Megumi Kawasaki

List of Publications by Citations

209 papers	5,845 citations	45 h-index	66 g-index
218 ext. papers	6,534 ext. citations	3.8 avg, IF	6.3 L-index

#	Paper	IF	Citations
209	Microstructural evolution in high purity aluminum processed by ECAP. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2009**, 524, 143-150	5.3	193
208	Principles of superplasticity in ultrafine-grained materials. *Journal of Materials Science*, **2007**, 42, 1782-1796	4.3	193
207	Effect of annealing on mechanical properties of a nanocrystalline CoCrFeNiMn high-entropy alloy processed by high-pressure torsion. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2016**, 676, 294-303	5.3	167
206	An investigation of hardness homogeneity throughout disks processed by high-pressure torsion. *Acta Materialia*, **2011**, 59, 308-316	8.4	164
205	The significance of strain reversals during processing by high-pressure torsion. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2008**, 498, 341-348	5.3	144
204	Different models of hardness evolution in ultrafine-grained materials processed by high-pressure torsion. *Journal of Materials Science*, **2014**, 49, 18-34	4.3	128
203	Spherical nanoindentation creep behavior of nanocrystalline and coarse-grained CoCrFeMnNi high-entropy alloys. *Acta Materialia*, **2016**, 109, 314-322	8.4	122
202	Microstructural evolution in a two-phase alloy processed by high-pressure torsion. *Acta Materialia*, **2010**, 58, 919-930	8.4	122
201	A comparison of microstructures and mechanical properties in a Cu□r alloy processed using different SPD techniques. *Journal of Materials Science*, **2013**, 48, 4653-4660	4.3	98
200	Three-dimensional shear-strain patterns induced by high-pressure torsion and their impact on hardness evolution. *Acta Materialia*, **2011**, 59, 3903-3914	8.4	92
199	Nanomechanical behavior and structural stability of a nanocrystalline CoCrFeNiMn high-entropy alloy processed by high-pressure torsion. *Journal of Materials Research*, **2015**, 30, 2804-2815	2.5	87
198	An investigation of hydrogen storage in a magnesium-based alloy processed by equal-channel angular pressing. *International Journal of Hydrogen Energy*, **2013**, 38, 8306-8312	6.7	81
197	Microstructure and properties of a CoCrFeNiMn high-entropy alloy processed by equal-channel angular pressing. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 705, 411-419	5.3	80
196	Grain Boundary Phenomena in an Ultrafine-Grained Al□n Alloy with Improved Mechanical Behavior for Micro-Devices. *Advanced Engineering Materials*, **2014**, 16, 1000-1009	3.5	80
195	Review: achieving superplastic properties in ultrafine-grained materials at high temperatures. *Journal of Materials Science*, **2016**, 51, 19-32	4.3	75
194	The development of hardness homogeneity in pure aluminum and aluminum alloy disks processed by high-pressure torsion. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2011**, 529, 345-351	5.3	74
193	Significance of strain reversals in a two-phase alloy processed by high-pressure torsion. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2010**, 527, 7008-7016	5.3	74

192	Defect structure and hardness in nanocrystalline CoCrFeMnNi High-Entropy Alloy processed by High-Pressure Torsion. *Journal of Alloys and Compounds*, **2017**, 711, 143-154	5.7	73
191	Review: Overcoming the paradox of strength and ductility in ultrafine-grained materials at low temperatures. *Journal of Materials Science*, **2016**, 51, 7-18	4.3	72
190	Strain rate sensitivity studies in an ultrafine-grained Al–0wt.% Zn alloy using micro- and nanoindentation. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2012**, 543, 117-120	5.3	71
189	Evidence for superplasticity in a CoCrFeNiMn high-entropy alloy processed by high-pressure torsion. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 685, 342-348	5.3	67
188	Microstructural evolution and the mechanical properties of an aluminum alloy processed by high-pressure torsion. *Journal of Materials Science*, **2012**, 47, 7789-7795	4.3	67
