Megumi Kawasaki

List of Publications by Year
in descending order

214	7,432	44069	76900
papers	citations	48 h-index	74 g-index

218	218	218	3080
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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.	5.6	225
2	Principles of superplasticity in ultrafine-grained materials. Journal of Materials Science, 2007, 42, 1782-1796.	3.7	219
3	Nanomaterials by severe plastic deformation: review of historical developments and recent advances. Materials Research Letters, 2022, 10, 163-256.	8.7	215
4	Microstructural evolution in high purity aluminum processed by ECAP. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 524, 143-150.	5.6	209
5	An investigation of hardness homogeneity throughout disks processed by high-pressure torsion. Acta Materialia, 2011, 59, 308-316.	7.9	174
6	Spherical nanoindentation creep behavior of nanocrystalline and coarse-grained CoCrFeMnNi high-entropy alloys. Acta Materialia, 2016, 109, 314-322.	7.9	156
7	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.	5.6	153
8	Different models of hardness evolution in ultrafine-grained materials processed by high-pressure torsion. Journal of Materials Science, 2014, 49, 18-34.	3.7	145
9	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.	5.6	137
10	Microstructural evolution in a two-phase alloy processed by high-pressure torsion. Acta Materialia, 2010, 58, 919-930.	7.9	128
11	A comparison of microstructures and mechanical properties in a Cuâ€“Zr alloy processed using different SPD techniques. Journal of Materials Science, 2013, 48, 4653-4660.	3.7	108
12	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.	2.6	101
13	Defect structure and hardness in nanocrystalline CoCrFeMnNi High-Entropy Alloy processed by High-Pressure Torsion. Journal of Alloys and Compounds, 2017, 711, 143-154.	5.5	100
14	Three-dimensional shear-strain patterns induced by high-pressure torsion and their impact on hardness evolution. Acta Materialia, 2011, 59, 3903-3914.	7.9	98
15	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.	7.1	96
16	Review: achieving superplastic properties in ultrafine-grained materials at high temperatures. Journal of Materials Science, 2016, 51, 19-32.	3.7	96
17	Strain rate sensitivity studies in an ultrafine-grained Alâ€“30wt.% Zn alloy using micro- and nanoindentation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 543, 117-120.	5.6	92
18	Grain Boundary Phenomena in an Ultrafineâ€Grained Alâ€“Zn Alloy with Improved Mechanical Behavior for Microâ€Devices. Advanced Engineering Materials, 2014, 16, 1000-1009.	3.5	92

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19	Review: Overcoming the paradox of strength and ductility in ultrafine-grained materials at low temperatures. Journal of Materials Science, 2016, 51, 7-18.	3.7	91
20	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.	5.6	91
21	Concurrent microstructural evolution of ferrite and austenite in a duplex stainless steel processed by high-pressure torsion. Acta Materialia, 2014, 63, 16-29.	7.9	90
22	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.	5.6	81
23	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.	5.6	74
24	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.	5.6	74
25	Developing superplasticity and a deformation mechanism map for the Znâ€“Al eutectoid alloy processed by high-pressure torsion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 6140-6145.	5.6	73
26	Microstructural evolution and the mechanical properties of an aluminum alloy processed by high-pressure torsion. Journal of Materials Science, 2012, 47, 7789-7795.	3.7	72
27	Introducing a strain-hardening capability to improve the ductility of bulk metallic glasses via severe plastic deformation. Acta Materialia, 2012, 60, 253-260.	7.9	72
28	Microstructures, strengthening mechanisms and fracture behavior of Cuâ€“Ag alloys processed by high-pressure torsion. Acta Materialia, 2012, 60, 269-281.	7.9	71
29	Microstructures and textures of a Cuâ€“Niâ€“Si alloy processed by high-pressure torsion. Journal of Alloys and Compounds, 2013, 574, 361-367.	5.5	68
30	Using high-pressure torsion to process an aluminumâ€“magnesium nanocomposite through diffusion bonding. Journal of Materials Research, 2016, 31, 88-99.	2.6	68
31	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.	3.7	65
32	Unusual macroscopic shearing patterns observed in metals processed by high-pressure torsion. Journal of Materials Science, 2010, 45, 4545-4553.	3.7	64
33	Review: achieving superplasticity in metals processed by high-pressure torsion. Journal of Materials Science, 2014, 49, 6487-6496.	3.7	61
34	Annealing effect on plastic flow in nanocrystalline CoCrFeMnNi high-entropy alloy: A nanomechanical analysis. Acta Materialia, 2017, 140, 443-451.	7.9	61
35	Effect of strain reversals on the processing of high-purity aluminum by high-pressure torsion. Journal of Materials Science, 2010, 45, 4583-4593.	3.7	59
36	Microstructural evolution and mechanical properties of a Cuâ€“Zr alloy processed by high-pressure torsion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 7715-7722.	5.6	59

