

Mingyi Zheng

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181
papers

6,907
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183
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ext. citations

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#	Paper	IF	Citations
181	Microstructure and mechanical properties of the Mg/Al laminated composite fabricated by accumulative roll bonding (ARB). <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010 , 527, 3073-3078	5.3	167
180	Ultra high-strength Mg _{0.9} Gd _{0.1} Y _{0.1} Zn _{0.9} Zr alloy sheets processed by large-strain hot rolling and ageing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012 , 547, 93-98	5.3	161
179	Effect of submicron size SiC particulates on microstructure and mechanical properties of AZ91 magnesium matrix composites. <i>Journal of Alloys and Compounds</i> , 2010 , 504, 542-547	5.7	125
178	Dynamic microstructural changes during hot extrusion and mechanical properties of a Mg _{0.9} Y _{0.1} Zn _{0.16} Zr (wt.%) alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011 , 528, 4055-4067	5.3	112
177	Microstructure and mechanical properties of SiC nanoparticles reinforced magnesium matrix composites fabricated by ultrasonic vibration. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011 , 528, 5278-5282	5.3	101
176	Processing maps for hot working of ZK60 magnesium alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007 , 464, 52-58	5.3	99
175	Processing, microstructure and mechanical properties of magnesium matrix nanocomposites fabricated by semisolid stirring assisted ultrasonic vibration. <i>Journal of Alloys and Compounds</i> , 2011 , 509, 8664-8669	5.7	95
174	Effect of interfacial reaction on mechanical behavior of SiCw/AZ91 magnesium matrix composites. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001 , 318, 50-56	5.3	91
173	Graphene nanoplatelets induced heterogeneous bimodal structural magnesium matrix composites with enhanced mechanical properties. <i>Scientific Reports</i> , 2016 , 6, 38824	4.9	91
172	A study of damping capacities in pure Mg and Mg ₉₂ Li alloys. <i>Scripta Materialia</i> , 2005 , 52, 1141-1145	5.6	89
171	Effect of microalloying with Ca on the microstructure and mechanical properties of Mg-6 mass%Zn alloys. <i>Materials and Design</i> , 2016 , 98, 285-293	8.1	86
170	The microstructure, texture and mechanical properties of extruded Mg _{0.3} Zn _{0.2} Ca _{0.5} Ce (wt%) alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015 , 620, 164-171	5.3	83
169	Microstructures and mechanical properties of high-strength Mg _{0.9} Gd _{0.1} Y _{0.1} Zn _{0.9} Zr alloy sheets processed by severe hot rolling. <i>Journal of Alloys and Compounds</i> , 2012 , 524, 46-52	5.7	83
168	Effect of LPSO and SFs on microstructure evolution and mechanical properties of Mg-Gd-Y-Zn-Zr alloy. <i>Scientific Reports</i> , 2017 , 7, 40846	4.9	82
167	Microstructure and mechanical properties of the Mg/Al multilayer fabricated by accumulative roll bonding (ARB) at ambient temperature. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012 , 543, 249-256	5.3	82
166	Effect of hot extrusion on microstructures and mechanical properties of SiC nanoparticles reinforced magnesium matrix composite. <i>Journal of Alloys and Compounds</i> , 2012 , 512, 355-360	5.7	81
165	Texture evolution of the Mg/Al laminated composite fabricated by the accumulative roll bonding. <i>Scripta Materialia</i> , 2009 , 61, 717-720	5.6	81

