Shouxun Ji

List of Publications by Year in descending order

118 papers	3,292 citations	196777 29 h-index	214428 50 g-index
125 all docs	125 docs citations	125 times ranked	1846 citing authors

#	Article	IF	Citations
1	Morphologically templated nucleation of primary Si on AlP in hypereutectic Al-Si alloys. Journal of Materials Science and Technology, 2022, 100, 36-45.	5.6	18
2	Optimization of mechanical and antibacterial properties of Ti-3wt%Cu alloy through cold rolling and annealing. Rare Metals, 2022, 41, 610-620.	3.6	15
3	Al-Mn Intermetallics in High Pressure Die Cast AZ91 and Direct Chill Cast AZ80. Metals, 2022, 12, 266.	1.0	1
4	Effect of high pressure die casting on the castability, defects and mechanical properties of aluminium alloys in extra-large thin-wall castings. Journal of Materials Processing Technology, 2022, 303, 117525.	3.1	23
5	Microstructures and Mechanical Properties of H13 Tool Steel Fabricated by Selective Laser Melting. Materials, 2022, 15, 2686.	1.3	11
6	On the exceptional creep resistance in a die-cast Gd-containing Mg alloy with Al addition. Acta Materialia, 2022, 232, 117957.	3.8	26
7	A quantitative strategy for achieving the high thermal conductivity of die-cast Mg-Al-based alloys. Materialia, 2022, 22, 101426.	1.3	11
8	High strength and ductility of an additively manufactured CrCoNi medium-entropy alloy achieved by minor Mo doping. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 843, 143129.	2.6	15
9	A high Fe-containing AlSi12 alloy fabricated by laser powder bed fusion. Journal of Materials Research and Technology, 2022, 18, 4513-4521.	2.6	8
10	Exceptional strength-ductility synergy of additively manufactured CoCrNi medium-entropy alloy achieved by lattice defects in heterogeneous microstructures. Journal of Materials Science and Technology, 2022, 127, 61-70.	5.6	16
11	Effect of heat treatment on the microstructure and mechanical properties of an Al-5Mg2Si-2Mg alloy processed by laser powder bed fusion. Journal of Alloys and Compounds, 2022, 920, 165944.	2.8	6
12	High as-cast strength die-cast AlSi9Cu2Mg alloy prepared by nanoparticle strengthening with industrially acceptable ductility. Journal of Alloys and Compounds, 2021, 852, 156873.	2.8	15
13	A new die-cast magnesium alloy for applications at higher elevated temperatures of 200â€“300â€¯Â°C. Journal of Magnesium and Alloys, 2021, 9, 90-101.	5.5	37
14	Improvement in as-cast strength of high pressure die-cast Alâ€“Siâ€“Cuâ€“Mg alloys by synergistic effect of Q-Al5Cu2Mg8Si6 and Î¸-Al2Cu phases. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 802, 140612.	2.6	33
15	Development of an Mgâ€“RE-Based Die-Cast Magnesium Alloy for Elevated Applications. Minerals, Metals and Materials Series, 2021, , 29-36.	0.3	0
16	The development of low-temperature heat-treatable high-pressure die-cast Alâ€“Mgâ€“Feâ€“Mn alloys with Zn. Journal of Materials Science, 2021, 56, 11083-11097.	1.7	12
17	Additive manufacturing of a high strength Al-5Mg2Si-2Mg alloy: Microstructure and mechanical properties. Journal of Materials Science and Technology, 2021, 91, 215-223.	5.6	31
18	Effect of Mn on Microstructure and Mechanical Properties of Al-4Ni Alloy. Jom, 2021, 73, 3819-3826.	0.9	7

