

# Wenjiang Ding

## List of Publications by Citations

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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.

282 papers	9,260 citations	53 h-index	78 g-index
286 ext. papers	10,866 ext. citations	5.2 avg, IF	6.42 L-index

#	Paper	IF	Citations
282	Ultralow-loading platinum-cobalt fuel cell catalysts derived from imidazolate frameworks. <i>Science</i> , <b>2018</b> , 362, 1276-1281	33.3	441
281	Effects of rare earths on the microstructure, properties and fracture behavior of MgAl alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2000</b> , 278, 66-76	5.3	239
280	Effects of extrusion ratio on the microstructure and mechanical properties of AZ31 Mg alloy. <i>Journal of Materials Processing Technology</i> , <b>2007</b> , 182, 281-285	5.3	175
279	Effects of extrusion and heat treatment on the mechanical properties and biocorrosion behaviors of a Mg-Nd-Zn-Zr alloy. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2012</b> , 7, 77-86	4.1	155
278	Tensile properties of extruded ZK60RE alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2003</b> , 349, 207-212	5.3	145
277	Research on a Zn-Cu alloy as a biodegradable material for potential vascular stents application. <i>Materials Science and Engineering C</i> , <b>2016</b> , 69, 407-13	8.3	140
276	Microstructure refinement of MgAlZnBi alloys. <i>Materials Letters</i> , <b>2002</b> , 56, 53-58	3.3	139
275	Effect of Nd and Y addition on microstructure and mechanical properties of as-cast MgZnZr alloy. <i>Journal of Alloys and Compounds</i> , <b>2007</b> , 427, 115-123	5.7	136
274	Microstructure, mechanical properties, biocorrosion behavior, and cytotoxicity of as-extruded Mg-Nd-Zn-Zr alloy with different extrusion ratios. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2012</b> , 9, 153-62	4.1	131
273	Comparison of biodegradable behaviors of AZ31 and MgNdZnZr alloys in Hank's physiological solution. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2012</b> , 177, 395-401	3.1	129
272	Biocorrosion properties of as-extruded MgNdZnZr alloy compared with commercial AZ31 and WE43 alloys. <i>Materials Letters</i> , <b>2012</b> , 66, 209-211	3.3	119
271	Precipitation behavior and mechanical properties of a MgZnZr alloy processed by thermo-mechanical treatment. <i>Journal of Alloys and Compounds</i> , <b>2005</b> , 395, 213-219	5.7	115
270	The relationship between (Mg,Zn)3RE phase and 14H-LPSO phase in MgCdYZnZr alloys solidified at different cooling rates. <i>Journal of Alloys and Compounds</i> , <b>2011</b> , 509, 3515-3521	5.7	107
269	Effect of strontium on the microstructure, mechanical properties, and fracture behavior of AZ31 magnesium alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2006</b> , 37, 1333-1341	2.3	107
268	Study of the microstructure, texture and tensile properties of as-extruded AZ91 magnesium alloy. <i>Journal of Alloys and Compounds</i> , <b>2008</b> , 456, 400-406	5.7	106
267	Effect of Zr on the microstructure, mechanical properties and corrosion resistance of Mg10GdBY magnesium alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2009</b> , 523, 145-151	5.3	104
266	Effects of RE on the microstructure and mechanical properties of MgBZnAl magnesium alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2006</b> , 416, 109-118	5.3	103

265	Investigation of the corrosion for Mg <sub>92</sub> Gd <sub>8</sub> Y <sub>0.4</sub> Zr (x=6,8,10,12wt%) alloys in a peak-aged condition. <i>Corrosion Science</i> , <b>2008</b> , 50, 166-177	6.8	100