164	Influence of ECAP routes on microstructure and mechanical properties of Mg ₉₂ Zn ₈ Ca alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010 , 527, 4250-4256	5.3	81
163	Microstructure and strengthening mechanism of carbon nanotubes reinforced magnesium matrix composite. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014 , 597, 264-269	5.3	80
162	Microstructure and tensile property of the ECAPed pure magnesium. <i>Journal of Alloys and Compounds</i> , 2009 , 470, 256-262	5.7	80
161	Altered ageing behaviour of a nanostructured Mg-8.2Gd-3.8Y-1.0Zn-0.4Zr alloy processed by high pressure torsion. <i>Acta Materialia</i> , 2018 , 151, 260-270	8.4	79
160	Effect of Mn addition on microstructure, texture and mechanical properties of Mg ₉₂ Zn ₈ Ca alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011 , 528, 3741-3747	5.3	78
159	Study on fracture behavior of particulate reinforced magnesium matrix composite using in situ SEM. <i>Composites Science and Technology</i> , 2007 , 67, 2253-2260	8.6	78
158	Deformation Behavior of Ultra-Strong and Ductile Mg-Gd-Y-Zn-Zr Alloy with Bimodal Microstructure. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018 , 49, 1931-1947	2.3	77
157	Development of SiCp/AZ91 magnesium matrix nanocomposites using ultrasonic vibration. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012 , 540, 123-129	5.3	73
156	Improving strength and ductility of Mg ₉₂ Gd ₅ Y ₂ Zn ₈ Zr alloy simultaneously via extrusion, hot rolling and ageing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015 , 643, 137-141	5.3	72
155	Microstructure evolution and mechanical properties of a particulate reinforced magnesium matrix composites forged at elevated temperatures. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010 , 527, 1630-1635	5.3	71
154	Microarc oxidation coating formed on SiCw/AZ91 magnesium matrix composite and its corrosion resistance. <i>Materials Letters</i> , 2005 , 59, 1727-1731	3.3	69
153	Development of high-strength, low-cost wrought Mg ₉₂ .5mass% Zn alloy through micro-alloying with Ca and La. <i>Materials and Design</i> , 2015 , 85, 549-557	8.1	68
152	Aging behavior of squeeze cast SiCw/AZ91 magnesium matrix composite. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003 , 348, 67-75	5.3	68
151	Effect of hot extrusion on the microstructure of a particulate reinforced magnesium matrix composite. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007 , 465, 78-84	5.3	66
150	Microstructure and mechanical properties of Mg ₉₂ Zn ₈ Ca alloy processed by equal channel angular pressing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009 , 523, 289-294	5.3	63
149	Microstructure and mechanical properties of SiCp/AZ91 composite deformed through a combination of forging and extrusion process. <i>Materials & Design</i> , 2010 , 31, 3929-3932		62
148	Ultrahigh strength as-extruded Mg ₉₀ .3Zn ₈ .4Y ₀ .4Zr ₀ .5Ca alloy containing W phase. <i>Materials and Design</i> , 2016 , 108, 391-399	8.1	61
147	Low frequency damping capacities and mechanical properties of MgBi alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007 , 452-453, 374-379	5.3	61

146	Effect of Ca/Al ratio on microstructure and mechanical properties of Mg-Al-Ca-Mn alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 682, 423-432	5:3	60
145	Thermal conductivity of as-cast and as-extruded binary Mg-Al alloys. <i>Journal of Alloys and Compounds</i> , 2014 , 608, 19-24	5:7	59
144	Effect of extrusion ratio on microstructure, texture and mechanical properties of indirectly extruded Mg-Zn-Ca alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 569, 48-53	5:3	58
143	Multidirectional forging of AZ91 magnesium alloy and its effects on microstructures and mechanical properties. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015 , 624, 157-168	5:3	57
142	Microstructures and mechanical properties of as-cast and as-extruded Mg-4.50Zn-1.13Ca (wt%) alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 576, 6-13	5:3	57
141	The effect of thermal exposure on the interface and mechanical properties of Al ₁₈ B ₄ O ₃₃ w/AZ91 magnesium matrix composite. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004 , 372, 66-74	5:3	57
140	Microstructure and tensile properties of micro-SiC particles reinforced magnesium matrix composites produced by semisolid stirring assisted ultrasonic vibration. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011 , 528, 8709-8714	5:3	56
139	Thermal conductivity of as-cast and as-extruded binary Mg-Zn alloys. <i>Journal of Alloys and Compounds</i> , 2015 , 621, 250-255	5:7	55
138	Microstructure evolution and mechanical properties of nano-SiCp/AZ91 composite processed by extrusion and equal channel angular pressing (ECAP). <i>Materials Characterization</i> , 2016 , 121, 222-230	3:9	55
137	Exceptional high-strain-rate superplasticity in Mg ₉₂ Gd ₅ Zn ₃ alloy with long-period stacking ordered phase. <i>Scripta Materialia</i> , 2013 , 69, 801-804	5:6	54
136	Microstructure and mechanical properties of WE43 magnesium alloy fabricated by direct-chill casting. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 684, 158-164	5:3	54
135	Improved mechanical property and internal friction of pure Mg processed by ECAP. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012 , 556, 588-594	5:3	54
134	Influence of deformation rate on microstructure, texture and mechanical properties of indirect-extruded Mg-Zn-Ca alloy. <i>Materials Characterization</i> , 2015 , 104, 66-72	3:9	52
133	Effect of cooling rate on the microstructure evolution and mechanical properties of homogenized Mg ₉₂ Gd ₅ Zn ₃ alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 559, 364-370	5:3	51
132	Ageing behavior of extruded Mg-8.2Gd-3.8Y-1.0Zn-0.4Zr (wt.%) alloy containing LPSO phase and β precipitates. <i>Scientific Reports</i> , 2017 , 7, 43391	4:9	50
131	Hardening mechanism of commercially pure Mg processed by high pressure torsion at room temperature. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014 , 619, 95-106	5:3	50
130	The effect of double extrusion on the microstructure and mechanical properties of Mg-Zn-Ca alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 583, 69-77	5:3	50
129	Isothermal forging of AZ91 reinforced with 10vol.% silicon carbon particles. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011 , 528, 1707-1712	5:3	50

