Yonghao Zhao

List of Publications by Year
in descending order

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187 papers	15,570 citations	28190 55 h-index	17546 121 g-index
191 all docs	191 docs citations	191 times ranked	9368 citing authors

#	Article	IF	Citations
1	Microstructures and mechanical properties of ultrafine grained 7075 Al alloy processed by ECAP and their evolutions during annealing. Acta Materialia, 2004, 52, 4589-4599.	3.8	820
2	Directly cast bulk eutectic and near-eutectic high entropy alloys with balanced strength and ductility in a wide temperature range. Acta Materialia, 2017, 124, 143-150.	3.8	747
3	Simultaneously Increasing the Ductility and Strength of Nanostructured Alloys. Advanced Materials, 2006, 18, 2280-2283.	11.1	735
4	Nanostructural hierarchy increases the strength of aluminium alloys. Nature Communications, 2010, 1, 63.	5.8	552
5	Ultralong single-wall carbon nanotubes. Nature Materials, 2004, 3, 673-676.	13.3	513
6	Microstructural origins of high strength and high ductility in an AlCoCrFeNi2.1 eutectic high-entropy alloy. Acta Materialia, 2017, 141, 59-66.	3.8	501
7	Corrosion resistance of ultra fine-grained Ti. Scripta Materialia, 2004, 51, 225-229.	2.6	425
8	Ultrastrong, Stiff, and Lightweight Carbonâ€Nanotube Fibers. Advanced Materials, 2007, 19, 4198-4201.	11.1	419
9	Deformation twinning in nanocrystalline copper at room temperature and low strain rate. Applied Physics Letters, 2004, 84, 592-594.	1.5	414
10	Optimizing the strength and ductility of fine structured 2024 Al alloy by nano-precipitation. Acta Materialia, 2007, 55, 5822-5832.	3.8	414
11	Structureâ€Đependent Electrical Properties of Carbon Nanotube Fibers. Advanced Materials, 2007, 19, 3358-3363.	11.1	393
12	Strong Carbon-Nanotube Fibers Spun from Long Carbon-Nanotube Arrays. Small, 2007, 3, 244-248.	5.2	370
13	Simultaneously Increasing the Ductility and Strength of Ultra-Fine-Grained Pure Copper. Advanced Materials, 2006, 18, 2949-2953.	11.1	359
14	Sustained Growth of Ultralong Carbon Nanotube Arrays for Fiber Spinning. Advanced Materials, 2006, 18, 3160-3163.	11.1	332
15	High Tensile Ductility and Strength in Bulk Nanostructured Nickel. Advanced Materials, 2008, 20, 3028-3033.	11.1	316
16	Tailoring stacking fault energy for high ductility and high strength in ultrafine grained Cu and its alloy. Applied Physics Letters, 2006, 89, 121906.	1.5	295
17	A promising new class of irradiation tolerant materials: Ti2ZrHfV0.5Mo0.2 high-entropy alloy. Journal of Materials Science and Technology, 2019, 35, 369-373.	5.6	266
18	Influence of stacking-fault energy on microstructural characteristics of ultrafine-grain copper and copperâ€“zinc alloys. Acta Materialia, 2008, 56, 809-820.	3.8	251

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19	Influence of specimen dimensions on the tensile behavior of ultrafine-grained Cu. Scripta Materialia, 2008, 59, 627-630.	2.6	241
20	Nucleation and growth of deformation twins in nanocrystalline aluminum. Applied Physics Letters, 2004, 85, 5049-5051.	1.5	202
21	Microstructure evolution and thermal properties in nanocrystalline Fe during mechanical attrition. Acta Materialia, 2001, 49, 365-375.	3.8	200
22	Influence of specimen dimensions and strain measurement methods on tensile stressâ€“strain curves. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 525, 68-77.	2.6	198
23	Enhanced Hydrogen Storage on Li-Dispersed Carbon Nanotubes. Journal of Physical Chemistry C, 2009, 113, 2028-2033.	1.5	196
24	Formation mechanism of wide stacking faults in nanocrystalline Al. Applied Physics Letters, 2004, 84, 3564-3566.	1.5	183
25	Influence of stacking fault energy on nanostructure formation under high pressure torsion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 410-411, 188-193.	2.6	179
