# Bin Jiang

List of Publications by Year
in descending order

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Version: 2024-02-01

| | | 53794 | 79698 |
|---|---|---|---|
| 258 | 8,053 | 45 | 73 |
| papers | citations | h-index | g-index |

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|---|---|---|---|
| 259 | 259 | 259 | 3719 |
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Current research progress in grain refinement of cast magnesium alloys: A review article. Journal of Alloys and Compounds, 2015, 619, 639-651. | 5.5 | 419 |
| 2 | Active corrosion protection by a smart coating based on a MgAl-layered double hydroxide on a cerium-modified plasma electrolytic oxidation coating on Mg alloy AZ31. Corrosion Science, 2018, 139, 370-382. | 6.6 | 271 |
| 3 | Lubrication performance of MoS2 and SiO2 nanoparticles as lubricant additives in magnesium alloy-steel contacts. Tribology International, 2016, 93, 63-70. | 5.9 | 260 |
| 4 | High performance NiFe layered double hydroxide for methyl orange dye and Cr(VI) adsorption. Chemosphere, 2016, 152, 415-422. | 8.2 | 252 |
| 5 | Hot Deformation Behavior and Microstructural Evolution of Twin-Roll-Casting Mg Alloy during High-Temperature Compression. Advances in Materials Science and Engineering, 2019, 2019, 1-7. | 1.8 | 207 |
| 6 | Kinetics of the hydrogen absorption and desorption processes of hydrogen storage alloys: A review. International Journal of Minerals, Metallurgy and Materials, 2022, 29, 32-48. | 4.9 | 169 |
| 7 | Superhydrophobic coatings for corrosion protection of magnesium alloys. Journal of Materials Science and Technology, 2020, 52, 100-118. | 10.7 | 164 |
| 8 | Influence of crystallographic texture and grain size on the corrosion behaviour of as-extruded Mg alloy AZ31 sheets. Corrosion Science, 2017, 126, 374-380. | 6.6 | 158 |
| 9 | Mechanisms of grain refinement by intensive shearing of AZ91 alloy melt. Acta Materialia, 2010, 58, 6526-6534. | 7.9 | 122 |
| 10 | A review on hot tearing of magnesium alloys. Journal of Magnesium and Alloys, 2016, 4, 151-172. | 11.9 | 104 |
| 11 | An Investigation on the Tribological Performances of the SiO2/MoS2 Hybrid Nanofluids for Magnesium Alloy-Steel Contacts. Nanoscale Research Letters, 2016, 11, 329. | 5.7 | 99 |
| 12 | Effect of Li addition on the mechanical behavior and texture of the as-extruded AZ31 magnesium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 562, 33-38. | 5.6 | 95 |
| 13 | Tribological performances of SiO2/graphene combinations as water-based lubricant additives for magnesium alloy rolling. Applied Surface Science, 2019, 475, 847-856. | 6.1 | 94 |
| 14 | Microstructure and corrosion behavior of Mg-Sc binary alloys in 3.5 wt.% NaCl solution. Corrosion Science, 2020, 174, 108831. | 6.6 | 90 |
| 15 | Influence of the Al2Ca phase on microstructure and mechanical properties of Mgâ€“Alâ€“Ca alloys. Journal of Alloys and Compounds, 2015, 647, 357-363. | 5.5 | 87 |
| 16 | Clarifying the roles of grain boundary and grain orientation on the corrosion and discharge processes of Î±-Mg based Mg-Li alloys for primary Mg-air batteries. Journal of Materials Science and Technology, 2021, 62, 128-138. | 10.7 | 87 |
| 17 | Effects of Surface Terminations of 2D Bi<sub>2</sub>WO<sub>6</sub> on Photocatalytic Hydrogen Evolution from Water Splitting. ACS Applied Materials & Interfaces, 2020, 12, 20067-20074. | 8.0 | 78 |
| 18 | Effects of Zn addition on the mechanical properties and texture of extruded Mg-Zn-Ca-Ce magnesium alloy sheets. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 705, 46-54. | 5.6 | 74 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Effect of rolling-induced microstructure on corrosion behaviour of an as-extruded Mg-5Li-1Al alloy sheet. Corrosion Science, 2017, 119, 14-22. | 6.6 | 71 |
| 20 | Understanding solid solution strengthening at elevated temperatures in a creep-resistant Mgâ€“Gdâ€“Ca alloy. Acta Materialia, 2019, 181, 185-199. | 7.9 | 71 |
