Wenjiang Ding

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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. *Science*, **2018**, 362, 1276-1281	33.3	441
281	Effects of rare earths on the microstructure, properties and fracture behavior of Mg-Al alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2000**, 278, 66-76	5.3	239
280	Effects of extrusion ratio on the microstructure and mechanical properties of AZ31 Mg alloy. *Journal of Materials Processing Technology*, **2007**, 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. *Journal of the Mechanical Behavior of Biomedical Materials*, **2012**, 7, 77-86	4.1	155
278	Tensile properties of extruded ZK60-RE alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2003**, 349, 207-212	5.3	145
277	Research on a Zn-Cu alloy as a biodegradable material for potential vascular stents application. *Materials Science and Engineering C*, **2016**, 69, 407-13	8.3	140
276	Microstructure refinement of Mg-Al-Zn-Si alloys. *Materials Letters*, **2002**, 56, 53-58	3.3	139
275	Effect of Nd and Y addition on microstructure and mechanical properties of as-cast Mg-Zn-Zr alloy. *Journal of Alloys and Compounds*, **2007**, 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. *Journal of the Mechanical Behavior of Biomedical Materials*, **2012**, 9, 153-62	4.1	131
273	Comparison of biodegradable behaviors of AZ31 and Mg-Nd-Zn-Zr alloys in Hank's physiological solution. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2012**, 177, 395-401	3.1	129
272	Biocorrosion properties of as-extruded Mg-Nd-Zn-Zr alloy compared with commercial AZ31 and WE43 alloys. *Materials Letters*, **2012**, 66, 209-211	3.3	119
271	Precipitation behavior and mechanical properties of a Mg-Zn-Y-Zr alloy processed by thermo-mechanical treatment. *Journal of Alloys and Compounds*, **2005**, 395, 213-219	5.7	115
270	The relationship between (Mg,Zn)3RE phase and 14H-LPSO phase in Mg-Gd-Y-Zn-Zr alloys solidified at different cooling rates. *Journal of Alloys and Compounds*, **2011**, 509, 3515-3521	5.7	107
269	Effect of strontium on the microstructure, mechanical properties, and fracture behavior of AZ31 magnesium alloy. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2006**, 37, 1333-1341	2.3	107
268	Study of the microstructure, texture and tensile properties of as-extruded AZ91 magnesium alloy. *Journal of Alloys and Compounds*, **2008**, 456, 400-406	5.7	106
267	Effect of Zr on the microstructure, mechanical properties and corrosion resistance of Mg-10Gd-3Y magnesium alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2009**, 523, 145-151	5.3	104
266	Effects of RE on the microstructure and mechanical properties of Mg-8Zn-4Al magnesium alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2006**, 416, 109-118	5.3	103

265	Investigation of the corrosion for Mg-xGd-3Y-0.4Zr (x=6,8,10,12wt%) alloys in a peak-aged condition. *Corrosion Science*, **2008**, 50, 166-177	6.8	100
264	Opportunities and challenges for the biodegradable magnesium alloys as next-generation biomaterials. *International Journal of Energy Production and Management*, **2016**, 3, 79-86	5.3	100
263	In vitro degradation behavior and biocompatibility of Mg-Nd-Zn-Zr alloy by hydrofluoric acid treatment. *Materials Science and Engineering C*, **2013**, 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. *International Journal of Hydrogen Energy* , **2013**, 38, 2337-2346	6.7	93
261	Mechanical properties and microstructure of AZ31 Mg alloy processed by two-step equal channel angular extrusion. *Materials Letters*, **2005**, 59, 2267-2270	3.3	88
260	Microstructure evolution of AZ31 Mg alloy during equal channel angular extrusion. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2006**, 423, 247-252	5.3	83