26	Investigation of aluminum-based nanocomposites with ultra-high strength. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 527, 305-316.	2.6	172
27	Grain-size effect on the deformation mechanisms of nanostructured copper processed by high-pressure torsion. Journal of Applied Physics, 2004, 96, 636-640.	1.1	169
28	Tougher ultrafine grain Cu via high-angle grain boundaries and low dislocation density. Applied Physics Letters, 2008, 92, .	1.5	158
29	Determining the optimal stacking fault energy for achieving high ductility in ultrafine-grained Cuâ€“Zn alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 493, 123-129.	2.6	157
30	Strategies for Improving Tensile Ductility of Bulk Nanostructured Materials. Advanced Engineering Materials, 2010, 12, 769-778.	1.6	156
31	Critical microstructures and defects in heterostructured materials and their effects on mechanical properties. Acta Materialia, 2020, 189, 129-144.	3.8	150
32	Evolution of defect structures during cold rolling of ultrafine-grained Cu and Cuâ€“Zn alloys: Influence of stacking fault energy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 474, 342-347.	2.6	144
33	The role of stacking faults and twin boundaries in grain refinement of a Cuâ€“Zn alloy processed by high-pressure torsion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 4959-4966.	2.6	141
34	Bulk nanocrystalline high-strength magnesium alloys prepared via rotary swaging. Acta Materialia, 2020, 200, 274-286.	3.8	134
35	Influence of stacking fault energy on deformation mechanism and dislocation storage capacity in ultrafine-grained materials. Scripta Materialia, 2009, 60, 52-55.	2.6	133
36	Grain size effect on tensile properties and slip systems of pure magnesium. Acta Materialia, 2021, 206, 116604.	3.8	127

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37	Influence of stacking fault energy on the minimum grain size achieved in severe plastic deformation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 463, 22-26.	2.6	119
38	Gradient Structured Copper by Rotationally Accelerated Shot Peening. Journal of Materials Science and Technology, 2017, 33, 758-761.	5.6	105
39	Structure characteristics of nanocrystalline element selenium with different grain sizes. Physical Review B, 1997, 56, 14322-14329.	1.1	99
40	Electric field induced reversible switch in hydrogen storage based on single-layer and bilayer graphenes. Carbon, 2009, 47, 3452-3460.	5.4	93
41	Grain growth and dislocation density evolution in a nanocrystalline Niâ€“Fe alloy induced by high-pressure torsion. Scripta Materialia, 2011, 64, 327-330.	2.6	93
42	Defects in Silicene: Vacancy Clusters, Extended Line Defects and Di-adatoms. Scientific Reports, 2015, 5, 7881.	1.6	92
43	Microstrain effect on thermal properties of nanocrystalline Cu. Acta Materialia, 2002, 50, 3425-3434.	3.8	87
44	Origins and dissociation of pyramidal <cÂ+Âa> dislocations in magnesium and its alloys. Acta Materialia, 2018, 146, 265-272.	3.8	82
45	Nanocrystalline Î²-Ti alloy with high hardness, low Young's modulus and excellent in vitro biocompatibility for biomedical applications. Materials Science and Engineering C, 2013, 33, 3530-3536.	3.8	81
46	Effect of stacking fault energy on strength and ductility of nanostructured alloys: An evaluation with minimum solution hardening. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 525, 83-86.	2.6	75
47	Grain size and reversible beta-to-omega phase transformation in a Ti alloy. Scripta Materialia, 2010, 63, 613-616.	2.6	75
48	Enhancing the strain hardening and ductility of Mg-Y alloy by introducing stacking faults. Journal of Magnesium and Alloys, 2020, 8, 1221-1227.	5.5	75