264	Opportunities and challenges for the biodegradable magnesium alloys as next-generation biomaterials. <i>International Journal of Energy Production and Management</i> , <b>2016</b> , 3, 79-86	5.3	100
263	In vitro degradation behavior and biocompatibility of Mg-Nd-Zn-Zr alloy by hydrofluoric acid treatment. <i>Materials Science and Engineering C</i> , <b>2013</b> , 33, 242-50	8.3	94
262	Study on the hydrogen storage properties of core-shell structured Mg/RE (RE=Nd, Gd, Er) nano-composites synthesized through arc plasma method. <i>International Journal of Hydrogen Energy</i> , <b>2013</b> , 38, 2337-2346	6.7	93
261	Mechanical properties and microstructure of AZ31 Mg alloy processed by two-step equal channel angular extrusion. <i>Materials Letters</i> , <b>2005</b> , 59, 2267-2270	3.3	88
260	Microstructure evolution of AZ31 Mg alloy during equal channel angular extrusion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2006</b> , 423, 247-252	5.3	83
259	Effect of Al-Ti-B master alloy on the grain refinement of AZ31 magnesium alloy. <i>Scripta Materialia</i> , <b>2006</b> , 54, 269-273	5.6	82
258	Nanophasic biodegradation enhances the durability and biocompatibility of magnesium alloys for the next-generation vascular stents. <i>Nanoscale</i> , <b>2013</b> , 5, 9517-22	7.7	80
257	Stable icosahedral phase in Mg <sub>92</sub> Zn <sub>8</sub> alloy. <i>Scripta Materialia</i> , <b>2006</b> , 55, 919-922	5.6	78
256	Enhanced bioactivity of Mg-Nd-Zn-Zr alloy achieved with nanoscale MgF <sub>2</sub> surface for vascular stent application. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 5320-30	9.5	77
255	The influence of heat treatment on damping response of AZ91D magnesium alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2005</b> , 392, 150-155	5.3	76
254	Microstructure evolution and mechanical properties of an ultra-high strength casting Mg <sub>95.6</sub> Gd <sub>1.8</sub> Ag <sub>0.4</sub> Zr alloy. <i>Journal of Alloys and Compounds</i> , <b>2014</b> , 615, 703-711	5.7	73
253	Enhanced biocorrosion resistance and biocompatibility of degradable Mg-Nd-Zn-Zr alloy by brushite coating. <i>Materials Science and Engineering C</i> , <b>2013</b> , 33, 4833-41	8.3	72
252	Electrodeposition of chemically and mechanically protective Al-coatings on AZ91D Mg alloy. <i>Corrosion Science</i> , <b>2011</b> , 53, 381-387	6.8	72
251	Effect of Y and Gd content on the microstructure and mechanical properties of Mg/RE alloys. <i>Journal of Magnesium and Alloys</i> , <b>2019</b> , 7, 345-354	8.8	71
250	Formation of 14H-type long period stacking ordered structure in the as-cast and solid solution treated Mg-Gd-Zn-Zr alloys. <i>Journal of Materials Research</i> , <b>2009</b> , 24, 1842-1854	2.5	71
249	A promising biodegradable magnesium alloy suitable for clinical vascular stent application. <i>Scientific Reports</i> , <b>2017</b> , 7, 46343	4.9	70
248	Electrodeposition mechanism and characterization of Ni-Ti alloy coatings from a eutectic-based ionic liquid. <i>Applied Surface Science</i> , <b>2014</b> , 288, 530-536	6.7	67

- 247 Preparation of superhydrophobic silica film on Mg<sub>95</sub>Al<sub>5</sub>Zn<sub>2</sub> magnesium alloy with enhanced corrosion resistance by combining micro-arc oxidation and sol-gel method. *Surface and Coatings Technology*, **2012**, 213, 192-201 4.4 67
- 246 Behavior of surface oxidation on molten Mg<sub>90</sub>Al<sub>10</sub>.5Zn<sub>0.3</sub>Be alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2001**, 301, 154-161 5.3 67
- 245 Ductility improvement by twinning and twin-slip interaction in a Mg-Y alloy. *Materials & Design*, **2014**, 56, 966-974 66
