

# Megumi Kawasaki

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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	On the enhanced hardening ability and plasticity mechanisms in a novel Mn-added CoCrNi medium entropy alloy during high-pressure torsion. <i>Journal of Alloys and Compounds</i> , <b>2022</b> , 904, 163941	5.7	1
208	Effect of nickel addition on enhancing nano-structuring and suppressing TRIP effect in Fe <sub>40</sub> Mn <sub>40</sub> Co <sub>10</sub> Cr <sub>10</sub> high entropy alloy during high-pressure torsion. <i>International Journal of Plasticity</i> , <b>2022</b> , 150, 103193	7.6	0
207	Thermal stability of nanocrystalline CoCrFeNi multi-principal element alloy: Effect of the degree of severe plastic deformation. <i>Intermetallics</i> , <b>2022</b> , 142, 107445	3.5	
206	Phase and structural changes during heat treatment of additive manufactured CrFeCoNi high-entropy alloy. <i>Journal of Alloys and Compounds</i> , <b>2022</b> , 889, 161495	5.7	2
205	Nanomaterials by severe plastic deformation: review of historical developments and recent advances. <i>Materials Research Letters</i> , <b>2022</b> , 10, 163-256	7.4	26
204	In Situ Heating Neutron and X-Ray Diffraction Analyses for Revealing Structural Evolution during Postprinting Treatments of Additive-Manufactured 316L Stainless Steel. <i>Advanced Engineering Materials</i> , <b>2022</b> , 24, 2270017	3.5	
203	Strain-dependent phase transformation mapping of diffusion-bonded nanocrystalline aluminum-magnesium by high-energy synchrotron X-rays. <i>Materials Letters</i> , <b>2022</b> , 321, 132414	3.3	1
202	Creep behavior of metals processed by equal-channel angular pressing. <i>Metallic Materials</i> , <b>2021</b> , 49, 75-83	8.3	9
201	An examination of microstructural evolution and homogeneity in a magnesium AZ80 alloy processed by high-pressure torsion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2021</b> , 806, 140832	5.3	7
200	Significance of grain refinement on micro-mechanical properties and structures of additively-manufactured CoCrFeNi high-entropy alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2021</b> , 807, 140898	5.3	21
199	Fatigue behavior of additive manufactured CrFeCoNi medium-entropy alloy. <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 863, 158609	5.7	8
198	Microstructure evolution in a nanocrystalline CoCrFeNi multi-principal element alloy during annealing. <i>Materials Characterization</i> , <b>2021</b> , 171, 110807	3.9	4
197	An examination of microstructural evolution in a PbSn eutectic alloy processed by high-pressure torsion and subsequent self-annealing. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2021</b> , 802, 140653	5.3	3
196	A stored energy analysis of grains with shear texture orientations in Cu-Ni-Si and Fe-Ni alloys processed by high-pressure torsion. <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 864, 158142	5.7	2
195	Mechanical mixing of Mg and Zn using high-pressure torsion. <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 869, 159302	5.7	7
194	On prominent TRIP effect and non-basal slip in a TWIP high entropy alloy during high-pressure torsion processing. <i>Materials Characterization</i> , <b>2021</b> , 178, 111284	3.9	3
193	Towards the ultimate strength of iron: spalling through laser shock. <i>Acta Materialia</i> , <b>2021</b> , 215, 117072	8.4	11

192	Epitaxial Thin Films of a Chalcogenide Perovskite. <i>Chemistry of Materials</i> , <b>2021</b> , 33, 7457-7464	9.6	6
191	Exploring the hydrogen absorption and strengthening behavior in nanocrystalline face-centered cubic high-entropy alloys. <i>Scripta Materialia</i> , <b>2021</b> , 203, 114069	5.6	2
190	Structural evolution during nanostructuring of additive manufactured 316L stainless steel by high-pressure torsion. <i>Materials Letters</i> , <b>2021</b> , 302, 130364	3.3	3
189	On the thermal evolution of high-pressure torsion processed titanium aluminide. <i>Materials Letters</i> , <b>2021</b> , 304, 130650	3.3	
188	High-pressure torsion processing of ZnMg alloy and its hybrid counterpart: A comparative study. <i>Journal of Alloys and Compounds</i> , <b>2020</b> , 831, 154891	5.7	9
187	Effect of grain size on the strain rate sensitivity of CoCrFeNi high-entropy alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2020</b> , 782, 139281	5.3	10
186	Size Effect on Microstructural Evolution and Micromechanical Responses of Mechanically Bonded Aluminum and Magnesium by High-Pressure Torsion. <i>Advanced Engineering Materials</i> , <b>2020</b> , 22, 1900971	3.5	2
