# Liming Peng

## List of Publications by Citations



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|---|---|---|---|
| 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 | Microstructure and strengthening mechanism of high strength Mg□10Gd□2Y□0.5Zr alloy. *Journal of Alloys and Compounds*, **2007**, 427, 316-323 | 5.7 | 517 |
| 187 | Precipitation in a Mg□10Gd□3Y□0.4Zr (wt.%) alloy during isothermal ageing at 250□C. *Journal of Alloys and Compounds*, **2006**, 421, 309-313 | 5.7 | 335 |
| 186 | Microstructure evolution in a Mg□15Gd□0.5Zr (wt.%) alloy during isothermal aging at 250□C. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2006**, 431, 322-327 | 5.3 | 265 |
| 185 | Effect of heat treatment on corrosion and electrochemical behaviour of Mg□3Nd□0.2Zn□0.4Zr (wt.%) alloy. *Electrochimica Acta*, **2007**, 52, 3160-3167 | 6.7 | 142 |
| 184 | The microstructure evolution with lamellar 14H-type LPSO structure in an Mg96.5Gd2.5Zn1 alloy during solid solution heat treatment at 773K. *Journal of Alloys and Compounds*, **2009**, 477, 193-197 | 5.7 | 119 |
| 183 | Comparison of the microstructure and mechanical properties of a ZK60 alloy with and without 1.3wt.% gadolinium addition. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2006**, 433, 175-181 | 5.3 | 109 |
| 182 | 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 |
| 181 | Investigation of the corrosion for Mg□Gd□3Y□0.4Zr (x=6,8,10,12wt%) alloys in a peak-aged condition. *Corrosion Science*, **2008**, 50, 166-177 | 6.8 | 100 |
| 180 | Microstructure and high tensile ductility of ZK60 magnesium alloy processed by cyclic extrusion and compression. *Journal of Alloys and Compounds*, **2009**, 476, 441-445 | 5.7 | 96 |
| 179 | First-principles investigation of the binary AB2 type Laves phase in Mg□Al□Ca alloy: Electronic structure and elastic properties. *Solid State Sciences*, **2009**, 11, 1400-1407 | 3.4 | 86 |
| 178 | Formation of a lamellar 14H-type long period stacking ordered structure in an as-cast Mg□Gd□Zn□Zr alloy. *Journal of Materials Science*, **2009**, 44, 1607-1612 | 4.3 | 76 |
| 177 | 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 |
| 176 | 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 |
| 175 | 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 |
| 174 | Preparation of superhydrophobic silica film on Mg□Nd□Zn□Zr 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 |
| 173 | The effects of heat treatment and zirconium on the corrosion behaviour of Mg□3Nd□0.2Zn□0.4Zr (wt.%) alloy. *Corrosion Science*, **2007**, 49, 2612-2627 | 6.8 | 65 |
| 172 | A systematic investigation of stacking faults in magnesium via first-principles calculation. *European Physical Journal B*, **2009**, 72, 397-403 | 1.2 | 63 |

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| 171 | 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 |
| 170 | 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 |
| 169 | Low-pressure die casting of magnesium alloy AM50: Response to process parameters. *Journal of Materials Processing Technology*, **2008**, 205, 224-234 | 5.3 | 58 |
| 168 | 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 |
| 167 | Influence of heat treatment and microstructure on the corrosion of magnesium alloy Mg-10Gd-3Y-0.4Zr. *Journal of Applied Electrochemistry*, **2009**, 39, 913-920 | 2.6 | 53 |
| 166 | Structural and mechanical properties of Mg17Al12and Mg24Y5from first-principles calculations. *Journal Physics D: Applied Physics*, **2008**, 41, 195408 | 3 | 53 |
| 165 | Comparison of the corrosion behaviour in 5% NaCl solution of Mg alloys NZ30K and AZ91D. *Journal of Applied Electrochemistry*, **2008**, 38, 207-214 | 2.6 | 53 |
| 164 | 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 |
| 163 | Heat treatment and mechanical properties of a high-strength cast Mg□d□n alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2016**, 651, 745-752 | 5.3 | 48 |
| 162 | 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 |
| 161 | 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 |
| 160 | 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 |
| 159 | Fracture behavior and mechanical properties of Mg□Y□Nd□Gd□.4Zr (wt.%) alloy at room temperature. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2008**, 486, 572-579 | 5.3 | 44 |
| 158 | Fatigue strength dependence on the ultimate tensile strength and hardness in magnesium alloys. *International Journal of Fatigue*, **2015**, 80, 468-476 | 5 | 42 |
| 157 | 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 |
| 156 | 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 |
| 155 | Microstructure, texture and mechanical properties of friction stir processed Mg-14Gd alloys. *Materials and Design*, **2017**, 130, 90-102 | 8.1 | 39 |
| 154 | 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 |