128	Effect of heat treatment on the stability of damping capacity in hypoeutectic Mg ₈₁ Si alloy. <i>Scripta Materialia</i> , 2006 , 54, 1639-1643	5.6	50
127	Effect of bimodal size SiC particulates on microstructure and mechanical properties of AZ31B magnesium matrix composites. <i>Materials & Design</i> , 2013 , 52, 1011-1017		49
126	Low-temperature electrical resistivity and thermal conductivity of binary magnesium alloys. <i>Acta Materialia</i> , 2014 , 80, 288-295	8.4	48
125	Dynamic recrystallization behavior of particle reinforced Mg matrix composites fabricated by stir casting. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012 , 545, 38-43	5.3	48
124	Superplasticity of Mg ₉₂ Zn ₈ alloy containing quasicrystal phase processed by equal channel angular pressing. <i>Materials Letters</i> , 2007 , 61, 4406-4408	3.3	47
123	Effect of extrusion parameters on microstructure and mechanical properties of Mg-7.5Gd-2.5Y-3.5Zn-0.9Ca-0.4Zr (wt%) alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 685, 159-167	5.3	46
122	Microstructure and mechanical properties of the Mg ₉₂ Gd ₈ Zn ₈ Zr alloy fabricated by semi-continuous casting. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012 , 549, 128-135	5.3	46
121	Dynamic recrystallization behavior during hot deformation and mechanical properties of 0.2% SiCp reinforced Mg matrix composite. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 560, 824-830	5.3	46
120	Influences of extrusion parameters on microstructure and mechanical properties of particulate reinforced magnesium matrix composites. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011 , 528, 6387-6392	5.3	46
119	Effect of submicron size SiC particles on microstructure and mechanical properties of AZ31B magnesium matrix composites. <i>Materials & Design</i> , 2014 , 54, 436-442		45
118	Effect of ageing treatment on the precipitation behaviour of Mg ₉₂ Gd ₈ Zn ₈ Zr alloy. <i>Journal of Alloys and Compounds</i> , 2013 , 550, 50-56	5.7	45
117	Distribution and integrity of carbon nanotubes in carbon nanotube/magnesium composites. <i>Journal of Alloys and Compounds</i> , 2014 , 612, 330-336	5.7	44
116	Compressive deformation of Mg ₉₂ Zn ₈ Zr alloy processed by equal channel angular pressing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 483-484, 564-567	5.3	44
115	Hot compression deformation behavior of Mg-9Gd-2.9Y-1.9Zn-0.4Zr-0.2Ca (wt%) alloy. <i>Materials Characterization</i> , 2017 , 124, 40-49	3.9	43
114	Ageing behavior of as-cast SiCp/AZ91 Mg matrix composites. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 682, 491-500	5.3	42
113	Influence of extrusion temperature and process parameter on microstructures and tensile properties of a particulate reinforced magnesium matrix nanocomposite. <i>Materials & Design</i> , 2012 , 36, 199-205		42
112	Influence of rolling temperature on the microstructure and mechanical properties of Mg ₉₂ Gd ₈ Zn ₈ Zr alloy sheets. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 559, 615-622	5.3	42
111	Microstructure and mechanical properties of aluminum borate whisker-reinforced magnesium matrix composites. <i>Materials Letters</i> , 2002 , 57, 558-564	3.3	42

