

Liang Chen

List of Publications by Year in descending order

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69
papers

1,848
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218677

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302126

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69
docs citations

69
times ranked

771
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 1 | Evolution mechanisms of charge weld during porthole die extrusion of ZK60 Mg profile. <i>Journal of Materials Processing Technology</i> , 2022, 300, 117401. | 6.3 | 5 |
| 2 | Aging precipitation and its effects on mechanical properties of TiB ₂ particulate reinforced 7075Al composite. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 837, 142742. | 5.6 | 5 |
| 3 | Experimental Study and Optimization on Solution and Artificial Aging of Cold-Rolled 2024 Al Alloy Sheet. <i>Journal of Materials Engineering and Performance</i> , 2022, 31, 5419-5431. | 2.5 | 4 |
| 4 | Effect of stress-aging treatment on the mechanical and corrosion properties of Al [~] Zn [~] Mg [~] Cu alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 838, 142791. | 5.6 | 30 |
| 5 | Effects of TiB ₂ particle and local aspect ratio on microstructure and mechanical properties of an I-shaped TiB ₂ /6061Al composite profile. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 846, 143284. | 5.6 | 7 |
| 6 | Effects of artificial aging on precipitation behavior, mechanical properties and corrosion resistance of Si ₃ N ₄ /6061Al composite fabricated by sintering and hot extrusion processes. <i>Journal of Materials Processing Technology</i> , 2022, 306, 117644. | 6.3 | 5 |
| 7 | Fabrication and strengthening mechanism of dual-phased and bimodal-sized (Si ₃ N ₄ p+TiB ₂ p)/6061Al hybrid composite. <i>Materials and Design</i> , 2022, 220, 110872. | 7.0 | 9 |
| 8 | Investigation on microstructure and mechanical properties of hot-rolled AZ31 Mg alloy with various cryogenic treatments. <i>Journal of Materials Research and Technology</i> , 2022, 19, 4557-4570. | 5.8 | 10 |
| 9 | A comprehensive analysis on microstructure evolution of Mg-5.65Zn-0.66Zr alloy during hot deformation. <i>Journal of Magnesium and Alloys</i> , 2021, 9, 520-531. | 11.9 | 18 |
| 10 | Formation of abnormal coarse grains and its effects on corrosion behaviors of solution treated ZK60 Mg alloy. <i>Corrosion Science</i> , 2021, 180, 109201. | 6.6 | 23 |
| 11 | Improving mechanical anisotropy and corrosion resistance of extruded AA7075 alloy by warm cross rolling and annealing. <i>Journal of Alloys and Compounds</i> , 2021, 863, 158725. | 5.5 | 21 |
| 12 | Effects of solution and aging treatments on the microstructure and mechanical properties of cold rolled 2024 Al alloy sheet. <i>Journal of Materials Research and Technology</i> , 2021, 12, 1126-1142. | 5.8 | 25 |
| 13 | Numerical and experimental study on extrusion of ZK60 Mg alloy using billet with temperature gradient. <i>Journal of Materials Research and Technology</i> , 2021, 14, 3018-3028. | 5.8 | 5 |
| 14 | Investigation on peripheral coarse grains and precipitation behavior of in-situ TiB ₂ /Al-Cu-Mg composites with various Mg contents. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 826, 142000. | 5.6 | 7 |
| 15 | Investigation on corrosion behavior and mechanical properties of an extruded Mg-Zn-Al-Sn-Mn alloy. <i>Materials Characterization</i> , 2021, 180, 111439. | 4.4 | 16 |
| 16 | Strengthening mechanism and anisotropy of mechanical properties of Si ₃ N ₄ p/Al-Mg-Si composites fabricated by sintering and extrusion. <i>Materials and Design</i> , 2021, 210, 110111. | 7.0 | 9 |
| 17 | Microstructure characterization and corrosion behavior of hollow ZK60 Mg profile containing longitudinal welds. <i>Corrosion Science</i> , 2021, 193, 109875. | 6.6 | 13 |
| 18 | Effects of annealing treatment on the microstructure and corrosion behavior of hot rolled AZ31 Mg alloy. <i>Journal of Materials Research and Technology</i> , 2021, 15, 4800-4812. | 5.8 | 24 |