185	An investigation of the stored energy and thermal stability in a CuNiBi alloy processed by high-pressure torsion. <i>Philosophical Magazine</i> , <b>2020</b> , 100, 688-712	1.6	6
184	Synthesis of Hybrid Nanocrystalline Alloys by Mechanical Bonding through High-Pressure Torsion. <i>Advanced Engineering Materials</i> , <b>2020</b> , 22, 1901289	3.5	17
183	Thermal stability of a nanocrystalline HfNbTiZr multi-principal element alloy processed by high-pressure torsion. <i>Materials Characterization</i> , <b>2020</b> , 168, 110550	3.9	9
182	Mechanical properties and structural stability of a bulk nanostructured metastable aluminum-magnesium system. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2020</b> , 796, 140050	5.3	11
181	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
180	Effect of post-deformation annealing on the microstructure and micro-mechanical behavior of ZnMg hybrids processed by High-Pressure Torsion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2020</b> , 771, 138578	5.3	19
179	Mechanical Bonding of Aluminum Hybrid Alloy Systems through High-Pressure Torsion. <i>Advanced Engineering Materials</i> , <b>2020</b> , 22, 1900483	3.5	9
178	Effect of High-Pressure Torsion on Hardness and Electrical Resistivity of Commercially Pure Cu. <i>Advanced Engineering Materials</i> , <b>2020</b> , 22, 1900547	3.5	4
177	Influence of severe plastic deformation on the microstructure and hardness of a CoCrFeNi high-entropy alloy: A comparison with CoCrFeNiMn. <i>Materials Characterization</i> , <b>2019</b> , 154, 304-314	3.9	30
176	Bulk-State Reactions and Improving the Mechanical Properties of Metals through High-Pressure Torsion. <i>Materials Transactions</i> , <b>2019</b> , 60, 1131-1138	1.3	26
175	The Contribution of Severe Plastic Deformation to Research on Superplasticity. <i>Materials Transactions</i> , <b>2019</b> , 60, 1123-1130	1.3	10

174	Consolidation of magnesium and magnesium-quasicrystal composites through high-pressure torsion. <i>Letters on Materials</i> , <b>2019</b> , 9, 546-550	0.9	8
173	Effect of HPT processing followed by long term natural ageing on mechanical and electrical properties of commercially pure Cu. <i>Letters on Materials</i> , <b>2019</b> , 9, 561-565	0.9	0
172	Phase transformation and structure evolution of a Ti-45Al-7.5Nb alloy processed by high-pressure torsion. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 787, 1149-1157	5.7	7
171	Evolution of microstructure and hardness in Hf <sub>25</sub> Nb <sub>25</sub> Ti <sub>25</sub> Zr <sub>25</sub> high-entropy alloy during high-pressure torsion. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 788, 318-328	5.7	22
170	Synthesis of a bulk nanostructured metastable Al alloy with extreme supersaturation of Mg. <i>Scientific Reports</i> , <b>2019</b> , 9, 17186	4.9	20
169	Microstructural evolution and intermetallic formation in Zn-Mg hybrids processed by High-Pressure Torsion. <i>Philosophical Magazine</i> , <b>2019</b> , 99, 557-584	1.6	29
168	Nano-graining a particle-strengthened high-entropy alloy. <i>Scripta Materialia</i> , <b>2019</b> , 163, 24-28	5.6	23
167	The influence of chemical heterogeneities on the local mechanical behavior of a high-entropy alloy: A micropillar compression study. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2018</b> , 721, 165-167	5.3	6
166	Microscopic plastic response in a bulk nano-structured TiAl intermetallic compound processed by high-pressure torsion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2018</b> , 714, 84-92	5.3	22
165	Superplastic Flow and Micro-Mechanical Response of Ultrafine-Grained Materials. <i>Defect and Diffusion Forum</i> , <b>2018</b> , 385, 9-14	0.7	1
164	Activation energy for plastic flow in nanocrystalline CoCrFeMnNi high-entropy alloy: A high temperature nanoindentation study. <i>Scripta Materialia</i> , <b>2018</b> , 156, 129-133	5.6	31
163	Effects of Pre-Strain on the Aging Behavior of Al 7075 Alloy for Hot-Stamping Capability. <i>Metals</i> , <b>2018</b> , 8, 137	2.3	11
162	Fabrication of nanocomposites through diffusion bonding under high-pressure torsion. <i>Journal of Materials Research</i> , <b>2018</b> , 33, 2700-2710	2.5	29
161	Direct Bonding of Aluminum-Copper Metals through High-Pressure Torsion Processing. <i>Advanced Engineering Materials</i> , <b>2018</b> , 20, 1800642	3.5	26
160	Fabrication of High Strength Hybrid Materials through the Application of High-Pressure Torsion. <i>Acta Physica Polonica A</i> , <b>2018</b> , 134, 615-623	0.6	3
159	Superplasticity in Ultrafine-Grained Materials.. <i>Reviews on Advanced Materials Science</i> , <b>2018</b> , 54, 46-55	4.8	21