| 21 | An investigation on microstructure, texture and formability of AZ31 sheet processed by asymmetric porthole die extrusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 720, 85-97. | 5.6 | 70 |
| 22 | Grain refinement of Ca addition in a twin-roll-cast Mgâ€“3Alâ€“1Zn alloy. Materials Chemistry and Physics, 2012, 133, 611-616. | 4.0 | 69 |
| 23 | Calculation of Schmid factor in Mg alloys: Influence of stress state. Scripta Materialia, 2019, 171, 31-35. | 5.2 | 68 |
| 24 | A tilted weak texture processed by an asymmetric extrusion for magnesium alloy sheets. Materials Letters, 2013, 100, 29-31. | 2.6 | 66 |
| 25 | Evolution of microstructure and mechanical properties of a duplex Mgâ€“Li alloy under extrusion with an increasing ratio. Materials & Design, 2014, 57, 121-127. | 5.1 | 66 |
| 26 | High temperature oxidation behavior of Mg-Y-Sn, Mg-Y, Mg-Sn alloys and its effect on corrosion property. Applied Surface Science, 2015, 353, 1013-1022. | 6.1 | 66 |
| 27 | Strategies for enhancing the room-temperature stretch formability of magnesium alloy sheets: a review. Journal of Materials Science, 2021, 56, 12965. | 3.7 | 64 |
| 28 | Highly Sensitive Nonenzymatic Glucose Sensor Based on 3D Ultrathin NiFe Layered Double Hydroxide Nanosheets. Electroanalysis, 2017, 29, 1755-1761. | 2.9 | 63 |
| 29 | Improvement of mechanical properties and reduction of yield asymmetry of extruded Mg-Sn-Zn alloy through Ca addition. Journal of Alloys and Compounds, 2019, 782, 1076-1086. | 5.5 | 62 |
| 30 | Tribological Behaviors of Graphene and Graphene Oxide as Water-Based Lubricant Additives for Magnesium Alloy/Steel Contacts. Materials, 2018, 11, 206. | 2.9 | 61 |
| 31 | Formation of the elliptical texture and its effect on the mechanical properties and stretch formability of dilute Mg-Sn-Y sheet by Zn addition. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 746, 259-275. | 5.6 | 60 |
| 32 | Influence of minor Ce additions on the microstructure and mechanical properties of Mg-1.0Sn-0.6Ca alloy. Journal of Materials Science and Technology, 2020, 37, 26-37. | 10.7 | 58 |
| 33 | The effects of orientation control via tension-compression on microstructural evolution and mechanical behavior of AZ31 Mg alloy sheet. Journal of Magnesium and Alloys, 2022, 10, 411-422. | 11.9 | 58 |
| 34 | Improved corrosion resistance of AZ31 Mg alloy coated with MXenes/MgAl-LDHs composite layer modified with yttrium. Electrochimica Acta, 2021, 374, 137913. | 5.2 | 58 |
| 35 | Comparison of microstructures and mechanical properties of composite extruded AZ31 sheets. Journal of Magnesium and Alloys, 2019, 7, 545-554. | 11.9 | 57 |
| 36 | Grain refining and mechanical properties of AZ31 alloy processed by accumulated extrusion bonding. Journal of Alloys and Compounds, 2018, 745, 599-608. | 5.5 | 56 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | The influence of CaO addition on grain refinement of cast magnesium alloys. Scripta Materialia, 2016, 114, 103-107. | 5.2 | 54 |
| 38 | A new approach to grain refinement of an Mgâ€“Liâ€“Al cast alloy. Journal of Alloys and Compounds, 2010, 492, 95-98. | 5.5 | 52 |
| 39 | Unveiling annealing texture formation and static recrystallization kinetics of hot-rolled Mg-Al-Zn-Mn-Ca alloy. Journal of Materials Science and Technology, 2020, 43, 104-118. | 10.7 | 51 |
| 40 | Extraordinary room temperature tensile ductility of laminated Ti/Al composite: Roles of anisotropy and strain rate sensitivity. International Journal of Plasticity, 2020, 133, 102806. | 8.8 | 50 |
| 41 | Effects of deformation processes on morphology, microstructure and corrosion resistance of LDHs films on magnesium alloy AZ31. Journal of Materials Science and Technology, 2021, 64, 10-20. | 10.7 | 50 |
| 42 | Influence of an asymmetric shear deformation on microstructure evolution and mechanical behavior of AZ31 magnesium alloy sheet. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 590, 440-447. | 5.6 | 49 |
