Liming Peng

List of Publications by Year in Descending Order

188 papers	5,455 citations	37 h-index	65 g-index
191 ext. papers	6,383 ext. citations	4.7 avg, IF	5.77 L-index

#	Paper	IF	Citations
188	The effect of cross-section geometry of castings on dendrite evolution in Mg Gd alloys by in situ X-ray radiography. *Materials Characterization*, **2022**, 186, 111751	3.9	
187	Optical H2-sensing properties of ordered porous WO3 films prepared by colloidal template method. *Journal of Materials Science: Materials in Electronics*, **2022**, 33, 1604-1617	2.1	1
186	Recent progress in Mg alloys investigated via synchrotron radiation. *Materials Science and Technology*, **2022**, 38, 131-142	1.5	0
185	Microstructure evolution and mechanical properties of a high-strength Mg-10Gd-3Y□Zn-0.4Zr alloy fabricated by laser powder bed fusion. *Additive Manufacturing*, **2022**, 49, 102517	6.1	0
184	Effect of heat treatment on microstructure evolution and mechanical properties of selective laser melted Mg-11Gd-2Zn-0.4Zr alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2022**, 829, 142139	5.3	4
183	Laser powder bed fusion of an age-hardenable Mg-10Gd-0.2Zr alloy with excellent strength-ductility synergy. *Journal of Alloys and Compounds*, **2022**, 164863	5.7	0
182	Microstructure and mechanical properties of Mg-Gd-Y-Zn-Zr alloy prepared by rheo-diecasting. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2022**, 143287	5.3	0
181	Cross-Scale Simulation Research on the Macro/Microstructure of TC4 Alloy Wire Laser Additive Manufacturing. *Metals*, **2022**, 12, 934	2.3	1
180	Interfacial reaction of aluminum borate whisker reinforced Mg-10Gd-3Y-1Zn-0.4Zr (wt%) alloy matrix composite. *Materials Characterization*, **2021**, 183, 111649	3.9	0
179	Synergic effects of Gd and Y contents on the age-hardening response and elevated-temperature mechanical properties of extruded Mg□d(-Y)-Zn-Mn alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 810, 141019	5.3	14
178	High-strength and high-modulus Al18B4O33W/GWZ1031K magnesium matrix composite prepared by squeeze casting. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 817, 141393	5.3	1
177	Deformation-induced dissolution of long-period stacking ordered structures and its re-precipitation in a Mg-Gd-Zn-Mn alloy. *Materials Characterization*, **2021**, 171, 110756	3.9	1
176	Microstructural evolution of Mg-10Gd-3Y-1Zn-0.4Zr (wt%) alloy prepared by strain-induced melt activation process. *Materials Characterization*, **2021**, 171, 110831	3.9	3
175	The effect of microstructure on the plastic strain localization and fatigue crack initiation in cast Mg□Gd□Y□.5Zr alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 801, 140383	5.3	2
174	Microstructures and mechanical properties of Mg-15Gd-1Zn-0.4Zr alloys treated by ultrasonic surface rolling process. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 141881	5.3	5
173	Influence of friction stir processing and aging heat treatment on microstructure and mechanical properties of selective laser melted Mg-Gd-Zr alloy. *Additive Manufacturing*, **2021**, 44, 102036	6.1	2
172	Microstructural evolution and interfacial characterization of Al18B4O33w/ GWZ1031K magnesium matrix composite during heat treatment. *Materials Characterization*, **2021**, 178, 111255	3.9	2

171	Concurrent effects of various B additions on grain refinement, Fe intermetallics morphologies, and ductility evolution of Al-7.5Si-0.55 Mg (A357) cast alloy. *SN Applied Sciences*, **2020**, 2, 1	1.8	1
170	Effects of nanoprecipitates and LPSO structure on deformation and fracture behaviour of high-strength Mg-Gd-Y-Zn-Mn alloys. *Materials Characterization*, **2020**, 165, 110396	3.9	21
