bulk metallic glasses. <i>Journal of Alloys and Compounds</i> , 2020, 837, 155494.	5.5	20
150	Fragility, thermodynamic properties, and thermal stability of Pd-rich glass forming liquids. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004, 375-377, 417-421.	5.6	19
151	Toward the existence of ultrafast diffusion paths in Cu with a gradient microstructure: Room temperature diffusion of Ni. <i>Applied Physics Letters</i> , 2008, 93, .	3.3	19
152	Kinetics of heterogeneous nucleation on intrinsic nucleants in pure fcc transition metals. <i>Journal of Physics Condensed Matter</i> , 2009, 21, 464113.	1.8	19
153	Primary crystallization in Al-rich metallic glasses at unusually low temperatures. <i>Acta Materialia</i> , 2010, 58, 3919-3926.	7.9	19
154	Kinetic, volumetric and structural effects induced by liquid Ga penetration into ultrafine grained Al. <i>Acta Materialia</i> , 2015, 99, 196-205.	7.9	19
155	Fast scanning calorimetric study of nucleation rates and nucleation transitions of Au-Sn alloys. <i>Scripta Materialia</i> , 2017, 139, 13-16.	5.2	19
156	Solidification loops in the phase diagram of nanoscale alloy particles: from a specific example towards a general vision. <i>Journal of Materials Science</i> , 2018, 53, 2859-2879.	3.7	19
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