W J Kim

List of Publications by Year in descending order

219 papers	8,853 citations	46918 47 h-index	53109 85 g-index
231 all docs	231 docs citations	231 times ranked	4465 citing authors

#	Article	IF	Citations
1	Texture development and its effect on mechanical properties of an AZ61 Mg alloy fabricated by equal channel angular pressing. Acta Materialia, 2003, 51, 3293-3307.	3.8	508
2	Thoracic Pedicle Screw Fixation in Spinal Deformities. Spine, 2001, 26, 2049-2057.	1.0	441
3	Mechanical properties and microstructures of an AZ61 Mg Alloy produced by equal channel angular pressing. Scripta Materialia, 2002, 47, 39-44.	2.6	330
4	Multi-layer graphene/copper composites: Preparation using high-ratio differential speed rolling, microstructure and mechanical properties. Carbon, 2014, 69, 55-65.	5.4	313
5	Superplasticity in thin magnesium alloy sheets and deformation mechanism maps for magnesium alloys at elevated temperatures. Acta Materialia, 2001, 49, 3337-3345.	3.8	297
6	Optimization of strength and ductility of 2024 Al by equal channel angular pressing (ECAP) and post-ECAP aging. Scripta Materialia, 2003, 49, 333-338.	2.6	227
7	Microstructure and mechanical properties of Mgâ€“Alâ€“Zn alloy sheets severely deformed by asymmetrical rolling. Scripta Materialia, 2007, 56, 309-312.	2.6	213
8	Enhancement of mechanical properties and corrosion resistance of Mgâ€“Ca alloys through microstructural refinement by indirect extrusion. Corrosion Science, 2014, 82, 392-403.	3.0	199
9	Effect of aging treatment on heavily deformed microstructure of a 6061 aluminum alloy after equal channel angular pressing. Scripta Materialia, 2001, 45, 901-907.	2.6	197
10	Microstructural instability and strength of an AZ31 Mg alloy after severe plastic deformation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 385, 300-308.	2.6	191
11	Enhancement of strength and superplasticity in a 6061 Al alloy processed by equal-channel-angular-pressing. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2002, 33, 3155-3164.	1.1	162
12	Strength and strain hardening of aluminum matrix composites with randomly dispersed nanometer-length fragmented carbon nanotubes. Scripta Materialia, 2013, 68, 711-714.	2.6	160
13	Achieving high strength and high ductility in magnesium alloys using severe plastic deformation combined with low-temperature aging. Scripta Materialia, 2009, 61, 1040-1043.	2.6	155
14	Improvement of high-cycle fatigue life in a 6061 Al alloy produced by equal channel angular pressing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 337, 39-44.	2.6	139
15	Development of biodegradable Mgâ€“Ca alloy sheets with enhanced strength and corrosion properties through the refinement and uniform dispersion of the Mg2Ca phase by high-ratio differential speed rolling. Acta Biomaterialia, 2015, 11, 531-542.	4.1	124
16	Micro-extrusion of ECAP processed magnesium alloy for production of high strength magnesium micro-gears. Scripta Materialia, 2006, 54, 1391-1395.	2.6	117
17	Microstructural characteristics and thermal stability of ultrafine grained 6061 Al alloy fabricated by accumulative roll bonding process. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 316, 145-152.	2.6	115
18	Large enhancement in mechanical properties of the 6061 Al alloys after a single pressing by ECAP. Scripta Materialia, 2005, 53, 1207-1211.	2.6	111

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19	Effect of differential speed rolling on microstructure and mechanical properties of an AZ91 magnesium alloy. Journal of Alloys and Compounds, 2008, 460, 289-293.	2.8	110
20	A combination of ball milling and high-ratio differential speed rolling for synthesizing carbon nanotube/copper composites. Carbon, 2013, 61, 487-500.	5.4	110
21	Microstructure and mechanical properties of pure Ti processed by high-ratio differential speed rolling at room temperature. Scripta Materialia, 2010, 62, 451-454.	2.6	109