187	Concurrent microstructural evolution of ferrite and austenite in a duplex stainless steel processed by high-pressure torsion. *Acta Materialia*, **2014**, 63, 16-29	8.4	66
186	Developing superplasticity and a deformation mechanism map for the Zn–Al eutectoid alloy processed by high-pressure torsion. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2011**, 528, 6140-6145	5.3	65
185	Introducing a strain-hardening capability to improve the ductility of bulk metallic glasses via severe plastic deformation. *Acta Materialia*, **2012**, 60, 253-260	8.4	61
184	Unusual macroscopic shearing patterns observed in metals processed by high-pressure torsion. *Journal of Materials Science*, **2010**, 45, 4545-4553	4.3	60
183	Evolution in hardness and texture of a ZK60A magnesium alloy processed by high-pressure torsion. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2015**, 630, 90-98	5.3	59
182	Microstructures, strengthening mechanisms and fracture behavior of Cu–Ag alloys processed by high-pressure torsion. *Acta Materialia*, **2012**, 60, 269-281	8.4	59
181	Microstructural evolution and mechanical properties of a Cu–Zr alloy processed by high-pressure torsion. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2011**, 528, 7715-7722	5.3	58
180	Effect of strain reversals on the processing of high-purity aluminum by high-pressure torsion. *Journal of Materials Science*, **2010**, 45, 4583-4593	4.3	58
179	Rapid synthesis of an extra hard metal matrix nanocomposite at ambient temperature. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2015**, 635, 109-117	5.3	56
178	Microstructures and textures of a Cu–Ni–Si alloy processed by high-pressure torsion. *Journal of Alloys and Compounds*, **2013**, 574, 361-367	5.7	56
177	Achieving homogeneity in a Cu–Zr alloy processed by high-pressure torsion. *Journal of Materials Science*, **2012**, 47, 7782-7788	4.3	56
176	Using high-pressure torsion to process an aluminum–magnesium nanocomposite through diffusion bonding. *Journal of Materials Research*, **2016**, 31, 88-99	2.5	56
175	Microstructure and tensile strength of grade 2 titanium processed by equal-channel angular pressing and by rolling. *Journal of Materials Science*, **2012**, 47, 7870-7876	4.3	55

174	Interpretation of hardness evolution in metals processed by high-pressure torsion. *Journal of Materials Science*, **2014**, 49, 6586-6596	4.3	54
173	Enhancement of strain-rate sensitivity and shear yield strength of a magnesium alloy processed by high-pressure torsion. *Scripta Materialia*, **2015**, 94, 44-47	5.6	52
172	Micro-mechanical and tribological properties of aluminum-magnesium nanocomposites processed by high-pressure torsion. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 684, 318-327	5.3	51
171	Review: achieving superplasticity in metals processed by high-pressure torsion. *Journal of Materials Science*, **2014**, 49, 6487-6496	4.3	51
170	Grain boundary formation by remnant dislocations from the de-twinning of thin nano-twins. *Scripta Materialia*, **2015**, 100, 98-101	5.6	51
169	Evolution of plasticity, strain-rate sensitivity and the underlying deformation mechanism in Zn□2% Al during high-pressure torsion. *Scripta Materialia*, **2014**, 75, 102-105	5.6	49
168	Annealing effect on plastic flow in nanocrystalline CoCrFeMnNi high-entropy alloy: A nanomechanical analysis. *Acta Materialia*, **2017**, 140, 443-451	8.4	48
167	Microstructural evolution and mechanical properties in a Zn□Al eutectoid alloy processed by high-pressure torsion. *Acta Materialia*, **2014**, 72, 67-79	8.4	47
166	Significance of grain refinement on microstructure and mechanical properties of an Al-3% Mg alloy processed by high-pressure torsion. *Journal of Alloys and Compounds*, **2016**, 686, 998-1007	5.7	46