49	Grain-size dependence of thermal properties of nanocrystalline elemental selenium studied by x-ray diffraction. Physical Review B, 1997, 56, 14330-14337.	1.1	73
50	A multiscale architectured CuCrZr alloy with high strength, electrical conductivity and thermal stability. Journal of Alloys and Compounds, 2018, 735, 1389-1394.	2.8	73
51	Carbonâ€Nanotube Cotton for Largeâ€Scale Fibers. Advanced Materials, 2007, 19, 2567-2570.	11.1	64
52	Enhanced strength and ductility of AZ80 Mg alloys by spray forming and ECAP. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 670, 280-291.	2.6	61
53	Compact and Dissociated Dislocations in Aluminum: Implications for Deformation. Physical Review Letters, 2005, 94, 125502.	2.9	60
54	Optimization of strength, ductility and electrical conductivity of a Cuâ€“Crâ€“Zr alloy by cold rolling and aging treatment. Vacuum, 2019, 167, 329-335.	1.6	60

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55	Enhanced mechanical properties in ultrafine grained 7075 Al alloy. Journal of Materials Research, 2005, 20, 288-291.	1.2	59
56	Microstructural evolution and mechanical properties of a Cuâ€“Zr alloy processed by high-pressure torsion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 7715-7722.	2.6	59
57	Experimental evidences of lattice distortion in Nanocrystalline Materials. Scripta Materialia, 1999, 12, 559-562.	0.5	58
58	Structure Modulation Driven by Cyclic Deformation in Nanocrystalline NiFe. Physical Review Letters, 2010, 104, 255501.	2.9	58
59	Fabrication of high-strength graphene nanosheets/Cu composites by accumulative roll bonding. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 642, 1-6.	2.6	57
60	Microstructure evolution and thermal properties in nanocrystalline Cu during mechanical attrition. Physical Review B, 2002, 66, .	1.1	55
61	High-pressure torsion-induced grain growth and detwinning in cryomilled Cu powders. Philosophical Magazine, 2010, 90, 4541-4550.	0.7	54
62	Microstructure and thermal stability of nanocrystalline Mg-Gd-Y-Zr alloy processed by high pressure torsion. Journal of Alloys and Compounds, 2017, 721, 577-585.	2.8	54
63	Wetting and crystallization at grain boundaries: Origin of aluminum-induced crystallization of amorphous silicon. Applied Physics Letters, 2006, 88, 061910.	1.5	51
64	Preparing bulk ultrafine-microstructure high-entropy alloys via direct solidification. Nanoscale, 2018, 10, 1912-1919.	2.8	51
65	Enhanced electrical conductivity and mechanical properties in thermally stable fine-grained copper wire. Communications Materials, 2021, 2, .	2.9	51
66	Strength and Ductility of Biâ€Modal Cu. Advanced Engineering Materials, 2011, 13, 865-871.	1.6	49
67	Non-uniform phase separation in ferrite of a duplex stainless steel. Acta Materialia, 2017, 140, 388-397.	3.8	49
68	Extraordinary ductility and strain hardening of Cr26Mn20Fe20Co20Ni14 TWIP high-entropy alloy by cooperative planar slipping and twinning. Materialia, 2019, 8, 100485.	1.3	49
69	Ni Nanobuffer Layer Provides Light-Weight CNT/Cu Fibers with Superior Robustness, Conductivity, and Ampacity. ACS Applied Materials & Interfaces, 2018, 10, 8197-8204.	4.0	48
70	Achieving ultra-strong Magnesiumâ€“lithium alloys by low-strain rotary swaging. Materials Research Letters, 2021, 9, 255-262.	4.1	48
71	Alloying Mg with Gd and Y: Increasing both plasticity and strength. Computational Materials Science, 2016, 115, 85-91.	1.4	46
72	Strain hardening and softening in a nanocrystalline Niâ€“Fe alloy induced by severe plastic deformation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 3398-3403.	2.6	45

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73	High Plasticity and Substantial Deformation in Nanocrystalline NiFe Alloys Under Dynamic Loading. Advanced Materials, 2009, 21, 5001-5004.	11.1	44