259	Effect of Al-4Ti-5B master alloy on the grain refinement of AZ31 magnesium alloy. *Scripta Materialia*, **2006**, 54, 269-273	5.6	82
258	Nanophasic biodegradation enhances the durability and biocompatibility of magnesium alloys for the next-generation vascular stents. *Nanoscale*, **2013**, 5, 9517-22	7.7	80
257	Stable icosahedral phase in Mg-Zn-Gd alloy. *Scripta Materialia*, **2006**, 55, 919-922	5.6	78
256	Enhanced bioactivity of Mg-Nd-Zn-Zr alloy achieved with nanoscale MgF2 surface for vascular stent application. *ACS Applied Materials & Interfaces*, **2015**, 7, 5320-30	9.5	77
255	The influence of heat treatment on damping response of AZ91D magnesium alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2005**, 392, 150-155	5.3	76
254	Microstructure evolution and mechanical properties of an ultra-high strength casting Mg-15.6Gd-1.8Ag-0.4Zr alloy. *Journal of Alloys and Compounds*, **2014**, 615, 703-711	5.7	73
253	Enhanced biocorrosion resistance and biocompatibility of degradable Mg-Nd-Zn-Zr alloy by brushite coating. *Materials Science and Engineering C*, **2013**, 33, 4833-41	8.3	72
252	Electrodeposition of chemically and mechanically protective Al-coatings on AZ91D Mg alloy. *Corrosion Science*, **2011**, 53, 381-387	6.8	72
251	Effect of Y and Gd content on the microstructure and mechanical properties of Mg-Y-RE alloys. *Journal of Magnesium and Alloys*, **2019**, 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. *Journal of Materials Research*, **2009**, 24, 1842-1854	2.5	71
249	A promising biodegradable magnesium alloy suitable for clinical vascular stent application. *Scientific Reports*, **2017**, 7, 46343	4.9	70
248	Electrodeposition mechanism and characterization of Ni-Cu alloy coatings from a eutectic-based ionic liquid. *Applied Surface Science*, **2014**, 288, 530-536	6.7	67

247	Preparation of superhydrophobic silica film on MgNd2Zn2Zr 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 Mg9Al0.5Zn0.3Be 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 β 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 MgNd2Zn2Zr 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-5wt.% Zn-2wt.% 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-Zn-Cd 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-Zn-Cd 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 MgNi 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-6Zn-0.5Zr and Mg-10Gd-3Y-0.5Zr magnesium alloys by shot peening. *International Journal of Plasticity*, **2013**, 49, 16-35	7.6	56
233	Deformation behavior of Mg-Zn-Cd-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-9Al 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-Gd-Nd-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-Zn-Nd-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. *International Journal of Hydrogen Energy*, **2015**, 40, 1820-1828	6.7	52
228	Study of the effect of δ phase on hydrogen embrittlement of Inconel 718 by notch tensile tests. *Corrosion Science*, **2005**, 47, 355-367	6.8	52
227	An investigation into interface formation and mechanical properties of aluminum–copper bimetal by squeeze casting. *Materials and Design*, **2016**, 89, 1137-1146	8.1	50
226	Effects of heat treatments on Microstructure and mechanical properties of Mg–4Y–4Sm–0.5Zr alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2007**, 448, 165-170	5.3	50
225	NaBH4 in "Graphene Wrapper:" Significantly Enhanced Hydrogen Storage Capacity and Regenerability through Nanoencapsulation. *Advanced Materials*, **2015**, 27, 5070-4	24	48
224	Grain Refinement of AZ31 Magnesium Alloy by Titanium and Low-Frequency Electromagnetic Casting. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2007**, 38, 1358-1366	2.3	48
223	Characterization of phases in Mg–4Y–4Sm–0.5Zr alloy processed by heat treatment. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2006**, 428, 295-300	5.3	48