165	Twenty-five years of severe plastic deformation: recent developments in evaluating the degree of homogeneity through the thickness of disks processed by high-pressure torsion. *Journal of Materials Science*, **2012**, 47, 7719-7725	4.3	45
164	Flow mechanisms in ultrafine-grained metals with an emphasis on superplasticity. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2011**, 528, 6624-6629	5.3	45
163	Influence of high-pressure torsion on microstructural evolution in an Al□Zn□Mg□Cu alloy. *Journal of Materials Science*, **2010**, 45, 4621-4630	4.3	45
162	Effect of aging on microstructural development in an Al□Mg□Si alloy processed by high-pressure torsion. *Journal of Materials Science*, **2012**, 47, 7815-7820	4.3	44
161	Grain Boundary Sliding in a Superplastic Zinc-Aluminum Alloy Processed Using Severe Plastic Deformation. *Materials Transactions*, **2008**, 49, 84-89	1.3	44
160	Flow and cavitation in a quasi-superplastic two-phase magnesium□lithium alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2006**, 429, 334-340	5.3	44
159	Microstructural evolution in two-phase alloys processed by high-pressure torsion. *Journal of Materials Science*, **2013**, 48, 4582-4591	4.3	41
158	Laser compression of nanocrystalline tantalum. *Acta Materialia*, **2013**, 61, 7767-7780	8.4	41
157	Characterization of creep properties and creep textures in pure aluminum processed by equal-channel angular pressing. *Acta Materialia*, **2008**, 56, 2307-2317	8.4	40

156	Constructing a deformation mechanism map for a superplastic Pb–Sn alloy processed by equal-channel angular pressing. *Scripta Materialia*, **2009**, 61, 963-966	5.6	39
155	An examination of microstructural evolution in a Cu–Ni–Si alloy processed by HPT and ECAP. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2013**, 576, 149-155	5.3	38
154	Processing a twinning-induced plasticity steel by high-pressure torsion. *Scripta Materialia*, **2012**, 67, 649-652	5.6	38
153	An investigation of cavity growth in a superplastic aluminum alloy processed by ECAP. *Acta Materialia*, **2005**, 53, 5353-5364	8.4	38
152	Development of hardness homogeneity and superplastic behavior in an aluminum–copper eutectic alloy processed by high-pressure torsion. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 561, 118-125	5.3	36
151	The development of hardness homogeneity in a Cu–Zr alloy processed by equal-channel angular pressing. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2012**, 556, 526-532	5.3	35
150	An in situ synchrotron X-ray diffraction study of precipitation kinetics in a severely deformed Cu–Ni–Si alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 597, 288-294	5.3	33
149	Nano- and Micro-Mechanical Properties of Ultrafine-Grained Materials Processed by Severe Plastic Deformation Techniques . *Advanced Engineering Materials*, **2017**, 19, 1600578	3.5	33
148	Effects of equal-channel angular pressing and accumulative roll-bonding on hydrogen storage properties of a commercial ZK60 magnesium alloy. *International Journal of Hydrogen Energy*, **2015**, 40, 16971-16976	6.7	32
147	Influence of Anvil Alignment on Shearing Patterns in High-Pressure Torsion. *Advanced Engineering Materials*, **2013**, 15, 747-755	3.5	32
146	Achieving superplastic behavior in fcc and hcp metals processed by equal-channel angular pressing. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2008**, 493, 104-110	5.3	32
145	The contribution of grain boundary sliding in tensile deformation of an ultrafine-grained aluminum alloy having high strength and high ductility. *Journal of Materials Science*, **2015**, 50, 3549-3561	4.3	31
144	Activation energy for plastic flow in nanocrystalline CoCrFeMnNi high-entropy alloy: A high temperature nanoindentation study. *Scripta Materialia*, **2018**, 156, 129-133	5.6	31
143	Influence of severe plastic deformation on the microstructure and hardness of a CoCrFeNi high-entropy alloy: A comparison with CoCrFeNiMn. *Materials Characterization*, **2019**, 154, 304-314	3.9	30