169	Achieving ultra-high strength in MgGdAgZr wrought alloy via bimodal-grained structure and enhanced precipitation. *Journal of Materials Science and Technology*, **2020**, 54, 160-170	9.1	28
168	Fabrication of high-strength Mg-Gd-Zn-Zr alloy via selective laser melting. *Materials Characterization*, **2020**, 165, 110377	3.9	18
167	Microstructure evolution difference in Mg96.5Gd2.5Zn1 alloys extruded from as-cast and solution-treated states. *Journal of Materials Processing Technology*, **2020**, 282, 116666	5.3	6
166	A study of microstructure, mechanical behavior and strengthen mechanism in the Mg-10Gd-0.2Zn-(Y)-0.4Zr alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2020**, 793, 139881	5.3	3
165	Phase-field study of the effects of the multi-controlling parameters on columnar dendrite during directional solidification in hexagonal materials. *European Physical Journal E*, **2020**, 43, 41	1.5	2
164	Coupling in situ synchrotron X-ray radiography and phase-field simulation to study the effect of low cooling rates on dendrite morphology during directional solidification in MgGd alloys. *Journal of Alloys and Compounds*, **2020**, 815, 152385	5.7	16
163	Microstructures and mechanical properties of Mg-Gd-Zn-Zr alloys prepared by spark plasma sintering. *Journal of Alloys and Compounds*, **2020**, 820, 153405	5.7	8
162	Role of Mg2Si precipitates size in determining the ductility of A357 cast alloy. *Materials and Design*, **2020**, 186, 108280	8.1	20
161	High-strength GWZ1031K alloy with gradient structure induced by surface mechanical attrition treatment. *Materials Characterization*, **2020**, 170, 110701	3.9	5
160	Characterization of microstructure and nanoscale phase in Mg-15Gd-1Zn (wt.%) alloy fabricated by rotating magnetic field casting. *Materials Characterization*, **2020**, 170, 110660	3.9	2
159	Tuning texture and precipitation using Y/Gd atomic ratio in iso-concentration MgYGdAgZr extruded alloys. *Materials Characterization*, **2020**, 167, 110473	3.9	9
158	Semisolid rheoforming of magnesium alloys: A review. *Materials and Design*, **2020**, 195, 108990	8.1	12
157	A Simplified Hot-Tearing Criterion for Shape Castings Based on Temperature-Field Simulation. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2019**, 50, 5271-5280	2.3	2
156	On the evolution of Bprecipitate during creep in a Mg3.3Y0.1Zr(at.%) alloy. *Materials Characterization*, **2019**, 147, 414-420	3.9	5
155	Development of high strength sand cast MgGdZn alloy by co-precipitation of the prismatic and 1 phases. *Materials Characterization*, **2019**, 153, 157-168	3.9	27
154	Effective strategy for improving infrared emissivity of Zn-Ni porous coating. *Applied Surface Science* , **2019**, 485, 92-100	6.7	5

153	Precipitation modification in cast Mg□Nd□Ce□Zr alloy by Zn addition. *Journal of Magnesium and Alloys*, **2019**, 7, 113-123	8.8	28
152	The effects of grain size and heat treatment on the deformation heterogeneities and fatigue behaviors of GW83K magnesium alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 754, 246-257	5.3	6
151	A super high-strength Mg-Gd-Y-Zn-Mn alloy fabricated by hot extrusion and strain aging. *Materials and Design*, **2019**, 169, 107666	8.1	45
150	Basal slip dominant fatigue damage behavior in a cast Mg-8Gd-3Y-Zr alloy. *International Journal of Fatigue*, **2019**, 118, 104-116	5	12
149	Quench sensitivity characterization of a LPSO-phase containing Mg alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 749, 291-300	5.3	9
148	A polycrystal plasticity based thermo-mechanical-dynamic recrystallization coupled modeling method and its application to light weight alloys. *International Journal of Plasticity*, **2019**, 116, 159-191	7.6	24
