

# Yonghao Zhao

## List of Publications by Citations

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#	Paper	IF	Citations
184	Microstructures and mechanical properties of ultrafine grained 7075 Al alloy processed by ECAP and their evolutions during annealing. <i>Acta Materialia</i> , <b>2004</b> , 52, 4589-4599	8.4	680
183	Simultaneously Increasing the Ductility and Strength of Nanostructured Alloys. <i>Advanced Materials</i> , <b>2006</b> , 18, 2280-2283	24	617
182	Directly cast bulk eutectic and near-eutectic high entropy alloys with balanced strength and ductility in a wide temperature range. <i>Acta Materialia</i> , <b>2017</b> , 124, 143-150	8.4	483
181	Nanostructural hierarchy increases the strength of aluminium alloys. <i>Nature Communications</i> , <b>2010</b> , 1, 63	17.4	452
180	Ultralong single-wall carbon nanotubes. <i>Nature Materials</i> , <b>2004</b> , 3, 673-6	27	441
179	Ultrastrong, Stiff, and Lightweight Carbon-Nanotube Fibers. <i>Advanced Materials</i> , <b>2007</b> , 19, 4198-4201	24	379
178	Deformation twinning in nanocrystalline copper at room temperature and low strain rate. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 592-594	3.4	364
177	Corrosion resistance of ultra fine-grained Ti. <i>Scripta Materialia</i> , <b>2004</b> , 51, 225-229	5.6	351
176	Structure-Dependent Electrical Properties of Carbon Nanotube Fibers. <i>Advanced Materials</i> , <b>2007</b> , 19, 3358-3363	24	338
175	Optimizing the strength and ductility of fine structured 2024 Al alloy by nano-precipitation. <i>Acta Materialia</i> , <b>2007</b> , 55, 5822-5832	8.4	335
174	Strong carbon-nanotube fibers spun from long carbon-nanotube arrays. <i>Small</i> , <b>2007</b> , 3, 244-8	11	330
173	Sustained Growth of Ultralong Carbon Nanotube Arrays for Fiber Spinning. <i>Advanced Materials</i> , <b>2006</b> , 18, 3160-3163	24	307
172	Simultaneously Increasing the Ductility and Strength of Ultra-Fine-Grained Pure Copper. <i>Advanced Materials</i> , <b>2006</b> , 18, 2949-2953	24	301
171	High Tensile Ductility and Strength in Bulk Nanostructured Nickel. <i>Advanced Materials</i> , <b>2008</b> , 20, 3028-3033	24	267
170	Microstructural origins of high strength and high ductility in an AlCoCrFeNi <sub>2.1</sub> eutectic high-entropy alloy. <i>Acta Materialia</i> , <b>2017</b> , 141, 59-66	8.4	266
169	Tailoring stacking fault energy for high ductility and high strength in ultrafine grained Cu and its alloy. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 121906	3.4	258
168	Influence of stacking-fault energy on microstructural characteristics of ultrafine-grain copper and copper-zinc alloys. <i>Acta Materialia</i> , <b>2008</b> , 56, 809-820	8.4	219

167	Influence of specimen dimensions on the tensile behavior of ultrafine-grained Cu. <i>Scripta Materialia</i> , <b>2008</b> , 59, 627-630	5.6	199
166	Microstructure evolution and thermal properties in nanocrystalline Fe during mechanical attrition. <i>Acta Materialia</i> , <b>2001</b> , 49, 365-375	8.4	180
165	Enhanced Hydrogen Storage on Li-Dispersed Carbon Nanotubes. <i>Journal of Physical Chemistry C</i> , <b>2009</b> , 113, 2028-2033	3.8	175
164	Nucleation and growth of deformation twins in nanocrystalline aluminum. <i>Applied Physics Letters</i> , <b>2004</b> , 85, 5049-5051	3.4	174
163	Influence of specimen dimensions and strain measurement methods on tensile stress-strain curves. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2009</b> , 525, 68-77	5.3	167
162	Influence of stacking fault energy on nanostructure formation under high pressure torsion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2005</b> , 410-411, 188-193	5.3	156
161	Formation mechanism of wide stacking faults in nanocrystalline Al. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 3564-3566	5.2	152
160	Grain-size effect on the deformation mechanisms of nanostructured copper processed by high-pressure torsion. <i>Journal of Applied Physics</i> , <b>2004</b> , 96, 636-640	2.5	149
159	Investigation of aluminum-based nanocomposites with ultra-high strength. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2009</b> , 527, 305-316	5.3	146