22	Grain-Size Strengthening in Equal-Channel-Angular-Pressing Processed AZ31 Mg Alloys with a Constant Texture. Materials Transactions, 2005, 46, 251-258.	0.4	102
23	Enhanced corrosion resistance of ultrafine-grained AZ61 alloy containing very fine particles of Mg17Al12 phase. Corrosion Science, 2013, 75, 228-238.	3.0	102
24	Ultrafine grained titanium sheets with high strength and high corrosion resistance. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 8479-8485.	2.6	95
25	Difference in the Hot Compressive Behavior and Processing Maps between the As-cast and Homogenized Al-Zn-Mg-Cu (7075) Alloys. Journal of Materials Science and Technology, 2016, 32, 660-670.	5.6	95
26	Finite element analysis of severe deformation in Mgâ€“3Alâ€“1Zn sheets through differential-speed rolling with a high speed ratio. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 454-455, 570-574.	2.6	83
27	Microstructure of the post-ECAP aging processed 6061 Al alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 464, 23-27.	2.6	83
28	Annealing effects on the corrosion resistance of ultrafine-grained pure titanium. Corrosion Science, 2014, 89, 331-337.	3.0	80
29	High-temperature deformation mechanisms and processing maps of equiatomic CoCrFeMnNi high-entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 756, 528-537.	2.6	79
30	Superplastic flow in a Zr65Al10Ni10Cu15 metallic glass crystallized during deformation in a supercooled liquid region. Scripta Materialia, 2003, 49, 1067-1073.	2.6	77
31	Mechanical properties and microstructure of ultra fine-grained copper prepared by a high-speed-ratio differential speed rolling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 506, 71-79.	2.6	67
32	The effect of the addition of multiwalled carbon nanotubes on the uniform distribution of TiC nanoparticles in aluminum nanocomposites. Scripta Materialia, 2014, 72-73, 25-28.	2.6	67
33	Effect of speed-ratio on microstructure, and mechanical properties of Mgâ€“3Alâ€“1Zn alloy, in differential speed rolling. Journal of Alloys and Compounds, 2011, 509, 8510-8517.	2.8	65
34	Grain size and texture control of Mgâ€“3Alâ€“1Zn alloy sheet using a combination of equal-channel angular rolling and high-speed-ratio differential speed-rolling processes. Scripta Materialia, 2009, 60, 897-900.	2.6	64
35	Ultrafine-grained Mgâ€“9Liâ€“1Zn alloy sheets exhibiting low temperature superplasticity. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 516, 17-22.	2.6	64
36	Effect of the speed ratio on grain refinement and texture development in pure Ti during differential speed rolling. Scripta Materialia, 2011, 64, 49-52.	2.6	64

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37	Realization of low-temperature superplasticity in Mgâ€“Alâ€“Zn alloy sheets processed by differential speed rolling. Scripta Materialia, 2007, 57, 755-758.	2.6	62
38	Exceptionally high strength in Mgâ€“3Alâ€“1Zn alloy processed by high-ratio differential speed rolling. Scripta Materialia, 2011, 65, 1105-1108.	2.6	62
39	Effect of post equal-channel-angular-pressing aging on the modified 7075 Al alloy containing Sc. Journal of Alloys and Compounds, 2008, 450, 222-228.	2.8	61
40	Superplastic behavior of a fine-grained ZK60 magnesium alloy processed by high-ratio differential speed rolling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 527, 322-327.	2.6	60
41	Ultrafine-grained Mgâ€“Znâ€“Zr alloy with high strength and high-strain-rate superplasticity. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 538, 374-385.	2.6	56
42	Effects of Mg concentration on the quasi-superplasticity of coarse-grained Al-Mg alloys. Scripta Materialia, 1997, 37, 1351-1358.	2.6	54
43	Enhancement of the strain hardening ability in ultrafine grained Mg alloys with high strength. Scripta Materialia, 2012, 67, 689-692.	2.6	53
44	Mechanical properties and Hall-Petch relationship of the extruded Mg-Zn-Y alloys with different volume fractions of icosahedral phase. Journal of Alloys and Compounds, 2019, 770, 589-599.	2.8	52