142	Achieving superplastic properties in a Pb–Sn eutectic alloy processed by equal-channel angular pressing. *Journal of Materials Science*, **2011**, 46, 155-160	4.3	30
141	Micro-Mechanical Behavior of an Exceptionally Strong Metal Matrix Nanocomposite Processed by High-Pressure Torsion . *Advanced Engineering Materials*, **2016**, 18, 1001-1008	3.5	30
140	Evolution of microstructure and mechanical properties in a hypoeutectic Al–Si–Mg alloy processed by accumulative back extrusion. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2016**, 651, 269-279	5.3	29
139	Fabrication of nanocomposites through diffusion bonding under high-pressure torsion. *Journal of Materials Research*, **2018**, 33, 2700-2710	2.5	29

138	A quantitative study of cavity development in the tensile testing of an aluminum metal matrix composite processed by equal-channel angular pressing. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2005**, 410-411, 402-407	5.3	29
137	Microstructural evolution and intermetallic formation in Zn-Mg hybrids processed by High-Pressure Torsion. *Philosophical Magazine*, **2019**, 99, 557-584	1.6	29
136	De-twinning via secondary twinning in face-centered cubic alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 578, 110-114	5.3	28
135	An investigation of flow patterns and hardness distributions using different anvil alignments in high-pressure torsion. *Journal of Materials Science*, **2013**, 48, 4533-4542	4.3	28
134	Superplasticity in a lean Fe-Mn-Al steel. *Nature Communications*, **2017**, 8, 751	17.4	27
133	Bulk-State Reactions and Improving the Mechanical Properties of Metals through High-Pressure Torsion. *Materials Transactions*, **2019**, 60, 1131-1138	1.3	26
132	Direct Bonding of Aluminum–Copper Metals through High-Pressure Torsion Processing. *Advanced Engineering Materials*, **2018**, 20, 1800642	3.5	26
131	A critical examination of the paradox of strength and ductility in ultrafine-grained metals. *Journal of Materials Research*, **2014**, 29, 2534-2546	2.5	26
130	Nanomaterials by severe plastic deformation: review of historical developments and recent advances. *Materials Research Letters*, **2022**, 10, 163-256	7.4	26
129	Evolution in hardness and microstructure of ZK60A magnesium alloy processed by high-pressure torsion. *Journal of Materials Research and Technology*, **2015**, 4, 18-25	5.5	25
128	Developing Superplastic Ductilities in Ultrafine-Grained Metals. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2007**, 38, 1891-1898	2.3	25
127	Atomic-scale investigation of interface-facilitated deformation twinning in severely deformed Ag-Cu nanolamellar composites. *Applied Physics Letters*, **2015**, 107, 011901	3.4	23
126	Evolution of hardness in ultrafine-grained metals processed by high-pressure torsion. *Journal of Materials Research and Technology*, **2014**, 3, 311-318	5.5	23
125	The significance of grain boundary sliding in the superplastic Zn–2 % Al alloy processed by ECAP. *Journal of Materials Science*, **2013**, 48, 4730-4741	4.3	23
124	Microstructure and texture evolution in a Cu–Ni–Si alloy processed by equal-channel angular pressing. *Journal of Alloys and Compounds*, **2015**, 638, 88-94	5.7	23
123	Applied stress controls the production of nano-twins in coarse-grained metals. *Applied Physics Letters*, **2012**, 101, 231903	3.4	23
122	Nano-graining a particle-strengthened high-entropy alloy. *Scripta Materialia*, **2019**, 163, 24-28	5.6	23
121	Microscopic plastic response in a bulk nano-structured TiAl intermetallic compound processed by high-pressure torsion. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2018**, 714, 84-92	5.3	22

120	An investigation into the homogeneity of microstructure, strain pattern and hardness of pure aluminum processed by accumulative back extrusion. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 595, 179-187	5.3	22
119	Evolution of microstructure and hardness in Hf25Nb25Ti25Zr25 high-entropy alloy during high-pressure torsion. *Journal of Alloys and Compounds*, **2019**, 788, 318-328	5.7	22
