

# Liang Zhang

## List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Microstructure and mechanical properties of repair welds of low-pressure sand-cast Mg-Y-RE-Zr alloy by tungsten inert gas welding. <i>Journal of Magnesium and Alloys</i> , 2022, 10, 180-194.	5.5	26
2	Addressing the strength-ductility trade-off in a cast Al-Li-Cu alloy—Synergistic effect of Sc-alloying and optimized artificial ageing scheme. <i>Journal of Materials Science and Technology</i> , 2022, 96, 212-225.	5.6	20
3	Microstructural Characteristics and Mechanical Properties of Cast Mg-3Nd-3Gd-xZn-0.5Zr Alloys. <i>Acta Metallurgica Sinica (English Letters)</i> , 2022, 35, 922-940.	1.5	5
4	Microstructure and stress corrosion cracking resistance of Al-6.5Zn-2Cu-1.5Mg-0.05Ti alloy modified by Cr addition. <i>Materials Characterization</i> , 2022, 183, 111621.	1.9	7
5	Role of Ti in the microstructure evolutions and mechanical properties of cast Al-2.5Li-1.5Cu-1Zn-0.5Mg(0.2Zr) alloys. <i>Journal of Alloys and Compounds</i> , 2022, 899, 163320.	2.8	9
6	On the microstructural characteristics and mechanical properties of Al-2Li-2Cu-0.5Mg alloy: the role of Yb additions. <i>Journal of Materials Science</i> , 2022, 57, 3688-3708.	1.7	5
7	Origin of the age-hardening and age-softening response in Mg-Li-Zn based alloys. <i>Acta Materialia</i> , 2022, 226, 117673.	3.8	29
8	Effect of heat treatments on microstructure and mechanical properties of sand cast Al-2Li-2Cu-0.5Mg-0.2Sc-0.2Zr alloy. <i>Transactions of Nonferrous Metals Society of China</i> , 2022, 32, 411-423.	1.7	6
9	Effects of heat treatment and pre-stretching on the mechanical properties and microstructure evolution of extruded 2050 Al-Cu-Li alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 845, 143236.	2.6	19
10	Achieving low-temperature Zr alloying for microstructural refinement of sand-cast Mg-Gd-Y alloy by employing zirconium tetrachloride. <i>Materials Characterization</i> , 2021, 171, 110727.	1.9	18
11	Effect of NaOH concentration on microstructure and corrosion resistance of MAO coating on cast Al-Li alloy. <i>Transactions of Nonferrous Metals Society of China</i> , 2021, 31, 913-924.	1.7	21
12	Variation in the microstructure and mechanical properties of permanent mold cast Al-3Li-2Mg-0.1Zr alloy with Zn addition. <i>Journal of Materials Research</i> , 2021, 36, 2071-2082.	1.2	1
13	Addressing the abnormal grain coarsening during post-weld heat treatment of TIG repair welded joint of sand-cast Mg-Y-RE-Zr alloy. <i>Materials Characterization</i> , 2021, 176, 111125.	1.9	9
14	Effect of Ca content and rheo-squeeze casting parameters on microstructure and mechanical properties of AZ91-1Ce-xCa alloys. <i>Transactions of Nonferrous Metals Society of China</i> , 2021, 31, 1572-1586.	1.7	7
15	Research on the post-weld heat treatment of TIG repair welded joint of sand-cast Mg-Y-RE-Zr alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 821, 141577.	2.6	7
16	High-cycle fatigue behavior of Mg-8Li-3Al-2Zn-0.5Y alloy under different states. <i>Journal of Magnesium and Alloys</i> , 2021, 9, 1609-1618.	5.5	15
17	An insight into the precipitate evolution and mechanical properties of a novel high-performance cast Al-Li-Cu-Mg-X alloy. <i>Journal of Alloys and Compounds</i> , 2021, 875, 159996.	2.8	21
18	Microstructure and mechanical properties of casting Al-3Li-2Mg-1Zn-0.1Zr alloys modified by Sc additions. <i>Journal of Alloys and Compounds</i> , 2021, 885, 161106.	2.8	5

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19	Microstructure characteristics of an ultra-high strength extruded Al-4.7Cu-1Li-0.5Mg-0.1Zr-1Zn alloy during heat treatment. <i>Journal of Alloys and Compounds</i> , 2020, 813, 152216.	2.8	22
20	Effect of Zn on precipitation evolution and mechanical properties of a high strength cast Al-Li-Cu alloy. <i>Materials Characterization</i> , 2020, 160, 110089.	1.9	25