- 244 Tailoring nickel coatings via electrodeposition from a eutectic-based ionic liquid doped with nicotinic acid. *Applied Surface Science*, **2011**, 257, 9094-9102 6.7 66
- 243 Characterization and strengthening effects of  $\beta$  precipitates in a high-strength casting Mg-15Gd-1Zn-0.4Zr (wt.%) alloy. *Materials Characterization*, **2017**, 126, 1-9 3.9 62
- 242 A novel biodegradable Mg<sub>95</sub>Al<sub>5</sub>Zn<sub>2</sub> alloy with uniform corrosion behavior in artificial plasma. *Materials Letters*, **2012**, 88, 1-4 3.3 60
- 241 The effects of yttrium element on microstructure and mechanical properties of Mg<sub>95</sub>wt.% Zn<sub>5</sub>wt.% Al alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2005**, 402, 142-148 5.3 60
- 240 An understanding of the hot tearing mechanism in AZ91 magnesium alloy. *Materials Letters*, **2002**, 53, 35-39 3.3 60
- 239 Recent developments and applications on high-performance cast magnesium rare-earth alloys. *Journal of Magnesium and Alloys*, **2021**, 9, 1-20 8.8 60
- 238 Microstructure evolution and mechanical properties of quasicrystal-reinforced Mg<sub>95</sub>Zn<sub>5</sub> alloy processed by cyclic extrusion and compression. *Journal of Alloys and Compounds*, **2015**, 626, 42-48 5.7 58
- 237 Effects of extrusion on the microstructure and mechanical properties of Mg<sub>95</sub>Zn<sub>5</sub> alloy reinforced with quasicrystalline particles. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2008**, 474, 348-354 5.3 58
- 236 Study on hydrogen storage properties of Mg nanoparticles confined in carbon aerogels. *International Journal of Hydrogen Energy*, **2013**, 38, 5302-5308 6.7 57
- 235 Hydrogen Storage Properties of a Mg<sub>95</sub>Li Nanocomposite Coprecipitated from Solution. *Journal of Physical Chemistry C*, **2014**, 118, 18401-18411 3.8 56
- 234 Grain refinement and fatigue strengthening mechanisms in as-extruded Mg<sub>95</sub>Zn<sub>5</sub> and Mg<sub>90</sub>Gd<sub>10</sub>Y<sub>0.5</sub>Zr magnesium alloys by shot peening. *International Journal of Plasticity*, **2013**, 49, 16-35 7.6 56
- 233 Deformation behavior of Mg<sub>95</sub>Zn<sub>5</sub>-based alloys reinforced with quasicrystal and Laves phases at elevated temperatures. *Journal of Alloys and Compounds*, **2007**, 427, 160-165 5.7 56
- 232 Effects of Zn and RE additions on the solidification behavior of Mg<sub>95</sub>Al magnesium alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2003**, 342, 178-182 5.3 56
- 231 Effect of Gd content on microstructure and mechanical properties of Mg<sub>95</sub>Gd<sub>5</sub>Zr alloys under peak-aged condition. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 615, 79-86 5.3 53
- 230 Deformation behavior and dynamic recrystallization of a Mg<sub>95</sub>Zn<sub>5</sub>Zr alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2006**, 428, 91-97 5.3 53

229	Preparation and hydrogen sorption properties of a Ni decorated Mg based Mg@Ni nano-composite. <i>International Journal of Hydrogen Energy</i> , <b>2015</b> , 40, 1820-1828	6.7	52
228	Study of the effect of $\beta$ phase on hydrogen embrittlement of Inconel 718 by notch tensile tests. <i>Corrosion Science</i> , <b>2005</b> , 47, 355-367	6.8	52
227	An investigation into interface formation and mechanical properties of aluminum-copper bimetal by squeeze casting. <i>Materials and Design</i> , <b>2016</b> , 89, 1137-1146	8.1	50
226	Effects of heat treatments on Microstructure and mechanical properties of Mg-4Y-0.5Zr alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2007</b> , 448, 165-170	5.3	50