74	Fabrication of Al/Mg/Al Composites via Accumulative Roll Bonding and Their Mechanical Properties. Materials, 2016, 9, 951.	1.3	44
75	Effect of charge redistribution factor on stacking-fault energies of Mg-based binary alloys. Scripta Materialia, 2016, 112, 101-105.	2.6	44
76	Unique defect evolution during the plastic deformation of a metal matrix composite. Scripta Materialia, 2019, 162, 316-320.	2.6	44
77	Revealing hetero-deformation induced (HDI) stress strengthening effect in laminated Al-(TiB2+TiC)p/6063 composites prepared by accumulative roll bonding. Journal of Alloys and Compounds, 2020, 815, 152285.	2.8	44
78	Stiff, strong and ductile heterostructured aluminum composites reinforced with oriented nanoplatelets. Scripta Materialia, 2020, 189, 140-144.	2.6	44
79	Dislocation density evolution during high pressure torsion of a nanocrystalline Niâ€“Fe alloy. Applied Physics Letters, 2009, 94, .	1.5	43
80	Breaking Material Property Trade-offs via Macrodesign of Microstructure. Nano Letters, 2021, 21, 3191-3197.	4.5	41
81	Influence of grain size on the density of deformation twins in Cuâ€“30%Zn alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 3942-3948.	2.6	39
82	Enhancement of the Mechanical Properties of an Mgâ€“Znâ€“Ca Alloy Using Highâ€Pressure Torsion. Advanced Engineering Materials, 2015, 17, 1738-1741.	1.6	39
83	A reversible switch for hydrogen adsorption and desorption: electric fields. Physical Chemistry Chemical Physics, 2009, 11, 9233.	1.3	36
84	Mechanical properties and deformation mechanisms of a Ni2Co1Fe1V0.5Mo0.2 medium-entropy alloy at elevated temperatures. Acta Materialia, 2021, 213, 116982.	3.8	36
85	Enhancing strength and electrical conductivity of Cuâ€“Cr composite wire by two-stage rotary swaging and aging treatments. Composites Part B: Engineering, 2022, 231, 109567.	5.9	35
86	Characterization of carbonic anhydrase II from Chlorella vulgaris in bio-CO2 capture. Environmental Science and Pollution Research, 2012, 19, 4227-4232.	2.7	34
87	Microstructure and mechanical behaviors of Al/Cu laminated composites fabricated by accumulative roll bonding and intermediate annealing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 832, 142510.	2.6	34
88	Effect of equal-channel angular pressing and aging on corrosion behavior of ZK60 Mg alloy. Transactions of Nonferrous Metals Society of China, 2015, 25, 3909-3920.	1.7	33
89	Influence of Pressing Temperature on Microstructure Evolution and Mechanical Behavior of Ultrafineâ€Grained Cu Processed by Equalâ€Channel Angular Pressing. Advanced Engineering Materials, 2012, 14, 185-194.	1.6	32
90	Strengthening and toughening effects by strapping carbon nanotube cross-links with polymer molecules. Composites Science and Technology, 2016, 135, 123-127.	3.8	32

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91	Deformation twinning in boron carbide particles within nanostructured Al 5083/B₄C metal matrix composites. Philosophical Magazine, 2010, 90, 783-792.	0.7	30
92	Influence of microstructure on thermal stability of ultrafine-grained Cu processed by equal channel angular pressing. Journal of Materials Science, 2018, 53, 13173-13185.	1.7	30
93	The influence of oxygen and nitrogen contamination on the densification behavior of cryomilled copper powders during spark plasma sintering. Journal of Materials Science, 2011, 46, 3006-3012.	1.7	28
94	A review on mechanical properties and microstructure of ultrafine grained metals and alloys processed by rotary swaging. Journal of Alloys and Compounds, 2022, 896, 163122.	2.8	28
95	Lattice instability in the solid-state amorphization of Fe(Al) solid solutions by mechanical alloying. Physical Review B, 1997, 56, 2302-2305.	1.1	27