222	Effect of Sb on the microstructure and mechanical properties of AZ91 magnesium alloy. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2001**, 32, 787-794	2.3	47
221	Microstructure and tensile properties of as-extruded Mg–Li–Zn–Gd alloys reinforced with icosahedral quasicrystal phase. *Materials & Design*, **2015**, 66, 162-168		45
220	Formability, mechanical and corrosive properties of Mg–Nd–Zn–Zr magnesium alloy seamless tubes. *Materials & Design*, **2010**, 31, 1417-1422		43
219	Effects of Nd on the microstructure of ZA52 alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2005**, 392, 229-234	5.3	43
218	Effect of chemical composition on the microstructure, tensile properties and fatigue behavior of sand-cast Mg–Gd–Y–Zr alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 612, 293-301	5.3	42
217	Hydrogen storage properties of Mg–TM–La (TM = Ti, Fe, Ni) ternary composite powders prepared through arc plasma method. *International Journal of Hydrogen Energy*, **2013**, 38, 8852-8862	6.7	42
216	Continuous intermetallic compounds coatings on AZ91D Mg alloy fabricated by diffusion reaction of Mg–Al couples. *Surface and Coatings Technology*, **2011**, 205, 2907-2913	4.4	42
215	Effect of cooling rate on the microstructure and mechanical properties of sand-casting Mg–10Gd–3Y–0.5Zr magnesium alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 562, 152-160	5.3	41
214	Cyclic deformation and fatigue of extruded Mg–Gd–Y magnesium alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 561, 403-410	5.3	40
213	An investigation into aluminum–aluminum bimetal fabrication by squeeze casting. *Materials & Design*, **2015**, 68, 8-17		39
212	In vivo and in vitro evaluation of a biodegradable magnesium vascular stent designed by shape optimization strategy. *Biomaterials*, **2019**, 221, 119414	15.6	39

211	Effect of Zn on the microstructure evolution of extruded Mg3Nd (2Zn)2Zr (wt.%) alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2012**, 543, 12-21	5.3	39
210	Effect of quasicrystal and Laves phases on strength and ductility of as-extruded and heat treated Mg2Zn1Gd-based alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2008**, 472, 75-82	5.3	39
209	Study on composite electroforming of Cu/SiCp composites. *Materials Letters*, **2004**, 58, 1634-1637	3.3	38
208	Microstructure evolution and mechanical properties of Mg-Gd-Sm-Zr alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2015**, 627, 223-229	5.3	37
207	Effects of processing parameters and Ca content on microstructure and mechanical properties of squeeze casting AZ91Ca alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 595, 109-117	5.3	37
206	Synthesis and hydrogen storage properties of core5shell structured binary Mg@Ti and ternary Mg@Ti@Ni composites. *International Journal of Hydrogen Energy*, **2017**, 42, 2239-2247	6.7	37
205	Fatigue behavior and plane-strain fracture toughness of sand-cast Mg10Gd3Y0.5Zr magnesium alloy. *Materials & Design*, **2014**, 59, 466-474		37
204	Effect of low-frequency electromagnetic field on microstructures and macrosegregation of 270 mm DC ingots of an Al2nMgCu2r alloy. *Materials Letters*, **2005**, 59, 1502-1506	3.3	37
203	Hydrogen storage properties of nanocrystalline Mg2Ni prepared from compressed 2MgH2Ni powder. *International Journal of Hydrogen Energy*, **2018**, 43, 22391-22400	6.7	36
202	Preparation of an MgGd2n alloy semisolid slurry by low frequency electro-magnetic stirring. *Materials and Design*, **2015**, 84, 53-63	8.1	35
201	Cyclic deformation and fatigue of extruded ZK60 magnesium alloy with aging effects. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 615, 262-272	5.3	35
