# Zhiyong Chen

## List of Publications by Citations



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|---|---|---|---|
| 41 papers | 547 citations | 15 h-index | 22 g-index |
| 43 ext. papers | 780 ext. citations | 4.6 avg, IF | 4.09 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 41 | Microstructures and tensile properties of Mg□dZr alloy during multidirectional forging at 773K. *Materials & Design*, **2013**, 50, 587-596 | | 82 |
| 40 | Evolution of LPSO phases in a Mg-Zn-Y-Gd-Zr alloy during semi-continuous casting, homogenization and hot extrusion. *Materials and Design*, **2018**, 152, 1-9 | 8.1 | 33 |
| 39 | Improved workability and ductility of the Mg-Gd-Y-Zn-Zr alloy via enhanced kinking and dynamic recrystallization. *Journal of Alloys and Compounds*, **2018**, 749, 878-886 | 5.7 | 32 |
| 38 | Microstructural evolution in adiabatic shear bands of copper at high strain rates: Electron backscatter diffraction characterization. *Materials Characterization*, **2012**, 64, 21-26 | 3.9 | 32 |
| 37 | Texture evolution, deformation mechanism and mechanical properties of the hot rolled Mg-Gd-Y-Zn-Zr alloy containing LPSO phase. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2018**, 731, 479-486 | 5.3 | 30 |
| 36 | The effect of LPSO on the deformation mechanism of MgGdZnZr magnesium alloy. *Journal of Magnesium and Alloys*, **2016**, 4, 83-88 | 8.8 | 26 |
| 35 | Hot deformation and dynamic recrystallization behaviors of Mg-Gd-Zn alloy with LPSO phases. *Journal of Alloys and Compounds*, **2019**, 792, 894-906 | 5.7 | 25 |
| 34 | Effects of texture on anisotropy of mechanical properties in annealed Mg.6%Zr.0%Cd sheets by unidirectional and cross rolling. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 615, 324-330 | 5.3 | 25 |
| 33 | Microstructure and mechanical properties of annealed Mg.6wt%Zr sheets by unidirectional and cross rolling. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 590, 60-65 | 5.3 | 24 |
| 32 | The role of long-period stacking ordered phases in the deformation behavior of a strong textured Mg-Zn-Gd-Y-Zr alloy sheet processed by hot extrusion. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 750, 31-39 | 5.3 | 22 |
| 31 | The role of long period stacking ordered phase in dynamic recrystallization of a MgZnY alloy during hot compression. *Journal of Alloys and Compounds*, **2020**, 818, 152814 | 5.7 | 21 |
| 30 | Adiabatic shear localization in pure titanium deformed by dynamic loading: Microstructure and microtexture characteristic. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2015**, 640, 436-442 | 5.3 | 20 |
| 29 | Adiabatic shear behaviors in rolled and annealed pure titanium subjected to dynamic impact loading. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 685, 95-106 | 5.3 | 19 |
| 28 | Microstructure and mechanical properties of Mg-6.75%Zn-0.57%Zr-0.4%Y-0.18%Gd sheets by unidirectional and cross rolling. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2016**, 662, 519-527 | 5.3 | 16 |
| 27 | Annealing-induced microstructural evolution and mechanical anisotropy improvement of the Mg-Gd-Y-Zr alloy processed by hot ring rolling. *Materials Characterization*, **2018**, 144, 641-651 | 3.9 | 15 |
| 26 | Microstructure and mechanical anisotropy of the hot rolled Mg-8.1Al-0.7Zn-0.15Ag alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 701, 7-15 | 5.3 | 14 |
| 25 | Quasi-static and dynamic forced shear deformation behaviors of Ti-5Mo-5V-8Cr-3Al alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 691, 51-59 | 5.3 | 13 |