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37	Interpretation of hardness evolution in metals processed by high-pressure torsion. Journal of Materials Science, 2014, 49, 6586-6596.	3.7	59
38	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.	5.6	59
39	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.	5.6	59
40	Achieving homogeneity in a Cuâ€“Zr alloy processed by high-pressure torsion. Journal of Materials Science, 2012, 47, 7782-7788.	3.7	58
41	Grain boundary formation by remnant dislocations from the de-twinning of thin nano-twins. Scripta Materialia, 2015, 100, 98-101.	5.2	58
42	Enhancement of strain-rate sensitivity and shear yield strength of a magnesium alloy processed by high-pressure torsion. Scripta Materialia, 2015, 94, 44-47.	5.2	56
43	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.	5.5	56
44	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.	5.6	55
45	Microstructural evolution and mechanical properties in a Znâ€“Al eutectoid alloy processed by high-pressure torsion. Acta Materialia, 2014, 72, 67-79.	7.9	54
46	Evolution of plasticity, strain-rate sensitivity and the underlying deformation mechanism in Znâ€“22% Al during high-pressure torsion. Scripta Materialia, 2014, 75, 102-105.	5.2	54
47	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.	4.4	53
48	Grain Boundary Sliding in a Superplastic Zinc-Aluminum Alloy Processed Using Severe Plastic Deformation. Materials Transactions, 2008, 49, 84-89.	1.2	51
49	Superplasticity in a lean Fe-Mn-Al steel. Nature Communications, 2017, 8, 751.	12.8	51
50	Flow and cavitation in a quasi-superplastic two-phase magnesiumâ€“lithium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 429, 334-340.	5.6	50
51	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.	5.6	50
52	Influence of high-pressure torsion on microstructural evolution in an Alâ€“Znâ€“Mgâ€“Cu alloy. Journal of Materials Science, 2010, 45, 4621-4630.	3.7	48
53	Microstructural evolution and intermetallic formation in Zn-Mg hybrids processed by High-Pressure Torsion. Philosophical Magazine, 2019, 99, 557-584.	1.6	48
54	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.	3.7	47