#	Article	IF	Citations
19	Casting lightweight stiff aluminum alloys: a review. Critical Reviews in Solid State and Materials Sciences, 2020, 45, 171-186.	6.8	31
20	A review on high stiffness aluminum-based composites and bimetallics. Critical Reviews in Solid State and Materials Sciences, 2020, 45, 1-21.	6.8	30
21	Influence of reinforcing particle distribution on the casting characteristics of Al-SiCp composites. Journal of Materials Processing Technology, 2020, 279, 116580.	3.1	14
22	Effects of Ni on the microstructure, hot tear and mechanical properties of Alâ€“Znâ€“Mgâ€“Cu alloys under as-cast condition. Journal of Alloys and Compounds, 2020, 821, 153458.	2.8	30
23	Advanced heat treated die-cast aluminium composites fabricated by TiB2 nanoparticle implantation. Materials and Design, 2020, 186, 108372.	3.3	10
24	High strength-ductility Co23Cr23Ni23Mn31 medium-entropy alloy achieved via defect engineering. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 796, 139974.	2.6	18
25	Evidence of disruption of Si-rich microstructure in engineering-lightweight Alâ€“12.2at.%Si alloy melt above liquidus temperature. Scientific Reports, 2020, 10, 12979.	1.6	5
26	Strengthening CoCrNi medium-entropy alloy by tuning lattice defects. Scripta Materialia, 2020, 188, 216-221.	2.6	68
27	Corrosion behavior of CoCrNi medium-entropy alloy compared with 304 stainless steel in H2SO4 and NaOH solutions. Corrosion Science, 2020, 177, 108973.	3.0	77
28	Al8Mn5 in High-Pressure Die Cast AZ91: Twinning, Morphology and Size Distributions. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 2523-2535.	1.1	8
29	A Die-Cast Magnesium Alloy for Applications at Elevated Temperatures. Minerals, Metals and Materials Series, 2020, , 31-36.	0.3	2
30	High Cycle Fatigue Properties of the Zr-Modified Alâ€“Siâ€“Cuâ€“Mg Alloy at Elevated Temperatures. Minerals, Metals and Materials Series, 2020, , 253-260.	0.3	2
31	The Formation of Al6(Fe, Mn) Phase in Die-Cast Alâ€“Mg Alloys. Minerals, Metals and Materials Series, 2020, , 297-300.	0.3	0
32	Effect of Zr on the high cycle fatigue and mechanical properties of Alâ€“Siâ€“Cuâ€“Mg alloys at elevated temperatures. Journal of Alloys and Compounds, 2019, 809, 151795.	2.8	31
33	Synergistic effects of WC nanoparticles and MC nanoprecipitates on the mechanical and tribological properties of Fe40Mn40Cr10Co10 medium-entropy alloy. Journal of Materials Research and Technology, 2019, 8, 3550-3564.	2.6	11
34	Microstructure and mechanical properties of SiC whisker reinforced CoCrNi medium entropy alloys. Materials Letters, 2019, 254, 77-80.	1.3	19
35	Atomic structure and interface chemistry in a high-stiffness and high-strength Alâ€“Siâ€“Mg/TiB2 nanocomposite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 763, 138072.	2.6	21
36	Formation of strength platform in cast Alâ€“Siâ€“Mgâ€“Cu alloys. Scientific Reports, 2019, 9, 9582.	1.6	19

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37	High performance Al/TiB2 composites fabricated by nanoparticle reinforcement and cutting-edge super vacuum assisted die casting process. Composites Part B: Engineering, 2019, 177, 107453.	5.9	41
38	Mechanical properties and wear resistance of medium entropy Fe40Mn40Cr10Co10/TiC composites. Transactions of Nonferrous Metals Society of China, 2019, 29, 1484-1494.	1.7	14
39	The effects of varying Mg and Si levels on the microstructural inhomogeneity and eutectic Mg2Si morphology in die-cast Alâ€“Mgâ€“Si alloys. Journal of Materials Science, 2019, 54, 5773-5787.	1.7	41
40	In-situ Mo nanoparticles strengthened CoCrNi medium entropy alloy. Journal of Alloys and Compounds, 2019, 798, 576-586.	2.8	38
41	Effect of SiC nanoparticles on the microstructure and texture of friction stir welded AA2024/AA6061. Materials Characterization, 2019, 152, 169-179.	1.9	47
42	Microstructure and properties of CoCrNi medium-entropy alloy produced by gas atomization and spark plasma sintering. Journal of Materials Research, 2019, 34, 2126-2136.	1.2	33
43	Electrochemical corrosion behaviour of Sn-Zn-xBi alloys used for miniature detonating cords. Journal of Materials Science and Technology, 2019, 35, 1618-1628.	5.6	24
44	Microstructure, dynamic restoration and recrystallization texture of Sn-Cu after rolling at room temperature. Materials Characterization, 2019, 150, 174-183.	1.9	12
45	The formation of Al₆ (Fe, Mn) phase in die-cast Al-Mg alloys. IOP Conference Series: Materials Science and Engineering, 2019, 529, 012011.	0.3	2
46	A novel Fe40Mn40Cr10Co10/SiC medium-entropy nanocomposite reinforced by the nanoparticles-woven architectural structures. Journal of Alloys and Compounds, 2019, 772, 272-279.	2.8	22
47	Effect of super vacuum assisted high pressure die casting on the repeatability of mechanical properties of Al-Si-Mg-Mn die-cast alloys. Journal of Materials Processing Technology, 2019, 266, 105-113.	3.1	66
48	High strength and ductility aluminium alloy processed by high pressure die casting. Journal of Alloys and Compounds, 2019, 773, 86-96.	2.8	70
49	Stiffness Improvement Through Alloying Elements in Al Alloys. Minerals, Metals and Materials Series, 2018, , 431-433.	0.3	0
50	Si poisoning and promotion on the microstructure and mechanical properties of Alâ€“Siâ€“Mg cast alloys. Journal of Materials Science, 2018, 53, 7778-7792.	1.7	33
51	Nanoscale Zr-containing precipitates; a solution for significant improvement of high-temperature strength in Al-Si-Cu-Mg alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 721, 328-338.	2.6	41
52	Microstructure and texture evolution of friction stir welded dissimilar aluminum alloys: AA2024 and AA6061. Journal of Manufacturing Processes, 2018, 32, 1-10.	2.8	108
53	Effect of Bi on the microstructure and mechanical properties of Sn-Zn alloys processed by rolling. Materials Characterization, 2018, 137, 39-49.	1.9	19
54	High performance gravity cast Al9Si0.45Mg0.4Cu alloy inoculated with AlB 2 and TiB 2. Journal of Materials Processing Technology, 2018, 252, 604-611.	3.1	19