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| 153 | 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 |
| 152 | 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 |
| 151 | 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 |
| 150 | Effects of hot rolling processing on microstructures and mechanical properties of Mg□%Al□%Zn alloy sheet. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2010**, 527, 1970-1974 | 5.3 | 37 |
| 149 | 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 |
| 148 | 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 |
| 147 | A detailed HAADF-STEM study of precipitate evolution in Mg□d alloy. *Journal of Alloys and Compounds*, **2019**, 777, 531-543 | 5.7 | 35 |
| 146 | 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 |
| 145 | Fabrication of high-strength Mg-Gd-Zn-Zr alloys via differential-thermal extrusion. *Materials Characterization*, **2017**, 131, 380-387 | 3.9 | 34 |
| 144 | Characterization of phases in a Mg□Gd□Sm□.4Zr (wt.%) alloy during solution treatment. *Materials Characterization*, **2009**, 60, 555-559 | 3.9 | 34 |
| 143 | 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 |
| 142 | Property and thermal stability of in situ composite Cu□r alloy contact cable. *Journal of Materials Processing Technology*, **2005**, 166, 193-198 | 5.3 | 33 |
| 141 | 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 |
| 140 | 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 |
| 139 | A high-strength extruded Mg-Gd-Zn-Zr alloy with superplasticity. *Journal of Materials Research*, **2009**, 24, 3596-3602 | 2.5 | 30 |
| 138 | Identification of NdH2 particles in solution-treated Mg□.5%Nd (wt.%) alloy. *Journal of Alloys and Compounds*, **2009**, 485, 245-248 | 5.7 | 29 |
| 137 | Precipitation modification in cast Mg□Nd□Ce□r alloy by Zn addition. *Journal of Magnesium and Alloys*, **2019**, 7, 113-123 | 8.8 | 28 |
| 136 | Achieving ultra-high strength in Mg□d□g□r wrought alloy via bimodal-grained structure and enhanced precipitation. *Journal of Materials Science and Technology*, **2020**, 54, 160-170 | 9.1 | 28 |

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| 135 | Effects of grain size and heat treatment on the tensile properties of Mg3Nd0.2Zn (wt%) magnesium alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 564, 450-460 | 5.3 | 28 |
| 134 | Structural, elastic and electronic properties of 2 phase precipitate in MgCd alloy system investigated via first-principles calculation. *Solid State Sciences*, **2009**, 11, 2156-2161 | 3.4 | 28 |
| 133 | Development of high strength sand cast MgGdZn alloy by co-precipitation of the prismatic 2 and 1 phases. *Materials Characterization*, **2019**, 153, 157-168 | 3.9 | 27 |
| 132 | On the role of Ag in enhanced age hardening kinetics of MgGdAgZr alloys. *Philosophical Magazine Letters*, **2016**, 96, 212-219 | 1 | 27 |
| 131 | Linear precipitate chains in Mg-2.4Gd-0.1Zr alloy after creep. *Materials Letters*, **2014**, 137, 417-420 | 3.3 | 27 |
| 130 | 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 |
| 129 | Effect of the Cyclic Extrusion and Compression Processing on Microstructure and Mechanical Properties of As-Extruded ZK60 Magnesium Alloy. *Materials Transactions*, **2008**, 49, 1021-1024 | 1.3 | 27 |
| 128 | Elastic properties and electronic structures of typical AlCe structures from first-principles calculations. *Solid State Sciences*, **2012**, 14, 555-561 | 3.4 | 26 |
| 127 | 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 |
| 126 | Formation and characterization of microstructure of as-cast Mg3Gd2YxZn0.5Zr (x = 0.3, 0.5 and 0.7 wt.%) alloys. *Materials Characterization*, **2013**, 79, 93-99 | 3.9 | 25 |
| 125 | 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 |
| 124 | On grain coarsening and refining of the Mg3Al alloy by Sm. *Journal of Alloys and Compounds*, **2016**, 663, 387-394 | 5.7 | 24 |
| 123 | Improvement in grain refinement efficiency of Mg2r master alloy for magnesium alloy by friction stir processing. *Journal of Magnesium and Alloys*, **2014**, 2, 239-244 | 8.8 | 24 |
| 122 | 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 |
| 121 | Characterization of highly corrosion-resistant nanocrystalline Ni coating electrodeposited on MgNd2n2r alloy from a eutectic-based ionic liquid. *Applied Surface Science*, **2014**, 313, 711-719 | 6.7 | 24 |
| 120 | Microstructure and strengthening mechanism of a thermomechanically treated Mg10Gd3Y1Sn0.5Zr alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 565, 262-268 | 5.3 | 24 |
| 119 | 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 |
| 118 | Generalized planner fault energies, twinning and ductility of L12 type Al3Sc and Al3Mg. *Solid State Sciences*, **2011**, 13, 120-125 | 3.4 | 24 |