96	Scratch-induced deformation in fine- and ultrafine-grained bulk alumina. Scripta Materialia, 2010, 63, 528-531.	2.6	27
97	Microstructural evolution and mechanical properties of a 5052 Al alloy with gradient structures. Journal of Materials Research, 2017, 32, 4443-4451.	1.2	27
98	Oxidation of CO Catalyzed by a Cu Cluster: Influence of an Electric Field. ChemPhysChem, 2009, 10, 3295-3302.	1.0	26
99	Localized deformation via multiple twinning in a Mgâ€“Gdâ€“Yâ€“Zr alloy processed by high-pressure torsion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 677, 68-75.	2.6	26
100	Improving the combination of electrical conductivity and tensile strength of Al 1070 by rotary swaging deformation. Results in Physics, 2019, 13, 102236.	2.0	26
101	Mechanical behavior, deformation mechanism and microstructure evolutions of ultrafine-grained Al during recovery via annealing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 772, 138706.	2.6	26
102	Microstructural changes in amorphous Si/crystalline Al thin bilayer films upon annealing. Applied Physics A: Materials Science and Processing, 2004, 79, 681-690.	1.1	25
103	Mechanical Properties and Deformation Mechanisms of Heterostructured High-Entropy and Medium-Entropy Alloys: A Review. Frontiers in Materials, 2022, 8, .	1.2	25
104	Control of band structure of van der Waals heterostructures: Silicene on ultrathin silicon nanosheets. Chemical Physics Letters, 2014, 609, 161-166.	1.2	24
105	Microstructure and mechanical properties of Al-TiB2/TiC in situ composites improved via hot rolling. Transactions of Nonferrous Metals Society of China, 2017, 27, 2548-2554.	1.7	24
106	Precipitation and aging phenomena in an ultrafine grained Al-Zn alloy by severe plastic deformation. Journal of Alloys and Compounds, 2021, 851, 156931.	2.8	24
107	Thermodynamic model for solid-state amorphization of pure elements by mechanical-milling. Journal of Non-Crystalline Solids, 2006, 352, 5578-5585.	1.5	23
108	Core-shell structured titanium-nitrogen alloys with high strength, high thermal stability and good plasticity. Scientific Reports, 2017, 7, 40039.	1.6	23

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109	Effect of strain rate on the mechanical properties of a gum metal with various microstructures. Acta Materialia, 2017, 132, 193-208.	3.8	23
110	Microstructure Evolution and Mechanical Properties of Al-TiB2/TiC In Situ Aluminum-Based Composites during Accumulative Roll Bonding (ARB) Process. Materials, 2017, 10, 109.	1.3	23
111	U-R relationship prediction method for aluminum alloy circular tube free-bending process based on sensitivity analysis of material parameters. International Journal of Advanced Manufacturing Technology, 2018, 99, 1967-1977.	1.5	23
112	Key roles of particles in grain refinement and material strengthening for an aluminum matrix composite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 801, 140414.	2.6	23
113	Dynamic impact behavior and deformation mechanisms of Cr26Mn20Fe20Co20Ni14 high-entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 824, 141858.	2.6	23
114	Microstructure and corrosion behavior of Al-TiB2/TiC composites processed by hot rolling. Results in Physics, 2019, 14, 102471.	2.0	22
115	Influences of strain rate, Al concentration and grain heterogeneity on mechanical behavior of CoNiFeAlxCu1-x high-entropy alloys: a molecular dynamics simulation. Journal of Materials Research and Technology, 2021, 14, 2071-2084.	2.6	22
116	High ductility of ultrafine-grained steel via phase transformation. Journal of Materials Research, 2008, 23, 1578-1586.	1.2	21
117	Visible and infrared transparency in lead-free bulk BaTiO3and SrTiO3nanoceramics. Nanotechnology, 2010, 21, 075706.	1.3	21