158	Developing Superplasticity in High-Entropy Alloys Processed by Severe Plastic Deformation. <i>Materials Science Forum</i> , <b>2018</b> , 941, 1059-1064	0.4	1
157	Micro-Scale Mechanical Behavior of Ultrafine-Grained Materials Processed by High-Pressure Torsion. <i>Materials Science Forum</i> , <b>2018</b> , 941, 1495-1500	0.4	

156	High temperature superplasticity and deformation behavior of naturally aged Zn-Al alloys with different phase compositions. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2018</b> , 730, 73-83	5.3	11
155	Evidence for superplasticity in a CoCrFeNiMn high-entropy alloy processed by high-pressure torsion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2017</b> , 685, 342-348	5.3	67
154	Applying Conventional Creep Mechanisms to Ultrafine-Grained Materials. <i>Minerals, Metals and Materials Series</i> , <b>2017</b> , 117-131	0.3	1
153	Defect structure and hardness in nanocrystalline CoCrFeMnNi High-Entropy Alloy processed by High-Pressure Torsion. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 711, 143-154	5.7	73
152	Effect of Severe Plastic Deformation and Subsequent Silicon Spheroidizing Treatment on the Microstructure and Mechanical Properties of an AlSiMg Alloy . <i>Advanced Engineering Materials</i> , <b>2017</b> , 19, 1700064	3.5	6
151	Micro-mechanical and tribological properties of aluminum-magnesium nanocomposites processed by high-pressure torsion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2017</b> , 684, 318-327	5.3	51
150	Superplasticity in a lean Fe-Mn-Al steel. <i>Nature Communications</i> , <b>2017</b> , 8, 751	17.4	27
149	The potential for achieving superplasticity in high-entropy alloys processed by severe plastic deformation. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2017</b> , 194, 012040	0.4	4
148	Fabrication of hybrid metal systems through the application of high-pressure torsion. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2017</b> , 194, 012002	0.4	4
147	Micro-Mechanical Response of an Al-Mg Hybrid System Synthesized by High-Pressure Torsion. <i>Materials</i> , <b>2017</b> , 10,	3.5	18
146	Using Severe Plastic Deformation to Fabricate Strong Metal Matrix Composites. <i>Materials Research</i> , <b>2017</b> , 20, 46-52	1.5	15
145	Microstructure and properties of a CoCrFeNiMn high-entropy alloy processed by equal-channel angular pressing. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2017</b> , 705, 411-419	5.3	80
144	Annealing effect on plastic flow in nanocrystalline CoCrFeMnNi high-entropy alloy: A nanomechanical analysis. <i>Acta Materialia</i> , <b>2017</b> , 140, 443-451	8.4	48
143	An examination of the superplastic characteristics of AlMgSc alloys after processing. <i>Journal of Materials Research</i> , <b>2017</b> , 32, 4541-4553	2.5	12
142	Nano- and Micro-Mechanical Properties of Ultrafine-Grained Materials Processed by Severe Plastic Deformation Techniques . <i>Advanced Engineering Materials</i> , <b>2017</b> , 19, 1600578	3.5	33
141	Developments in Processing by Severe Plastic Deformation at the 3rd Pan American Materials Congress. <i>Jom</i> , <b>2017</b> , 69, 2022-2023	2.1	
140	Evolution of microstructure and mechanical properties in a hypoeutectic AlSiMg alloy processed by accumulative back extrusion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2016</b> , 651, 269-279	5.3	29
139	Review: Overcoming the paradox of strength and ductility in ultrafine-grained materials at low temperatures. <i>Journal of Materials Science</i> , <b>2016</b> , 51, 7-18	4.3	72

138	Review: achieving superplastic properties in ultrafine-grained materials at high temperatures. <i>Journal of Materials Science</i> , <b>2016</b> , 51, 19-32	4.3	75
137	Effect of annealing on mechanical properties of a nanocrystalline CoCrFeNiMn high-entropy alloy processed by high-pressure torsion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2016</b> , 676, 294-303	5.3	167
136	Resolving the Strength-Ductility Paradox through Severe Plastic Deformation of a Cast Al-7% Si Alloy. <i>Materials Science Forum</i> , <b>2016</b> , 879, 1043-1048	0.4	0
135	The Development of Superplasticity and Deformation Mechanism Maps in an Ultrafine-Grained Magnesium Alloy. <i>Materials Science Forum</i> , <b>2016</b> , 879, 48-53	0.4	1
134	Micro-Mechanical Responses of Ultrafine-Grained Materials Processed through High-Pressure Torsion. <i>Materials Science Forum</i> , <b>2016</b> , 879, 42-47	0.4	1
133	Description of the Superplastic Flow Process by Deformation Mechanism Maps in Ultrafine-Grained Materials. <i>Materials Science Forum</i> , <b>2016</b> , 838-839, 51-58	0.4	1