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55	Reinforcement of TiB2 Nanoparticles in Aluminium Piston Alloys for High Performance at Elevated Temperature. Nanomanufacturing and Metrology, 2018, 1, 248-251.	1.5	5
56	Strengthening die-cast Al-Mg and Al-Mg-Mn alloys with Fe as a beneficial element. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 732, 240-250.	2.6	43
57	Abnormal Grain Refinement Behavior in High-Pressure Die Casting of Pure Mg with Addition of Zr as Grain Refiner. Jom, 2018, 70, 2555-2560.	0.9	4
58	The formation mechanism of Al₆(Fe, Mn) in die-cast Alâ€“Mg alloys. CrystEngComm, 2018, 20, 3839-3848.	1.3	15
59	Effect of Zn Concentration on the Microstructure and Mechanical Properties of Al-Mg-Si-Zn Alloys Processed by Gravity Die Casting. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 3247-3256.	1.1	20
60	Halo formation of Zn-Al alloys under conventional solidification and intensive convection solidification. Journal of Alloys and Compounds, 2017, 696, 460-469.	2.8	6
61	X-Ray Computed Tomographic Investigation of High Pressure Die Castings. Minerals, Metals and Materials Series, 2017, , 861-866.	0.3	2
62	Microstructural Transition and Elevated Temperature Tensile Properties of Modified Alâ€“Siâ€“Cuâ€“Mg Alloys. Minerals, Metals and Materials Series, 2017, , 419-425.	0.3	1
63	The Enhancement of Mechanical Properties of A356 Alloy Solidified at Lower Cooling Rate via Effectively Grain Refinement. Minerals, Metals and Materials Series, 2017, , 221-226.	0.3	0
64	Enhancement of mechanical properties in high silicon gravity cast AlSi9Mg alloy refined by Al3Ti3B master alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 700, 291-300.	2.6	27
65	Microstructure and mechanical properties of Snâ€“Cu alloys for detonating and explosive cords. Materials Science and Technology, 2017, 33, 1907-1918.	0.8	4
66	Improvement of mechanical properties of Al-Si alloy with effective grain refinement by in-situ integrated Al2.2Ti1B-Mg refiner. Journal of Alloys and Compounds, 2017, 710, 166-171.	2.8	20
67	Interfacial characterisation of overcasting a cast Al-Si-Mg (A356) alloy on a wrought Al-Mg-Si (AA6060) alloy. Journal of Materials Processing Technology, 2017, 243, 197-204.	3.1	12
68	High modulus Al Si Mg Cu/Mg2Si TiB2 hybrid nanocomposite: Microstructural characteristics and micromechanics-based analysis. Journal of Alloys and Compounds, 2017, 694, 313-324.	2.8	26
69	Insight into the partial solutionisation of a high pressure die-cast Al-Mg-Zn-Si alloy for mechanical property enhancement. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 682, 85-89.	2.6	10
70	Macro-heterogeneities in microstructures, concentrations, defects and tensile properties of die cast Alâ€“Mgâ€“Si alloys. Materials Science and Technology, 2017, 33, 2223-2233.	0.8	9
71	A High Strength Aluminium Alloy for High Pressure Die Casting. , 2016, , 207-210.		0
72	Development of a high strength Alâ€“Mg2Siâ€“Mgâ€“Zn based alloy for high pressure die casting. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 626, 165-174.	2.6	61