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| 117 | 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 |
| 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 | 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 |
| 114 | Formation of denuded zones in crept Mg–2.5Gd–0.1Zr alloy. *Acta Materialia*, **2015**, 84, 317-329 | 8.4 | 23 |
| 113 | Comparison of high cycle fatigue behaviors of Mg–3Nd–0.2Zn–Zr alloy prepared by different casting processes. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 579, 170-179 | 5.3 | 23 |
| 112 | Thermodynamic modeling and experimental investigation of the magnesium–neodymium–zinc alloys. *Intermetallics*, **2011**, 19, 1720-1726 | 3.5 | 23 |
| 111 | Microstructure and electronic characteristics of the 6H-type ABACAB LPSO structure in Mg97Zn1Y2 alloy. *Journal of Alloys and Compounds*, **2009**, 485, 672-676 | 5.7 | 23 |
| 110 | Effect of applied pressure on microstructures of squeeze cast Mg–15Gd–1Zn–0.4Zr alloy. *Journal of Magnesium and Alloys*, **2018**, 6, 197-204 | 8.8 | 23 |
| 109 | Effects of glycine and current density on the mechanism of electrodeposition, composition and properties of Ni–Mn films prepared in ionic liquid. *Applied Surface Science*, **2016**, 365, 31-37 | 6.7 | 22 |
| 108 | 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 |
| 107 | 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 |
| 106 | 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 |
| 105 | Influence of processing parameters on thermal field in Mg–Nd–Zn–Zr alloy during friction stir processing. *Materials and Design*, **2016**, 94, 186-194 | 8.1 | 21 |
| 104 | High cycle fatigue properties of cast Mg–Nd–0.2Zn–Zr alloys. *Journal of Materials Science*, **2014**, 49, 7105-7115 | 4.3 | 21 |
| 103 | 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 |
| 102 | Role of Mg2Si precipitates size in determining the ductility of A357 cast alloy. *Materials and Design*, **2020**, 186, 108280 | 8.1 | 20 |
| 101 | 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 |
| 100 | On the production of Mg-Nd master alloy from NdFeB magnet scraps. *Journal of Materials Processing Technology*, **2015**, 218, 57-61 | 5.3 | 19 |

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| 99 | Crystal structure of the mirror symmetry 10H-type long-period stacking order phase in Mg□□Zn alloy. *Journal of Alloys and Compounds*, **2011**, 509, 669-674 | 5.7 | 19 |
| 98 | Study on deformation behavior and strain homogeneity during cyclic extrusion and compression. *Journal of Materials Science*, **2008**, 43, 6920-6924 | 4.3 | 19 |
| 97 | LPSO STRUCTURE AND AGING PHASES IN Mg--Gd--Zn--Zr ALLOY. *Jinshu Xuebao/Acta Metallurgica Sinica*, **2010**, 46, 1041-1046 | | 19 |
| 96 | Fabrication of high-strength Mg-Gd-Zn-Zr alloy via selective laser melting. *Materials Characterization*, **2020**, 165, 110377 | 3.9 | 18 |
| 95 | 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 |
| 94 | 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 |
| 93 | First-principles investigation of the structural and mechanical properties of □ phase in Mg□d alloy system. *Journal of Alloys and Compounds*, **2010**, 492, 416-420 | 5.7 | 18 |
| 92 | 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 |
| 91 | 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 |
| 90 | 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 |
| 89 | Texture and mechanical behavior evolution of age-hardenable Mg□d□n extrusions during aging treatment. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2011**, 529, 151-155 | 5.3 | 16 |
| 88 | 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 Mg□d alloys. *Journal of Alloys and Compounds*, **2020**, 815, 152385 | 5.7 | 16 |
| 87 | The effect of low cooling rates on dendrite morphology during directional solidification in Mg□d alloys: In situ X-ray radiographic observation. *Materials Letters*, **2016**, 163, 218-221 | 3.3 | 15 |
| 86 | 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 |
| 85 | 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 |
| 84 | 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 |
| 83 | Thermodynamic and electronic properties of quaternary hydrides LixNa1□MgH3. *Journal of Alloys and Compounds*, **2009**, 474, 522-526 | 5.7 | 15 |
| 82 | Ab initiostudy on the thermal properties of the fcc Al3Mg and Al3Sc alloys. *Journal Physics D: Applied Physics*, **2009**, 42, 225407 | 3 | 15 |