147	Small crack initiation and early propagation in an as-extruded Mg-10Gd-3Y-0.5Zr alloy in high cycle fatigue regime. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 744, 716-723	5.3	12
146	A detailed HAADF-STEM study of precipitate evolution in Mg□d alloy. *Journal of Alloys and Compounds*, **2019**, 777, 531-543	5.7	35
145	Effect of Cu addition on microstructures and tensile properties of high-pressure die-casting Al-5.5Mg-0.7Mn alloy. *Journal of Materials Science and Technology*, **2019**, 35, 1017-1026	9.1	14
144	Effect of microstructure on small fatigue crack initiation and early propagation behavior in Mg-10Gd-3Y-0.3Zr alloy. *International Journal of Fatigue*, **2019**, 119, 311-319	5	22
143	The role of bimodal-grained structure in strengthening tensile strength and decreasing yield asymmetry of Mg-Gd-Zn-Zr alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 740-741, 262-273	5.3	51
142	Effect of cooling rates on the dendritic morphology transition of Mg□Gd alloy by in situ X-ray radiography. *Journal of Materials Science and Technology*, **2018**, 34, 1142-1148	9.1	21
141	Quasi-in-situ STEM-EDS insight into the role of Ag in the corrosion behaviour of Mg-Gd-Zr alloys. *Corrosion Science*, **2018**, 136, 106-118	6.8	30
140	Improved optical properties of switchable mirrors based on Pd/Mg-TiO2 films fabricated by magnetron sputtering. *Materials and Design*, **2018**, 144, 256-262	8.1	7
139	On the Precipitation in an Ag-Containing Mg-Gd-Zr Alloy. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2018**, 49, 673-694	2.3	36
138	Influence of alloying elements on hot tearing susceptibility of Mg□n alloys based on thermodynamic calculation and experimental. *Journal of Magnesium and Alloys*, **2018**, 6, 44-51	8.8	12
137	Polycrystal plasticity simulation of extrusion of a magnesium alloy round bar: Effect of strain path non-uniformity. *Journal of Alloys and Compounds*, **2018**, 730, 161-181	5.7	8
136	Influence of sodium dodecyl sulphate on the surface morphology and infrared emissivity of porous Ni film. *Infrared Physics and Technology*, **2018**, 93, 162-170	2.7	6

135	Small crack behavior of extruded Mg-Gd-Y-Zr alloy under high cycle fatigue. *The Proceedings of Conference of Kyushu Branch*, **2018**, 2018.71, C45	0	
134	Co-precipitation on the Basal and Prismatic Planes in MgGdAgZr Alloy Subjected to Over-Ageing. *Minerals, Metals and Materials Series*, **2018**, 379-383	0.3	
133	Solute-homogenization model and its experimental verification in Mg-Gd-based alloys. *Journal of Materials Science and Technology*, **2018**, 34, 1132-1141	9.1	12
132	Cyclic Deformation and Correspondent Crack Initiation at Low-Stress Amplitudes in Mg?Gd?Y?Zr Alloy. *Materials*, **2018**, 11,	3.5	2
131	Effect of applied pressure on microstructures of squeeze cast Mg15Gd1Zn0.4Zr alloy. *Journal of Magnesium and Alloys*, **2018**, 6, 197-204	8.8	23
130	Effect of heat treatment on strain-controlled fatigue behavior of cast MgNdZnZr alloy. *Journal of Materials Science and Technology*, **2018**, 34, 2091-2099	9.1	9
129	A comparative study of the role of Ag in microstructures and mechanical properties of Mg-Gd and Mg-Y alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2018**, 731, 609-622	5.3	39
128	A simulation study of the distribution of precipitates in a crept Mg-Gd-Zr alloy. *Computational Materials Science*, **2017**, 130, 152-164	3.2	10
127	Microstructure and mechanical properties of laser melting deposited GW103K Mg-RE alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2017**, 687, 281-287	5.3	8