118	Microstructural softening induced adiabatic shear banding in Ti-23Nb-0.7Ta-2Zr-O gum metal. Journal of Materials Science and Technology, 2020, 54, 31-39.	5.6	21
119	Microstructure evolution and mechanical properties of commercial pure titanium subjected to rotary swaging. Journal of Alloys and Compounds, 2021, 859, 158222.	2.8	21
120	Contribution of van der Waals forces to the plasticity of magnesium. Acta Materialia, 2016, 107, 127-132.	3.8	20
121	On the Heterogeneity of Local Shear Strain Induced by Highâ€Pressure Torsion. Advanced Engineering Materials, 2020, 22, 1900477.	1.6	20
122	Mechanical-milling-induced amorphization of Se: A crystallite destabilization model. Philosophical Magazine Letters, 1999, 79, 747-754.	0.5	19
123	Simultaneously improving the tensile strength and ductility of the AlNp/ Al composites by the particle's hierarchical structure with bimodal distribution and nano-network. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 770, 138519.	2.6	19
124	EXAFS study of structural characteristics of nanocrystalline selenium with different grain sizes. Physical Review B, 1999, 59, 11117-11120.	1.1	18
125	Strength scaling law, deformation kinetics and mechanisms of nanostructured Ti. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 573, 141-147.	2.6	18
126	Grain Refinement Mechanisms in Gradient Nanostructured AZ31B Mg Alloy Prepared via Rotary Swaging. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 4053-4065.	1.1	18

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127	Elemental separation in nanocrystalline Cu-Al alloys. Applied Physics Letters, 2013, 102, 231912.	1.5	17
128	Pressure induced structural transitions in nanocrystalline grained selenium. Physica B: Condensed Matter, 2002, 315, 210-214.	1.3	16
129	Mechanism of solid-state amorphization of Se induced by mechanical milling. Journal of Applied Physics, 2004, 95, 7674-7680.	1.1	16
130	Effect of grain structure on Charpy impact behavior of copper. Scientific Reports, 2017, 7, 44783.	1.6	16
131	Determination of the interdiffusion coefficient for Si/Al multilayers by Auger electron spectroscopical sputter depth profiling. Thin Solid Films, 2003, 433, 92-96.	0.8	15
132	Ductility of ultrafine-grained copper processed by equal-channel angular pressing. International Journal of Materials Research, 2009, 100, 1647-1652.	0.1	14
133	Strain softening in nanocrystalline Niâ€“Fe alloy induced by large HPT revolutions. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 4807-4811.	2.6	14
134	Reactive synthesis of hexagonal Ti5P3.16 crystals and their heterogenous nucleating mechanism on primary Si. Journal of Alloys and Compounds, 2019, 777, 8-17.	2.8	14
135	Mechanical Properties and Microstructures of Commercialâ€Purity Aluminum Processed by Rotational Accelerated Shot Peening Plus Cold Rolling. Advanced Engineering Materials, 2020, 22, 1900478.	1.6	14
136	Achieving maximum strength-ductility combination in fine-grained Cu-Zn alloy via detwinning and twinning deformation mechanisms. Journal of Alloys and Compounds, 2022, 906, 164401.	2.8	14
137	Annealing behaviour of ultrafine-grained aluminium. Philosophical Magazine, 2014, 94, 476-491.	0.7	13
138	Improving the high-temperature ductility of Al composites by tailoring the nanoparticle network. Materialia, 2020, 9, 100523.	1.3	13
139	Microstructure and Mechanical Properties of Ultrafine-Grained Copper by Accumulative Roll Bonding and Subsequent Annealing. Materials, 2020, 13, 5171.	1.3	13
140	Effects of nanostructural hierarchy on the hardness and thermal stability of an austenitic stainless steel. Journal of Materials Research and Technology, 2021, 12, 376-384.	2.6	13