132	Development of mechanical properties in a CaO added AZ31 magnesium alloy processed by equal-channel angular pressing. <i>Materials Characterization</i> , <b>2016</b> , 112, 105-112	3.9	8
131	Spherical nanoindentation creep behavior of nanocrystalline and coarse-grained CoCrFeMnNi high-entropy alloys. <i>Acta Materialia</i> , <b>2016</b> , 109, 314-322	8.4	122
130	Significance of grain refinement on microstructure and mechanical properties of an Al-3% Mg alloy processed by high-pressure torsion. <i>Journal of Alloys and Compounds</i> , <b>2016</b> , 686, 998-1007	5.7	46
129	Micro-Mechanical Behavior of an Exceptionally Strong Metal Matrix Nanocomposite Processed by High-Pressure Torsion. <i>Advanced Engineering Materials</i> , <b>2016</b> , 18, 1001-1008	3.5	30
128	Investigating Anvil Alignment and Anvil Roughness on Flow Pattern Development in High-Pressure Torsion. <i>Materials Research Society Symposia Proceedings</i> , <b>2016</b> , 1818, 1		
127	Mechanical Behavior of a Metal Matrix Nanocomposite Synthesized by High-Pressure Torsion via Diffusion Bonding. <i>Materials Science Forum</i> , <b>2016</b> , 879, 1068-1073	0.4	
126	Using high-pressure torsion to process an aluminum-magnesium nanocomposite through diffusion bonding. <i>Journal of Materials Research</i> , <b>2016</b> , 31, 88-99	2.5	56
125	Self-annealing in a two-phase Pb-Sn alloy after processing by high-pressure torsion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2016</b> , 666, 350-359	5.3	16
124	The Requirements for Superplasticity with an Emphasis on Magnesium Alloys. <i>Advanced Engineering Materials</i> , <b>2016</b> , 18, 127-131	3.5	18
123	Significance of Si impurities on exceptional room-temperature superplasticity in a high-purity Zn-22%Al alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2015</b> , 645, 47-56	5.3	20
122	Rapid synthesis of an extra hard metal matrix nanocomposite at ambient temperature. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2015</b> , 635, 109-117	5.3	56
121	Evolution in hardness and microstructure of ZK60A magnesium alloy processed by high-pressure torsion. <i>Journal of Materials Research and Technology</i> , <b>2015</b> , 4, 18-25	5.5	25



120	The contribution of grain boundary sliding in tensile deformation of an ultrafine-grained aluminum alloy having high strength and high ductility. <i>Journal of Materials Science</i> , <b>2015</b> , 50, 3549-3561	4.3	31
119	Evolution Of Precipitate Morphology During Extrusion In Mg ZK60A Alloy. <i>Archives of Metallurgy and Materials</i> , <b>2015</b> , 60, 1423-1426		1
118	An X-ray absorption spectroscopy investigation of the local atomic structure in CuNiSi alloy after severe plastic deformation and ageing. <i>Philosophical Magazine</i> , <b>2015</b> , 95, 2482-2490	1.6	2
117	Atomic-scale investigation of interface-facilitated deformation twinning in severely deformed Ag-Cu nanolamellar composites. <i>Applied Physics Letters</i> , <b>2015</b> , 107, 011901	3.4	23
116	Microstructural homogeneity and superplastic behavior in an aluminum-copper eutectic alloy processed by high-pressure torsion. <i>Journal of Materials Science</i> , <b>2015</b> , 50, 6700-6712	4.3	1
115	Enhancement of strain-rate sensitivity and shear yield strength of a magnesium alloy processed by high-pressure torsion. <i>Scripta Materialia</i> , <b>2015</b> , 94, 44-47	5.6	52
114	Formation of epsilon martensite by high-pressure torsion in a TRIP steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2015</b> , 625, 114-118	5.3	20
113	Nanomechanical behavior and structural stability of a nanocrystalline CoCrFeNiMn high-entropy alloy processed by high-pressure torsion. <i>Journal of Materials Research</i> , <b>2015</b> , 30, 2804-2815	2.5	87
112	Grain boundary character distribution of CuNiSi and FeNi alloys processed by severe plastic deformation. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2015</b> , 82, 012076	0.4	5
111	High Temperature Deformation Flow Of A ZK60A Magnesium Alloy After Extrusion. <i>Archives of Metallurgy and Materials</i> , <b>2015</b> , 60, 1327-1330		
110	Microstructure and texture evolution in a CuNiSi alloy processed by equal-channel angular pressing. <i>Journal of Alloys and Compounds</i> , <b>2015</b> , 638, 88-94	5.7	23
109	Effects of equal-channel angular pressing and accumulative roll-bonding on hydrogen storage properties of a commercial ZK60 magnesium alloy. <i>International Journal of Hydrogen Energy</i> , <b>2015</b> , 40, 16971-16976	6.7	32
108	Grain boundary formation by remnant dislocations from the de-twinning of thin nano-twins. <i>Scripta Materialia</i> , <b>2015</b> , 100, 98-101	5.6	51