110	Significantly improved strength and ductility in bimodal-size grained microstructural magnesium matrix composites reinforced by bimodal sized SiCp over traditional magnesium matrix composites. <i>Composites Science and Technology</i> , 2015 , 118, 85-93	8.6	41
109	Formation of long-period stacking ordered phase only within grains in Mg ₉₂ Gd ₃ Y ₂ Zn ₃ Zr casting by friction stir processing. <i>Journal of Alloys and Compounds</i> , 2013 , 581, 585-589	5.7	41
108	Ultrahigh strength Mg-Al-Ca-Mn extrusion alloys with various aluminum contents. <i>Journal of Alloys and Compounds</i> , 2019 , 792, 130-141	5.7	40
107	Effect of solidification on microstructures and mechanical properties of carbon nanotubes reinforced magnesium matrix composite. <i>Materials & Design</i> , 2014 , 58, 204-208		40
106	Reducing the tension-compression yield asymmetry of extruded Mg ₉₂ Zn ₃ Ca alloy via equal channel angular pressing. <i>Journal of Magnesium and Alloys</i> , 2015 , 3, 302-308	8.8	40
105	Recycling of AZ91 Mg alloy through consolidation of machined chips by extrusion and ECAP. <i>Transactions of Nonferrous Metals Society of China</i> , 2010 , 20, s604-s607	3.3	40
104	Achieving ultra-high hardness of nanostructured Mg-8.2Gd-3.2Y-1.0Zn-0.4Zr alloy produced by a combination of high pressure torsion and ageing treatment. <i>Scripta Materialia</i> , 2018 , 155, 21-25	5.6	39
103	Effect of final rolling reduction on the microstructure and mechanical properties of Mg ₉₂ Gd ₃ Y ₂ Zn ₃ Zr alloy sheets. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 559, 232-240	5.3	38
102	Microstructure and mechanical properties of Mg ₉₂ Gd ₃ Y ₂ Zn ₃ Zr alloy sheets processed by combined processes of extrusion, hot rolling and ageing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 559, 844-851	5.3	38
101	Microstructure and mechanical property of the ECAPed Mg ₂ Si/Mg composite. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009 , 516, 283-289	5.3	38
100	Microstructure and mechanical properties of the accumulative roll bonded (ARBed) pure magnesium sheet. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010 , 527, 7176-7183	5.3	38
99	In-situ quasicrystal-reinforced magnesium matrix composite processed by equal channel angular extrusion (ECAE). <i>Journal of Materials Science</i> , 2005 , 40, 2587-2590	4.3	38
98	Microstructure and mechanical properties of a nanostructured Mg-8.2Gd-3.8Y-1.0Zn-0.4Zr supersaturated solid solution prepared by high pressure torsion. <i>Materials and Design</i> , 2017 , 135, 366-376	8.1	37
97	Improving microstructure and mechanical properties in Mg ₉₂ mass% Zn alloys by combined addition of Ca and Ce. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 656, 67-74	5.3	37
96	Effect of ageing treatment on the microstructure, texture and mechanical properties of extruded Mg ₉₂ .2Gd ₃ .8Y ₂ Zn ₃ .4Zr (wt%) alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 565, 112-117	5.3	37
95	Exceptional grain refinement in a Mg alloy during high pressure torsion due to rare earth containing nanosized precipitates. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018 , 728, 115-123	5.3	36
94	Fabrication of bimodal size SiCp reinforced AZ31B magnesium matrix composites. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014 , 601, 58-64	5.3	36
93	Microstructures and mechanical properties of AZ91 magnesium alloy processed by multidirectional forging under decreasing temperature conditions. <i>Journal of Alloys and Compounds</i> , 2014 , 617, 979-987	5.7	36