45	Significant strengthening in superlight Al-Mg alloy with an exceptionally large amount of Mg (13â€¯wt%) after cold rolling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 744, 36-44.	2.6	52
46	Texture and mechanical properties of ultrafine-grained Mgâ€“3Alâ€“1Zn alloy sheets prepared by high-ratio differential speed rolling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 874-879.	2.6	51
47	Enhanced corrosion resistance of high strength Mgâ€“3Alâ€“1Zn alloy sheets with ultrafine grains in a phosphate-buffered saline solution. Corrosion Science, 2013, 74, 139-148.	3.0	50
48	Microstructures and mechanical properties of Mgâ€“Alâ€“Znâ€“Ca alloys fabricated by high frequency electromagnetic casting method. Journal of Materials Science, 2009, 44, 47-54.	1.7	47
49	Magnesium matrix composites fabricated by using accumulative roll bonding of magnesium sheets coated with carbon-nanotube-containing aluminum powders. Scripta Materialia, 2012, 67, 129-132.	2.6	47
50	High-temperature deformation behavior of carbon nanotube (CNT)-reinforced aluminum composites and prediction of their high-temperature strength. Composites Part A: Applied Science and Manufacturing, 2014, 67, 308-315.	3.8	47
51	Plastic forming of the equal-channel angular pressing processed 6061 aluminum alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 487, 360-368.	2.6	45
52	Creep behavior of AZ31 magnesium alloy in low temperature range between 423ÂK and 473ÂK. Journal of Materials Science, 2007, 42, 6171-6176.	1.7	42
53	The effect of Al to high-temperature deformation mechanisms and processing maps of Al0.5CoCrFeMnNi high entropy alloy. Journal of Alloys and Compounds, 2019, 802, 152-165.	2.8	42
54	Dynamic recrystallization and hot deformation mechanisms of a eutectic Al0.7CoCrFeMnNi high-entropy alloy. Journal of Alloys and Compounds, 2021, 871, 159488.	2.8	41

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55	Significant effects of adding trace amounts of Ti on the microstructure and corrosion properties of Mgâ€“6Alâ€“1Zn magnesium alloy. Journal of Alloys and Compounds, 2014, 614, 49-55.	2.8	40
56	Microstructural instability and strength of an AZ31 Mg alloy after severe plastic deformation. , 2004, 385, 300-300.		40
57	Temperature and strain rate effect incorporated failure criteria for sheet forming of magnesium alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 488, 468-474.	2.6	38
58	Effects of large amounts of Mg (5â€“13â€¯wt%) on hot compressive deformation behavior and processing maps of Al-Mg alloys. Journal of Alloys and Compounds, 2019, 788, 1282-1299.	2.8	38
59	Microstructure tailoring of Al0.5CoCrFeMnNi to achieve high strength and high uniform strain using severe plastic deformation and an annealing treatment. Journal of Materials Science and Technology, 2021, 71, 228-240.	5.6	37
60	Superplastic gas pressure forming of fine-grained AZ61 magnesium alloy sheet. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 372, 15-20.	2.6	36
61	Synthesis of ultra high strength Alâ€“Mgâ€“Si alloy sheets by differential speed rolling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 520, 23-28.	2.6	35
62	Synthesis of high-strain-rate superplastic magnesium alloy sheets using a high-ratio differential speed rolling technique. Scripta Materialia, 2010, 63, 772-775.	2.6	35
63	Restoration of thoracic kyphosis in the hypokyphotic spine: a comparison between multiple-hook and segmental pedicle screw fixation in adolescent idiopathic scoliosis. Journal of Spinal Disorders, 1999, 12, 489-95.	1.1	34
64	The effect of addition of Sn to copper on hot compressive deformation mechanisms, microstructural evolution and processing maps. Journal of Materials Research and Technology, 2020, 9, 749-761.	2.6	33
65	Fabrication of ultrafine-grained Mgâ€“3Alâ€“1Zn magnesium alloy sheets using a continuous high-ratio differential speed rolling technique. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 594, 189-192.	2.6	32