158	Determining the optimal stacking fault energy for achieving high ductility in ultrafine-grained Cu-Zn alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2008</b> , 493, 123-129	5.3	146
157	A promising new class of irradiation tolerant materials: Ti2ZrHFV0.5Mo0.2 high-entropy alloy. <i>Journal of Materials Science and Technology</i> , <b>2019</b> , 35, 369-373	9.1	145
156	Tougher ultrafine grain Cu via high-angle grain boundaries and low dislocation density. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 081903	3.4	135
155	Strategies for Improving Tensile Ductility of Bulk Nanostructured Materials. <i>Advanced Engineering Materials</i> , <b>2010</b> , 12, 769-778	3.5	128
154	Evolution of defect structures during cold rolling of ultrafine-grained Cu and Cu-Zn alloys: Influence of stacking fault energy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2008</b> , 474, 342-347	5.3	124
153	Influence of stacking fault energy on deformation mechanism and dislocation storage capacity in ultrafine-grained materials. <i>Scripta Materialia</i> , <b>2009</b> , 60, 52-55	5.6	116
152	The role of stacking faults and twin boundaries in grain refinement of a Cu-Zn alloy processed by high-pressure torsion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2010</b> , 527, 4959-4966	5.3	111
151	Influence of stacking fault energy on the minimum grain size achieved in severe plastic deformation. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2007</b> , 463, 22-26	5.3	101
150	Structure characteristics of nanocrystalline element selenium with different grain sizes. <i>Physical Review B</i> , <b>1997</b> , 56, 14322-14329	3.3	88

149	Electric field induced reversible switch in hydrogen storage based on single-layer and bilayer graphenes. <i>Carbon</i> , <b>2009</b> , 47, 3452-3460	10.4	87
148	Grain growth and dislocation density evolution in a nanocrystalline NiBe alloy induced by high-pressure torsion. <i>Scripta Materialia</i> , <b>2011</b> , 64, 327-330	5.6	79
147	Microstrain effect on thermal properties of nanocrystalline Cu. <i>Acta Materialia</i> , <b>2002</b> , 50, 3425-3434	8.4	75
146	Defects in silicene: vacancy clusters, extended line defects, and Di-adatoms. <i>Scientific Reports</i> , <b>2015</b> , 5, 7881	4.9	74
145	Gradient Structured Copper by Rotationally Accelerated Shot Peening. <i>Journal of Materials Science and Technology</i> , <b>2017</b> , 33, 758-761	9.1	71
144	Effect of stacking fault energy on strength and ductility of nanostructured alloys: An evaluation with minimum solution hardening. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2009</b> , 525, 83-86	5.3	66
143	Grain size and reversible beta-to-omega phase transformation in a Ti alloy. <i>Scripta Materialia</i> , <b>2010</b> , 63, 613-616	5.6	66
142	Nanocrystalline Ti alloy with high hardness, low Young's modulus and excellent in vitro biocompatibility for biomedical applications. <i>Materials Science and Engineering C</i> , <b>2013</b> , 33, 3530-6	8.3	65
141	Grain-size dependence of thermal properties of nanocrystalline elemental selenium studied by x-ray diffraction. <i>Physical Review B</i> , <b>1997</b> , 56, 14330-14337	3.3	65
140	Critical microstructures and defects in heterostructured materials and their effects on mechanical properties. <i>Acta Materialia</i> , <b>2020</b> , 189, 129-144	8.4	63
139	Carbon-Nanotube Cotton for Large-Scale Fibers. <i>Advanced Materials</i> , <b>2007</b> , 19, 2567-2570	24	61
138	Microstructural evolution and mechanical properties of a CuZr alloy processed by high-pressure torsion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2011</b> , 528, 7715-7722	5.3	58
137	Experimental evidences of lattice distortion in Nanocrystalline Materials. <i>Scripta Materialia</i> , <b>1999</b> , 12, 559-562		55
136	Structure modulation driven by cyclic deformation in nanocrystalline NiFe. <i>Physical Review Letters</i> , <b>2010</b> , 104, 255501	7.4	53