126	A Zn-Ni coating with both high electrical conductivity and infrared emissivity prepared by hydrogen evolution method. *Applied Surface Science*, **2017**, 402, 92-98	6.7	24
125	Characterization and strengthening effects of precipitates in a high-strength casting Mg-15Gd-1Zn-0.4Zr (wt.%) alloy. *Materials Characterization*, **2017**, 126, 1-9	3.9	62
124	Effect of Nd additions on fatigue characteristics of a cast MgZnZr alloy. *Journal of Materials Research*, **2017**, 32, 1083-1093	2.5	1
123	Fatigue characteristics of sand-cast AZ91D magnesium alloy. *Journal of Magnesium and Alloys*, **2017** , 5, 1-12	8.8	12
122	A comparison of low-cycle fatigue behavior between the solutionized and aged Mg-3Nd-0.2Zn-0.5Zr alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 695, 342-349	5.3	4
121	Elemental distribution within the long-period stacking ordered structure in a Mg-Gd-Zn-Mn alloy. *Materials Characterization*, **2017**, 129, 247-251	3.9	2
120	Fabrication and characterization of magnesium matrix composite processed by combination of friction stir processing and high-energy ball milling. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 683, 207-214	5.3	17
119	Microstructure, texture and mechanical properties of friction stir processed Mg-14Gd alloys. *Materials and Design*, **2017**, 130, 90-102	8.1	39
118	Formation of and interaction between F and phases in a Mg-Gd alloy. *Journal of Alloys and Compounds*, **2017**, 712, 334-344	5.7	31

117	Effects of Mn addition on the microstructures and mechanical properties of the Mg-15Gd-1Zn alloy. *Journal of Alloys and Compounds*, **2017**, 698, 1066-1076	5.7	19
116	On the strengthening precipitate phases and phase transformation of β′/β in a Mg-Sm-Zr alloy. *Materials and Design*, **2017**, 116, 419-426	8.1	23
115	Precipitation of Long-Period Stacking Ordered Structure in MgGdZnMn Alloy . *Advanced Engineering Materials*, **2017**, 19, 1600705	3.5	1
114	Effects of process parameters on microstructure and mechanical properties of friction stir lap linear welded 6061 aluminum alloy to NZ30K magnesium alloy. *Journal of Magnesium and Alloys*, **2017**, 5, 56-63	8.8	34
113	Fabrication of high-strength Mg-Gd-Zn-Zr alloys via differential-thermal extrusion. *Materials Characterization*, **2017**, 131, 380-387	3.9	34
112	Effects of Zr and Mn additions on formation of LPSO structure and dynamic recrystallization behavior of Mg-15Gd-1Zn alloy. *Journal of Alloys and Compounds*, **2017**, 692, 805-816	5.7	53
111	On grain coarsening and refining of the MgAl alloy by Sm. *Journal of Alloys and Compounds*, **2016**, 663, 387-394	5.7	24
110	On the role of Ag in enhanced age hardening kinetics of MgGdAgZr alloys. *Philosophical Magazine Letters*, **2016**, 96, 212-219	1	27
109	Effects of glycine and current density on the mechanism of electrodeposition, composition and properties of NiMn films prepared in ionic liquid. *Applied Surface Science*, **2016**, 365, 31-37	6.7	22
108	Influence of processing parameters on thermal field in MgNdZnZr alloy during friction stir processing. *Materials and Design*, **2016**, 94, 186-194	8.1	21
107	Damage morphology study of high cycle fatigued as-cast Mg3.0Nd0.2Zn0.4Zr (wt.%) alloy. *Materials Characterization*, **2016**, 111, 93-105	3.9	12
106	Formation of lamellar phase with 18R-type LPSO structure in an as-cast Mg96Gd3Zn1(at%) alloy. *Materials Letters*, **2016**, 169, 168-171	3.3	35
105	The effect of low cooling rates on dendrite morphology during directional solidification in MgGd alloys: In situ X-ray radiographic observation. *Materials Letters*, **2016**, 163, 218-221	3.3	15
104	Improved tensile properties of a new aluminum alloy for high pressure die casting. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2016**, 651, 376-390	5.3	20