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55	Effect of aging on microstructural development in an Alâ€“Mgâ€“Si alloy processed by high-pressure torsion. Journal of Materials Science, 2012, 47, 7815-7820.	3.7	47
56	Laser compression of nanocrystalline tantalum. Acta Materialia, 2013, 61, 7767-7780.	7.9	46
57	Bulk-State Reactions and Improving the Mechanical Properties of Metals through High-Pressure Torsion. Materials Transactions, 2019, 60, 1131-1138.	1.2	46
58	Processing a twinning-induced plasticity steel by high-pressure torsion. Scripta Materialia, 2012, 67, 649-652.	5.2	45
59	Microstructural evolution in two-phase alloys processed by high-pressure torsion. Journal of Materials Science, 2013, 48, 4582-4591.	3.7	45
60	An examination of microstructural evolution in a Cuâ€“Niâ€“Si alloy processed by HPT and ECAP. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 576, 149-155.	5.6	45
61	Characterization of creep properties and creep textures in pure aluminum processed by equal-channel angular pressing. Acta Materialia, 2008, 56, 2307-2317.	7.9	44
62	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.	7.1	44
63	Activation energy for plastic flow in nanocrystalline CoCrFeMnNi high-entropy alloy: A high temperature nanoindentation study. Scripta Materialia, 2018, 156, 129-133.	5.2	44
64	Nanoâ€•and Microâ€Mechanical Properties of Ultrafineâ€Grained Materials Processed by Severe Plastic Deformation Techniques. Advanced Engineering Materials, 2017, 19, 1600578.	3.5	42
65	Fabrication of nanocomposites through diffusion bonding under high-pressure torsion. Journal of Materials Research, 2018, 33, 2700-2710.	2.6	41
66	An investigation of cavity growth in a superplastic aluminum alloy processed by ECAP. Acta Materialia, 2005, 53, 5353-5364.	7.9	40
67	Constructing a deformation mechanism map for a superplastic Pbâ€“Sn alloy processed by equal-channel angular pressing. Scripta Materialia, 2009, 61, 963-966.	5.2	40
68	Development of hardness homogeneity and superplastic behavior in an aluminumâ€“copper eutectic alloy processed by high-pressure torsion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 561, 118-125.	5.6	40
69	The development of hardness homogeneity in a Cuâ€“Zr alloy processed by equal-channel angular pressing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 556, 526-532.	5.6	39
70	Towards the ultimate strength of iron: spalling through laser shock. Acta Materialia, 2021, 215, 117072.	7.9	39
71	De-twinning via secondary twinning in face-centered cubic alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 578, 110-114.	5.6	38
72	An in situ synchrotron X-ray diffraction study of precipitation kinetics in a severely deformed Cuâ€“Niâ€“Si alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 597, 288-294.	5.6	38

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73	Evolution of microstructure and mechanical properties in a hypoeutectic Alâ€“Siâ€“Mg alloy processed by accumulative back extrusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 651, 269-279.	5.6	38
74	Nano-graining a particle-strengthened high-entropy alloy. Scripta Materialia, 2019, 163, 24-28.	5.2	38
75	Evolution of microstructure and hardness in Hf25Nb25Ti25Zr25 high-entropy alloy during high-pressure torsion. Journal of Alloys and Compounds, 2019, 788, 318-328.	5.5	37
76	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.	3.7	36
77	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.	5.6	33
78	Influence of Anvil Alignment on Shearing Patterns in Highâ€Pressure Torsion. Advanced Engineering Materials, 2013, 15, 747-755.	3.5	33
79	A critical examination of the paradox of strength and ductility in ultrafine-grained metals. Journal of Materials Research, 2014, 29, 2534-2546.	2.6	32
80	Microâ€Mechanical Behavior of an Exceptionally Strong Metal Matrix Nanocomposite Processed by Highâ€Pressure Torsion. Advanced Engineering Materials, 2016, 18, 1001-1008.	3.5	32
81	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.	5.6	32
82	Atomic-scale investigation of interface-facilitated deformation twinning in severely deformed Ag-Cu nanolamellar composites. Applied Physics Letters, 2015, 107, .	3.3	31
83	Superplasticity in Ultrafine-Grained Materials.. Reviews on Advanced Materials Science, 2018, 54, 46-55.	3.3	31
84	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.	5.6	30
85	Achieving superplastic properties in a Pbâ€“Sn eutectic alloy processed by equal-channel angular pressing. Journal of Materials Science, 2011, 46, 155-160.	3.7	30
86	The Requirements for Superplasticity with an Emphasis on Magnesium Alloys. Advanced Engineering Materials, 2016, 18, 127-131.	3.5	30
87	Direct Bonding of Aluminumâ€“Copper Metals through Highâ€Pressure Torsion Processing. Advanced Engineering Materials, 2018, 20, 1800642.	3.5	30
88	Developing Superplastic Ductilities in Ultrafine-Grained Metals. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2007, 38, 1891-1898.	2.2	28
89	An investigation of flow patterns and hardness distributions using different anvil alignments in high-pressure torsion. Journal of Materials Science, 2013, 48, 4533-4542.	3.7	28
90	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.	5.6	28