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73	Formation and sedimentation of Fe-rich intermetallics in Alâ€“Siâ€“Cuâ€“Fe alloy. Transactions of Nonferrous Metals Society of China, 2015, 25, 1704-1714.	1.7	30
74	Heterogeneous nucleation in Mgâ€“Zr alloy under die casting condition. Materials Letters, 2015, 160, 263-267.	1.3	23
75	Effect of heat treatment and Fe content on the microstructure and mechanical properties of die-cast Alâ€“Siâ€“Cu alloys. Materials and Design, 2015, 85, 823-832.	3.3	68
76	Effect of Mg level on the microstructure and mechanical properties of die-cast Alâ€“Siâ€“Cu alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 642, 340-350.	2.6	66
77	Melt superheating on the microstructure and mechanical properties of diecast Al-Mg-Si-Mn alloy. Metals and Materials International, 2015, 21, 382-390.	1.8	14
78	Investigation of mechanical and corrosion properties of an Alâ€“Znâ€“Mgâ€“Cu alloy under various ageing conditions and interface analysis of Î·â€² precipitate. Materials and Design, 2015, 85, 752-761.	3.3	116
79	Repeatability of tensile properties in high pressure die-castings of an Al-Mg-Si-Mn alloy. Metals and Materials International, 2015, 21, 936-943.	1.8	7
80	Effect of solutionising and ageing on the microstructure and mechanical properties of a high strength die-cast Alâ€“Mgâ€“Znâ€“Si alloy. Materials Chemistry and Physics, 2015, 167, 88-96.	2.0	19
81	Grain boundary precipitation induced by grain crystallographic misorientations in an extruded Alâ€“Mgâ€“Siâ€“Cu alloy. Journal of Alloys and Compounds, 2015, 624, 27-30.	2.8	37
82	Effect of nickel on the microstructure and mechanical property of die-cast Alâ€“Mgâ€“Siâ€“Mn alloy. Journal of Materials Science, 2014, 49, 8412-8422.	1.7	24
83	Initial precipitation and hardening mechanism during non-isothermal aging in an Alâ€“Mgâ€“Siâ€“Cu 6005A alloy. Materials Characterization, 2014, 94, 170-177.	1.9	31
84	Heterogeneous Nucleation of Î±-Al Grain on Primary Î±-AlFeMnSi Intermetallic Investigated Using 3D SEM Ultramicrotomy and HRTEM. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 3971-3980.	1.1	30
85	Precipitation behaviour of Alâ€“Znâ€“Mgâ€“Cu alloy and diffraction analysis from Î·â€² precipitates in four variants. Journal of Alloys and Compounds, 2014, 610, 623-629.	2.8	129
86	Microstructural Evolution and Solidification Behavior of Al-Mg-Si Alloy in High-Pressure Die Casting. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 3185-3197.	1.1	47
87	Effect of iron on the microstructure and mechanical property of Alâ€“Mgâ€“Siâ€“Mn and Alâ€“Mgâ€“Si diecast alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 564, 130-139.	2.6	231
88	Weibull statistical analysis of the effect of melt conditioning on the mechanical properties of AM60 alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 566, 119-125.	2.6	19
89	Melt Conditioned Twin Roll Casting (MC-TRC) of Thin Mg-Alloy Strips for Direct Stamping of Mg Components. Materials Science Forum, 2013, 765, 170-174.	0.3	6
90	Effect of Ti Addition on Mechanical Properties of High Pressure Die Cast Al-Mg-Si Alloys. Materials Science Forum, 2013, 765, 23-27.	0.3	19