66	Mg-Ca binary alloy sheets with Ca contents of â‰¤1 wt.% with high corrosion resistance and high toughness. Corrosion Science, 2015, 98, 372-381.	3.0	32
67	Effect of thermal treatment on the bio-corrosion and mechanical properties of ultrafine-grained ZK60 magnesium alloy. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 51, 291-301.	1.5	32
68	The improvement of corrosion resistance of AZ91 magnesium alloy through development of dense and tight network structure of Al-rich Î± phase by addition of a trace amount of Ti. Journal of Alloys and Compounds, 2017, 696, 736-745.	2.8	32
69	Computational analysis of effect of route on strain uniformity in equal channel angular extrusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 412, 287-297.	2.6	31
70	Hot compression characteristics and processing maps of a cast Mgâ€“9.5Znâ€“2.0Y alloy with icosahedral quasicrystalline phase. Journal of Alloys and Compounds, 2015, 644, 645-653.	2.8	31
71	Microstructure and superplasticity of Mgâ€“Alâ€“Ca electromagnetic casting alloys after hot extrusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 494, 391-396.	2.6	30
72	Formation of a nanocomposite-like microstructure in Mgâ€“6Alâ€“1Zn alloy. Scripta Materialia, 2012, 66, 590-593.	2.6	30

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73	Microstructure and superplasticity of the as-cast Mgâ€“9Alâ€“1Zn magnesium alloy after high-ratio differential speed rolling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 677, 332-339.	2.6	30
74	Hot deformation behavior and processing map of a Sn0.5CoCrFeMnNi high entropy alloy with dual phases. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 801, 140394.	2.6	30
75	Refinement of the icosahedral quasicrystalline phase and the grain size of Mgâ€“9.25Znâ€“1.66Y alloy by high-ratio differential speed rolling. Scripta Materialia, 2015, 103, 49-52.	2.6	29
76	Microstructures and mechanical properties of the non-equiatomic FeMnNiCoCr high entropy alloy processed by differential speed rolling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 727, 38-42.	2.6	29
77	High-strength Mgâ€“Alâ€“Ca alloy with ultrafine grain size sensitive to strain rate. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 2062-2066.	2.6	28
78	Prestressing effect of cold-drawn short NiTi SMA fibres in steel reinforced mortar beams. Smart Materials and Structures, 2016, 25, 085041.	1.8	28
79	Pullout behavior of superelastic SMA fibers with various end-shapes embedded in cement mortar. Construction and Building Materials, 2018, 167, 605-616.	3.2	28
80	Characterization of the microstructures and the shape memory properties of the Fe-Mn-Si-Cr-Ni-C shape memory alloy after severe plastic deformation by differential speed rolling and subsequent annealing. Materials Characterization, 2018, 136, 12-19.	1.9	27
81	Effect of refinement of grains and icosahedral phase on hot compressive deformation and processing maps of Mg-Zn-Y magnesium alloys with different volume fractions of icosahedral phase. Journal of Materials Science and Technology, 2019, 35, 181-191.	5.6	27
82	Embedding Nanofibers in a Polymer Matrix by Polymerization of Organogels Comprising Heterobifunctional Organogelators and Monomeric Solvents. Chemistry of Materials, 2008, 20, 5532-5540.	3.2	26
83	Enhanced superplasticity and diffusional creep in ultrafine-grained Mgâ€“6Alâ€“1Zn alloy with high thermal stability. Scripta Materialia, 2013, 68, 179-182.	2.6	26
84	Development of the highly corrosion resistant AZ31 magnesium alloy by the addition of a trace amount of Ti. Journal of Alloys and Compounds, 2016, 664, 25-37.	2.8	26
85	Effect of microalloying by Ca on the microstructure and mechanical properties of as-cast and wrought Mgâ€“Mg2Si composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 820, 141574.	2.6	26
86	Microstructure and superplasticity of AZ31 sheet fabricated by differential speed rolling. Journal of Alloys and Compounds, 2009, 483, 279-282.	2.8	25