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91	Evolution of hardness in ultrafine-grained metals processed by high-pressure torsion. Journal of Materials Research and Technology, 2014, 3, 311-318.	5.8	28
92	Synthesis of a bulk nanostructured metastable Al alloy with extreme supersaturation of Mg. Scientific Reports, 2019, 9, 17186.	3.3	28
93	Effect of post-deformation annealing on the microstructure and micro-mechanical behavior of Znâ€“Mg hybrids processed by High-Pressure Torsion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 771, 138578.	5.6	28
94	Evolution in hardness and microstructure of ZK60A magnesium alloy processed by high-pressure torsion. Journal of Materials Research and Technology, 2015, 4, 18-25.	5.8	27
95	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.	5.6	27
96	Synthesis of Hybrid Nanocrystalline Alloys by Mechanical Bonding through Highâ€Pressure Torsion. Advanced Engineering Materials, 2020, 22, 1901289.	3.5	26
97	Epitaxial Thin Films of a Chalcogenide Perovskite. Chemistry of Materials, 2021, 33, 7457-7464.	6.7	26
98	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.	5.6	25
99	Fatigue behavior of additive manufactured CrFeCoNi medium-entropy alloy. Journal of Alloys and Compounds, 2021, 863, 158609.	5.5	25
100	The significance of grain boundary sliding in the superplastic Znâ€“22Â% Al alloy processed by ECAP. Journal of Materials Science, 2013, 48, 4730-4741.	3.7	24
101	Microstructure and texture evolution in a Cuâ€“Niâ€“Si alloy processed by equal-channel angular pressing. Journal of Alloys and Compounds, 2015, 638, 88-94.	5.5	24
102	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.	5.6	23
103	Applied stress controls the production of nano-twins in coarse-grained metals. Applied Physics Letters, 2012, 101, 231903.	3.3	23
104	Evolution of microhardness and microstructure in a cast Alâ€“7Â% Si alloy during high-pressure torsion. Journal of Materials Science, 2013, 48, 4671-4680.	3.7	23
105	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.	5.6	23
106	An evaluation of creep behavior in ultrafine-grained aluminum alloys processed by ECAP. Journal of Materials Science, 2010, 45, 271-274.	3.7	22
107	Micro-Mechanical Response of an Al-Mg Hybrid System Synthesized by High-Pressure Torsion. Materials, 2017, 10, 596.	2.9	21
108	Flow behavior of a superplastic Znâ€“22% Al alloy processed by equal-channel angular pressing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 503, 48-51.	5.6	20