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|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 19 | Multi-objective optimization and experimental investigation on hot extruded plate of high strength Al-Zn-Mg alloy. <i>Journal of Materials Research and Technology</i> , 2020, 9, 507-519. | 5.8 | 14 |
| 20 | Interface microstructure evolution and mechanical properties of the extruded fiber-reinforced aluminum-based composite bar. <i>Materials and Design</i> , 2020, 188, 108446. | 7.0 | 17 |
| 21 | Improvement in mechanical properties of Al-Zn-Mg alloy by applying electric pulse during hot extrusion. <i>Journal of Materials Research and Technology</i> , 2020, 9, 1210-1220. | 5.8 | 6 |
| 22 | Formation mechanism of abnormal coarse grains on weld seam of extruded ZK60 alloy and the effects on mechanical properties. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 773, 138718. | 5.6 | 21 |
| 23 | Response of mechanical properties and corrosion behavior of Al-Zn-Mg alloy treated by aging and annealing: A comparative study. <i>Journal of Alloys and Compounds</i> , 2020, 848, 156561. | 5.5 | 30 |
| 24 | Effects of artificial aging on microstructure, mechanical properties and stress corrosion cracking of a novel high strength 7A99 Al alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 780, 139217. | 5.6 | 36 |
| 25 | Achieving three-layered Al/Mg/Al sheet via combining porthole die co-extrusion and hot forging. <i>Journal of Magnesium and Alloys</i> , 2020, 8, 654-666. | 11.9 | 34 |
| 26 | Formation mechanism and evolution of surface coarse grains on a ZK60 Mg profile extruded by a porthole die. <i>Journal of Materials Science and Technology</i> , 2020, 47, 88-102. | 10.7 | 29 |
| 27 | Effects of solution treatment on the microstructure and mechanical properties of naturally aged EN AW 2024 Al alloy sheet. <i>Journal of Alloys and Compounds</i> , 2020, 824, 153943. | 5.5 | 32 |
| 28 | Influence of homogenization treatment on microstructure and mechanical properties of Al-Zn-Mg alloy extruded by porthole die. <i>Materials Characterization</i> , 2020, 161, 110148. | 4.4 | 13 |
| 29 | Microstructure evolution, plastic anisotropy, and intergranular corrosion of Al-Mg-Si sheet processed through a combination of hot extrusion and cold rolling. <i>Materials Characterization</i> , 2020, 164, 110299. | 4.4 | 17 |
| 30 | Investigation on microstructure and mechanical properties of in-situ TiB ₂ /Al-Cu-Mg composite profile fabricated by porthole die extrusion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 786, 139449. | 5.6 | 15 |
| 31 | Influence of aging treatment on the microstructure, mechanical properties and anisotropy of hot extruded Al-Mg-Si plate. <i>Materials and Design</i> , 2019, 182, 107999. | 7.0 | 33 |
| 32 | Evolution of grain structure, micro-texture and second phase during porthole die extrusion of Al-Zn-Mg alloy. <i>Materials Characterization</i> , 2019, 158, 109953. | 4.4 | 24 |
| 33 | Investigation on microstructure and mechanical properties of Al-5.50Zn-2.35Mg-1.36Cu alloy fabricated by hot extrusion process. <i>Journal of Materials Research</i> , 2019, 34, 3151-3162. | 2.6 | 5 |
| 34 | Microstructure and mechanical properties of hot extruded Mg-8.89Li-0.96Zn alloy. <i>Results in Physics</i> , 2019, 13, 102148. | 4.1 | 8 |
| 35 | Influence of extrusion parameters on microstructure, texture, and second-phase particles in an Al-Mg-Si alloy. <i>Journal of Materials Processing Technology</i> , 2019, 270, 323-334. | 6.3 | 34 |
| 36 | Correlation between homogenization treatment and subsequent hot extrusion of Al-Mg-Si alloy. <i>Journal of Materials Science</i> , 2019, 54, 9843-9856. | 3.7 | 21 |