118	Significance of grain refinement on micro-mechanical properties and structures of additively-manufactured CoCrFeNi high-entropy alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 807, 140898	5.3	21
117	Superplasticity in Ultrafine-Grained Materials.. *Reviews on Advanced Materials Science*, **2018**, 54, 46-55	4.8	21
116	Significance of Si impurities on exceptional room-temperature superplasticity in a high-purity Zn-22%Al alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2015**, 645, 47-56	5.3	20
115	Formation of epsilon martensite by high-pressure torsion in a TRIP steel. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2015**, 625, 114-118	5.3	20
114	Evolution of microhardness and microstructure in a cast Al7 % Si alloy during high-pressure torsion. *Journal of Materials Science*, **2013**, 48, 4671-4680	4.3	20
113	The effect of impurity level on ultrafine-grained microstructures and their stability in low stacking fault energy silver. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2011**, 528, 8694-8699	5.3	20
112	Synthesis of a bulk nanostructured metastable Al alloy with extreme supersaturation of Mg. *Scientific Reports*, **2019**, 9, 17186	4.9	20
111	An evaluation of creep behavior in ultrafine-grained aluminum alloys processed by ECAP. *Journal of Materials Science*, **2010**, 45, 271-274	4.3	19
110	Effect of post-deformation annealing on the microstructure and micro-mechanical behavior of Zn5Mg hybrids processed by High-Pressure Torsion. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2020**, 771, 138578	5.3	19
109	Micro-Mechanical Response of an Al-Mg Hybrid System Synthesized by High-Pressure Torsion. *Materials*, **2017**, 10,	3.5	18
108	Flow behavior of a superplastic Zn22% Al alloy processed by equal-channel angular pressing. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2009**, 503, 48-51	5.3	18
107	An Evaluation of Homogeneity and Heterogeneity in Metals Processed by High-Pressure Torsion. *Acta Physica Polonica A*, **2012**, 122, 425-429	0.6	18
106	The Requirements for Superplasticity with an Emphasis on Magnesium Alloys. *Advanced Engineering Materials*, **2016**, 18, 127-131	3.5	18
105	An evaluation of the shearing patterns introduced by different anvil alignments in high-pressure torsion. *Journal of Materials Science*, **2014**, 49, 3146-3157	4.3	17
104	Mechanical properties and microstructure evolution in an aluminum 6082 alloy processed by high-pressure torsion. *Journal of Materials Science*, **2014**, 49, 6597-6607	4.3	17
103	Microstructure of low stacking fault energy silver processed by different routes of severe plastic deformation. *Journal of Alloys and Compounds*, **2012**, 536, S190-S193	5.7	17

102	Synthesis of Hybrid Nanocrystalline Alloys by Mechanical Bonding through High-Pressure Torsion. *Advanced Engineering Materials*, **2020**, 22, 1901289	3.5	17
101	Stability of the ultrafine-grained microstructure in silver processed by ECAP and HPT. *Journal of Materials Science*, **2013**, 48, 4637-4645	4.3	16
100	An Investigation of Cavity Development during Superplastic Flow in a Zinc–Aluminum Alloy Processed Using Severe Plastic Deformation. *Materials Transactions*, **2012**, 53, 87-95	1.3	16
99	Self-annealing in a two-phase Pb-Sn alloy after processing by high-pressure torsion. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2016**, 666, 350-359	5.3	16
98	Using Severe Plastic Deformation to Fabricate Strong Metal Matrix Composites. *Materials Research*, **2017**, 20, 46-52	1.5	15
97	The development of internal cavitation in a superplastic zinc□luminum alloy processed by ECAP. *Journal of Materials Science*, **2008**, 43, 7360-7365	4.3	15
96	On the Heterogeneity of Local Shear Strain Induced by High-Pressure Torsion. *Advanced Engineering Materials*, **2020**, 22, 1900477	3.5	15