135	Compact and dissociated dislocations in aluminum: implications for deformation. <i>Physical Review Letters</i> , <b>2005</b> , 94, 125502	7.4	52
134	Origins and dissociation of pyramidal dislocations in magnesium and its alloys. <i>Acta Materialia</i> , <b>2018</b> , 146, 265-272	8.4	50
133	High-pressure torsion-induced grain growth and detwinning in cryomilled Cu powders. <i>Philosophical Magazine</i> , <b>2010</b> , 90, 4541-4550	1.6	50
132	Enhanced mechanical properties in ultrafine grained 7075 Al alloy. <i>Journal of Materials Research</i> , <b>2005</b> , 20, 288-291	2.5	48

131	Microstructure evolution and thermal properties in nanocrystalline Cu during mechanical attrition. <i>Physical Review B</i> , <b>2002</b> , 66,	3-3	48
130	Wetting and crystallization at grain boundaries: Origin of aluminum-induced crystallization of amorphous silicon. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 061910	3-4	46
129	Bulk nanocrystalline high-strength magnesium alloys prepared via rotary swaging. <i>Acta Materialia</i> , <b>2020</b> , 200, 274-286	8-4	43
128	Fabrication of high-strength graphene nanosheets/Cu composites by accumulative roll bonding. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2015</b> , 642, 1-6	5-3	41
127	High Plasticity and Substantial Deformation in Nanocrystalline NiFe Alloys Under Dynamic Loading. <i>Advanced Materials</i> , <b>2009</b> , 21, 5001-5004	24	41
126	Strain hardening and softening in a nanocrystalline NiFe alloy induced by severe plastic deformation. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2011</b> , 528, 3398-3403	5-3	41
125	Enhanced strength and ductility of AZ80 Mg alloys by spray forming and ECAP. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2016</b> , 670, 280-291	5-3	40
124	Microstructure and thermal stability of nanocrystalline Mg-Gd-Y-Zr alloy processed by high pressure torsion. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 721, 577-585	5-7	38
123	Effect of charge redistribution factor on stacking-fault energies of Mg-based binary alloys. <i>Scripta Materialia</i> , <b>2016</b> , 112, 101-105	5-6	38
122	A multiscale architected CuCrZr alloy with high strength, electrical conductivity and thermal stability. <i>Journal of Alloys and Compounds</i> , <b>2018</b> , 735, 1389-1394	5-7	36
121	Dislocation density evolution during high pressure torsion of a nanocrystalline NiFe alloy. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 091911	3-4	35
120	Preparing bulk ultrafine-microstructure high-entropy alloys via direct solidification. <i>Nanoscale</i> , <b>2018</b> , 10, 1912-1919	7-7	33
119	Influence of grain size on the density of deformation twins in Cu30%Zn alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2010</b> , 527, 3942-3948	5-3	33
118	Strength and Ductility of Bi-Modal Cu. <i>Advanced Engineering Materials</i> , <b>2011</b> , 13, 865-871	3-5	32
117	A reversible switch for hydrogen adsorption and desorption: electric fields. <i>Physical Chemistry Chemical Physics</i> , <b>2009</b> , 11, 9233-40	3-6	32
116	Non-uniform phase separation in ferrite of a duplex stainless steel. <i>Acta Materialia</i> , <b>2017</b> , 140, 388-397	8-4	31
115	Unique defect evolution during the plastic deformation of a metal matrix composite. <i>Scripta Materialia</i> , <b>2019</b> , 162, 316-320	5-6	31
114	Ni Nanobuffer Layer Provides Light-Weight CNT/Cu Fibers with Superior Robustness, Conductivity, and Ampacity. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 8197-8204	9-5	30

113	Optimization of strength, ductility and electrical conductivity of a Cu <sub>90</sub> Zr <sub>10</sub> alloy by cold rolling and aging treatment. <i>Vacuum</i> , <b>2019</b> , 167, 329-335	3.7	30
112	Enhancement of the Mechanical Properties of an Mg <sub>90</sub> Zn <sub>10</sub> Alloy Using High-Pressure Torsion. <i>Advanced Engineering Materials</i> , <b>2015</b> , 17, 1738-1741	3.5	29
111	Alloying Mg with Gd and Y: Increasing both plasticity and strength. <i>Computational Materials Science</i> , <b>2016</b> , 115, 85-91	3.2	28