87	Superplasticity and superplastic forming of Mgâ€“Alâ€“Zn alloy sheets fabricated by strip casting method. Journal of Alloys and Compounds, 2008, 464, 197-204.	2.8	24
88	Failure prediction of magnesium alloy sheets deforming at warm temperatures using the Zener-Holloman parameter. Mechanics of Materials, 2010, 42, 293-303.	1.7	24
89	Critical review of superplastic magnesium alloys with emphasis on tensile elongation behavior and deformation mechanisms. Journal of Magnesium and Alloys, 2022, 10, 1133-1153.	5.5	24
90	Deformation behavior of powder-metallurgy processed high-strain-rate superplastic 20%SiCp/2124 Al composite in a wide range of temperature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1999, 269, 142-151.	2.6	23

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91	The effect of 0.5Âwt.% Ca addition on the hot compressive characteristics and processing maps of the cast and extruded Mgâ€“3Alâ€“1Zn alloys. Journal of Alloys and Compounds, 2016, 658, 157-169.	2.8	23
92	Superplastic behavior of an ultrafine-grained Mg-13Zn-1.55Y alloy with a high volume fraction of icosahedral phases prepared by high-ratio differential speed rolling. Journal of Materials Science and Technology, 2017, 33, 919-925.	5.6	23
93	The hot compressive deformation behavior of cast Mg-Gd-Y-Zn-Zr alloys with and without LPSO phase in their initial microstructures. Journal of Magnesium and Alloys, 2022, 10, 2901-2917.	5.5	23
94	Particle weakening in superplastic SiC/2124 Al composites at high temperature. Acta Materialia, 2000, 48, 1763-1774.	3.8	22
95	Superplastic deformation behavior of spray-deposited hyper-eutectic Alâ€“25Si alloy. Journal of Alloys and Compounds, 2000, 308, 237-243.	2.8	22
96	Dispersion of TiC particles in an in situ aluminum matrix composite by shear plastic flow during high-ratio differential speed rolling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 559, 325-332.	2.6	22
97	Stress corrosion cracking of high-strength AZ31 processed by high-ratio differential speed rolling. Journal of Magnesium and Alloys, 2015, 3, 271-282.	5.5	22
98	Analysis of strain uniformity during multi-pressing in equal channel angular extrusion. Scripta Materialia, 2005, 53, 293-298.	2.6	21
99	Superplastic gas pressure forming of Zr65Al10Ni10Cu15 metallic glass sheets fabricated by squeeze mold casting. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 428, 205-210.	2.6	21
100	Estimation of Fracture Toughness of Metallic Materials Using Instrumented Indentation: Critical Indentation Stress and Strain Model. Experimental Mechanics, 2017, 57, 1013-1025.	1.1	21
101	Comparison of Hot Deformation Behavior Characteristics Between As-Cast and Extruded Al-Zn-Mg-Cu (7075) Aluminum Alloys with a Similar Grain Size. Materials, 2019, 12, 3807.	1.3	21
102	Superplastic deformation and crystallization behavior of Cu54Ni6Zr22Ti18 metallic-glass sheet. Intermetallics, 2006, 14, 1391-1396.	1.8	20
103	The effect of volume fraction and dispersion of icosahedral phase particles on the strength and work hardening of Mg-Zn-Y alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 684, 284-291.	2.6	20
104	Effect of I(Mg3YZn6)-, W(Mg3Y2Zn3)- and LPSO(Mg12ZnY)-phases on tensile work-hardening and fracture behaviors of rolled Mgâ€“Yâ€“Zn alloys. Journal of Materials Research and Technology, 2019, 8, 2316-2325.	2.6	20
105	Explanation for deviations from the Hallâ€“Petch Relation based on the creep behavior of an ultrafine-grained Mgâ€“Li alloy with low diffusivity. Scripta Materialia, 2009, 61, 652-655.	2.6	19
106	Achieving ultrafine grained Fe-Mn-Si shape memory alloys with enhanced shape memory recovery stresses. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 701, 285-288.	2.6	19
107	Operation of solute-drag creep in an AlCoCrFeMnNi high-entropy alloy and enhanced hot workability. Journal of Alloys and Compounds, 2020, 824, 153829.	2.8	19