| 43 | An effective approach called the composite extrusion to improve the mechanical properties of AZ31 magnesium alloy sheets. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 655, 339-345. | 5.6 | 48 |
| 44 | Effect of Li content on microstructure, texture and mechanical behaviors of the as-extruded Mg-Li sheets. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 700, 59-65. | 5.6 | 48 |
| 45 | Microstructure and strengthening mechanism of hot-extruded ultralight Mg-Li-Al-Sn alloys with high strength. Journal of Materials Science and Technology, 2022, 103, 186-196. | 10.7 | 48 |
| 46 | Tailoring texture and refining grain of magnesium alloy by differential speed extrusion process. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 612, 187-191. | 5.6 | 47 |
| 47 | A micro-alloyed Mg-Sn-Y alloy with high ductility at room temperature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 735, 131-144. | 5.6 | 47 |
| 48 | Ameliorating the mechanical properties of magnesium alloy: Role of texture. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 689, 395-403. | 5.6 | 46 |
| 49 | Effects of Fe concentration on microstructure and corrosion of Mg-6Al-1Zn-xFe alloys for fracturing balls applications. Journal of Materials Science and Technology, 2019, 35, 2086-2098. | 10.7 | 44 |
| 50 | Improved mechanical properties of Mg-3Al-1Zn alloy sheets by optimizing the extrusion die angles: Microstructural and texture evolution. Journal of Alloys and Compounds, 2018, 762, 719-729. | 5.5 | 43 |
| 51 | Role of second phases on the corrosion resistance of Mg-Nd-Zr alloys. Journal of Alloys and Compounds, 2020, 849, 156619. | 5.5 | 43 |
| 52 | Effect of microalloyed Ca on the microstructure and corrosion behavior of extruded Mg alloy AZ31. Journal of Alloys and Compounds, 2020, 823, 153844. | 5.5 | 43 |
| 53 | Combined influence of Be and Ca on improving the high-temperature oxidation resistance of the magnesium alloy Mg-9Al-1Zn. Corrosion Science, 2017, 122, 1-11. | 6.6 | 42 |
| 54 | Effect of effective strain gradient on texture and mechanical properties of Mgâ€“3Alâ€“1Zn alloy sheets produced by asymmetric extrusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 706, 172-180. | 5.6 | 42 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Tailoring the textures and mechanical properties of AZ31 alloy sheets using asymmetric composite extrusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 673, 606-615. | 5.6 | 40 |
| 56 | The effect of the existing state of Y on high temperature oxidation properties of magnesium alloys. Applied Surface Science, 2016, 370, 357-363. | 6.1 | 40 |
| 57 | Effect of texture symmetry on mechanical performance and corrosion resistance of magnesium alloy sheet. Journal of Alloys and Compounds, 2017, 723, 213-224. | 5.5 | 40 |
| 58 | Effect of substitution of Zn with Ni on microstructure evolution and mechanical properties of LPSO dominant Mgâ€“Yâ€“Zn alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 773, 138735. | 5.6 | 40 |
| 59 | Effect of Nd addition on the microstructure and mechanical properties of extruded Mg-Gd-Zr alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 816, 141320. | 5.6 | 40 |
| 60 | Effect of Mg24Y5 intermetallic particles on grain refinement of Mg-9Li alloy. Intermetallics, 2014, 45, 18-23. | 3.9 | 39 |
| 61 | Diffusion Kinetics in Mg-Cu Binary System. Journal of Phase Equilibria and Diffusion, 2015, 36, 613-619. | 1.4 | 39 |
| 62 | Effect of Al content on microstructure and mechanical properties of as-cast Mg-5Nd alloys. Journal of Alloys and Compounds, 2018, 737, 263-270. | 5.5 | 39 |
| 63 | A good balance between ductility and stretch formability of dilute Mg-Sn-Y sheet at room temperature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 736, 404-416. | 5.6 | 39 |