110	Grain size effect on tensile properties and slip systems of pure magnesium. <i>Acta Materialia</i> , <b>2021</b> , 206, 116604	8.4	28
109	Extraordinary ductility and strain hardening of Cr <sub>26</sub> Mn <sub>20</sub> Fe <sub>20</sub> Co <sub>20</sub> Ni <sub>14</sub> TWIP high-entropy alloy by cooperative planar slipping and twinning. <i>Materialia</i> , <b>2019</b> , 8, 100485	3.2	27
108	Characterization of carbonic anhydrase II from <i>Chlorella vulgaris</i> in bio-CO <sub>2</sub> capture. <i>Environmental Science and Pollution Research</i> , <b>2012</b> , 19, 4227-32	5.1	26
107	Enhancing the strain hardening and ductility of Mg-Y alloy by introducing stacking faults. <i>Journal of Magnesium and Alloys</i> , <b>2020</b> , 8, 1221-1227	8.8	26
106	Strengthening and toughening effects by strapping carbon nanotube cross-links with polymer molecules. <i>Composites Science and Technology</i> , <b>2016</b> , 135, 123-127	8.6	25
105	Deformation twinning in boron carbide particles within nanostructured Al 5083/B <sub>4</sub> C metal matrix composites. <i>Philosophical Magazine</i> , <b>2010</b> , 90, 783-792	1.6	24
104	Oxidation of CO catalyzed by a Cu cluster: influence of an electric field. <i>ChemPhysChem</i> , <b>2009</b> , 10, 3295-302	3.02	24
103	The influence of oxygen and nitrogen contamination on the densification behavior of cryomilled copper powders during spark plasma sintering. <i>Journal of Materials Science</i> , <b>2011</b> , 46, 3006-3012	4.3	23
102	Microstructural changes in amorphous Si/crystalline Al thin bilayer films upon annealing. <i>Applied Physics A: Materials Science and Processing</i> , <b>2004</b> , 79, 681-690	2.6	23
101	Influence of microstructure on thermal stability of ultrafine-grained Cu processed by equal channel angular pressing. <i>Journal of Materials Science</i> , <b>2018</b> , 53, 13173-13185	4.3	22
100	Control of band structure of van der Waals heterostructures: Silicene on ultrathin silicon nanosheets. <i>Chemical Physics Letters</i> , <b>2014</b> , 609, 161-166	2.5	22
99	Scratch-induced deformation in fine- and ultrafine-grained bulk alumina. <i>Scripta Materialia</i> , <b>2010</b> , 63, 528-531	5.6	22
98	Lattice instability in the solid-state amorphization of Fe(Al) solid solutions by mechanical alloying. <i>Physical Review B</i> , <b>1997</b> , 56, 2302-2305	3.3	22
97	Influence of Pressing Temperature on Microstructure Evolution and Mechanical Behavior of Ultrafine-Grained Cu Processed by Equal-Channel Angular Pressing. <i>Advanced Engineering Materials</i> , <b>2012</b> , 14, 185-194	3.5	21
96	Fabrication of Al/Mg/Al Composites via Accumulative Roll Bonding and Their Mechanical Properties. <i>Materials</i> , <b>2016</b> , 9,	3.5	21

95	Localized deformation via multiple twinning in a Mg <sub>97</sub> Zn <sub>3</sub> alloy processed by high-pressure torsion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2016</b> , 677, 68-75	5.3	20
94	Microstructural evolution and mechanical properties of a 5052 Al alloy with gradient structures. <i>Journal of Materials Research</i> , <b>2017</b> , 32, 4443-4451	2.5	20
93	Effect of equal-channel angular pressing and aging on corrosion behavior of ZK60 Mg alloy. <i>Transactions of Nonferrous Metals Society of China</i> , <b>2015</b> , 25, 3909-3920	3.3	20
92	Thermodynamic model for solid-state amorphization of pure elements by mechanical-milling. <i>Journal of Non-Crystalline Solids</i> , <b>2006</b> , 352, 5578-5585	3.9	20
91	Core-shell structured titanium-nitrogen alloys with high strength, high thermal stability and good plasticity. <i>Scientific Reports</i> , <b>2017</b> , 7, 40039	4.9	19
90	Microstructure Evolution and Mechanical Properties of Al-TiB <sub>2</sub> /TiC In Situ Aluminum-Based Composites during Accumulative Roll Bonding (ARB) Process. <i>Materials</i> , <b>2017</b> , 10,	3.5	19
89	High ductility of ultrafine-grained steel via phase transformation. <i>Journal of Materials Research</i> , <b>2008</b> , 23, 1578-1586	2.5	19
88	Contribution of van der Waals forces to the plasticity of magnesium. <i>Acta Materialia</i> , <b>2016</b> , 107, 127-1328.4	18	