200	Effect of solid solution and aging treatments on the microstructures evolution and mechanical properties of Mg14Gd3Y1.8Zn0.5Zr alloy. *Journal of Alloys and Compounds*, **2013**, 557, 91-97	5.7	35
199	Grain Refinement of Magnesium Alloys by Mg2r Master Alloys: The Role of Alloy Chemistry and Zr Particle Number Density. *Advanced Engineering Materials*, **2013**, 15, 373-378	3.5	35
198	Characterization of precipitate phases in a MgDyGdNd alloy. *Journal of Alloys and Compounds*, **2007**, 439, 254-257	5.7	35
197	Heat treatment, microstructure and mechanical properties of a MgGd7 alloy grain-refined by Al additions. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 576, 298-305	5.3	34
196	Characterization of phases in a Mg6Gd4Sm0.4Zr (wt.%) alloy during solution treatment. *Materials Characterization*, **2009**, 60, 555-559	3.9	34
195	Electrochemical behavior of magnesium alloys AZ91D, AZCe2, and AZLa1 in chloride and sulfate solutions. *Journal of Applied Electrochemistry*, **2008**, 38, 251-257	2.6	34
194	Behavior of Mg4AlCa alloy during solution heat treatment at 415 °C. *Journal of Materials Science Letters*, **2002**, 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. *Materials Characterization*, **2017**, 126, 17-27	3.9	33
192	Effect of extrusion ratio on microstructure and mechanical properties of Mg8Li3Al2Zn0.5Y alloy with duplex structure. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 692, 9-16	5.3	33
191	Preparation of MgNd2Zn(Zr) alloys semisolid slurry by electromagnetic stirring. *Materials and Design*, **2016**, 95, 398-409	8.1	33
190	Microstructure and Mechanical Properties of Extruded Magnesium-Aluminum-Cerium Alloy Tubes. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2010**, 41, 2662-2674	2.3	33
189	Hydrogen storage properties of core-shell structured Mg@TM (TM=Co, V) composites. *International Journal of Hydrogen Energy*, **2017**, 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. *Journal of Power Sources*, **2017**, 366, 131-142	8.9	32
187	Towards high ductility in magnesium alloys - The role of intergranular deformation. *International Journal of Plasticity*, **2019**, 123, 121-132	7.6	32
186	A comparison study of MgY2O3 and MgY hydrogen storage composite powders prepared through arc plasma method. *Journal of Alloys and Compounds*, **2014**, 615, S684-S688	5.7	32
185	Dry sliding wear of Cu15Ni8Sn alloy. *Tribology International*, **2010**, 43, 64-68	4.9	32
184	A study of fatigue damage development in extruded MgGdY magnesium alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 589, 209-216	5.3	31
183	Grain refinement of Mg-10Gd alloy by Al additions. *Journal of Materials Research*, **2012**, 27, 2790-2797	2.5	31
182	Study on Fe reduction in AZ91 melt by B2O3. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2004**, 368, 311-317	5.3	31
181	Visualization of fast hydrogen pumping in core-shell nanostructured Mg@Pt through hydrogen-stabilized Mg3Pt. *Journal of Materials Chemistry A*, **2019**, 7, 14629-14637	13	30
180	Mechanisms of reversible hydrogen storage in NaBH4 through NdF3 addition. *Journal of Materials Chemistry A*, **2013**, 1, 3983	13	30
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178	An electron back-scattered diffraction study on the microstructure evolution of AZ31 Mg alloy during equal channel angular extrusion. *Journal of Alloys and Compounds*, **2006**, 426, 148-154	5.7	30
177	Identification of NdH2 particles in solution-treated Mg2.5%Nd (wt.%) alloy. *Journal of Alloys and Compounds*, **2009**, 485, 245-248	5.7	29
176	Microstructure and mechanical properties of hot-rolled Mg2ZnNd2Zr alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2008**, 483-484, 228-230	5.3	29

175	Preparation and hydrogen storage properties of MgH2-trimesic acid-TM MOF (TM=Co, Fe) composites. *Journal of Materials Science and Technology*, **2019**, 35, 2132-2143	9.1	28