21	Formation of non-dendritic microstructures in preparation of semi-solid Mg-RE alloys slurries: Roles of RE content and cooling rate. <i>Journal of Materials Processing Technology</i> , 2020, 279, 116545.	3.1	7
22	Microstructures and mechanical properties of ultralight cast Al-3Li-XMg-0.1Zr alloys. <i>Materials Characterization</i> , 2020, 170, 110698.	1.9	15
23	Effect of Zn Addition on the Microstructure and Mechanical Properties of Cast Mg-10Gd-3.5Er-xZn-0.5Zr Alloys. <i>Acta Metallurgica Sinica (English Letters)</i> , 2020, 33, 1505-1517.	1.5	11
24	Role of Cu on the mechanical properties and microstructures evolution of Al-xCu-1Li-0.4Mg-1Zn-0.1Zr alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 792, 139833.	2.6	10
25	Effect of Different Ageing Processes on Microstructure and Mechanical Properties of Cast Al-3Li-2Cu-0.2Zr Alloy. <i>Acta Metallurgica Sinica (English Letters)</i> , 2020, 33, 1243-1251.	1.5	3
26	Influences of Mg content on the microstructures and mechanical properties of cast Al-2Li-2Cu-0.2Zr alloy. <i>Journal of Materials Science</i> , 2019, 54, 791-811.	1.7	22
27	Effect of refining processes on inclusions and mechanical properties of cast Al-2Li-2Cu-0.2Zr alloy. <i>Transactions of Nonferrous Metals Society of China</i> , 2019, 29, 1375-1382.	1.7	5
28	Effect of Y and Gd content on the microstructure and mechanical properties of Mg-Y-RE alloys. <i>Journal of Magnesium and Alloys</i> , 2019, 7, 345-354.	5.5	154
29	Effects of Al and Y Addition on Microstructures and Mechanical Properties of As-Cast Mg-14Li Based Alloy. <i>Advanced Engineering Materials</i> , 2019, 21, 1800755.	1.6	10
30	Particle Filter and Its Application in the Integrated Train Speed Measurement. <i>Journal of Shanghai Jiaotong University (Science)</i> , 2019, 24, 130-136.	0.5	0
31	Balance of mechanical properties of Mg-8Li-3Al-2Zn-0.5Y alloy by solution and low-temperature aging treatment. <i>Journal of Alloys and Compounds</i> , 2019, 791, 655-664.	2.8	34
32	Effects of Mg and Sc additions on the microstructure, mechanical properties, and thermal stability of a cast Al-2Li-2Cu-0.2Zr alloy after thermal exposure. <i>Journal of Alloys and Compounds</i> , 2019, 788, 367-382.	2.8	19
33	High temperature mechanical behavior of low-pressure sand-cast Mg-Gd-Y-Zr magnesium alloy. <i>Journal of Magnesium and Alloys</i> , 2019, 7, 597-604.	5.5	61
34	Microstructural characteristics and mechanical properties of extruded Al-4Cu-1Li-0.4Mg-0.1Zr-xZn alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 743, 223-232.	2.6	13
35	Effects of pressure and aging treatment on microstructures and mechanical properties of rheo-squeeze casting Mg-3Nd-0.2Zn-0.4Zr alloy. <i>Journal of Materials Research</i> , 2018, 33, 758-771.	1.2	5
36	Effect of heat treatment on the microstructure and mechanical properties of extruded Al-4Cu-1Li-0.4Mg-0.4Ag-0.18Zr Alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 717, 11-19.	2.6	37

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37	Al-5.5Mg-1.5Li-0.5Zn-0.07Sc-0.07Zr alloy produced by gravity casting and heat treatment processing. <i>Materials and Manufacturing Processes</i> , 2018, 33, 891-897.	2.7	18
38	Improved Post-Weld Heat Treatment for Argon TIG Welded Joint of a New Al-Zn-Mg-Cu Alloy. <i>Metal Science and Heat Treatment</i> , 2018, 60, 399-402.	0.2	2
39	Influence of Sc content on the microstructure and mechanical properties of cast Al-2Li-2Cu-0.5Mg-0.2Zr alloy. <i>Materials Characterization</i> , 2018, 142, 223-236.	1.9	43
40	Effects of processing parameters and addition of flame-retardant into moulding sand on the microstructure and fluidity of sand-cast magnesium alloy Mg-10Gd-3Y-0.5Zr. <i>Journal of Materials Science and Technology</i> , 2017, 33, 558-566.	5.6	10
41	Influences of Mn content on the microstructures and mechanical properties of cast Al-3Li-2Cu-0.2Zr alloy. <i>Journal of Alloys and Compounds</i> , 2017, 715, 421-431.	2.8	30
42	Effects of Sc addition on the microstructure and mechanical properties of cast Al-3Li-1.5Cu-0.15Zr alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 680, 232-238.	2.6	48