103	Fatigue Properties of Cast Magnesium Wheels. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2016**, 47, 4239-4257	2.3	8
102	Heat treatment and mechanical properties of a high-strength cast MgGdZn alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2016**, 651, 745-752	5.3	48
101	Size Effect on Magnesium Alloy Castings. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2016**, 47, 2686-2704	2.3	5
100	Fabrication of a bulk GdN nanoparticles-reinforced Mg-Gd matrix nanocomposite with phenomenal mechanical properties. *Materials Letters*, **2016**, 185, 127-130	3.3	4

99	Tensile crack initiation behavior of cast Mg3Nd0.2Zn0.5Zr magnesium alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2016**, 673, 458-466	5.3	7
98	Fatigue strength dependence on the ultimate tensile strength and hardness in magnesium alloys. *International Journal of Fatigue*, **2015**, 80, 468-476	5	42
97	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
96	Fatigue behavior and life prediction of cast magnesium alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2015**, 647, 113-126	5.3	23
95	On the production of Mg-Nd master alloy from NdFeB magnet scraps. *Journal of Materials Processing Technology*, **2015**, 218, 57-61	5.3	19
94	Formation of denuded zones in crept Mg2.5Gd0.1Zr alloy. *Acta Materialia*, **2015**, 84, 317-329	8.4	23
93	Experimental investigation and thermodynamic assessment of the MgGdAg system focused on Mg-rich region. *Calphad: Computer Coupling of Phase Diagrams and Thermochemistry*, **2015**, 48, 43-54	1.9	7
92	Effects of Sm on the grain refinement, microstructures and mechanical properties of AZ31 magnesium alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2015**, 620, 89-96	5.3	37
91	Phase-field modeling the effect of misfit on the precipitation of the second-phase particles and grain coarsening. *Computational Materials Science*, **2015**, 100, 166-172	3.2	5
90	Study on the interfacial heat transfer coefficient between AZ91D magnesium alloy and silica sand. *Experimental Thermal and Fluid Science*, **2014**, 54, 196-203	3	17
89	Microstructure evolution and mechanical properties of an ultra-high strength casting Mg15.6Gd1.8Ag0.4Zr alloy. *Journal of Alloys and Compounds*, **2014**, 615, 703-711	5.7	73
88	Improvement in grain refinement efficiency of MgZr master alloy for magnesium alloy by friction stir processing. *Journal of Magnesium and Alloys*, **2014**, 2, 239-244	8.8	24
87	High cycle fatigue properties of cast MgNd0.2Zn2r alloys. *Journal of Materials Science*, **2014**, 49, 7105-7115	4.3	21
86	Effects of Alloying Elements on Creep Properties of Mg-Gd-Zr Alloys. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2014**, 45, 4103-4116	2.3	14
85	Linear precipitate chains in Mg-2.4Gd-0.1Zr alloy after creep. *Materials Letters*, **2014**, 137, 417-420	3.3	27
84	Effect of temperature-induced solute distribution on stacking fault energy in MgX(X = Li, Cu, Zn, Al, Y and Zr) solid solution: a first-principles study. *Philosophical Magazine*, **2014**, 94, 1578-1587	1.6	25
83	Effects of intermediate frequency magnetic field on the solution treatment of MgGd alloy. *Materials Letters*, **2014**, 123, 238-241	3.3	10
82	Electrodeposition mechanism and characterization of NiCu alloy coatings from a eutectic-based ionic liquid. *Applied Surface Science*, **2014**, 288, 530-536	6.7	67

81	High cycle fatigue improvement by heat-treatment for semi-continuous casting Mg96.34Gd2.5Zn1Zr0.16 alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 604, 78-85	5.3	16
80	Effects of Mn addition on the microstructure and mechanical properties of cast Mg□Al□Sn (wt.%) alloy. *Journal of Magnesium and Alloys*, **2014**, 2, 27-35	8.8	24