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| 24 | Mechanical Properties of the Mg-Gd-Y-Zn-Zr Alloys with Different Morphologies of Long-Period Stacking Ordered Phases. *Journal of Materials Engineering and Performance*, **2018**, 27, 6237-6245 | 1.6 | 12 |
| 23 | Adiabatic shear deformation behaviors of cold-rolled copper under different impact loading directions. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 754, 330-338 | 5.3 | 10 |
| 22 | Microstructure and Microtexture Evolution of Shear Localization in Dynamic Deformation with Different Strains in Annealed Copper. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2013**, 44, 793-805 | 2.3 | 7 |
| 21 | Analysis of crystallographic twinning and slip in fcc crystals under plane strain compression. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2007**, 464, 101-109 | 5.3 | 7 |
| 20 | Grain Refinement Mechanisms in Gradient Nanostructured AZ31B Mg Alloy Prepared via Rotary Swaging. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2021**, 52, 4053-4065 | 2.3 | 7 |
| 19 | Deformation Mechanism of Mg-Gd-Y-Zn-Zr Alloy Containing Long-Period Stacking Ordered Phases During Hot Rolling. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2020**, 51, 1911-1923 | 2.3 | 6 |
| 18 | Manufacturing high-performance Mg alloy through hot extrusion. *Materials and Manufacturing Processes*, **2018**, 33, 863-866 | 4.1 | 6 |
| 17 | Fragmentation of long period stacking ordered (LPSO) phase and its impact on microstructure evolution of a Mg□□□n alloy during multi-directional forging. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2020**, 793, 139898 | 5.3 | 6 |
| 16 | Interactions between kinking and {101?2} twinning in a Mg□n-Gd alloy containing long period stacking ordered (LPSO) phase. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 767, 138418 | 5.3 | 5 |
| 15 | Co-yield surfaces for {111}<110> slip and {111}<112> twinning in fcc metals. *Journal of Materials Science*, **2002**, 37, 2843-2848 | 4.3 | 5 |
| 14 | Evolution of long-period stacking ordered phases and their effect on recrystallization in extruded Mg-Gd-Y-Zn-Zr alloy during annealing. *Materials Characterization*, **2020**, 167, 110515 | 3.9 | 5 |
| 13 | Improving the Ductility of Mg□d□□r Alloy through Extrusion and a Following Rolling. *Advanced Engineering Materials*, **2018**, 20, 1701041 | 3.5 | 4 |
| 12 | Computer Simulation of Rolling Textures Evolution of Pure Aluminum with Initial Texture. *Materials Transactions*, **2004**, 45, 2845-2850 | 1.3 | 4 |
| 11 | Influence of Heat Treatment on Microstructures and Impact Toughness of Mg-Al-Zn Alloy. *Jom*, **2019**, 71, 2874-2883 | 2.1 | 3 |
| 10 | Strengthening the Mg□□n alloy through the formation of nanoscale lamellar structures and nanograins. *Journal of Alloys and Compounds*, **2021**, 886, 161148 | 5.7 | 3 |
| 9 | Analysis for twinning and slip in face-centered cubic crystals under axisymmetric co-deformation. *Science in China Series D: Earth Sciences*, **2006**, 49, 521-536 | | 2 |
| 8 | The Interaction Between ( { 10bar{1}2} ) Twinning and Long-Period Stacking Ordered (LPSO) Phase During Hot Rolling and Annealing Process of a Mg-Gd-Y-Zn-Zr Alloy. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2021**, 52, 520-530 | 2.3 | 2 |
| 7 | Effects of T5 Treatment on Microstructure and Mechanical Properties at Elevated Temperature of AZ80-Ag Alloy. *Materials*, **2019**, 12, | 3.5 | 1 |

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| 6 | Influence of Corrosion Morphology on Inductive Impedance of Mg-Gd-Y-Zn-Zr-Ag Alloy. *Journal of Materials Engineering and Performance*, **2021**, 30, 4126-4137 | 1.6 | 1 |
| 5 | Deformation mechanism, orientation evolution and mechanical properties of annealed cross-rolled Mg-Zn-Zr-Y-Gd sheet during tension. *Journal of Magnesium and Alloys*, **2021**, | 8.8 | 1 |
| 4 | Formation of nanocrystalline AZ31B Mg alloys via cryogenic rotary swaging. *Journal of Magnesium and Alloys*, **2021**, | 8.8 | 1 |
| 3 | Fabrication of Nanocrystalline High-Strength Magnesium–Lithium Alloy by Rotary Swaging. *Advanced Engineering Materials*,2100666 | 3.5 | 0 |
| 2 | Forced shear deformation behaviors of annealed pure titanium under quasi-static and dynamic loading. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2022**, 839, 142872 | 5.3 | 0 |
| 1 | Loading Mode Dependence of {(10bar{1}2)} Twin Variant Selection in a Rolled Mg-Al-Zn Alloy. *Journal of Materials Engineering and Performance*,1 | 1.6 | |