92	Multidirectional forging of magnesium matrix composites: Effect on microstructures and tensile properties. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010 , 527, 7364-7368	5.3	36
91	Ultra-fine grained Mg-Zn-Ca-Mn alloy with simultaneously improved strength and ductility processed by equal channel angular pressing. <i>Journal of Alloys and Compounds</i> , 2019 , 785, 410-421	5.7	36
90	Microstructures and mechanical properties of SiCp/AZ91 magnesium matrix nanocomposites processed by multidirectional forging. <i>Journal of Alloys and Compounds</i> , 2015 , 622, 1018-1026	5.7	34
89	The interfacial characteristic of SiCp/AZ91 magnesium matrix composites fabricated by stir casting. <i>Journal of Materials Science</i> , 2009 , 44, 2759-2764	4.3	34
88	Influence of size and distribution of W phase on strength and ductility of high strength Mg-5.1Zn-3.2Y-0.4Zr-0.4Ca alloy processed by indirect extrusion. <i>Journal of Materials Science and Technology</i> , 2018 , 34, 277-283	9.1	33
87	Intermetallics formed at interface of ultrafine grained Al/Mg bi-layered disks processed by high pressure torsion at room temperature. <i>Materials Letters</i> , 2016 , 181, 187-190	3.3	33
86	Tension-compression asymmetry of extruded Mg-Gd-Y-Zr alloy with a bimodal microstructure studied by in-situ synchrotron diffraction. <i>Materials and Design</i> , 2019 , 170, 107705	8.1	32
85	Microstructure and elevated tensile properties of submicron SiCp/AZ91 magnesium matrix composite. <i>Materials & Design</i> , 2012 , 38, 110-114		32
84	Effects of reinforcement phases in magnesium matrix composites on microarc discharge behavior and characteristics of microarc oxidation coatings. <i>Surface and Coatings Technology</i> , 2006 , 201, 353-360	4.4	32
83	Evolution of microstructure, texture and mechanical properties of SiC/AZ31 nanocomposite during hot rolling process. <i>Materials and Design</i> , 2016 , 93, 194-202	8.1	31
82	The microstructural evolution and superplastic behavior at low temperatures of Mg ₈₈ .00Zn _{0.92} Y _{0.16} Zr (wt.%) alloys after hot extrusion and ECAP process. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012 , 549, 60-68	5.3	31
81	Effect of ultrasonic vibration and solution heat treatment on microstructures and tensile properties of AZ91 alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011 , 528, 7484-7487	5.3	31
80	Damping capacities and tensile properties of magnesium matrix composites reinforced by graphite particles. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010 , 527, 6816-6821	5.3	31
79	Effect of heat treatment on internal friction in ECAP processed commercial pure Mg. <i>Journal of Alloys and Compounds</i> , 2013 , 549, 38-45	5.7	30
78	Hot extrusion of SiCp/AZ91 Mg matrix composites. <i>Transactions of Nonferrous Metals Society of China</i> , 2012 , 22, 1912-1917	3.3	30
77	Effect of extrusion temperature on microstructures and damping capacities of Grp/AZ91 composite. <i>Journal of Alloys and Compounds</i> , 2010 , 506, 688-692	5.7	30
76	Effects of microarc oxidation surface treatment on the mechanical properties of Mg alloy and Mg matrix composites. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007 , 447, 227-232	5.3	30
75	Effect of La addition on the microstructure and mechanical properties of Mg ₈₈ wt% Zn alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 673, 47-54	5.3	29

74	Microstructure and mechanical properties of SiCp/MgZnCa composites fabricated by stir casting. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012 , 534, 60-67	5.3	29
73	Microstructure and mechanical properties of rolled sheets of Mg _{8.2} Gd _{3.8} Y _{1.0} Zn _{0.4} Zr alloy: As-cast versus as-homogenized. <i>Journal of Alloys and Compounds</i> , 2012 , 528, 40-44	5.7	29
72	Effect of multidirectional forging on microstructures and tensile properties of a particulate reinforced magnesium matrix composite. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011 , 528, 7133-7139	5.3	29
71	Damping capacities and microstructures of magnesium matrix composites reinforced by graphite particles. <i>Materials & Design</i> , 2010 , 31, 4862-4865		29
70	Hot deformation behavior of SiCp/AZ91 magnesium matrix composite fabricated by stir casting. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 492, 481-485	5.3	29
69	Internal friction and microplastic deformation behavior of pure magnesium processed by equal channel angular pressing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 561, 100-108	5.3	25
68	Hot deformation and processing maps of Al ₁₈ B ₄ O ₃₃ w/ZK60 composite. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 477, 179-184	5.3	25
67	Fabrication of SiC particles-reinforced magnesium matrix composite by ultrasonic vibration. <i>Journal of Materials Science</i> , 2012 , 47, 138-144	4.3	24
66	Microstructure and mechanical properties of Mg _{8.2} Gd _{3.8} Y _{1.0} Zn _{0.4} Zr alloy processed by semi-continuous casting. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 582, 134-139	5.3	24
65	Interfacial reaction in squeeze cast SiCw/AZ91 magnesium alloy composite. <i>Scripta Materialia</i> , 1996 , 35, 529-534	5.6	23
64	Evolution of microstructure and mechanical properties of an as-cast Mg-8.2Gd-3.8Y-1.0Zn-0.4Zr alloy processed by high pressure torsion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 700, 312-320	5.3	22
63	Comparison of microstructure and mechanical properties of Mg-Zn microalloyed with Ca or Ce. <i>Vacuum</i> , 2018 , 151, 221-225	3.7	22
62	Hot deformation behavior of Al ₁₈ B ₄ O ₃₃ w/ZK60 magnesium matrix composite. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 487, 495-498	5.3	22
61	Study on distribution of long-period stacking ordered phase in Mg _{8.2} Gd _{3.8} Y _{1.0} Zn _{0.4} Zr alloy using friction stir processing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015 , 626, 275-285	5.3	21
60	Characterization of interfacial reaction in squeeze cast SiCw/Mg composites. <i>Materials Letters</i> , 2001 , 47, 118-124	3.3	21
59	Microstructure and tensile properties of SiC nanoparticles reinforced magnesium matrix composite prepared by multidirectional forging under decreasing temperature conditions. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015 , 639, 465-473	5.3	20
58	Microstructure and texture evolution of deformed Mg-Zn alloy during recrystallization. <i>Materials Characterization</i> , 2018 , 145, 501-506	3.9	20
57	Evolution of long-period stacking ordered structure and hardness of Mg-8.2Gd-3.8Y-1.0Zn-0.4Zr alloy during processing by high pressure torsion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018 , 738, 238-252	5.3	19