| 64 | Role of Al modification on the microstructure and mechanical properties of as-cast Mgâ€“6Ce alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 645, 57-64. | 5.6 | 38 |
| 65 | Oxidation resistance of Mgâ€“9Alâ€“1Zn alloys micro-alloyed with Be. Scripta Materialia, 2016, 115, 38-41. | 5.2 | 38 |
| 66 | Influence of stress state on microstructure evolution of AZ31 Mg alloy rolled sheet during deformation at room temperature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 715, 379-388. | 5.6 | 37 |
| 67 | Influence of Zn addition on the microstructure, tensile properties and work-hardening behavior of Mg-1Gd alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 772, 138779. | 5.6 | 37 |
| 68 | Tribological properties of carbon nanotube/SiO2 combinations as water-based lubricant additives for magnesium alloy. Journal of Materials Research and Technology, 2021, 12, 138-149. | 5.8 | 37 |
| 69 | Influence of different extrusion processes on mechanical properties of magnesium alloy. Journal of Magnesium and Alloys, 2014, 2, 220-224. | 11.9 | 36 |
| 70 | Effects of Zn and Ca addition on microstructure and mechanical properties of as-extruded Mg-1.0Sn alloy sheet. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 746, 82-93. | 5.6 | 35 |
| 71 | Microstructure and mechanical behavior of the Mgâ€“Mnâ€“Ce magnesium alloy sheets. Journal of Magnesium and Alloys, 2014, 2, 8-12. | 11.9 | 34 |
| 72 | Effect of rolling paths and pass reductions on the microstructure and texture evolutions of AZ31 sheet with an initial asymmetrical texture distribution. Journal of Alloys and Compounds, 2019, 786, 394-408. | 5.5 | 34 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Multiphase and multiphysics modeling of dendrite growth and gas porosity evolution during solidification. Acta Materialia, 2021, 214, 117005. | 7.9 | 34 |
| 74 | Strain path dependence of texture and property evolutions on rolled Mg-Li-Al-Zn alloy possessed of an asymmetric texture. Journal of Alloys and Compounds, 2017, 698, 771-785. | 5.5 | 33 |
| 75 | Improving the room-temperature formability of Mg-3Al-1Zn alloy sheet by introducing an orthogonal four-peak texture. Journal of Alloys and Compounds, 2019, 797, 443-455. | 5.5 | 33 |
| 76 | Grain refinement mechanism and improved mechanical properties in Mgâ€“Sn alloy with trace Y addition. Journal of Alloys and Compounds, 2020, 820, 153122. | 5.5 | 33 |
| 77 | Novel Mg-Bi-Mn wrought alloys: The effects of extrusion temperature and Mn addition on their microstructures and mechanical properties. Journal of Magnesium and Alloys, 2022, 10, 2588-2606. | 11.9 | 33 |
| 78 | Unusual texture formation in Mgâ€“3Alâ€“1Zn alloy sheets processed by slope extrusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 732, 1-5. | 5.6 | 32 |
| 79 | Role of Al content on the microstructure, texture and mechanical properties of Mg-3.5Ca based alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 730, 303-316. | 5.6 | 32 |
| 80 | Effect of Li content on microstructure, texture and mechanical properties of cold rolled Mgâ€“3Alâ€“1Zn alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 631, 189-195. | 5.6 | 31 |
| 81 | Improved oxidation resistance of Mg-9Al-1Zn alloy microalloyed with 60â€¯wtâ€¯ppm Be attributed to the formation of a more protective (Mg,Be)O surface oxide. Corrosion Science, 2018, 132, 272-283. | 6.6 | 31 |
| 82 | Improved formability with theoretical critical shear strength transforming in Mg alloys with Sn addition. Journal of Alloys and Compounds, 2018, 764, 555-564. | 5.5 | 31 |
| 83 | Microstructure evolution and mechanical properties of friction stir welded dissimilar joints of as-extruded AM60 and AZ31 alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 759, 479-489. | 5.6 | 31 |
| 84 | Generalisation of the oxide reinforcement model for the high oxidation resistance of some Mg alloys micro-alloyed with Be. Corrosion Science, 2019, 147, 357-371. | 6.6 | 30 |