87	Microstructure and mechanical properties of Al-TiB <sub>2</sub> /TiC in situ composites improved via hot rolling. <i>Transactions of Nonferrous Metals Society of China</i> , <b>2017</b> , 27, 2548-2554	3.3	18
86	Visible and infrared transparency in lead-free bulk BaTiO <sub>3</sub> and SrTiO <sub>3</sub> nanoceramics. <i>Nanotechnology</i> , <b>2010</b> , 21, 75706	3.4	18
85	EXAFS study of structural characteristics of nanocrystalline selenium with different grain sizes. <i>Physical Review B</i> , <b>1999</b> , 59, 11117-11120	3.3	18
84	Mechanical-milling-induced amorphization of Se: A crystallite destabilization model. <i>Philosophical Magazine Letters</i> , <b>1999</b> , 79, 747-754	1	17
83	Effect of strain rate on the mechanical properties of a gum metal with various microstructures. <i>Acta Materialia</i> , <b>2017</b> , 132, 193-208	8.4	16
82	Elemental separation in nanocrystalline Cu-Al alloys. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 231912	3.4	16
81	Strength scaling law, deformation kinetics and mechanisms of nanostructured Ti. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2013</b> , 573, 141-147	5.3	16
80	Mechanism of solid-state amorphization of Se induced by mechanical milling. <i>Journal of Applied Physics</i> , <b>2004</b> , 95, 7674-7680	2.5	16
79	Revealing hetero-deformation induced (HDI) stress strengthening effect in laminated Al-(TiB <sub>2</sub> +TiC)p/6063 composites prepared by accumulative roll bonding. <i>Journal of Alloys and Compounds</i> , <b>2020</b> , 815, 152285	5.7	16
78	Pressure induced structural transitions in nanocrystalline grained selenium. <i>Physica B: Condensed Matter</i> , <b>2002</b> , 315, 210-214	2.8	15



77	Enhanced electrical conductivity and mechanical properties in thermally stable fine-grained copper wire. <i>Communications Materials</i> , <b>2021</b> , 2,	6	15
76	On the Heterogeneity of Local Shear Strain Induced by High-Pressure Torsion. <i>Advanced Engineering Materials</i> , <b>2020</b> , 22, 1900477	3.5	15
75	Microstructure and corrosion behavior of Al-TiB <sub>2</sub> /TiC composites processed by hot rolling. <i>Results in Physics</i> , <b>2019</b> , 14, 102471	3.7	14
74	Ductility of ultrafine-grained copper processed by equal-channel angular pressing. <i>International Journal of Materials Research</i> , <b>2009</b> , 100, 1647-1652	0.5	14
73	Strain softening in nanocrystalline NiBe alloy induced by large HPT revolutions. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2011</b> , 528, 4807-4817	5.3	14
72	Determination of the interdiffusion coefficient for Si/Al multilayers by Auger electron spectroscopical sputter depth profiling. <i>Thin Solid Films</i> , <b>2003</b> , 433, 92-96	2.2	13
71	Stiff, strong and ductile heterostructured aluminum composites reinforced with oriented nanoplatelets. <i>Scripta Materialia</i> , <b>2020</b> , 189, 140-144	5.6	13
70	Achieving ultra-strong Magnesium-Lithium alloys by low-strain rotary swaging. <i>Materials Research Letters</i> , <b>2021</b> , 9, 255-262	7.4	13
69	Microstructural softening induced adiabatic shear banding in Ti-23Nb-0.7Ta-2Zr-O gum metal. <i>Journal of Materials Science and Technology</i> , <b>2020</b> , 54, 31-39	9.1	12
68	Size-Dependent Deformation and Adsorption Behavior of Carbon Monoxide, Hydrogen, and Carbon on Pyramidal Copper Clusters. <i>Journal of Physical Chemistry C</i> , <b>2008</b> , 112, 7672-7677	3.8	12
67	SnO <sub>2</sub> nanobelts and nanocrystals: Synthesis, characterization and optical properties. <i>Journal of Crystal Growth</i> , <b>2008</b> , 310, 4226-4232	1.6	12
66	Interaction of amorphous Si and crystalline Al thin films during low-temperature annealing in vacuum. <i>Thin Solid Films</i> , <b>2003</b> , 433, 82-87	2.2	12
65	Reactive synthesis of hexagonal Ti <sub>5</sub> P <sub>3</sub> 16 crystals and their heterogenous nucleating mechanism on primary Si. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 777, 8-17	5.7	12
64	Improving the combination of electrical conductivity and tensile strength of Al 1070 by rotary swaging deformation. <i>Results in Physics</i> , <b>2019</b> , 13, 102236	3.7	11