225	NaBH <sub>4</sub> in "Graphene Wrapper:" Significantly Enhanced Hydrogen Storage Capacity and Regenerability through Nanoencapsulation. <i>Advanced Materials</i> , <b>2015</b> , 27, 5070-4	24	48
224	Grain Refinement of AZ31 Magnesium Alloy by Titanium and Low-Frequency Electromagnetic Casting. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2007</b> , 38, 1358-1366	2.3	48
223	Characterization of phases in Mg-4Y-0.5Zr alloy processed by heat treatment. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2006</b> , 428, 295-300	5.3	48
222	Effect of Sb on the microstructure and mechanical properties of AZ91 magnesium alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2001</b> , 32, 787-794	2.3	47
221	Microstructure and tensile properties of as-extruded Mg-12Zn-1Nd alloys reinforced with icosahedral quasicrystal phase. <i>Materials &amp; Design</i> , <b>2015</b> , 66, 162-168		45
220	Formability, mechanical and corrosive properties of Mg-12Zn-1Nd magnesium alloy seamless tubes. <i>Materials &amp; Design</i> , <b>2010</b> , 31, 1417-1422		43
219	Effects of Nd on the microstructure of ZA52 alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2005</b> , 392, 229-234	5.3	43
218	Effect of chemical composition on the microstructure, tensile properties and fatigue behavior of sand-cast Mg-12Zn-1Nd alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2014</b> , 612, 293-301	5.3	42
217	Hydrogen storage properties of Mg-TM-Ala (TM=Ti, Fe, Ni) ternary composite powders prepared through arc plasma method. <i>International Journal of Hydrogen Energy</i> , <b>2013</b> , 38, 8852-8862	6.7	42
216	Continuous intermetallic compounds coatings on AZ91D Mg alloy fabricated by diffusion reaction of Mg-Al couples. <i>Surface and Coatings Technology</i> , <b>2011</b> , 205, 2907-2913	4.4	42
215	Effect of cooling rate on the microstructure and mechanical properties of sand-casting Mg-10Gd-0.5Zr magnesium alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2013</b> , 562, 152-160	5.3	41
214	Cyclic deformation and fatigue of extruded Mg-12Zn magnesium alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2013</b> , 561, 403-410	5.3	40
213	An investigation into aluminum-aluminum bimetal fabrication by squeeze casting. <i>Materials &amp; Design</i> , <b>2015</b> , 68, 8-17		39
212	In vivo and in vitro evaluation of a biodegradable magnesium vascular stent designed by shape optimization strategy. <i>Biomaterials</i> , <b>2019</b> , 221, 119414	15.6	39

211	Effect of Zn on the microstructure evolution of extruded Mg <sub>95</sub> Nd <sub>5</sub> (Zn) <sub>2</sub> (wt.%) alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2012</b> , 543, 12-21	5:3	39
210	Effect of quasicrystal and Laves phases on strength and ductility of as-extruded and heat treated Mg <sub>95</sub> Nd <sub>5</sub> -based alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2008</b> , 472, 75-82	5:3	39
209	Study on composite electroforming of Cu/SiCp composites. <i>Materials Letters</i> , <b>2004</b> , 58, 1634-1637	3:3	38
208	Microstructure evolution and mechanical properties of Mg-Gd-Sm-Zr alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2015</b> , 627, 223-229	5:3	37
207	Effects of processing parameters and Ca content on microstructure and mechanical properties of squeeze casting AZ91D alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2014</b> , 595, 109-117	5:3	37
206	Synthesis and hydrogen storage properties of core-shell structured binary Mg@Ti and ternary Mg@Ti@Ni composites. <i>International Journal of Hydrogen Energy</i> , <b>2017</b> , 42, 2239-2247	6:7	37