107	Evolution in hardness and texture of a ZK60A magnesium alloy processed by high-pressure torsion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2015</b> , 630, 90-98	5.3	59
106	Developing Superplasticity in Ultrafine-Grained Metals. <i>Acta Physica Polonica A</i> , <b>2015</b> , 128, 470-478	0.6	9
105	Achieving room-temperature superplasticity in an ultrafine-grained Zn-22% Al alloy. <i>Letters on Materials</i> , <b>2015</b> , 5, 269-275	0.9	5
104	An in situ synchrotron X-ray diffraction study of precipitation kinetics in a severely deformed CuNiSi alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2014</b> , 597, 288-294	5.3	33
103	Effect of anvil roughness on the flow patterns and hardness development in high-pressure torsion. <i>Journal of Materials Science</i> , <b>2014</b> , 49, 6517-6528	4.3	9

102	Microstructural evolution and mechanical properties in a ZnAl eutectoid alloy processed by high-pressure torsion. <i>Acta Materialia</i> , <b>2014</b> , 72, 67-79	8.4	47
101	Evolution of plasticity, strain-rate sensitivity and the underlying deformation mechanism in Zn22% Al during high-pressure torsion. <i>Scripta Materialia</i> , <b>2014</b> , 75, 102-105	5.6	49
100	An evaluation of the shearing patterns introduced by different anvil alignments in high-pressure torsion. <i>Journal of Materials Science</i> , <b>2014</b> , 49, 3146-3157	4.3	17
99	Concurrent microstructural evolution of ferrite and austenite in a duplex stainless steel processed by high-pressure torsion. <i>Acta Materialia</i> , <b>2014</b> , 63, 16-29	8.4	66
98	Evolution of hardness in ultrafine-grained metals processed by high-pressure torsion. <i>Journal of Materials Research and Technology</i> , <b>2014</b> , 3, 311-318	5.5	23
97	Review: achieving superplasticity in metals processed by high-pressure torsion. <i>Journal of Materials Science</i> , <b>2014</b> , 49, 6487-6496	4.3	51
96	Mechanical properties and microstructure evolution in an aluminum 6082 alloy processed by high-pressure torsion. <i>Journal of Materials Science</i> , <b>2014</b> , 49, 6597-6607	4.3	17
95	High-cycle fatigue behavior of Zn22% Al alloy processed by high-pressure torsion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2014</b> , 618, 37-40	5.3	9
94	Interpretation of hardness evolution in metals processed by high-pressure torsion. <i>Journal of Materials Science</i> , <b>2014</b> , 49, 6586-6596	4.3	54
93	Producing ultrafine-grained materials through severe plastic deformation. <i>Emerging Materials Research</i> , <b>2014</b> , 3, 252-260	1.4	4
92	The characteristics of two-phase Al-Cu and Zn-Al alloys processed by high-pressure torsion. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2014</b> , 63, 012106	0.4	1
91	The significance of self-annealing in two-phase alloys processed by high-pressure torsion. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2014</b> , 63, 012126	0.4	8
90	High-Pressure Torsion of Ti: Synchrotron characterization of phase volume fraction and domain sizes. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2014</b> , 63, 012147	0.4	3
89	Evolution of hardness, microstructure, and strain rate sensitivity in a Zn-22% Al eutectoid alloy processed by high-pressure torsion. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2014</b> , 63, 012101	0.4	2
88	An overview of flow patterns development on disc lower surfaces when processing by high-pressure torsion. <i>Journal of Materials Research and Technology</i> , <b>2014</b> , 3, 303-310	5.5	6
87	An examination of the saturation microstructures achieved in ultrafine-grained metals processed by high-pressure torsion. <i>Journal of Materials Research and Technology</i> , <b>2014</b> , 3, 319-326	5.5	13
86	Martensitic Phase Transformation and Deformation Behavior of FeMnAl Twinning-Induced Plasticity Steel during High-Pressure Torsion. <i>Advanced Engineering Materials</i> , <b>2014</b> , 16, 927-932	3.5	9
85	Grain Boundary Phenomena in an Ultrafine-Grained AlZn Alloy with Improved Mechanical Behavior for Micro-Devices. <i>Advanced Engineering Materials</i> , <b>2014</b> , 16, 1000-1009	3.5	80



84	Microstructure Development and Superplasticity in a Zn-22% Al Eutectoid Alloy Processed by Severe Plastic Deformation. <i>Materials Science Forum</i> , <b>2014</b> , 783-786, 2647-2652	0.4	2
83	A critical examination of the paradox of strength and ductility in ultrafine-grained metals. <i>Journal of Materials Research</i> , <b>2014</b> , 29, 2534-2546	2.5	26
82	Factors Influencing the Shearing Patterns in High-Pressure Torsion. <i>Materials Science Forum</i> , <b>2014</b> , 783-786, 45-50	0.4	1