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|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 37 | Microstructure, mechanical properties and welding quality evaluation of longitudinal welds in hollow magnesium alloy profiles extruded at different ram speeds. <i>Materials Characterization</i> , 2019, 151, 414-428. | 4.4 | 7 |
| 38 | Grain refinement and strength enhancing of hot extruded Mg alloy by application of electric pulse. <i>Materials Letters</i> , 2019, 241, 104-107. | 2.6 | 9 |
| 39 | Study on Al/Mg/Al sheet fabricated by combination of porthole die co-extrusion and subsequent hot rolling. <i>Journal of Alloys and Compounds</i> , 2019, 784, 727-738. | 5.5 | 53 |
| 40 | Microstructures of longitudinal/transverse welds and back-end defects and their influences on the corrosion resistance and mechanical properties of aluminum alloy extrusion profiles. <i>Journal of Materials Processing Technology</i> , 2019, 267, 1-16. | 6.3 | 17 |
| 41 | Microstructure evolution of AZ91 alloy during hot extrusion process with various ram velocity. <i>Vacuum</i> , 2018, 150, 136-143. | 3.5 | 22 |
| 42 | Microstructure and mechanical properties of Mg-Al-Zn alloy extruded by porthole die with different initial billets. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 718, 390-397. | 5.6 | 29 |
| 43 | Fabrication of Al/Mg/Al laminate by a porthole die co-extrusion process. <i>Journal of Materials Processing Technology</i> , 2018, 258, 165-173. | 6.3 | 46 |
| 44 | Effects of asymmetric feeder on microstructure and mechanical properties of high strength Al-Zn-Mg alloy by hot extrusion. <i>Journal of Alloys and Compounds</i> , 2018, 749, 293-304. | 5.5 | 29 |
| 45 | Hot deformation behavior and microstructure analysis of 25Cr3Mo3NiNb steel during hot compression tests. <i>Vacuum</i> , 2018, 147, 8-17. | 3.5 | 63 |
| 46 | Microstructure and mechanical properties of Mg-3.0Zn-1.0Sn-0.3Mn-0.3Ca alloy extruded at different temperatures. <i>Journal of Alloys and Compounds</i> , 2018, 732, 257-269. | 5.5 | 43 |
| 47 | Microstructure and texture evolution during porthole die extrusion of Mg-Al-Zn alloy. <i>Journal of Materials Processing Technology</i> , 2018, 259, 346-352. | 6.3 | 36 |
| 48 | Co-extrusion of dissimilar AA6063/AA7075 by porthole die at various temperatures. <i>Journal of Alloys and Compounds</i> , 2018, 764, 162-169. | 5.5 | 21 |
| 49 | Flow behavior and constitutive description of 20CrMnTi steel at high temperature. <i>Journal of Central South University</i> , 2018, 25, 1013-1024. | 3.0 | 7 |
| 50 | Dynamic evolution of grain structure and micro-texture along a welding path of aluminum alloy profiles extruded by porthole dies. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 682, 679-690. | 5.6 | 47 |
| 51 | Microstructural evolution and mechanical properties of welding seams in aluminum alloy profiles extruded by a porthole die under different billet heating temperatures and extrusion speeds. <i>Journal of Materials Processing Technology</i> , 2017, 247, 214-222. | 6.3 | 43 |
| 52 | Evolution of transverse weld during porthole extrusion of AA7N01 hollow profile. <i>Journal of Materials Processing Technology</i> , 2017, 248, 103-114. | 6.3 | 16 |
| 53 | Microstructure analysis of an Al-Zn-Mg alloy during porthole die extrusion based on modeling of constitutive equation and dynamic recrystallization. <i>Journal of Alloys and Compounds</i> , 2017, 710, 80-91. | 5.5 | 90 |
| 54 | Investigation on longitudinal weld seams during porthole die extrusion process of high strength 7075 aluminum alloy. <i>International Journal of Advanced Manufacturing Technology</i> , 2017, 91, 1897-1907. | 3.0 | 16 |