141	Interaction of amorphous Si and crystalline Al thin films during low-temperature annealing in vacuum. Thin Solid Films, 2003, 433, 82-87.	0.8	12
142	EXAFS study of mechanical-milling-induced solid-state amorphization of Se. Journal of Non-Crystalline Solids, 2004, 333, 246-251.	1.5	12
143	SnO2 nanobelts and nanocrystals: Synthesis, characterization and optical properties. Journal of Crystal Growth, 2008, 310, 4226-4232.	0.7	12
144	Size-Dependent Deformation and Adsorption Behavior of Carbon Monoxide, Hydrogen, and Carbon on Pyramidal Copper Clusters. Journal of Physical Chemistry C, 2008, 112, 7672-7677.	1.5	12

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145	Highly Sensitive CO Gas Sensor from Defective Graphene: Role of van der Waals Interactions. Journal of Nanomaterials, 2015, 2015, 1-7.	1.5	12
146	Nano-Gradient Materials Prepared by Rotary Swaging. Nanomaterials, 2021, 11, 2223.	1.9	12
147	X-ray diffraction analysis of the anisotropic nature of the structural imperfections in a sputter-deposited TiO2/Ti3Al bilayer. Thin Solid Films, 2006, 514, 110-119.	0.8	11
148	Grain size effect on deformation twin thickness in a nanocrystalline metal with low stacking-fault energy. Journal of Materials Research, 2019, 34, 2398-2405.	1.2	11
149	Revealing triboâ€“oxidation mechanisms of the copperâ€“WC system under high tribological loading. Scripta Materialia, 2021, 204, 114142.	2.6	11
150	Twin boundary-dislocation interactions in nanocrystalline Cu-30% Zn alloys prepared by high pressure torsion. Journal of Materials Research and Technology, 2020, 9, 11958-11967.	2.6	10
151	Chemistry of grain boundary environments in nanocrystalline Al 7075. Journal of Alloys and Compounds, 2010, 495, 391-393.	2.8	9
152	Effective Surface Nano-Crystallization of Ni2FeCoMo0.5V0.2 Medium Entropy Alloy by Rotationally Accelerated Shot Peening (RASP). Entropy, 2020, 22, 1074.	1.1	9
153	In situ thermomechanical processing to avoid grain boundary precipitation and strength-ductility loss of age hardening alloys. Transactions of Nonferrous Metals Society of China, 2021, 31, 1205-1216.	1.7	9
154	The influence of cooling rate on the microstructures and mechanical properties in ultrafine-grained aluminum processed by hot rolling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 5287-5294.	2.6	8
155	The mechanical properties of multi-scale metallic materials. , 2011, , 375-429.		8
156	Microstructure and mechanical property evolutions of bulk core-shell structured Ti-N alloys during annealing. Journal of Alloys and Compounds, 2017, 710, 418-423.	2.8	8
157	Charpy impact behavior and deformation mechanisms of Cr26Mn20Fe20Co20Ni14 high-entropy alloy at ambient and cryogenic temperatures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 837, 142735.	2.6	8
158	Study on the evolution processes from TiCx to TiB2 induced by B in Al melt. Materials Characterization, 2015, 100, 68-73.	1.9	7
159	The mechanism for the serrated flow induced by Suzuki segregation in a Ni alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 820, 141575.	2.6	7
160	Improving ductility in ultrafine grained nickel with porosity and segregation via deformation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 1744-1750.	2.6	6
161	Modeling of Stacking Fault Energy in Hexagonal-Close-Packed Metals. Advances in Materials Science and Engineering, 2015, 2015, 1-8.	1.0	6
162	Deformation mechanisms and plasticity of ultrafine-grained Al under complex stress state revealed by digital image correlation technique. Nanotechnology Reviews, 2021, 10, 73-86.	2.6	6

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163	AES depth profiling of thermally treated Al/Si thin-film structures. Vacuum, 2003, 71, 11-17.	1.6	5