43	Effect of reclaimed sand additions on mechanical properties and fracture behavior of furan no-bake resin sand. <i>China Foundry</i> , 2017, 14, 128-137.	0.5	10
44	Semi-solid slurry preparation, rheo-die casting and rheo-squeeze casting of an AZ91-2Ca-1.5Ce ignition-proof magnesium alloy by gas-bubbling process. <i>Journal of Materials Research</i> , 2017, 32, 677-686.	1.2	5
45	Effect of mold temperature on microstructure and mechanical properties of rheo-squeeze casting Mg-3Nd-0.2Zn-0.4Zr alloy. <i>Journal of Materials Research</i> , 2017, 32, 4206-4218.	1.2	7
46	Effects of minor Y addition on microstructure and mechanical properties of Mg-Nd-Zn-Zr alloy. <i>Journal of Materials Research</i> , 2017, 32, 3712-3722.	1.2	6
47	Microstructure and mechanical properties of Mg-3.0Y-2.5Nd-1.0Gd-xZn-0.5Zr alloys produced by metallic and sand mold casting. <i>Journal of Materials Research</i> , 2017, 32, 3191-3201.	1.2	11
48	Microstructural evolution and mechanical properties of cast Al-2Li-2Cu-0.5Mg-0.2Zr alloy during heat treatment. <i>Materials Characterization</i> , 2017, 132, 312-319.	1.9	40
49	Correlation Between Microstructure and Mechanical Properties of 2219-T8 Aluminum Alloy Joints by VPTIG Welding. <i>Acta Metallurgica Sinica (English Letters)</i> , 2017, 30, 438-446.	1.5	18
50	An Improved Particle Filter Based on Bird Swarm Algorithm. , 2017, , .		6
51	Rate control model for high dynamic range video. , 2017, , .		3
52	Dry wear behavior of rheo-casting Al-16Si-4Cu-0.5Mg alloy. <i>Transactions of Nonferrous Metals Society of China</i> , 2016, 26, 2818-2829.	1.7	9
53	Effects of Cu content on the microstructure, mechanical property, and hot tearing susceptibility of die casting hypereutectic Al-22Si-0.4Mg alloy. <i>Journal of Materials Research</i> , 2016, 31, 3629-3637.	1.2	2
54	Microstructure evolution and mechanical properties of rheo-processed ADC12 alloy. <i>Transactions of Nonferrous Metals Society of China</i> , 2016, 26, 3070-3080.	1.7	18

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55	Influence of heat treatment on microstructure and mechanical properties of as-cast Mg <sub>8</sub> Li <sub>3</sub> Al <sub>2</sub> Zn <sub>x</sub> alloy with duplex structure. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 669, 87-94.	2.6	38
56	Effect of Mn addition on microstructure and mechanical properties of cast Al <sub>2</sub> Li <sub>2</sub> Cu <sub>0.8</sub> Mg <sub>0.4</sub> Zn <sub>0.2</sub> Zr alloy. Journal of Materials Research, 2016, 31, 250-258.	1.2	10
57	Effect of solution treatment on microstructure and mechanical properties of cast Al <sub>3</sub> Li <sub>1.5</sub> Cu <sub>0.2</sub> Zr alloy. Journal of Materials Research, 2016, 31, 1124-1132.	1.2	14
58	Microstructural characteristics and mechanical properties of cast Al-3Li-xCu-0.2Zr alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 677, 29-40.	2.6	56
59	Effect of heat treatment on microstructure, mechanical properties and fracture behaviors of sand-cast Mg-4Y-3Nd-1Gd-0.2Zn-0.5Zr alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 677, 411-420.	2.6	43
60	Influence of different casting processes on high cycle fatigue behavior of Mg <sub>10</sub> Gd <sub>3</sub> Y <sub>0.5</sub> Zr alloy. Journal of Materials Research, 2016, 31, 2538-2548.	1.2	4
61	Softening Behavior of a New Al-Zn-Mg-Cu Alloy Due to TIG Welding. Journal of Materials Engineering and Performance, 2016, 25, 1870-1879.	1.2	24
62	Primary phase evolution of rheo-processed ADC12 aluminum alloy. Transactions of Nonferrous Metals Society of China, 2016, 26, 19-27.	1.7	13
63	Microstructural evolution and mechanical properties of cast Al-3Li-1.5Cu-0.2Zr alloy during heat treatment. Materials Characterization, 2016, 114, 234-242.	1.9	40
64	Preparation of Mg-Nd-Zn (Zr) alloys semisolid slurry by electromagnetic stirring. Materials and Design, 2016, 95, 398-409.	3.3	41