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|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 55 | Microstructure evolution during solution treatment of extruded Al-Zn-Mg profile containing a longitudinal weld seam. <i>Journal of Alloys and Compounds</i> , 2017, 729, 210-221. | 5.5 | 33 |
| 56 | Joining of 1060/6063 aluminum alloys based on porthole die extrusion process. <i>Journal of Materials Processing Technology</i> , 2017, 250, 65-72. | 6.3 | 44 |
| 57 | Study on solid bonding behavior of AZ31 Mg alloy during porthole die extrusion process. <i>International Journal of Advanced Manufacturing Technology</i> , 2017, 93, 2791-2799. | 3.0 | 12 |
| 58 | Analysis of longitudinal weld seam defects and investigation of solid-state bonding criteria in porthole die extrusion process of aluminum alloy profiles. <i>Journal of Materials Processing Technology</i> , 2016, 237, 31-47. | 6.3 | 88 |
| 59 | A comparative study of several constitutive models for powder metallurgy tungsten at elevated temperature. <i>Materials and Design</i> , 2016, 90, 91-100. | 7.0 | 50 |
| 60 | Investigation of interface evolution, microstructure and mechanical properties of solid-state bonding seams in hot extrusion process of aluminum alloy profiles. <i>Journal of Materials Processing Technology</i> , 2016, 230, 153-166. | 6.3 | 58 |
| 61 | Hot deformation behavior and constitutive modeling of homogenized 6026 aluminum alloy. <i>Materials & Design</i> , 2015, 74, 25-35. | 5.1 | 106 |
| 62 | Analysis of retarding effect on β to β' transformation in Fe-C alloy by addition of dispersed particles. <i>Progress in Natural Science: Materials International</i> , 2015, 25, 236-241. | 4.4 | 0 |
| 63 | Effects of ram velocity on pyramid die extrusion of hollow aluminum profile. <i>International Journal of Advanced Manufacturing Technology</i> , 2015, 79, 2117-2125. | 3.0 | 22 |
| 64 | Evaluation of a pyramid die extrusion for a hollow aluminum profile using FE simulation. <i>Journal of Mechanical Science and Technology</i> , 2015, 29, 2195-2203. | 1.5 | 16 |
| 65 | Hot Deformation Behaviors and Processing Maps of 2024 Aluminum Alloy in As-cast and Homogenized States. <i>Journal of Materials Engineering and Performance</i> , 2015, 24, 5002-5012. | 2.5 | 38 |
| 66 | Constitutive analysis of homogenized 7005 aluminum alloy at evaluated temperature for extrusion process. <i>Materials & Design</i> , 2015, 66, 129-136. | 5.1 | 106 |
| 67 | Analysis and porthole die design for a multi-hole extrusion process of a hollow, thin-walled aluminum profile. <i>International Journal of Advanced Manufacturing Technology</i> , 2014, 74, 383-392. | 3.0 | 43 |
| 68 | Effects of Second Phase Particle Dispersion on Kinetics of Isothermal Peritectic Transformation in Fe-C Alloy. <i>ISIJ International</i> , 2012, 52, 434-440. | 1.4 | 9 |
| 69 | Effects of Second Phase Particles on Migration of α/γ Interface during Isothermal α to γ Transformation. <i>ISIJ International</i> , 2012, 52, 1841-1847. | 1.4 | 4 |