81	An investigation into the homogeneity of microstructure, strain pattern and hardness of pure aluminum processed by accumulative back extrusion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2014</b> , 595, 179-187	5.3	22
80	Different models of hardness evolution in ultrafine-grained materials processed by high-pressure torsion. <i>Journal of Materials Science</i> , <b>2014</b> , 49, 18-34	4.3	128
79	The flow characteristics of superplasticity. <i>Letters on Materials</i> , <b>2014</b> , 4, 78-83	0.9	3
78	A comparison of microstructures and mechanical properties in a Cu <sub>3</sub> Zr alloy processed using different SPD techniques. <i>Journal of Materials Science</i> , <b>2013</b> , 48, 4653-4660	4.3	98
77	Microstructural evolution in two-phase alloys processed by high-pressure torsion. <i>Journal of Materials Science</i> , <b>2013</b> , 48, 4582-4591	4.3	41
76	Stability of the ultrafine-grained microstructure in silver processed by ECAP and HPT. <i>Journal of Materials Science</i> , <b>2013</b> , 48, 4637-4645	4.3	16
75	Evolution of microhardness and microstructure in a cast Al <sub>70</sub> % Si alloy during high-pressure torsion. <i>Journal of Materials Science</i> , <b>2013</b> , 48, 4671-4680	4.3	20
74	An investigation of hydrogen storage in a magnesium-based alloy processed by equal-channel angular pressing. <i>International Journal of Hydrogen Energy</i> , <b>2013</b> , 38, 8306-8312	6.7	81
73	The significance of grain boundary sliding in the superplastic Zn <sub>82</sub> % Al alloy processed by ECAP. <i>Journal of Materials Science</i> , <b>2013</b> , 48, 4730-4741	4.3	23
72	Laser compression of nanocrystalline tantalum. <i>Acta Materialia</i> , <b>2013</b> , 61, 7767-7780	8.4	41
71	High temperature thermal stability of ultrafine-grained silver processed by equal-channel angular pressing. <i>Journal of Materials Science</i> , <b>2013</b> , 48, 1675-1684	4.3	14
70	Microstructures and textures of a Cu <sub>50</sub> Ni <sub>50</sub> Bi alloy processed by high-pressure torsion. <i>Journal of Alloys and Compounds</i> , <b>2013</b> , 574, 361-367	5.7	56
69	De-twinning via secondary twinning in face-centered cubic alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2013</b> , 578, 110-114	5.3	28
68	An examination of microstructural evolution in a Cu <sub>50</sub> Ni <sub>50</sub> Bi alloy processed by HPT and ECAP. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2013</b> , 576, 149-155	5.3	38
67	An investigation of flow patterns and hardness distributions using different anvil alignments in high-pressure torsion. <i>Journal of Materials Science</i> , <b>2013</b> , 48, 4533-4542	4.3	28

66	Development of hardness homogeneity and superplastic behavior in an aluminum-copper eutectic alloy processed by high-pressure torsion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2013</b> , 561, 118-125	5.3	36
65	Evaluating the Flow Properties of Ultrafine-Grained Materials. <i>Advanced Materials Research</i> , <b>2013</b> , 829, 3-9	0.5	
64	Influence of Anvil Alignment on Shearing Patterns in High-Pressure Torsion. <i>Advanced Engineering Materials</i> , <b>2013</b> , 15, 747-755	3.5	32
63	The many facets of deformation mechanism mapping and the application to nanostructured materials. <i>Journal of Materials Research</i> , <b>2013</b> , 28, 1827-1834	2.5	14
62	Evaluating the flow processes in ultrafine-grained materials at elevated temperatures. <i>Materials Research</i> , <b>2013</b> , 16, 565-570	1.5	1
61	Strain rate sensitivity studies in an ultrafine-grained Al <sub>80</sub> wt.% Zn alloy using micro- and nanoindentation. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2012</b> , 543, 117-120	5.3	71
60	The development of hardness homogeneity in a Cu <sub>50</sub> Zr alloy processed by equal-channel angular pressing. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2012</b> , 556, 526-532	5.3	35
59	Microstructure of low stacking fault energy silver processed by different routes of severe plastic deformation. <i>Journal of Alloys and Compounds</i> , <b>2012</b> , 536, S190-S193	5.7	17
58	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. <i>Journal of Materials Science</i> , <b>2012</b> , 47, 7719-7725	4.3	45
57	Using deformation mechanism maps to depict flow processes in superplastic ultrafine-grained materials. <i>Journal of Materials Science</i> , <b>2012</b> , 47, 7726-7734	4.3	8
56	Microstructural evolution and the mechanical properties of an aluminum alloy processed by high-pressure torsion. <i>Journal of Materials Science</i> , <b>2012</b> , 47, 7789-7795	4.3	67