95	High temperature thermal stability of ultrafine-grained silver processed by equal-channel angular pressing. *Journal of Materials Science*, **2013**, 48, 1675-1684	4.3	14
94	The many facets of deformation mechanism mapping and the application to nanostructured materials. *Journal of Materials Research*, **2013**, 28, 1827-1834	2.5	14
93	An examination of the saturation microstructures achieved in ultrafine-grained metals processed by high-pressure torsion. *Journal of Materials Research and Technology*, **2014**, 3, 319-326	5.5	13
92	An examination of the superplastic characteristics of Al□Mg□c alloys after processing. *Journal of Materials Research*, **2017**, 32, 4541-4553	2.5	12
91	Effects of Pre-Strain on the Aging Behavior of Al 7075 Alloy for Hot-Stamping Capability. *Metals*, **2018**, 8, 137	2.3	11
90	Mechanical properties and structural stability of a bulk nanostructured metastable aluminum-magnesium system. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2020**, 796, 140050	5.3	11
89	High temperature superplasticity and deformation behavior of naturally aged Zn-Al alloys with different phase compositions. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2018**, 730, 73-83	5.3	11
88	Towards the ultimate strength of iron: spalling through laser shock. *Acta Materialia*, **2021**, 215, 117072	8.4	11
87	The Contribution of Severe Plastic Deformation to Research on Superplasticity. *Materials Transactions*, **2019**, 60, 1123-1130	1.3	10
86	Effect of grain size on the strain rate sensitivity of CoCrFeNi high-entropy alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2020**, 782, 139281	5.3	10
85	High-pressure torsion processing of Zn□Mg alloy and its hybrid counterpart: A comparative study. *Journal of Alloys and Compounds*, **2020**, 831, 154891	5.7	9

84	Effect of anvil roughness on the flow patterns and hardness development in high-pressure torsion. *Journal of Materials Science*, **2014**, 49, 6517-6528	4.3	9
83	High-cycle fatigue behavior of Zn22% Al alloy processed by high-pressure torsion. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 618, 37-40	5.3	9
82	Martensitic Phase Transformation and Deformation Behavior of Fe30Mn10Al Twinning-Induced Plasticity Steel during High-Pressure Torsion. *Advanced Engineering Materials*, **2014**, 16, 927-932	3.5	9
81	Developing Superplasticity in Ultrafine-Grained Metals. *Acta Physica Polonica A*, **2015**, 128, 470-478	0.6	9
80	Creep behavior of metals processed by equal-channel angular pressing. *Metallic Materials*, **2021**, 49, 75-83	1.3	9
79	Thermal stability of a nanocrystalline HfNbTiZr multi-principal element alloy processed by high-pressure torsion. *Materials Characterization*, **2020**, 168, 110550	3.9	9
78	Mechanical Bonding of Aluminum Hybrid Alloy Systems through High-Pressure Torsion. *Advanced Engineering Materials*, **2020**, 22, 1900483	3.5	9
77	Development of mechanical properties in a CaO added AZ31 magnesium alloy processed by equal-channel angular pressing. *Materials Characterization*, **2016**, 112, 105-112	3.9	8
76	The significance of self-annealing in two-phase alloys processed by high-pressure torsion. *IOP Conference Series: Materials Science and Engineering*, **2014**, 63, 012126	0.4	8
75	Using deformation mechanism maps to depict flow processes in superplastic ultrafine-grained materials. *Journal of Materials Science*, **2012**, 47, 7726-7734	4.3	8
74	Processing of Ultrafine-Grained Materials through the Application of Severe Plastic Deformation. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2011**, 42, 3035-3045	2.3	8
73	Consolidation of magnesium and magnesium-quasicrystal composites through high-pressure torsion. *Letters on Materials*, **2019**, 9, 546-550	0.9	8
72	Fatigue behavior of additive manufactured CrFeCoNi medium-entropy alloy. *Journal of Alloys and Compounds*, **2021**, 863, 158609	5.7	8
71	Effect of Equal-Channel Angular Pressing on the Creep Resistance of Precipitation-Strengthened Alloys. *Materials Science Forum*, **2010**, 667-669, 897-902	0.4	7