205	Fatigue behavior and plane-strain fracture toughness of sand-cast Mg <sub>90</sub> Gd <sub>5</sub> Y <sub>2.5</sub> Zr magnesium alloy. <i>Materials &amp; Design</i> , <b>2014</b> , 59, 466-474		37
204	Effect of low-frequency electromagnetic field on microstructures and macrosegregation of Ø70 mm DC ingots of an Al <sub>90</sub> Mg <sub>10</sub> Zr alloy. <i>Materials Letters</i> , <b>2005</b> , 59, 1502-1506	3:3	37
203	Hydrogen storage properties of nanocrystalline Mg <sub>2</sub> Ni prepared from compressed 2MgH <sub>2</sub> Ni powder. <i>International Journal of Hydrogen Energy</i> , <b>2018</b> , 43, 22391-22400	6:7	36
202	Preparation of an Mg <sub>90</sub> Al <sub>10</sub> alloy semisolid slurry by low frequency electro-magnetic stirring. <i>Materials and Design</i> , <b>2015</b> , 84, 53-63	8:1	35
201	Cyclic deformation and fatigue of extruded ZK60 magnesium alloy with aging effects. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2014</b> , 615, 262-272	5:3	35
200	Effect of solid solution and aging treatments on the microstructures evolution and mechanical properties of Mg <sub>94</sub> Gd <sub>4</sub> Y <sub>1.8</sub> Zn <sub>0.5</sub> Zr alloy. <i>Journal of Alloys and Compounds</i> , <b>2013</b> , 557, 91-97	5:7	35
199	Grain Refinement of Magnesium Alloys by Mg <sub>95</sub> Zr Master Alloys: The Role of Alloy Chemistry and Zr Particle Number Density. <i>Advanced Engineering Materials</i> , <b>2013</b> , 15, 373-378	3:5	35
198	Characterization of precipitate phases in a Mg <sub>90</sub> Dy <sub>5</sub> Al <sub>5</sub> alloy. <i>Journal of Alloys and Compounds</i> , <b>2007</b> , 439, 254-257	5:7	35
197	Heat treatment, microstructure and mechanical properties of a Mg <sub>90</sub> Al <sub>10</sub> alloy grain-refined by Al additions. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2013</b> , 576, 298-305	5:3	34
196	Characterization of phases in a Mg <sub>85</sub> Gd <sub>10</sub> Sm <sub>5</sub> .4Zr (wt.%) alloy during solution treatment. <i>Materials Characterization</i> , <b>2009</b> , 60, 555-559	3:9	34
195	Electrochemical behavior of magnesium alloys AZ91D, AZCe2, and AZLa1 in chloride and sulfate solutions. <i>Journal of Applied Electrochemistry</i> , <b>2008</b> , 38, 251-257	2:6	34
194	Behavior of Mg <sub>90</sub> Al <sub>10</sub> alloy during solution heat treatment at 415 °C. <i>Journal of Materials Science Letters</i> , <b>2002</b> , 21, 1281-1283		34

193	Effects of cyclic extrusion and compression on the microstructure and mechanical properties of AZ91D magnesium composites reinforced by SiC nanoparticles. <i>Materials Characterization</i> , <b>2017</b> , 126, 17-27	3.9	33
192	Effect of extrusion ratio on microstructure and mechanical properties of Mg <sub>8</sub> Li <sub>3</sub> Al <sub>12</sub> Zn <sub>0.5</sub> Y alloy with duplex structure. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2017</b> , 692, 9-16	5.3	33
191	Preparation of Mg <sub>92</sub> Nd <sub>8</sub> Zn <sub>2</sub> (Zr) alloys semisolid slurry by electromagnetic stirring. <i>Materials and Design</i> , <b>2016</b> , 95, 398-409	8.1	33
190	Microstructure and Mechanical Properties of Extruded Magnesium-Aluminum-Cerium Alloy Tubes. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2010</b> , 41, 2662-2674	4.3	33
189	Hydrogen storage properties of core-shell structured Mg@TM (TM=Co, V) composites. <i>International Journal of Hydrogen Energy</i> , <b>2017</b> , 42, 15246-15255	6.7	32
188	Hydrogen storage and hydrolysis properties of core-shell structured Mg-MFx (M=V, Ni, La and Ce) nano-composites prepared by arc plasma method. <i>Journal of Power Sources</i> , <b>2017</b> , 366, 131-142	8.9	32