65	Comparison of microstructure and mechanical properties of TIG and laser welding joints of a new Al-Zn-Mg-Cu alloy. Materials and Design, 2016, 92, 880-887.	3.3	44
66	Effect of Y content on microstructure and mechanical properties of as-cast Mg <sub>8</sub> Li <sub>3</sub> Al <sub>2</sub> Zn alloy with duplex structure. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 650, 240-247.	2.6	70
67	Small group people behavior analysis based on temporal recursive trajectory identification. , 2015, , .		2
68	Effects of processing parameters on microstructure of semi-solid slurry of AZ91D magnesium alloy prepared by gas bubbling. Transactions of Nonferrous Metals Society of China, 2015, 25, 2181-2187.	1.7	9
69	Fast depth decision with enlarged coding block sizes for HEVC intra coding of 4K ultra-HD video. , 2015, , .		2
70	Gradient based fast mode and depth decision for high efficiency intra frame video coding. , 2015, , .		8
71	Influence of pouring temperature on solidification behavior, microstructure and mechanical properties of sand-cast Mg-10Gd-3Y-0.4Zr alloy. Transactions of Nonferrous Metals Society of China, 2015, 25, 363-374.	1.7	10
72	Preparation of an Mg-Gd-Zn alloy semisolid slurry by low frequency electro-magnetic stirring. Materials and Design, 2015, 84, 53-63.	3.3	39

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73	Refinement of primary Si in Al-20%Si alloy by MRB through phosphorus additions. Journal of Materials Processing Technology, 2015, 225, 485-491.	3.1	13
74	Microstructure and mechanical properties of a new Al-Zn-Mg-Cu alloy joints welded by laser beam. Materials and Design, 2015, 83, 451-458.	3.3	42
75	Preparation and rheo-squeeze casting of semi-solid AZ91-2 wt% Ca magnesium alloy by gas bubbling process. Journal of Materials Research, 2015, 30, 825-832.	1.2	11
76	Wavelet transform-based downsampling for low bit-rate video coding. , 2015, , .		0
77	Microstructure and tensile properties of as-extruded Mg-Li-Zn-Gd alloys reinforced with icosahedral quasicrystal phase. Materials & Design, 2015, 66, 162-168.	5.1	58
78	Microstructure and mechanical properties of rheo-squeeze casting AZ91-Ca magnesium alloy prepared by gas bubbling process. Materials & Design, 2015, 67, 1-8.	5.1	30
79	Microstructure and mechanical properties of as-cast and extruded Mg-8Li-3Al-2Zn-0.5Nd alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 621, 198-203.	2.6	40
80	Effect of Al additions on grain refinement and mechanical properties of Mg-Sm alloys. Journal of Alloys and Compounds, 2015, 620, 172-179.	2.8	66
81	Influence of cooling rate on solidification behavior of sand-cast Mg-10Gd-3Y-0.4Zr alloy. Transactions of Nonferrous Metals Society of China, 2014, 24, 3413-3420.	1.7	16
82	Multilevel DCT-based zerotree image coding. , 2014, , .		0
83	Fast AVS to HEVC transcoding based on ROI detection using visual characteristics. , 2014, , .		4
84	Effects of processing parameters on microstructure and mechanical properties of squeeze-cast Mg-12Zn-4Al-0.5Ca alloy. Materials & Design, 2014, 63, 729-737.	5.1	22
85	Effects of processing parameters and Ca content on microstructure and mechanical properties of squeeze casting AZ91-Ca alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 595, 109-117.	2.6	55
86	Effects of Ca content on the microstructure of semisolid Mg-13Al alloy produced via isothermal heat treatment. Journal of Alloys and Compounds, 2012, 534, 52-58.	2.8	6
87	Effect of cooling condition on microstructure of semi-solid AZ91 slurry produced via ultrasonic vibration process. Transactions of Nonferrous Metals Society of China, 2012, 22, 2357-2363.	1.7	25
88	Study on microstructure and mechanical properties of Al-Mg-Mn-Er alloy joints welded by TIG and laser beam. Materials & Design, 2012, 40, 117-123.	5.1	35
89	Microstructure evolution of semi-solid Mg-14Al-0.5Mn alloys during isothermal heat treatment. Transactions of Nonferrous Metals Society of China, 2010, 20, 1244-1248.	1.7	10