| 85 | Intercalation of Y in Mg-Al layered double hydroxide films on anodized AZ31 and Mg-Y alloys to influence corrosion protective performance. Applied Surface Science, 2021, 551, 149432. | 6.1 | 30 |
| 86 | Effect of Ca addition on grain refinement of Mgâ€“9Liâ€“1Al alloy. Journal of Magnesium and Alloys, 2013, 1, 297-302. | 11.9 | 29 |
| 87 | Influence of Ca and Zn synergistic alloying on the microstructure, tensile properties and strain hardening of Mg-1Gd alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 785, 139344. | 5.6 | 29 |
| 88 | Understanding the enhanced ductility of Mg-Gd with Ca and Zn microalloying by slip trace analysis. Journal of Materials Science and Technology, 2021, 95, 20-28. | 10.7 | 29 |
| 89 | The influence of Gd on the recrystallisation, texture and mechanical properties of Mg alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 839, 142867. | 5.6 | 29 |
| 90 | Enhanced stretch formability at room temperature for Mg-Al-Zn/Mg-Y laminated composite via porthole die extrusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 731, 184-194. | 5.6 | 28 |

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|---|---|---|---|
| 91 | Improving mechanical properties of heterogeneous Mg-Gd alloy laminate via accumulated extrusion bonding. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 785, 139324. | 5.6 | 28 |
| 92 | Development of metal-organic framework (MOF) decorated graphene oxide/MgAl-layered double hydroxide coating via microstructural optimization for anti-corrosion micro-arc oxidation coatings of magnesium alloy. Journal of Materials Science and Technology, 2022, 130, 12-26. | 10.7 | 28 |
| 93 | Evolution of microstructure and mechanical properties of Mgâ€“Mnâ€“Ce alloys under hot extrusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 628, 143-148. | 5.6 | 27 |
| 94 | Effect of Al2Ca intermetallic compound addition on grain refinement of AZ31 magnesium alloy. Transactions of Nonferrous Metals Society of China, 2016, 26, 1284-1293. | 4.2 | 27 |
| 95 | Effect of Zn addition on the oxidation property of Mg-Y alloy at high temperatures. Journal of Alloys and Compounds, 2016, 687, 252-262. | 5.5 | 27 |
| 96 | Texture optimization on Mg sheets by preparing soft orientations of extension twinning for rolling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 760, 174-185. | 5.6 | 27 |
| 97 | Improving performance of friction stir welded AZ31/AM60 dissimilar joint by adjusting texture distribution and microstructure. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 778, 139088. | 5.6 | 27 |
| 98 | The oxidation behavior of Mg-Er binary alloys at 500Âà„$f$. Corrosion Science, 2022, 195, 109961. | 6.6 | 27 |
| 99 | Tailoring microstructure and texture of Mgâ€“3Alâ€“1Zn alloy sheets through curve extrusion process for achieving low planar anisotropy. Journal of Materials Science and Technology, 2022, 113, 48-60. | 10.7 | 27 |
| 100 | Oxidation resistance of Mg-Y alloys at elevated temperatures and the protection performance of the oxide films. Journal of Alloys and Compounds, 2018, 749, 1054-1062. | 5.5 | 26 |
| 101 | A study of the corrosion behavior of AZ31 Mg alloy in depth direction after surface nanocrystallization. Surface and Coatings Technology, 2020, 396, 125968. | 4.8 | 26 |
| 102 | Influence of Zn on the microstructure and mechanical properties of Mg-Gd-Zr alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 843, 143136. | 5.6 | 26 |
| 103 | Recent advances in micro-alloyed wrought magnesium alloys: Theory and design. Transactions of Nonferrous Metals Society of China, 2022, 32, 1741-1780. | 4.2 | 26 |
| 104 | Effect of Li content on microstructure and mechanical property of Mgâ^'xLiâ^'3(Alâ^'Si) alloys. Transactions of Nonferrous Metals Society of China, 2019, 29, 2506-2513. | 4.2 | 25 |
| 105 | Enhanced formability of a magnesium alloy sheet via in-plane pre-strain paths. Journal of Alloys and Compounds, 2020, 814, 152278. | 5.5 | 25 |