187	Towards high ductility in magnesium alloys - The role of intergranular deformation. <i>International Journal of Plasticity</i> , <b>2019</b> , 123, 121-132	7.6	32
186	A comparison study of Mg <sub>2</sub> O <sub>3</sub> and Mg <sub>2</sub> hydrogen storage composite powders prepared through arc plasma method. <i>Journal of Alloys and Compounds</i> , <b>2014</b> , 615, S684-S688	5.7	32
185	Dry sliding wear of Cu <sub>15</sub> Ni <sub>85</sub> Sn alloy. <i>Tribology International</i> , <b>2010</b> , 43, 64-68	4.9	32
184	A study of fatigue damage development in extruded Mg <sub>97</sub> Gd <sub>3</sub> magnesium alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2014</b> , 589, 209-216	5.3	31
183	Grain refinement of Mg-10Gd alloy by Al additions. <i>Journal of Materials Research</i> , <b>2012</b> , 27, 2790-2797	2.5	31
182	Study on Fe reduction in AZ91 melt by B <sub>2</sub> O <sub>3</sub> . <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2004</b> , 368, 311-317	5.3	31
181	Visualization of fast hydrogen pump in core-shell nanostructured Mg@Pt through hydrogen-stabilized Mg <sub>3</sub> Pt. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 14629-14637	13	30
180	Mechanisms of reversible hydrogen storage in NaBH <sub>4</sub> through NdF <sub>3</sub> addition. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 3983	13	30
179	Effects of Zn/Gd Ratio and Content of Zn, Gd on Phase Constitutions of Mg Alloys. <i>Materials Transactions</i> , <b>2008</b> , 49, 941-944	1.3	30
178	An electron back-scattered diffraction study on the microstructure evolution of AZ31 Mg alloy during equal channel angular extrusion. <i>Journal of Alloys and Compounds</i> , <b>2006</b> , 426, 148-154	5.7	30
177	Identification of NdH <sub>2</sub> particles in solution-treated Mg <sub>99.5</sub> Nd <sub>0.5</sub> (wt.%) alloy. <i>Journal of Alloys and Compounds</i> , <b>2009</b> , 485, 245-248	5.7	29
176	Microstructure and mechanical properties of hot-rolled Mg <sub>92</sub> Nd <sub>8</sub> Zr alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2008</b> , 483-484, 228-230	5.3	29

175	Preparation and hydrogen storage properties of MgH <sub>2</sub> -trimesic acid-TM MOF (TM=Co, Fe) composites. <i>Journal of Materials Science and Technology</i> , <b>2019</b> , 35, 2132-2143	9.1	28
174	In vitro cytocompatibility, hemocompatibility and antibacterial properties of biodegradable Zn-Cu-Fe alloys for cardiovascular stents applications. <i>Materials Science and Engineering C</i> , <b>2020</b> , 113, 111007	8.3	28
173	Preparation and hydrogen sorption properties of a nano-structured Mg based Mg <sub>92</sub> Al <sub>8</sub> composite. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 13067-13073	6.7	28
172	High strength extruded Mg <sub>92</sub> Zn <sub>2</sub> Nd <sub>0.5</sub> Y <sub>0.6</sub> Zr <sub>0.4</sub> Ca alloy produced by electromagnetic casting. <i>Materials Letters</i> , <b>2005</b> , 59, 2549-2554	3.3	28
171	Effect of SiC particles and the particulate size on the hot deformation and processing map of AZ91 magnesium matrix composites. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2017</b> , 707, 315-324	5.3	27
170	Reversible hydrogen storage in a 3NaBH <sub>4</sub> /YF <sub>3</sub> composite. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 17118-17125	6.7	27
169	Gd contents, mechanical and corrosion properties of Mg <sub>90</sub> Gd <sub>5</sub> Y <sub>0.5</sub> Zr alloy purified by fluxes containing GdCl <sub>3</sub> additions. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2009</b> , 507, 207-214	5.3	27
