Su-Ming Zhu

List of Publications by Year
in descending order

52 papers	1,286 citations	304701 22 h-index	377849 34 g-index
59 all docs	59 docs citations	59 times ranked	921 citing authors

#	Article	IF	Citations
1	Effect of process parameters and grain refinement on hot tearing susceptibility of high strength aluminum alloy 2139 in laser powder bed fusion. Progress in Additive Manufacturing, 2022, 7, 887-901.	4.8	14
2	Quasi-in-situ EBSD Study of the Microstructure and Texture Evolution During Static Recrystallization in an Extruded Mg-Mn-Ce Alloy. Jom, 2022, 74, 2592-2608.	1.9	2
3	Investigating the stress corrosion cracking of a biodegradable Zn-0.8Âwt%Li alloy in simulated body fluid. Bioactive Materials, 2021, 6, 1468-1478.	15.6	22
4	Re-evaluation of the mechanical properties and creep resistance of commercial magnesium die-casting alloy AE44. Journal of Magnesium and Alloys, 2021, 9, 1537-1545.	11.9	16
5	Grain refinement in laser remelted Mg-3Nd-1Gd-0.5Zr alloy. Scripta Materialia, 2020, 183, 12-16.	5.2	35
6	Microstructure, mechanical properties and creep behaviour of extruded Zn-xLi (x = 0.1, 0.3 and 0.4) alloys for biodegradable vascular stent applications. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 777, 139082.	5.6	41
7	Revisiting the intermetallic phases in high-pressure die-cast Mgâ€“4Alâ€“4Ce and Mgâ€“4Alâ€“4La alloys. Materials Characterization, 2019, 156, 109839.	4.4	12
8	An Analysis of the Tensile Deformation Behavior of Commercial Die-Cast Magnesium-Aluminum-Based Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 3827-3841.	2.2	13
9	Compressive Creep Behavior of High-Pressure Die-Cast Aluminum-Containing Magnesium Alloys Developed for Elevated Temperature Applications. Frontiers in Materials, 2019, 6, .	2.4	14
10	Creep properties of biodegradable Zn-0.1Li alloy at human body temperature: implications for its durability as stents. Materials Research Letters, 2019, 7, 347-353.	8.7	22
11	Quench Sensitivity in a Dispersoid-Containing Al-Mg-Si Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 1957-1969.	2.2	18
12	Solidification path and microstructure evolution of Mg-3Al-14La alloy: Implications for the Mg-rich corner of the Mg-Al-La phase diagram. Journal of Alloys and Compounds, 2019, 784, 527-534.	5.5	7
13	Development of Magnesium-Rare Earth Die-Casting Alloys. Minerals, Metals and Materials Series, 2018, , 329-336.	0.4	5
14	(Al,Mg)₃La: a new phase in the Mgâ€“Alâ€“La system. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2018, 74, 370-375.	1.1	11
15	Phase Stability and Formation in Mgâ€“Gdâ€“Zn Alloysâ€”Key Data for ICME of Mg Alloys. Minerals, Metals and Materials Series, 2017, , 365-371.	0.4	0
16	Strain-rate sensitivity of die-cast magnesium-aluminium based alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 699, 239-246.	5.6	18
17	The mechanism of aqueous stress-corrosion cracking of Î± + Î² titanium alloys. Corrosion Science, 2017, 125, 29-39.	6.6	36
18	Anelasticity of die-cast magnesium-aluminium based alloys under different strain rates. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 707, 101-109.	5.6	13