55	Effect of aging on microstructural development in an Al <sub>80</sub> Mg <sub>20</sub> Bi alloy processed by high-pressure torsion. <i>Journal of Materials Science</i> , <b>2012</b> , 47, 7815-7820	4.3	44
54	Microstructure and tensile strength of grade 2 titanium processed by equal-channel angular pressing and by rolling. <i>Journal of Materials Science</i> , <b>2012</b> , 47, 7870-7876	4.3	55
53	Processing a twinning-induced plasticity steel by high-pressure torsion. <i>Scripta Materialia</i> , <b>2012</b> , 67, 649-652	5.2	38
52	Achieving homogeneity in a Cu <sub>50</sub> Zr alloy processed by high-pressure torsion. <i>Journal of Materials Science</i> , <b>2012</b> , 47, 7782-7788	4.3	56
51	Introducing a strain-hardening capability to improve the ductility of bulk metallic glasses via severe plastic deformation. <i>Acta Materialia</i> , <b>2012</b> , 60, 253-260	8.4	61
50	Microstructures, strengthening mechanisms and fracture behavior of Cu <sub>50</sub> Ag alloys processed by high-pressure torsion. <i>Acta Materialia</i> , <b>2012</b> , 60, 269-281	8.4	59
49	The Influence of Impurity Content on Thermal Stability of Low Stacking Fault Energy Silver Processed by Severe Plastic Deformation. <i>Materials Science Forum</i> , <b>2012</b> , 729, 222-227	0.4	4

48	Developing Hardness and Microstructural Homogeneity in High-Pressure Torsion. <i>Materials Science Forum</i> , <b>2012</b> , 706-709, 1805-1810	0.4	
47	Applied stress controls the production of nano-twins in coarse-grained metals. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 231903	3.4	23
46	Laser compression of nanocrystalline tantalum <b>2012</b> ,		2
45	An Investigation of Cavity Development during Superplastic Flow in a Zinc&ndash;Aluminum Alloy Processed Using Severe Plastic Deformation. <i>Materials Transactions</i> , <b>2012</b> , 53, 87-95	1.3	16
44	An Evaluation of Homogeneity and Heterogeneity in Metals Processed by High-Pressure Torsion. <i>Acta Physica Polonica A</i> , <b>2012</b> , 122, 425-429	0.6	18
43	The effect of impurity level on ultrafine-grained microstructures and their stability in low stacking fault energy silver. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2011</b> , 528, 8694-8699	5.3	20
42	The development of hardness homogeneity in pure aluminum and aluminum alloy disks processed by high-pressure torsion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2011</b> , 529, 345-351	5.3	74
41	Achieving superplastic properties in a Pb&Sn eutectic alloy processed by equal-channel angular pressing. <i>Journal of Materials Science</i> , <b>2011</b> , 46, 155-160	4.3	30
40	Developing superplasticity and a deformation mechanism map for the Zn&Al eutectoid alloy processed by high-pressure torsion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2011</b> , 528, 6140-6145	5.3	65
39	Microstructural evolution and mechanical properties of a Cu&r 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
38	Processing of Ultrafine-Grained Materials through the Application of Severe Plastic Deformation. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2011</b> , 42, 3035-3045	2.3	8
37	An investigation of hardness homogeneity throughout disks processed by high-pressure torsion. <i>Acta Materialia</i> , <b>2011</b> , 59, 308-316	8.4	164
36	Three-dimensional shear-strain patterns induced by high-pressure torsion and their impact on hardness evolution. <i>Acta Materialia</i> , <b>2011</b> , 59, 3903-3914	8.4	92
35	Flow mechanisms in ultrafine-grained metals with an emphasis on superplasticity. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2011</b> , 528, 6624-6629	5.3	45
34	Developing the Technique of Severe Plastic Deformation Processing through High-Pressure Torsion. <i>Materials Science Forum</i> , <b>2010</b> , 667-669, 397-402	0.4	1
33	The Evolution of Homogeneity during Processing of Aluminium Alloys by HPT. <i>Materials Science Forum</i> , <b>2010</b> , 667-669, 277-282	0.4	3
32	Effect of Equal-Channel Angular Pressing on the Creep Resistance of Precipitation-Strengthened Alloys. <i>Materials Science Forum</i> , <b>2010</b> , 667-669, 897-902	0.4	7
31	Characteristics of High Temperature Creep in Pure Aluminum Processed by Equal-Channel Angular Pressing. <i>Materials Science Forum</i> , <b>2010</b> , 638-642, 1965-1970	0.4	7

30	Significance of strain reversals in a two-phase alloy processed by high-pressure torsion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2010</b> , 527, 7008-7016	5.3	74
29	An evaluation of creep behavior in ultrafine-grained aluminum alloys processed by ECAP. <i>Journal of Materials Science</i> , <b>2010</b> , 45, 271-274	4.3	19