| 106 | Microstructure evolution and mechanical properties of the Mg-Sm-Gd-Zn-Zr alloy during extrusion. Journal of Materials Research and Technology, 2021, 15, 2518-2528. | 5.8 | 25 |
| 107 | Effect of Sr on microstructure and aging behavior of Mgâ€“14Li alloys. Progress in Natural Science: Materials International, 2012, 22, 160-168. | 4.4 | 24 |
| 108 | Influence of pre-hardening on microstructure evolution and mechanical behavior of AZ31 magnesium alloy sheet. Journal of Alloys and Compounds, 2015, 621, 301-306. | 5.5 | 24 |

| # | Article | IF | Citations |
|---|---|---|---|
| 109 | Improved the anisotropy of extruded Mg 3Li 3Al Zn alloy sheet by presetting grain re-orientation and subsequent annealing. Journal of Alloys and Compounds, 2016, 676, 64-73. | 5.5 | 24 |
| 110 | Enhanced strength and ductility AZ91 alloy with heterogeneous lamella structure prepared by pre-aging and low-temperature extrusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 812, 141094. | 5.6 | 24 |
| 111 | Effects of Sn on microstructure of as-cast and as-extruded Mgâ€“9Li alloys. Transactions of Nonferrous Metals Society of China, 2013, 23, 904-908. | 4.2 | 23 |
| 112 | Effect of Cu addition on the microstructure, mechanical properties and degradation rate of Mg-2Gd alloy. Journal of Materials Research and Technology, 2021, 15, 477-487. | 5.8 | 23 |
| 113 | Enhancement of Corrosion Resistance and Discharge Performance of Mgâ€“5Liâ€“3Alâ€“1Zn Sheet for Mg-air Battery via Rolling. Journal of the Electrochemical Society, 2020, 167, 110529. | 2.9 | 23 |
| 114 | Twin-roll strip casting of magnesium alloys in China. Transactions of Nonferrous Metals Society of China, 2008, 18, s7-s11. | 4.2 | 22 |
| 115 | Effects of combined additions of Li and Alâ€“5Tiâ€“1B on the mechanical anisotropy of AZ31 magnesium alloy. Materials & Design, 2013, 46, 922-927. | 5.1 | 22 |
| 116 | Synergistic Effect of MoS2 and SiO2 Nanoparticles as Lubricant Additives for Magnesium Alloyâ€“Steel Contacts. Nanomaterials, 2017, 7, 154. | 4.1 | 22 |
| 117 | Effect of precompression and subsequent annealing on the texture evolution and bendability of Mgâ€“Gd binary alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 799, 140290. | 5.6 | 22 |
| 118 | Optimization in strength-ductility of heterogeneous Mg-13Gd alloy via small extrusion ratio combined with pre-aging. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 833, 142540. | 5.6 | 22 |
| 119 | Twinning, grain orientation, and texture variations in Mg alloy processed by pre-rolling. Progress in Natural Science: Materials International, 2019, 29, 231-236. | 4.4 | 21 |
| 120 | Effect of pass reduction on distribution of shear bands and mechanical properties of AZ31B alloy sheets prepared by on-line heating rolling. Journal of Materials Processing Technology, 2020, 280, 116611. | 6.3 | 21 |
| 121 | Tuning the Active Sites of Atomically Thin Defective Bi<sub>12</sub>O<sub>17</sub>Cl<sub>2</sub> via Incorporation of Subnanometer Clusters. ACS Applied Materials & Interfaces, 2021, 13, 9216-9223. | 8.0 | 21 |
| 122 | Effects of yttrium and strontium additions on as-cast microstructure of Mg-14Li-1Al alloys. Transactions of Nonferrous Metals Society of China, 2011, 21, 778-783. | 4.2 | 20 |
| 123 | The Corrosion Behavior of AZ91D Magnesium Alloy in Simulated Haze Aqueous Solution. Materials, 2018, 11, 970. | 2.9 | 20 |
| 124 | Optimizing the mechanical properties of friction stir welded dissimilar joint of AM60 and AZ31 alloys by controlling deformation behavior. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 773, 138839. | 5.6 | 20 |
| 125 | The high-temperature oxidation resistance properties of magnesium alloys alloyed with Gd and Ca. Journal of Materials Science, 2021, 56, 8745-8761. | 3.7 | 20 |