79	High cycle fatigue behaviors of low pressure cast Mg□Nd□.2Zn□Zr alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 611, 170-176	5.3	15
78	Characterization of highly corrosion-resistant nanocrystalline Ni coating electrodeposited on Mg□Nd□n□r alloy from a eutectic-based ionic liquid. *Applied Surface Science*, **2014**, 313, 711-719	6.7	24
77	Strengthening mechanisms in solution treated Mg□Nd□Zn□Zr alloy. *Journal of Materials Science*, **2013**, 48, 6367-6376	4.3	12
76	High Cycle Fatigue of Cast Mg-3Nd-0.2Zn Magnesium Alloys. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2013**, 44, 5202-5215	2.3	27
75	Ab initio study of the effect of solute atoms Zn and Y on stacking faults in Mg solid solution. *Physica B: Condensed Matter*, **2013**, 416, 39-44	2.8	41
74	Microstructures and mechanical properties of friction stir processed Mg□.0Nd□.3Zn□.0Zr magnesium alloy. *Journal of Magnesium and Alloys*, **2013**, 1, 122-127	8.8	44
73	Modification of long period stacking ordered phase and improvement of mechanical properties of Mg□d□n□r alloy by friction stir processing. *Materials Letters*, **2013**, 113, 206-209	3.3	18
72	Influence of solution temperature on fatigue behavior of AM-SC1 cast magnesium alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 565, 250-257	5.3	15
71	High cycle fatigue behavior of as-cast Mg96.34Gd2.5Zn1Zr0.16 alloy fabricated by semi-continuous casting. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 587, 72-78	5.3	11
70	Microstructure and strengthening mechanism of a thermomechanically treated Mg□0Gd□Y□Sn□.5Zr alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 565, 262-268	5.3	24
69	Comparison of high cycle fatigue behaviors of Mg□Nd□.2Zn□r alloy prepared by different casting processes. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 579, 170-179	5.3	23
68	Effects of grain size and heat treatment on the tensile properties of Mg□Nd□.2Zn (wt%) magnesium alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 564, 450-460	5.3	28
67	Improved high cycle fatigue properties of a new magnesium alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 582, 170-177	5.3	24
66	Formation and characterization of microstructure of as-cast Mg□Gd□Y□Zn□.5Zr (x = 0.3, 0.5 and 0.7 wt.%) alloys. *Materials Characterization*, **2013**, 79, 93-99	3.9	25
65	Ab initio study of I2 and T2 stacking faults in C14 Laves phase MgZn2. *European Physical Journal B*, **2013**, 86, 1	1.2	9
64	Microstructure modification and performance improvement of Mg-RE alloys by friction stir processing **2013**, 191-196		1

63	Effect of Zn on the microstructure evolution of extruded Mg□Nd (□n)□r (wt.%) alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2012**, 543, 12-21	5.3	39
62	Elastic properties and electronic structures of typical Al□e structures from first-principles calculations. *Solid State Sciences*, **2012**, 14, 555-561	3.4	26
61	Solidification Microstructure and Mechanical Properties of Cast Magnesium-Aluminum-Tin Alloys. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2012**, 43, 360-368	2.3	59
60	Ab-initio study of the effect of rare-earth elements on the stacking faults of Mg solid solutions. *Intermetallics*, **2012**, 29, 21-26	3.5	47
59	Preparation of superhydrophobic silica film on Mg□Nd□n□r magnesium alloy with enhanced corrosion resistance by combining micro-arc oxidation and sol□el method. *Surface and Coatings Technology*, **2012**, 213, 192-201	4.4	67
58	Ignition-proof properties of a high-strength Mg-Gd-Ag-Zr alloy. *Journal of Shanghai Jiaotong University (Science)*, **2012**, 17, 643-647	0.6	10