174	In vitro cytocompatibility, hemocompatibility and antibacterial properties of biodegradable Zn-Cu-Fe alloys for cardiovascular stents applications. *Materials Science and Engineering C*, **2020**, 113, 111007	8.3	28
173	Preparation and hydrogen sorption properties of a nano-structured Mg based MgLaO composite. *International Journal of Hydrogen Energy*, **2012**, 37, 13067-13073	6.7	28
172	High strength extruded Mg9Zn2Nd1.5Y0.6Zr0.4Ca alloy produced by electromagnetic casting. *Materials Letters*, **2005**, 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. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 707, 315-324	5.3	27
170	Reversible hydrogen storage in a 3NaBH4/YF3 composite. *International Journal of Hydrogen Energy*, **2012**, 37, 17118-17125	6.7	27
169	Gd contents, mechanical and corrosion properties of Mg10Gd3Y0.5Zr alloy purified by fluxes containing GdCl3 additions. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2009**, 507, 207-214	5.3	27
168	Evolution of microstructure and texture of AZ91 alloy during hot compression. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2007**, 452-453, 503-507	5.3	27
167	A Novel Method to Achieve Grain Refinement in Aluminum. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2016**, 47, 4788-4794	2.3	26
166	A co-precipitated MgTi nano-composite with high capacity and rapid hydrogen absorption kinetics at room temperature. *RSC Advances*, **2014**, 4, 42764-42771	3.7	26
165	Effect of Shot Peening on Surface Characteristics and Fatigue Properties of T5-Treated ZK60 Alloy. *Materials Transactions*, **2009**, 50, 791-798	1.3	26
164	Effect of cerium on microstructures and mechanical properties of AZ61 wrought magnesium alloy. *Journal of Materials Science*, **2004**, 39, 7061-7066	4.3	26
163	Evaluation of the effect of vacuum on mold filling in the magnesium EPC process. *Journal of Materials Processing Technology*, **2002**, 120, 94-100	5.3	26
162	Hot-tearing susceptibility of Mg9AlXZn alloy. *Materials Letters*, **2002**, 57, 929-934	3.3	26
161	Study on hydrogen storage properties of MgX (X = Fe, Co, V) nano-composites co-precipitated from solution. *RSC Advances*, **2015**, 5, 7687-7696	3.7	25
160	Microstructure and mechanical properties of rheo-squeeze casting AZ91-Ca magnesium alloy prepared by gas bubbling process. *Materials & Design*, **2015**, 67, 1-8		25
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158	Effect of Cooling Rate on the Microstructure and Mechanical Properties of Cu/Al Bimetal Fabricated by Compound Casting. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2018**, 49, 661-672	2.3	24

157	Improvement in grain refinement efficiency of Mg2Zr master alloy for magnesium alloy by friction stir processing. *Journal of Magnesium and Alloys*, **2014**, 2, 239-244	8.8	24
156	Effects of Mn addition on the microstructure and mechanical properties of cast Mg9Al2Sn (wt.%) alloy. *Journal of Magnesium and Alloys*, **2014**, 2, 27-35	8.8	24
155	Characterization of highly corrosion-resistant nanocrystalline Ni coating electrodeposited on Mg5Nd2Zn2Zr alloy from a eutectic-based ionic liquid. *Applied Surface Science*, **2014**, 313, 711-719	6.7	24
154	Microstructure and mechanical properties of double continuously extruded Mg2Zn1Gd-based magnesium alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 560, 241-248	5.3	24
153	The role of nanoquasicrystals on the ductility enhancement of as-extruded Mg2Zn1Gd alloy at elevated temperature. *Journal of Materials Science*, **2008**, 43, 5527-5533	4.3	24
152	Influence of flux containing YCl3 additions on purifying effectiveness and properties of Mg10Gd3Y0.5Zr alloy. *Journal of Alloys and Compounds*, **2009**, 480, 386-391	5.7	23