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109	On the Heterogeneity of Local Shear Strain Induced by Highâ€Pressure Torsion. Advanced Engineering Materials, 2020, 22, 1900477.	3.5	20
110	The many facets of deformation mechanism mapping and the application to nanostructured materials. Journal of Materials Research, 2013, 28, 1827-1834.	2.6	19
111	An evaluation of the shearing patterns introduced by different anvil alignments in high-pressure torsion. Journal of Materials Science, 2014, 49, 3146-3157.	3.7	19
112	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.	5.6	19
113	The Contribution of Severe Plastic Deformation to Research on Superplasticity. Materials Transactions, 2019, 60, 1123-1130.	1.2	19
114	Thermal stability of a nanocrystalline HfNbTiZr multi-principal element alloy processed by high-pressure torsion. Materials Characterization, 2020, 168, 110550.	4.4	19
115	Mechanical mixing of Mg and Zn using high-pressure torsion. Journal of Alloys and Compounds, 2021, 869, 159302.	5.5	19
116	Stability of the ultrafine-grained microstructure in silver processed by ECAP and HPT. Journal of Materials Science, 2013, 48, 4637-4645.	3.7	18
117	Mechanical properties and microstructure evolution in an aluminum 6082 alloy processed by high-pressure torsion. Journal of Materials Science, 2014, 49, 6597-6607.	3.7	18
118	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.	5.6	18
119	Using Severe Plastic Deformation to Fabricate Strong Metal Matrix Composites. Materials Research, 2017, 20, 46-52.	1.3	18
120	Effects of Pre-Strain on the Aging Behavior of Al 7075 Alloy for Hot-Stamping Capability. Metals, 2018, 8, 137.	2.3	18
121	An Evaluation of Homogeneity and Heterogeneity in Metals Processed by High-Pressure Torsion. Acta Physica Polonica A, 2012, 122, 425-429.	0.5	18
122	Effect of nickel addition on enhancing nano-structuring and suppressing TRIP effect in Fe40Mn40Co10Cr10 high entropy alloy during high-pressure torsion. International Journal of Plasticity, 2022, 150, 103193.	8.8	18
123	An Investigation of Cavity Development during Superplastic Flow in a Zinc–Aluminum Alloy Processed Using Severe Plastic Deformation. Materials Transactions, 2012, 53, 87-95.	1.2	17
124	Microstructure of low stacking fault energy silver processed by different routes of severe plastic deformation. Journal of Alloys and Compounds, 2012, 536, S190-S193.	5.5	17
125	An examination of the superplastic characteristics of Alâ€“Mgâ€“Sc alloys after processing. Journal of Materials Research, 2017, 32, 4541-4553.	2.6	17
126	The development of internal cavitation in a superplastic zincâ€“aluminum alloy processed by ECAP. Journal of Materials Science, 2008, 43, 7360-7365.	3.7	16

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127	High temperature thermal stability of ultrafine-grained silver processed by equal-channel angular pressing. Journal of Materials Science, 2013, 48, 1675-1684.	3.7	16
128	High-pressure torsion processing of Znâ€“3Mg alloy and its hybrid counterpart: A comparative study. Journal of Alloys and Compounds, 2020, 831, 154891.	5.5	16
129	Metal hybrids processed by high-pressure torsion: synthesis, microstructure, mechanical properties and developing trends. International Materials Reviews, 2022, 67, 231-265.	19.3	16
130	Structural evolution during nanostructuring of additive manufactured 316L stainless steel by high-pressure torsion. Materials Letters, 2021, 302, 130364.	2.6	16
131	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.	5.8	15
132	An investigation of the stored energy and thermal stability in a Cuâ€“Niâ€“Si alloy processed by high-pressure torsion. Philosophical Magazine, 2020, 100, 688-712.	1.6	15
133	Microstructure evolution in a nanocrystalline CoCrFeNi multi-principal element alloy during annealing. Materials Characterization, 2021, 171, 110807.	4.4	15
134	Phase and structural changes during heat treatment of additive manufactured CrFeCoNi high-entropy alloy. Journal of Alloys and Compounds, 2021, 889, 161495.	5.5	15
135	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.	5.5	14
136	Mechanical Bonding of Aluminum Hybrid Alloy Systems through Highâ€Pressure Torsion. Advanced Engineering Materials, 2020, 22, 1900483.	3.5	14
137	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.	5.6	14
138	Developing Superplasticity in Ultrafine-Grained Metals. Acta Physica Polonica A, 2015, 128, 470-478.	0.5	14
139	Martensitic Phase Transformation and Deformation Behavior of Feâ€“Mnâ€“Câ€“Al Twinningâ€Induced Plasticity Steel during Highâ€Pressure Torsion. Advanced Engineering Materials, 2014, 16, 927-932.	3.5	12
140	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.	5.6	12
141	On prominent TRIP effect and non-basal slip in a TWIP high entropy alloy during high-pressure torsion processing. Materials Characterization, 2021, 178, 111284.	4.4	12
142	Exploring the hydrogen absorption and strengthening behavior in nanocrystalline face-centered cubic high-entropy alloys. Scripta Materialia, 2021, 203, 114069.	5.2	12
143	On the enhanced hardening ability and plasticity mechanisms in a novel Mn-added CoCrNi medium entropy alloy during high-pressure torsion. Journal of Alloys and Compounds, 2022, 904, 163941.	5.5	12
144	Effect of anvil roughness on the flow patterns and hardness development in high-pressure torsion. Journal of Materials Science, 2014, 49, 6517-6528.	3.7	11