164	Revealing grain coarsening and detwinning in bimodal Cu under tension. Reviews on Advanced Materials Science, 2021, 60, 15-24.	1.4	5
165	Novel as-cast NiAlCoFeNb dual-phase high-entropy alloys with high hardness. Materials Letters, 2022, 324, 132676.	1.3	5
166	Microstructure and mechanical properties of ultrafinegrained Mg-Zn-Ca alloy. IOP Conference Series: Materials Science and Engineering, 2014, 63, 012142.	0.3	4
167	Revealing twinning from triple lines in nanocrystalline copper via molecular dynamics simulation and experimental observation. Journal of Materials Research and Technology, 2021, 11, 342-350.	2.6	4
168	Significance of surface layer integrity for sustaining the ductility of gradient-structured nickel. Materials Letters, 2021, 303, 130491.	1.3	4
169	Preface to the Special Issue on Ultrafine Grained Materials. Journal of Materials Science, 2010, 45, 4543-4544.	1.7	3
170	Plasticity and Deformation Mechanisms of Ultrafine-Grained Ti in Necking Region Revealed by Digital Image Correlation Technique. Nanomaterials, 2021, 11, 574.	1.9	3
171	Structures and Mechanical Properties of ECAP Processed 7075 Al Alloy upon Natural Aging and T651 Treatment. Materials Research Society Symposia Proceedings, 2004, 821, 343.	0.1	2
172	Strategies for Improving Ductility of Cryomilled Nanostructured Titanium. Materials Science Forum, 0, 633-634, 459-469.	0.3	2
173	Enzyme kinetic characterization of microbe-produced urease for microbe-driven calcite mineralization. Reaction Kinetics, Mechanisms and Catalysis, 2013, 108, 51-57.	0.8	2
174	Computational Modeling of Sand Cementation by Bio-Mineral CaCO₃. Materials Science Forum, 0, 749, 535-539.	0.3	2
175	Modeling the deformation behavior of nanocrystalline alloy with hierarchical microstructures. Journal of Nanoparticle Research, 2016, 18, 1.	0.8	2
176	Ternary relation among stacking fault energy, grain size and twin nucleation size in nanocrystalline and ultrafine grained CuAl alloys. Journal of Alloys and Compounds, 2022, 896, 162953.	2.8	2
177	Effect of triple junctions on deformation twinning in a nanostructured Cuâ€“Zn alloy: A statistical study using transmission Kikuchi diffraction. Beilstein Journal of Nanotechnology, 2016, 7, 1501-1506.	1.5	1
178	Effect of Cold and Warm Rolling on the Particle Distribution and Tensile Properties of Heterogeneous Structured AlN/Al Nanocomposites. Materials, 2020, 13, 4001.	1.3	1
179	Dynamic strain ageing induced by Suzuki segregation in a Ni alloy. Materials Letters, 2021, 296, 129879.	1.3	1
180	Enhanced Strength and Ductility of AZ80 Magnesium Alloys by Spray Forming and ECAP Techniques. KnE Materials Science, 2016, 1, 168.	0.1	1

#	Article	IF	Citations
181	Initial Interaction of Crystalline Al/Amorphous Si Bilayer during Annealing. Materials Research Society Symposia Proceedings, 2004, 808, 173.	0.1	0
182	Unconfined Twist: a Simple Method to Prepare Ultrafine Grained Metallic Materials. Materials Research Society Symposia Proceedings, 2004, 821, 234.	0.1	0
183	Effect of Ppm Level Dopant on Ductility of Ultrafine Grained Gold Wires. Materials Science Forum, 2009, 633-634, 449-457.	0.3	0
184	Pores and Microanalysis of Microbe-Inspired Nano-CaCO₃Cementing Sand Columns. Journal of Nanomaterials, 2013, 2013, 1-5.	1.5	0
185	Effect of Thermal Aging on Microstructural Evolution in Ferrite of Duplex Stainless Steel in Nuclear Power Plant Applications. Materials Science Forum, 0, 898, 818-825.	0.3	0
186	Revealing intrinsic lattice expansion and grain boundary excess volume of nanocrystalline Se prepared via various methods. Materialia, 2020, 9, 100535.	1.3	0
187	Effect of High Pressure Torsion on corrosion behavior of High Entropy Alloy in alkaline solution. , 2017, , .		0