108	Low-cycle fatigue behavior and deformation mechanisms of a dual-phase Al0.5CoCrFeMnNi high-entropy alloy. International Journal of Fatigue, 2022, 163, 107075.	2.8	19

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109	High strain rate superplastic behaviour of powder-metallurgy processed 7475Al+0.7Zr alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1999, 260, 170-177.	2.6	18
110	Hot compression behavior of the 1 wt% calcium containing Mgâ€“8Alâ€“0.5Zn (AZ80) alloy fabricated using electromagnetic casting technology. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 615, 222-230.	2.6	18
111	Verification on the extreme scalability of STT-MRAM without loss of thermal stability below 15 nm MTJ cell. , 2014, , .		18
112	Effect of Ca and CaO on the microstructure and hot compressive deformation behavior of Mgâ€“9.5Znâ€“2.0Y alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 648, 146-156.	2.6	18
113	Effect of the volume fraction of the icosahedral phase on the microstructures, hot compressive behaviors and processing maps of Mg-Zn-Y alloys. Journal of Alloys and Compounds, 2017, 725, 711-723.	2.8	18
114	Prestressing effect of embedded Fe-based SMA wire on the flexural behavior of mortar beams. Engineering Structures, 2021, 227, 111472.	2.6	18
115	Large strain hardening in Tiâ€“V carbon steel processed by equal channel angular pressing. Materials Letters, 2001, 51, 177-182.	1.3	17
116	The effect of die geometry on the double shear extrusion by parametric FVM simulation. Scripta Materialia, 2004, 51, 1117-1122.	2.6	17
117	The significant effect of adding trace amounts of Ti on the high-temperature deformation behavior of fine-grained Mgâ€“6Alâ€“1Zn magnesium alloys. Journal of Alloys and Compounds, 2014, 617, 352-358.	2.8	17
118	Pronounced yield drop phenomenon at high temperatures in Al-Mg alloys with high contents of Mg (5â€“13â€¯wt%). Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 743, 590-596.	2.6	17
119	Calculation and construction of deformation mechanism maps and processing maps for CoCrFeMnNi and Al0.5CoCrFeMnNi high-entropy alloys. Journal of Alloys and Compounds, 2021, 869, 159256.	2.8	17
120	Superplasticity in PM 6061 Al alloy and elimination of strengthening effect by reinforcement in superplastic PM aluminum composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 298, 166-173.	2.6	16
121	Mechanical Properties and Texture Evolution in ECAP Processed AZ61 Mg Alloys. Materials Science Forum, 2003, 419-422, 201-206.	0.3	16
122	Analysis of deformation behavior in 3D during equal channel angular extrusion. Journal of Materials Processing Technology, 2006, 176, 260-267.	3.1	16
123	Forging of Mgâ€“3Alâ€“1Znâ€“1Ca alloy prepared by high-frequency electromagnetic casting. Materials & Design, 2009, 30, 4120-4125.	5.1	16
124	Strength enhancement by shear-flow assisted dispersion of carbon nanotubes in aluminum matrix composite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 570, 102-105.	2.6	16
125	Corrosion behavior of magnesium powder fabricated by high-energy ball milling and spark plasma sintering. Metals and Materials International, 2014, 20, 1095-1101.	1.8	16
126	Flame-resistant Ca-containing AZ31 magnesium alloy sheets with good mechanical properties fabricated by a combination of strip casting and high-ratio differential speed rolling methods. Metals and Materials International, 2015, 21, 374-381.	1.8	16

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127	Shape memory and superelasticity of nanograined Ti-51.2â€¯at.% Ni alloy processed by severe plastic deformation via high-ratio differential speed rolling. Materials Characterization, 2018, 145, 284-293.	1.9	16
128	Grain size and temperature effect on the tensile behavior and deformation mechanisms of non-equiatomic Fe41Mn25Ni24Co8Cr2 high entropy alloy. Journal of Materials Science and Technology, 2020, 42, 190-202.	5.6	16