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69	The high-temperature creep properties of materials processed using severe plastic deformation. *International Journal of Materials Research*, **2009**, 100, 750-756	0.5	7
68	An examination of microstructural evolution and homogeneity in a magnesium AZ80 alloy processed by high-pressure torsion. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 806, 140832	5.3	7
67	Phase transformation and structure evolution of a Ti-45Al-7.5Nb alloy processed by high-pressure torsion. *Journal of Alloys and Compounds*, **2019**, 787, 1149-1157	5.7	7

66	Mechanical mixing of Mg and Zn using high-pressure torsion. *Journal of Alloys and Compounds*, **2021**, 869, 159302	5.7	7
65	Effect of Severe Plastic Deformation and Subsequent Silicon Spheroidizing Treatment on the Microstructure and Mechanical Properties of an Al–Si–Mg Alloy . *Advanced Engineering Materials*, **2017**, 19, 1700064	3.5	6
64	The influence of chemical heterogeneities on the local mechanical behavior of a high-entropy alloy: A micropillar compression study. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2018**, 721, 165-167	5.3	6
63	An overview of flow patterns development on disc lower surfaces when processing by high-pressure torsion. *Journal of Materials Research and Technology*, **2014**, 3, 303-310	5.5	6
62	An investigation of the stored energy and thermal stability in a Cu–Ni–Si alloy processed by high-pressure torsion. *Philosophical Magazine*, **2020**, 100, 688-712	1.6	6
61	Epitaxial Thin Films of a Chalcogenide Perovskite. *Chemistry of Materials*, **2021**, 33, 7457-7464	9.6	6
60	Grain boundary character distribution of CuNiSi and FeNi alloys processed by severe plastic deformation. *IOP Conference Series: Materials Science and Engineering*, **2015**, 82, 012076	0.4	5
59	Achieving room-temperature superplasticity in an ultrafine-grained Zn-22% Al alloy. *Letters on Materials*, **2015**, 5, 269-275	0.9	5
58	The potential for achieving superplasticity in high-entropy alloys processed by severe plastic deformation. *IOP Conference Series: Materials Science and Engineering*, **2017**, 194, 012040	0.4	4
57	Fabrication of hybrid metal systems through the application of high-pressure torsion. *IOP Conference Series: Materials Science and Engineering*, **2017**, 194, 012002	0.4	4
56	Producing ultrafine-grained materials through severe plastic deformation. *Emerging Materials Research*, **2014**, 3, 252-260	1.4	4
55	The Influence of Impurity Content on Thermal Stability of Low Stacking Fault Energy Silver Processed by Severe Plastic Deformation. *Materials Science Forum*, **2012**, 729, 222-227	0.4	4
54	Effect of High-Pressure Torsion on Hardness and Electrical Resistivity of Commercially Pure Cu. *Advanced Engineering Materials*, **2020**, 22, 1900547	3.5	4
53	Microstructure evolution in a nanocrystalline CoCrFeNi multi-principal element alloy during annealing. *Materials Characterization*, **2021**, 171, 110807	3.9	4
52	High-Pressure Torsion of Ti: Synchrotron characterization of phase volume fraction and domain sizes. *IOP Conference Series: Materials Science and Engineering*, **2014**, 63, 012147	0.4	3
51	The Evolution of Homogeneity during Processing of Aluminium Alloys by HPT. *Materials Science Forum*, **2010**, 667-669, 277-282	0.4	3
50	Superplastic Behavior in Ultrafine-Grained Materials Produced by Equal-Channel Angular Pressing. *Materials Science Forum*, **2008**, 579, 29-40	0.4	3
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48	The flow characteristics of superplasticity. *Letters on Materials*, **2014**, 4, 78-83	0.9	3
47	An examination of microstructural evolution in a PbSn eutectic alloy processed by high-pressure torsion and subsequent self-annealing. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 802, 140653	5.3	3
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