28	Influence of high-pressure torsion on microstructural evolution in an AlZnMgCu alloy. <i>Journal of Materials Science</i> , <b>2010</b> , 45, 4621-4630	4.3	45
27	Effect of strain reversals on the processing of high-purity aluminum by high-pressure torsion. <i>Journal of Materials Science</i> , <b>2010</b> , 45, 4583-4593	4.3	58
26	Unusual macroscopic shearing patterns observed in metals processed by high-pressure torsion. <i>Journal of Materials Science</i> , <b>2010</b> , 45, 4545-4553	4.3	60
25	Microstructural evolution in a two-phase alloy processed by high-pressure torsion. <i>Acta Materialia</i> , <b>2010</b> , 58, 919-930	8.4	122
24	Factors Influencing Ductility in Ultrafine-Grained Metals Processed by Equal-Channel Angular Pressing. <i>Materials Science Forum</i> , <b>2009</b> , 633-634, 341-352	0.4	2
23	Constructing a deformation mechanism map for a superplastic PbSn alloy processed by equal-channel angular pressing. <i>Scripta Materialia</i> , <b>2009</b> , 61, 963-966	5.6	39
22	Flow behavior of a superplastic Zn2% Al alloy processed by equal-channel angular pressing. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2009</b> , 503, 48-51	5.3	18
21	Microstructural evolution in high purity aluminum processed by ECAP. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2009</b> , 524, 143-150	5.3	193
20	The high-temperature creep properties of materials processed using severe plastic deformation. <i>International Journal of Materials Research</i> , <b>2009</b> , 100, 750-756	0.5	7
19	Superplastic Behavior in Ultrafine-Grained Materials Produced by Equal-Channel Angular Pressing. <i>Materials Science Forum</i> , <b>2008</b> , 579, 29-40	0.4	3
18	Developing Superplasticity in Metallic Alloys through the Application of Severe Plastic Deformation. <i>Materials Science Forum</i> , <b>2008</b> , 604-605, 97-111	0.4	2
17	Grain Boundary Sliding in a Superplastic Zinc-Aluminum Alloy Processed Using Severe Plastic Deformation. <i>Materials Transactions</i> , <b>2008</b> , 49, 84-89	1.3	44
16	Achieving superplastic behavior in fcc and hcp metals processed by equal-channel angular pressing. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2008</b> , 493, 104-110	5.3	32
15	The development of internal cavitation in a superplastic zincaluminum alloy processed by ECAP. <i>Journal of Materials Science</i> , <b>2008</b> , 43, 7360-7365	4.3	15
14	The significance of strain reversals during processing by high-pressure torsion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2008</b> , 498, 341-348	5.3	144
13	Characterization of creep properties and creep textures in pure aluminum processed by equal-channel angular pressing. <i>Acta Materialia</i> , <b>2008</b> , 56, 2307-2317	8.4	40

12	Principles of superplasticity in ultrafine-grained materials. <i>Journal of Materials Science</i> , <b>2007</b> , 42, 1782-1796	193
11	Developing Superplastic Ductilities in Ultrafine-Grained Metals. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2007</b> , 38, 1891-1898	25
10	Mechanical Properties of a Spray-Cast Aluminum Alloy Processed by Severe Plastic Deformation. <i>Materials Science Forum</i> , <b>2007</b> , 539-543, 141-148	1
9	Extending Creep and Superplasticity to Materials with Submicrometer Grain Sizes. <i>Key Engineering Materials</i> , <b>2007</b> , 345-346, 539-544	
8	An Investigation of Cavitation in the Tensile Testing of a Spray-Cast Aluminum Alloy Processed by ECAP. <i>Materials Science Forum</i> , <b>2006</b> , 503-504, 83-90	2
7	Flow and cavitation in a quasi-superplastic two-phase magnesium–titanium alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2006</b> , 429, 334-340	44
6	A quantitative study of cavity development in the tensile testing of an aluminum metal matrix composite processed by equal-channel angular pressing. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2005</b> , 410-411, 402-407	29
5	An investigation of cavity growth in a superplastic aluminum alloy processed by ECAP. <i>Acta Materialia</i> , <b>2005</b> , 53, 5353-5364	38
4	Metal hybrids processed by high-pressure torsion: synthesis, microstructure, mechanical properties and developing trends. <i>International Materials Reviews</i> , 1-35	2
3	Achieving Superplasticity in Fine-Grained Al-Mg-Sc Alloys. <i>Materials Science Forum</i> , 1016, 11-17	
2	Recent Developments in the Processing of Advanced Materials Using Severe Plastic Deformation. <i>Materials Science Forum</i> , 1016, 3-8	0
1	Hardness Development of Mechanically-Bonded Hybrid Nanostructured Alloys through High-Pressure Torsion. <i>Materials Science Forum</i> , 1016, 177-182	0