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145	Development of mechanical properties in a CaO added AZ31 magnesium alloy processed by equal-channel angular pressing. Materials Characterization, 2016, 112, 105-112.	4.4	11
146	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.	5.6	11
147	Consolidation of magnesium and magnesium-quasicrystal composites through highâ€‘pressure torsion. Letters on Materials, 2019, 9, 546-550.	0.7	11
148	A stored energy analysis of grains with shear texture orientations in Cu-Ni-Si and Fe-Ni alloys processed by high-pressure torsion. Journal of Alloys and Compounds, 2021, 864, 158142.	5.5	10
149	Creep behavior of metals processed by equal-channel angular pressing. Metallic Materials, 2021, 49, 75-83.	0.3	10
150	High-cycle fatigue behavior of Znâ€“22% Al alloy processed by high-pressure torsion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 618, 37-40.	5.6	9
151	Effect of Severe Plastic Deformation and Subsequent Silicon Spheroidizing Treatment on the Microstructure and Mechanical Properties of an Alâ€“Siâ€“Mg Alloy. Advanced Engineering Materials, 2017, 19, 1700064.	3.5	9
152	Achieving room-temperature superplasticity in an ultrafine-grained Zn-22% Al alloy. Letters on Materials, 2015, 5, 269-275.	0.7	9
153	The high-temperature creep properties of materials processed using severe plastic deformation. International Journal of Materials Research, 2009, 100, 750-756.	0.3	8
154	Effect of Equal-Channel Angular Pressing on the Creep Resistance of Precipitation-Strengthened Alloys. Materials Science Forum, 2010, 667-669, 897-902.	0.3	8
155	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.	2.2	8
156	Using deformation mechanism maps to depict flow processes in superplastic ultrafine-grained materials. Journal of Materials Science, 2012, 47, 7726-7734.	3.7	8
157	The significance of self-annealing in two-phase alloys processed by high-pressure torsion. IOP Conference Series: Materials Science and Engineering, 2014, 63, 012126.	0.6	8
158	In Situ Heating Neutron and Xâ€Ray Diffraction Analyses for Revealing Structural Evolution during Postprinting Treatments of Additiveâ€Manufactured 316L Stainless Steel. Advanced Engineering Materials, 2022, 24, .	3.5	8
159	Characteristics of High Temperature Creep in Pure Aluminum Processed by Equal-Channel Angular Pressing. Materials Science Forum, 0, 638-642, 1965-1970.	0.3	7
160	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.	5.8	7
161	The potential for achieving superplasticity in high-entropy alloys processed by severe plastic deformation. IOP Conference Series: Materials Science and Engineering, 2017, 194, 012040.	0.6	7
162	Effect of Highâ€Pressure Torsion on Hardness and Electrical Resistivity of Commercially Pure Cu. Advanced Engineering Materials, 2020, 22, 1900547.	3.5	6

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164	Producing ultrafine-grained materials through severe plastic deformation. Emerging Materials Research, 2014, 3, 252-260.	0.7	5
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