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91	Improvement of Mechanical Properties of HPDC A356 Alloy through Melt Quenching Process. , 2013, , 273-276.		0
92	Effect of intensive melt shearing on the formation of Fe-containing intermetallics in LM24 Al-alloy. IOP Conference Series: Materials Science and Engineering, 2012, 27, 012075.	0.3	4
93	Extruded microstructure of Znâ€“5 wt-Al eutectic alloy processed by twin screw extrusion. Materials Science and Technology, 2012, 28, 1287-1294.	0.8	7
94	Development of a super ductile diecast Alâ€“Mgâ€“Si alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 556, 824-833.	2.6	80
95	Solidification Behavior and Microstructural Evolution of Near-Eutectic Zn-Al Alloys under Intensive Shear. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2009, 40, 185-195.	1.1	10
96	The creep behaviour of rheo-diecast AZ91D (Mgâ€“9Alâ€“1Zn) alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 434, 7-12.	2.6	15
97	Semisolid processing characteristics of AM series Mg alloys by rheo-diecasting. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2006, 37, 779-787.	1.1	33
98	The effects of rheo-diecasting on the integrity and mechanical properties of Mgâ€“6Alâ€“1Zn. Scripta Materialia, 2006, 54, 207-211.	2.6	26
99	Isothermal coarsening of fine and spherical particles in semisolid slurry of Mgâ€“9Alâ€“1Zn alloy under low shear. Scripta Materialia, 2006, 55, 971-974.	2.6	30
100	Effects of rheo-die casting process on the microstructure and mechanical properties of AM50 magnesium alloy. Materials Science and Technology, 2005, 21, 1019-1024.	0.8	28
101	Microstructure and mechanical properties of rheo-diecast (RDC) aluminium alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 412, 298-306.	2.6	113
102	Low pressure lost foam process for casting magnesium alloys. Materials Science and Technology, 2005, 21, 727-734.	0.8	18
103	The fragmentation of primary dendrites during shearing in semisolid processing. Journal of Materials Science, 2003, 38, 1559-1564.	1.7	20
104	Effect of shot peening on fatigue performance of ductile iron castings. Materials Science and Technology, 2002, 18, 193-197.	0.8	18
105	Solidification behavior of the remnant liquid in the sheared semisolid slurry of Snâ€“15 wt.%Pb alloy. Scripta Materialia, 2002, 46, 205-210.	2.6	18
106	Solidification behavior of Sn-15 wt pct Pb alloy under a high shear rate and high intensity of turbulence during semisolid processing. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2002, 33, 3511-3520.	1.1	58
107	Morphological development of solidification structures under forced fluid flow: a Monte-Carlo simulation. Acta Materialia, 2002, 50, 4571-4585.	3.8	77
108	Processing of immiscible metallic alloys by rheomixing process. Materials Science and Technology, 2001, 17, 837-842.	0.8	20

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109	Improving the roundness of foundry sands with artificial processing. International Journal of Cast Metals Research, 2001, 14, 37-42.	0.5	2
110	Semi-solid processing of engineering alloys by a twin-screw rheomoulding process. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 299, 210-217.	2.6	149
111	The Toxic Compounds and Leaching Characteristics of Spent Foundry Sands. Water, Air, and Soil Pollution, 2001, 132, 347-364.	1.1	44
112	Moulding characteristics of sand mixture with partial vacuum suction techniques. International Journal of Cast Metals Research, 2000, 13, 161-165.	0.5	1
113	A casting classification and coding system suitable for a CIMS in casting production. International Journal of Cast Metals Research, 1999, 12, 161-165.	0.5	0
114	Effect of Excess Mg on the Microstructure and Mechanical Properties of Al-Mg₂Si High Pressure Die Casting Alloys. Materials Science Forum, 0, 765, 64-68.	0.3	16
115	Melt Quenched High Pressure Die Casting (MQ-HPDC) of an A356 Alloy. Materials Science Forum, 0, 765, 195-199.	0.3	1
116	A Super-Ductile Alloy for the Diecasting of Aluminium Automotive Body Structural Components. Materials Science Forum, 0, 794-796, 526-531.	0.3	1
117	Microstructure and Mechanical Properties of Ductile Aluminium Alloy Manufactured by Recycled Materials. Materials Science Forum, 0, 794-796, 1077-1082.	0.3	3
118	Effect of Cu on the Microstructure and Mechanical Properties of Diecast Al-Mg₂Si-Mg Based Alloy. Materials Science Forum, 0, 794-796, 172-177.	0.3	4