63	X-ray diffraction analysis of the anisotropic nature of the structural imperfections in a sputter-deposited TiO <sub>2</sub> /Ti <sub>3</sub> Al bilayer. <i>Thin Solid Films</i> , <b>2006</b> , 514, 110-119	2.2	11
62	Effect of grain structure on Charpy impact behavior of copper. <i>Scientific Reports</i> , <b>2017</b> , 7, 44783	4.9	10
61	Highly Sensitive CO Gas Sensor from Defective Graphene: Role of van der Waals Interactions. <i>Journal of Nanomaterials</i> , <b>2015</b> , 2015, 1-7	3.2	10
60	Mechanical behavior, deformation mechanism and microstructure evolutions of ultrafine-grained Al during recovery via annealing. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2020</b> , 772, 138706	5.3	10



59	Annealing behaviour of ultrafine-grained aluminium. <i>Philosophical Magazine</i> , <b>2014</b> , 94, 476-491	1.6	9
58	Chemistry of grain boundary environments in nanocrystalline Al 7075. <i>Journal of Alloys and Compounds</i> , <b>2010</b> , 495, 391-393	5.7	9
57	Simultaneously improving the tensile strength and ductility of the AlNp/ Al composites by the particle hierarchical structure with bimodal distribution and nano-network. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2020</b> , 770, 138519	5.3	9
56	Key roles of particles in grain refinement and material strengthening for an aluminum matrix composite. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2021</b> , 801, 140414	5.3	9
55	Breaking Material Property Trade-offs via Macrodesign of Microstructure. <i>Nano Letters</i> , <b>2021</b> , 21, 3191-3197	3.9	9
54	U-R relationship prediction method for aluminum alloy circular tube free-bending process based on sensitivity analysis of material parameters. <i>International Journal of Advanced Manufacturing Technology</i> , <b>2018</b> , 99, 1967-1977	3.2	9
53	Microstructure and mechanical property evolutions of bulk core-shell structured Ti-N alloys during annealing. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 710, 418-423	5.7	8
52	Grain size effect on deformation twin thickness in a nanocrystalline metal with low stacking-fault energy. <i>Journal of Materials Research</i> , <b>2019</b> , 34, 2398-2405	2.5	7
51	Effects of nanostructural hierarchy on the hardness and thermal stability of an austenitic stainless steel. <i>Journal of Materials Research and Technology</i> , <b>2021</b> , 12, 376-384	5.5	7
50	Mechanical properties and deformation mechanisms of a Ni <sub>2</sub> Co <sub>1</sub> Fe <sub>1</sub> V <sub>0.5</sub> Mo <sub>0.2</sub> medium-entropy alloy at elevated temperatures. <i>Acta Materialia</i> , <b>2021</b> , 213, 116982	8.4	7
49	Precipitation and aging phenomena in an ultrafine grained Al-Zn alloy by severe plastic deformation. <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 851, 156931	5.7	7
48	Grain Refinement Mechanisms in Gradient Nanostructured AZ31B Mg Alloy Prepared via Rotary Swaging. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2021</b> , 52, 4053-4065	2.3	7
47	Study on the evolution processes from TiCx to TiB <sub>2</sub> induced by B in Al melt. <i>Materials Characterization</i> , <b>2015</b> , 100, 68-73	3.9	6
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41	AES depth profiling of thermally treated Al/Si thin-film structures. <i>Vacuum</i> , <b>2003</b> , 71, 11-17	3.7	5
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38	Microstructure evolution and mechanical properties of commercial pure titanium subjected to rotary swaging. <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 859, 158222	5.7	5
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33	Twin boundary-dislocation interactions in nanocrystalline Cu-30% Zn alloys prepared by high pressure torsion. <i>Journal of Materials Research and Technology</i> , <b>2020</b> , 9, 11958-11967	5.5	4
32	Modeling of Stacking Fault Energy in Hexagonal-Close-Packed Metals. <i>Advances in Materials Science and Engineering</i> , <b>2015</b> , 2015, 1-8	1.5	3
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