57	Stacking faults in B2-structured magnesium alloys from first principles calculations. *Computational Materials Science*, **2011**, 50, 3198-3207	3.2	10
56	Crystal structure of the mirror symmetry 10H-type long-period stacking order phase in Mg□□n alloy. *Journal of Alloys and Compounds*, **2011**, 509, 669-674	5.7	19
55	Structural, elastic and electronic properties of Mg(Cu1□Znx)2 alloys calculated by first-principles. *Journal of Alloys and Compounds*, **2011**, 509, 2885-2890	5.7	18
54	Thermodynamic modeling and experimental investigation of the magnesium□eodymium□inc alloys. *Intermetallics*, **2011**, 19, 1720-1726	3.5	23
53	Microstructure of 18R-type long period ordered structure phase in Mg97Y2Zn1 alloy. *Transactions of Nonferrous Metals Society of China*, **2011**, 21, 801-806	3.3	9
52	Optimization of Magnesium-Aluminum-Tin Alloys for As-Cast Microstructure And Mechanical Properties **2011**, 161-165		
51	Generalized planner fault energies, twinning and ductility of L12 type Al3Sc and Al3Mg. *Solid State Sciences*, **2011**, 13, 120-125	3.4	24
50	Texture and mechanical behavior evolution of age-hardenable Mg□Nd□n extrusions during aging treatment. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2011**, 529, 151-155	5.3	16
49	First-principles study of long-period stacking ordered-like multi-stacking fault structures in pure magnesium. *Scripta Materialia*, **2011**, 64, 942-945	5.6	41
48	Interaction between stacking faults in pure Mg. *European Physical Journal B*, **2011**, 82, 143-146	1.2	11
47	Study on microstructure of squeeze casting AZ91D alloy. *Materials Science and Technology*, **2011**, 27, 189-193	1.5	12
46	Theoretical investigation of new type of ternary magnesium alloys AMgNi4 (A=Y, La, Ce, Pr and Nd). *Physica B: Condensed Matter*, **2011**, 406, 1330-1335	2.8	15

45	Study of the structural, elastic and electronic properties of ordered Ca(Mg1−xLix)2alloys from first-principles calculations. *Physica Scripta*, **2011**, 84, 055603	2.6	4
44	Formation of a Novel X Phase in Mg–Gd–Zn–Zr Alloy. *Materials Science Forum*, **2010**, 654-656, 623-626	0.4	5
43	Bending Mechanisms in AM30 Alloy Tube Using a Rotary Draw Bender. *Materials and Manufacturing Processes*, **2010**, 25, 1359-1364	4.1	10
42	First-principles investigation of the structural and mechanical properties of β phase in Mg–Gd alloy system. *Journal of Alloys and Compounds*, **2010**, 492, 416-420	5.7	18
41	Interfacial and fracture behavior of short-fibers reinforced AE44 based magnesium matrix composites. *Journal of Alloys and Compounds*, **2010**, 504, 527-534	5.7	33
40	First-principles study of elastic and electronic properties of MgZn2 and ScZn2 phases in Mg–Sc–Zn alloy. *Journal of Alloys and Compounds*, **2010**, 506, 412-417	5.7	104
39	Effects of hot rolling processing on microstructures and mechanical properties of Mg–3%Al–1%Zn alloy sheet. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2010**, 527, 1970-1974	5.3	37
38	The thermal properties of Al–Mg–TM (TM=Sc, Zr): Ab initio study. *Solid State Sciences*, **2010**, 12, 845-850	3.4	4
37	Effect of solidification conditions on microstructure, mechanical and wear properties of Mg–5Al–3Ca–0.12Sr magnesium alloy. *Materials & Design*, **2010**, 31, 3901-3907		11
36	Elastic and electronic properties of ScMn2 from first-principles calculations. *Physica B: Condensed Matter*, **2010**, 405, 4812-4817	2.8	10
35	LPSO STRUCTURE AND AGING PHASES IN Mg--Gd--Zn--Zr ALLOY. *Jinshu Xuebao/Acta Metallurgica Sinica*, **2010**, 46, 1041-1046		19
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33	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
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