151	Challenges and Solutions for the Additive Manufacturing of Biodegradable Magnesium Implants. *Engineering*, **2020**, 6, 1267-1275	9.7	23
150	A combined electron backscattered diffraction and visco-plastic self-consistent analysis on the anisotropic deformation behavior in a Mg-Gd-Y alloy. *Materials and Design*, **2017**, 122, 164-171	8.1	22
149	Enhanced hydrogenation and hydrolysis properties of core-shell structured Mg-MOx (M = Al, Ti and Fe) nanocomposites prepared by arc plasma method. *Chemical Engineering Journal*, **2019**, 371, 233-243	14.7	22
148	Effects of cyclic extrusion and compression parameters on microstructure and mechanical properties of Mg1.50Zn0.25Gd alloy. *Materials and Design*, **2015**, 86, 788-796	8.1	22
147	Effects of glycine and current density on the mechanism of electrodeposition, composition and properties of Ni9Mn films prepared in ionic liquid. *Applied Surface Science*, **2016**, 365, 31-37	6.7	22
146	Microstructure and Mechanical Properties of Mg-7Al-2Sn Alloy Processed by Super Vacuum Die-Casting. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2013**, 44, 4788-4799	2.3	22
145	Microstructure evolution of semi-solid Mg10Gd3Y0.5Zr alloy during isothermal heat treatment. *Journal of Magnesium and Alloys*, **2013**, 1, 39-46	8.8	22
144	Consolidation and mechanical properties of Cu46Zr42Al7Y5 metallic glass by spark plasma sintering. *Journal of Non-Crystalline Solids*, **2012**, 358, 1263-1267	3.9	22
143	Microstructure refinement of Mg-Al-RE alloy by Gd addition. *Materials Letters*, **2019**, 246, 125-128	3.3	21
142	The in vitro and in vivo biological effects and osteogenic activity of novel biodegradable porous Mg alloy scaffolds. *Materials and Design*, **2020**, 189, 108514	8.1	21
141	Influence of processing parameters on thermal field in Mg5Nd2Zn2Zr alloy during friction stir processing. *Materials and Design*, **2016**, 94, 186-194	8.1	21
140	Improving hydrogen sorption performances of MgH2 through nanoconfinement in a mesoporous CoS nano-boxes scaffold. *Chemical Engineering Journal*, **2021**, 406, 126790	14.7	21

139	Microstructure characterization and high-temperature shear strength of the Mg10GdxYy1.2Zn0.5Zr alloy in the as-cast and aged conditions. *Journal of Alloys and Compounds*, **2015**, 619, 826-833	5.7	20
138	Using CoS cathode materials with 3D hierarchical porosity and an ionic liquid (IL) as an electrolyte additive for high capacity rechargeable magnesium batteries. *Journal of Materials Chemistry A*, **2019**, 7, 18880-18888	13	20
137	Reversible hydrogen sorption in NaBH4 at lower temperatures. *Journal of Materials Chemistry A*, **2013**, 1, 13510	13	20
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135	Fabrication of ultra-high strength magnesium alloys over 540 MPa with low alloying concentration by double continuously extrusion. *Journal of Magnesium and Alloys*, **2018**, 6, 107-113	8.8	20
134	On the production of Mg-Nd master alloy from NdFeB magnet scraps. *Journal of Materials Processing Technology*, **2015**, 218, 57-61	5.3	19
133	Effects of Gd and Zr additions on the microstructures and high-temperature mechanical behavior of MgGdYZr magnesium alloys in the product form of a large structural casting. *Journal of Materials Research*, **2015**, 30, 3461-3473	2.5	19
132	Bonding of Aluminum Alloys in Compound Casting. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2017**, 48, 4632-4644	2.3	19
131	Effect of Si on the precipitation behavior of Mg-6Al alloy. *Journal of Materials Science Letters*, **2001**, 20, 397-399		19
130	Effect of macrophages on in vitro corrosion behavior of magnesium alloy. *Journal of Biomedical Materials Research - Part A*, **2016**, 104, 2476-87	5.4	19
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