168	Evolution of microstructure and texture of AZ91 alloy during hot compression. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2007</b> , 452-453, 503-507	5.3	27
167	A Novel Method to Achieve Grain Refinement in Aluminum. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2016</b> , 47, 4788-4794	2.3	26
166	A co-precipitated Mg <sub>90</sub> Li nano-composite with high capacity and rapid hydrogen absorption kinetics at room temperature. <i>RSC Advances</i> , <b>2014</b> , 4, 42764-42771	3.7	26
165	Effect of Shot Peening on Surface Characteristics and Fatigue Properties of T5-Treated ZK60 Alloy. <i>Materials Transactions</i> , <b>2009</b> , 50, 791-798	1.3	26
164	Effect of cerium on microstructures and mechanical properties of AZ61 wrought magnesium alloy. <i>Journal of Materials Science</i> , <b>2004</b> , 39, 7061-7066	4.3	26
163	Evaluation of the effect of vacuum on mold filling in the magnesium EPC process. <i>Journal of Materials Processing Technology</i> , <b>2002</b> , 120, 94-100	5.3	26
162	Hot-tearing susceptibility of Mg <sub>90</sub> Al <sub>10</sub> Zn alloy. <i>Materials Letters</i> , <b>2002</b> , 57, 929-934	3.3	26
161	Study on hydrogen storage properties of Mg <sub>X</sub> (X = Fe, Co, V) nano-composites co-precipitated from solution. <i>RSC Advances</i> , <b>2015</b> , 5, 7687-7696	3.7	25
160	Microstructure and mechanical properties of rheo-squeeze casting AZ91-Ca magnesium alloy prepared by gas bubbling process. <i>Materials &amp; Design</i> , <b>2015</b> , 67, 1-8		25
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38	Effect of heat treatment on microstructure evolution and mechanical properties of selective laser melted Mg-11Gd-2Zn-0.4Zr alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2022</b> , 829, 142139	5.3	4
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25	Turning Trash into Treasure: MXene with Intrinsic LiF Solid Electrolyte Interfaces Performs Better and Better during Battery Cycling. <i>Advanced Materials Technologies</i> , <b>2021</b> , 6, 2000882	6.8	3
24	A Simplified Hot-Tearing Criterion for Shape Castings Based on Temperature-Field Simulation. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2019</b> , 50, 5271-5280	2.3	2
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21	Orientation relationship between 14H-LPSO structured X phase and DO <sub>3</sub> -type (Mg,Zn) <sub>3</sub> RE phase in an Mg <sub>90</sub> Gd <sub>7</sub> Y <sub>2</sub> Zn <sub>1</sub> alloy. <i>International Journal of Materials Research</i> , <b>2012</b> , 103, 559-563	0.5	2
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15	Microstructure and Mechanical Properties of Squeeze Cast Al-5 Mg-3Zn-1Cu-1Si Alloy Along Cross Section. <i>Metals and Materials International</i> , <b>2020</b> , 27, 3776	2.4	1
14	Effects of Gd Addition on the Microstructure and Tensile Properties of Mg <sub>90</sub> Al <sub>7</sub> RE Alloy Produced by Three Different Casting Methods. <i>Acta Metallurgica Sinica (English Letters)</i> , <b>2021</b> , 34, 1361-1374	2.5	1

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12	Microstructure and Tensile Properties of the Mg-6Zn-4Al-xSn Die Cast Magnesium Alloy. <i>Metals</i> , <b>2019</b> , 9, 113	2.3	0
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8	Study on the Grain Refinement Behavior of Mg-Zr Master Alloy and Zr Containing Compounds in Mg-10Gd-3Y Magnesium Alloy <b>2011</b> , 181-185		0
7	Microstructure and mechanical properties of high performance die cast Al-8Ce-3Y aluminum alloy containing Al <sub>4</sub> (Ce,Y) phase. <i>Materials Letters</i> , <b>2021</b> , 305, 130742	3.3	0
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