#	Article	IF	Citations
19	Proof stress measurement of die-cast magnesium alloys. Materials and Design, 2016, 112, 402-409.	7.0	32
20	Atomic-scale study of {1â€‰1â€‰2} twin boundary structure in a Î²-Ti alloy. Philosophical Magazine Letters, 2016, 96, 280-285.	1.2	7
21	Evaluation of Magnesium Dieâ€Casting Alloys for Elevated Temperature Applications: Castability. Advanced Engineering Materials, 2016, 18, 953-962.	3.5	22
22	The Influence of Individual Rare Earth Elements (La, Ce, or Nd) on Creep Resistance of Dieâ€Cast Magnesium Alloy AE44. Advanced Engineering Materials, 2016, 18, 932-937.	3.5	38
23	Metastable phase formation in ternary Mgâ€"Gdâ€"Zn alloys. Journal of Alloys and Compounds, 2016, 675, 149-157.	5.5	15
24	Effects of quench rate and natural ageing on the age hardening behaviour of aluminium alloy AA6060. Materials Characterization, 2016, 111, 43-52.	4.4	36
25	Hot Tearing in Magnesium-Rare Earth Alloys. , 2016, , 123-128.		1
26	An Initial Assessment of the Effects of Increased Ni and V Content in A356 and AA6063 Alloys. Minerals, Metals and Materials Series, 2016, , 39-45.	0.4	0
27	Evaluation of Magnesium Die-Casting Alloys for Elevated Temperature Applications: Microstructure, Tensile Properties, and Creep Resistance. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 3543-3554.	2.2	116
28	Phase equilibria and transformations in ternary Mgâ€"Gdâ€"Zn alloys. Acta Materialia, 2015, 90, 400-416.	7.9	86
29	Microstructure and property evaluation of high-pressure die-cast Mgâ€"Laâ€"rare earth (Nd, Y or Gd) alloys. Journal of Alloys and Compounds, 2014, 597, 21-29.	5.5	34
30	An A Priori Hot-Tearing Indicator Applied to Die-Cast Magnesium-Rare Earth Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 3586-3595.	2.2	55
31	The effect of HIPping pressure on phase transformations in Tiâ€"5Alâ€"5Moâ€"5Vâ€"3Cr. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 598, 207-216.	5.6	13
32	Precipitation process in a Mgâ€"Gdâ€"Y alloy grain-refined by Al addition. Materials Characterization, 2014, 88, 7-14.	4.4	21
33	The Effect of Trace Levels of Ni And V on the Microstructure and Properties of Four Common Aluminum Alloys. , 2014, , 969-974.		1
34	Heat treatment, microstructure and mechanical properties of a Mgâ€"Gdâ€"Y alloy grain-refined by Al additions. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 576, 298-305.	5.6	57
35	Influences of Nickel and Vanadium Impurities on Microstructure of Aluminum Alloys. Jom, 2013, 65, 584-592.	1.9	20
36	Thermodynamics of phase formation in Mg-La-Ce-Nd alloys. , 2013, , 243-248.		0

#	Article	IF	Citations
37	Grain refinement of Mgâ€“10Gd alloy by Al additions. Journal of Materials Research, 2012, 27, 2790-2797.	2.6	49
38	Phase analysis of Mgâ€“Laâ€“Nd and Mgâ€“Laâ€“Ce alloys. Intermetallics, 2012, 28, 92-101.	3.9	33
39	Thermal analysis of precipitation reactions in a Tiâ€“25Nbâ€“3Moâ€“3Zrâ€“2Sn alloy. Applied Physics A: Materials Science and Processing, 2012, 107, 835-841.	2.3	17
40	Microstructural characterization of high pressure die cast Mg-Zn-Al-RE alloys. Materials Characterization, 2012, 65, 28-36.	4.4	30
41	Compressive deformation behavior of a near-beta titanium alloy. Materials & Design, 2012, 34, 739-745.	5.1	41
42	The influence of Zn additions on the microstructure and creep resistance of high pressure die cast magnesium alloy AE44. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 539, 177-184.	5.6	30
43	Casting Defects and Mechanical Properties of High Pressure Die Cast Mgâ€Znâ€Alâ€RE Alloys. Advanced Engineering Materials, 2012, 14, 68-76.	3.5	38
44	Thermodynamic Analysis of As-cast and Heat Treated Microstructures of Mg-Ce-Nd Alloys. , 2011, , 167-167.		0
45	Thermodynamic analysis of as-cast and heat-treated microstructures of Mgâ€“Ceâ€“Nd alloys. Acta Materialia, 2011, 59, 613-622.	7.9	33
46	Thermodynamic Analysis of As-Cast and Heat-Treated Microstructures of Mg-Ce-Nd Alloys. , 2011, , 167-167.		0
47	Microstructure and Mechanical and Tribological Properties of High Carbon Fe₃Al and FeAl Intermetallic Alloys. Materials Transactions, 2002, 43, 36-41.	1.2	23
48	Effects of Titanium Addition on the Microstructure and Mechanical Behavior of Iron Aluminide Fe_{<B>3</B>}Al. Materials Transactions, 2001, 42, 484-490.	1.2	32
49	Synthesis and Characterization of Mechanically Alloyed and HIP-Consolidated Fe-25Al-10Ti Intermetallic Alloy. Materials Research Society Symposia Proceedings, 2000, 646, 203.	0.1	0
50	Characterization of Fe3Al-based intermetallic alloys fabricated by mechanical alloying and HIP consolidation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2000, 292, 83-89.	5.6	49
51	Characterization of mechanically alloyed ternary Feâ€“Tiâ€“Al powders. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1999, 270, 170-177.	5.6	31
52	Microstructure and Mechanical Properties of Mechanically Alloyed and HIP-Consolidated Fe₃Al. Materials Transactions, JIM, 1999, 40, 1461-1466.	0.9	9