129	Strain hardening behavior and strengthening mechanism in Mg-rich Alâ€“Mg binary alloys subjected to aging treatment. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 794, 139862.	2.6	16
130	Microstructure and tensile properties of magnesium nanocomposites fabricated using magnesium chips and carbon black. Journal of Magnesium and Alloys, 2020, 8, 860-872.	5.5	16
131	Construction of processing maps combined with deformation mechanism maps using creep deformation equations. Journal of Materials Research and Technology, 2020, 9, 13434-13449.	2.6	16
132	Enhanced ductility and deformation mechanisms of ultrafine-grained Alâ€“Mgâ€“Si alloy in sheet form at warm temperatures. Scripta Materialia, 2009, 61, 125-128.	2.6	15
133	Ductility enhancement through texture control and strength restoration through subsequent age-hardening in Mgâ€“Znâ€“Zr alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 597, 157-163.	2.6	15
134	Hot compression behavior of the ignition-resistant Mgâ€“5Yâ€“2.5Znâ€“1.2Ca alloy with long-period stacking ordered structures. Journal of Alloys and Compounds, 2015, 632, 417-428.	2.8	15
135	Warm Temperature Deformation Behavior and Processing Maps of 5182 and 7075 Aluminum Alloy Sheets with Fine Grains. Metals and Materials International, 2018, 24, 455-463.	1.8	15
136	Variation of true strain-rate sensitivity exponent as a function of plastic strain in the PM processed superplastic 7475Al+0.7Zr alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2000, 277, 134-142.	2.6	14
137	Correlation between crystallization and strain hardening during homogeneous deformation of Cu54Ni6Zr22Ti18 bulk metallic glass. Intermetallics, 2007, 15, 282-287.	1.8	14
138	Achieving Low Temperature Superplasticity from Caâ€Containing Magnesium Alloy Sheets. Advanced Engineering Materials, 2009, 11, 525-529.	1.6	14
139	A strategy for creating ultrafine-grained microstructure in magnesium alloy sheets. Materials Letters, 2010, 64, 647-649.	1.3	14
140	Retardation of grain growth in Mgâ€“3Alâ€“1Zn alloy processed by strip-casting method. Journal of Alloys and Compounds, 2009, 482, 106-109.	2.8	13
141	Molecular imprinting into organogel nanofibers. Soft Matter, 2011, 7, 4160.	1.2	13
142	Enhancement of recovery stresses of the Ni-50.2Ti alloy by severe plastic deformation using a high-ratio differential speed rolling technique. Scripta Materialia, 2016, 124, 95-98.	2.6	13
143	Constitutive modeling and understanding of the hot compressive deformation of Mgâ€“9.5Znâ€“2.0Y magnesium alloy with reduced number of strain-dependent constitutive parameters. Metals and Materials International, 2017, 23, 660-672.	1.8	13
144	Successful transition from low-temperature superplasticity to high-strain-rate superplasticity with increasing temperature in anÂultrafine-grained Mgâ€“Yâ€“Znâ€“Zr alloy. Journal of Alloys and Compounds, 2020, 817, 153298.	2.8	13

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145	Additive manufacturing of a porous titanium layer structure Ti on a Coâ€“Cr alloy for manufacturing cementless implants. Journal of Materials Research and Technology, 2021, 10, 250-267.	2.6	13
146	High strain rate superplasticity of an ultra-fine grained Al-Ti-Fe alloy. Scripta Materialia, 1998, 40, 223-228.	2.6	12
147	High-strain-rate superplasticity of Zr65Al10Ni10Cu15 sheet fabricated by squeeze casting method. Intermetallics, 2006, 14, 377-381.	1.8	12
148	Importance of diffusional creep in fine grained Mgâ€“3Alâ€“1Zn alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 580, 133-141.	2.6	12
149	Low temperature superplasticity of ultrafine grained Mgâ€“9.25Znâ€“1.66Y alloy with an icosahedral quasicrystalline phase. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 643, 47-50.	2.6	12
150	Effect of Post-annealing and Strong Deformation Process on the Mechanical and Corrosion Properties of a Mg-Mn alloy for Biomedical Application. Journal of the Korean Physical Society, 2018, 72, 692-698.	0.3	12
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