56	Effects of hot rolling on microstructure, macrotexture and mechanical properties of pre-extruded AZ31/SiC nanocomposite sheets. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 683, 15-23	5.3	18
55	Microstructure evolutions of SiCp/AZ91 Mg matrix composites during hot compression. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 559, 139-146	5.3	18
54	Effect of La content on microstructure, thermal conductivity and mechanical properties of Mg ₉₂ Al magnesium alloys. <i>Journal of Alloys and Compounds</i> , 2019 , 806, 71-78	5.7	17
53	Microstructure and room temperature tensile properties of 1 μ m-SiCp/AZ31B magnesium matrix composite. <i>Journal of Magnesium and Alloys</i> , 2015 , 3, 155-161	8.8	17
52	Influence of secondary extrusion on microstructures and mechanical properties of ZK60 Mg alloy processed by extrusion and ECAP. <i>Transactions of Nonferrous Metals Society of China</i> , 2012 , 22, 1896-1903	3.3	17
51	Room-temperature compressive deformation behavior of Mg ₉₂ Zn ₄ Ca alloy processed by equal channel angular pressing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010 , 528, 672-679	5.3	17
50	Effect of trace zinc on the microstructure and mechanical properties of extruded Mg-Gd-Y-Zr alloy. <i>Journal of Alloys and Compounds</i> , 2019 , 789, 416-427	5.7	15
49	High strength and excellent ductility of dilute Mg-0.68Al-0.32Ca-0.50Mn (wt%) extrusion alloy obtained by T6 treatment. <i>Materials Characterization</i> , 2020 , 162, 110197	3.9	15
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41	Effect of forced-air cooling on the microstructure and age-hardening response of extruded Mg-Gd-Y-Zn-Zr alloy full with LPSO lamella. <i>Journal of Materials Science and Technology</i> , 2021 , 73, 66-75	9.1	11
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39	Low frequency damping capacities of commercial pure magnesium. <i>Transactions of Nonferrous Metals Society of China</i> , 2012 , 22, 1907-1911	3.3	10

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32	Effect of small tensile deformation on damping capacities of Mg-1%Al alloy. <i>Transactions of Nonferrous Metals Society of China</i> , 2010 , 20, s444-s447	3.3	9
31	Effect of nano-precipitation on thermal conductivity and mechanical properties of Mg-2Mn-xLa alloys during hot extrusion. <i>Journal of Alloys and Compounds</i> , 2020 , 830, 154570	5.7	8
30	Ultrahigh strength Mg-Y-Ni alloys obtained by regulating second phases. <i>Journal of Materials Science and Technology</i> , 2020 , 45, 117-124	9.1	8
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23	Microstructure and mechanical properties of magnesium matrix composite reinforced with carbon nanotubes by ultrasonic vibration. <i>Rare Metals</i> , 2015 , 1	5.5	4
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20	Precipitates in aged SiCw/AZ91 magnesium matrix composite. <i>Journal of Materials Science Letters</i> , 1997 , 16, 1106-1108		4
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18	Effect of grain size on cyclic microplasticity of ECAP processed commercial pure magnesium. <i>Journal of Materials Science</i> , 2013 , 48, 1239-1248	4.3	3
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12	Microstructure and Properties of Pure Mg/ZK60 Laminate Processed by Accumulative Roll Bonding. <i>Materials Science Forum</i> , 2010 , 650, 343-346	0.4	2
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