| 126 | The formation of intermetallic compounds during interdiffusion of Mgâ€“Al/Mgâ€“Ce diffusion couples. Journal of Alloys and Compounds, 2015, 619, 411-416. | 5.5 | 19 |

| # | Article | IF | Citations |
|---|---|---|---|
| 127 | Fabrication of Mg/Mg composite with sleeve-core structure and its effect on room-temperature yield asymmetry via bimetal casting-co-extrusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 769, 138476. | 5.6 | 19 |
| 128 | Reduction per pass effect on texture traits and mechanical anisotropy of Mgâ€“Alâ€“Znâ€“Mnâ€“Ca alloy subjected to unidirectional and cross rolling. Journal of Materials Research and Technology, 2020, 9, 9607-9619. | 5.8 | 19 |
| 129 | Microstructure and mechanical properties with various pre-treatment and Zn content in Mg-Gd-Y-Zn alloys. Journal of Alloys and Compounds, 2020, 831, 154873. | 5.5 | 19 |
| 130 | Effect of tension on edge crack of on-line heating rolled AZ31B magnesium alloy sheet. Journal of Materials Research and Technology, 2020, 9, 1988-1997. | 5.8 | 18 |
| 131 | Effects of Grain Size on the Corrosion and Discharge Behaviors of Mgâ€“Y Binary Alloys for Mg-Air Batteries. Journal of the Electrochemical Society, 2020, 167, 130515. | 2.9 | 18 |
| 132 | Exploiting an as-extruded fine-grained Mg-Bi-Mn alloy with strength-ductility synergy via dilute Zn addition. Journal of Alloys and Compounds, 2022, 924, 166337. | 5.5 | 18 |
| 133 | Twin nucleation, twin growth and their effects on annealing strengths of Mgâ€“Alâ€“Znâ€“Mn sheets experienced different pre-compressive strains. Journal of Alloys and Compounds, 2020, 815, 152310. | 5.5 | 17 |
| 134 | Microstructure and mechanical properties of 1060/7050 laminated composite produced via cross accumulative extrusion bonding and subsequent aging. Journal of Alloys and Compounds, 2020, 826, 154094. | 5.5 | 17 |
| 135 | Improvement of planar isotropy, mechanical properties and corrosion resistance of extruded Mg-3Al-1Zn alloy sheet by special grain re-orientation. Journal of Alloys and Compounds, 2017, 721, 106-117. | 5.5 | 17 |
| 136 | Effect of Gd content on the microstructure, texture and mechanical properties of Mg-xGd-0.5Mn alloys. Journal of Materials Research and Technology, 2022, 20, 343-358. | 5.8 | 17 |
| 137 | Improved tension-compression performance of Mg-Al-Zn alloy processed by co-extrusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 675, 76-81. | 5.6 | 16 |
| 138 | Study on mechanical behaviors and theoretical critical shear strength of cold-rolled AZ31 alloy with different Li additions. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 742, 241-254. | 5.6 | 16 |
| 139 | Deformation behavior and texture evolution in an extruded Mg Li sheet with non-basal texture during tensile deformation. Materials Characterization, 2020, 159, 110041. | 4.4 | 16 |
| 140 | Discharge properties of Mg-Sn-Y alloys as anodes for Mg-air batteries. International Journal of Minerals, Metallurgy and Materials, 2021, 28, 1705-1715. | 4.9 | 16 |
| 141 | Role of secondary phase in microstructural stability of as-extruded Mgâ€“Snâ€“Ca at high temperature. Materials Science and Technology, 2016, 32, 1818-1825. | 1.6 | 15 |
| 142 | Preparation and Characterization of Magnesium Alloy Containing Al2Y Particles. Materials, 2018, 11, 1748. | 2.9 | 15 |
| 143 | Effect of grain size on the luminescent properties of Ce3+ doped Y3Al5O12 ceramic phosphor plates. Ceramics International, 2020, 46, 10452-10456. | 4.8 | 15 |
| 144 | Ameliorating mechanical properties and reducing anisotropy of as-extruded Mg-1.0Sn-0.5Ca alloy via Al addition. Progress in Natural Science: Materials International, 2021, 31, 722-730. | 4.4 | 15 |

| # | Article | IF | Citations |
|---|---|---|---|
| 145 | Effect of extrusion processing parameters on microstructure and mechanical properties of as-extruded AZ31 sheets. Transactions of Nonferrous Metals Society of China, 2008, 18, s160-s164. | 4.2 | 14 |
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