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| 81 | Relationship between heat treatment and corrosion behaviour of Mg-3.0%Nd-0.4%Zr magnesium alloy. *Transactions of Nonferrous Metals Society of China*, **2007**, 17, 1152-1157 | 3.3 | 15 |
| 80 | 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 |
| 79 | 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 |
| 78 | 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 |
| 77 | Fatigue characteristics of sand-cast AZ91D magnesium alloy. *Journal of Magnesium and Alloys*, **2017**, 5, 1-12 | 8.8 | 12 |
| 76 | 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 |
| 75 | Damage morphology study of high cycle fatigued as-cast Mg□.0Nd□.2Zn□r (wt.%) alloy. *Materials Characterization*, **2016**, 111, 93-105 | 3.9 | 12 |
| 74 | Basal slip dominant fatigue damage behavior in a cast Mg-8Gd-3Y-Zr alloy. *International Journal of Fatigue*, **2019**, 118, 104-116 | 5 | 12 |
| 73 | Strengthening mechanisms in solution treated Mg□Nd□Zn□Zr alloy. *Journal of Materials Science*, **2013**, 48, 6367-6376 | 4.3 | 12 |
| 72 | Study on microstructure of squeeze casting AZ91D alloy. *Materials Science and Technology*, **2011**, 27, 189-193 | 1.5 | 12 |
| 71 | Semisolid rheoforming of magnesium alloys: A review. *Materials and Design*, **2020**, 195, 108990 | 8.1 | 12 |
| 70 | 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 |
| 69 | 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 |
| 68 | 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 |
| 67 | Interaction between stacking faults in pure Mg. *European Physical Journal B*, **2011**, 82, 143-146 | 1.2 | 11 |
| 66 | Effect of solidification conditions on microstructure, mechanical and wear properties of Mg□Al□Ca□.12Sr magnesium alloy. *Materials & Design*, **2010**, 31, 3901-3907 | | 11 |
| 65 | 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 |
| 64 | Effects of intermediate frequency magnetic field on the solution treatment of Mg□d alloy. *Materials Letters*, **2014**, 123, 238-241 | 3.3 | 10 |

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| 63 | 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 |
| 62 | Stacking faults in B2-structured magnesium alloys from first principles calculations. *Computational Materials Science*, **2011**, 50, 3198-3207 | 3.2 | 10 |
| 61 | Bending Mechanisms in AM30 Alloy Tube Using a Rotary Draw Bender. *Materials and Manufacturing Processes*, **2010**, 25, 1359-1364 | 4.1 | 10 |
| 60 | Elastic and electronic properties of ScMn2 from first-principles calculations. *Physica B: Condensed Matter*, **2010**, 405, 4812-4817 | 2.8 | 10 |
| 59 | Ab initio study of I2 and T2 stacking faults in C14 Laves phase MgZn2. *European Physical Journal B*, **2013**, 86, 1 | 1.2 | 9 |
| 58 | 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 |
| 57 | Tuning texture and precipitation using Y/Gd atomic ratio in iso-concentration MgYGdAgZr extruded alloys. *Materials Characterization*, **2020**, 167, 110473 | 3.9 | 9 |
| 56 | 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 |
| 55 | Effect of heat treatment on strain□ontrolled fatigue behavior of cast MgNdZnZr alloy. *Journal of Materials Science and Technology*, **2018**, 34, 2091-2099 | 9.1 | 9 |
| 54 | 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 |
| 53 | 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 |
| 52 | 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 |
| 51 | Fatigue Properties of Cast Magnesium Wheels. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2016**, 47, 4239-4257 | 2.3 | 8 |
| 50 | 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 |
| 49 | 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 |
| 48 | Anisotropic plastic deformation behavior of as-extruded ZK60 magnesium alloy at room temperature. *Science in China Series D: Earth Sciences*, **2009**, 52, 161-165 | | 7 |
| 47 | Tensile crack initiation behavior of cast MgNd0.2Zn0.5Zr magnesium alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2016**, 673, 458-466 | 5.3 | 7 |
| 46 | 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 |

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| 45 | 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 |
| 44 | 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 |
| 43 | Effects of Process Parameters on the Macrostructure of a Squeeze-Cast Mg-2.5 mass%Nd Alloy. *Materials Transactions*, **2009**, 50, 2820-2825 | 1.3 | 6 |
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