

# Su-Ming Zhu

## List of Publications by Year in descending order

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52  
papers

1,286  
citations

346980

22  
h-index

425179

34  
g-index

59  
all docs

59  
docs citations

59  
times ranked

1031  
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. <i>Progress in Additive Manufacturing</i> , 2022, 7, 887-901.	2.5	14
2	Quasi-in-situ EBSD Study of the Microstructure and Texture Evolution During Static Recrystallization in an Extruded Mg-Mn-Ce Alloy. <i>Jom</i> , 2022, 74, 2592-2608.	0.9	2
3	Investigating the stress corrosion cracking of a biodegradable Zn-0.8wt%Li alloy in simulated body fluid. <i>Bioactive Materials</i> , 2021, 6, 1468-1478.	8.6	22
4	Re-evaluation of the mechanical properties and creep resistance of commercial magnesium die-casting alloy AE44. <i>Journal of Magnesium and Alloys</i> , 2021, 9, 1537-1545.	5.5	16
5	Grain refinement in laser remelted Mg-3Nd-1Gd-0.5Zr alloy. <i>Scripta Materialia</i> , 2020, 183, 12-16.	2.6	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. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 777, 139082.	2.6	41
7	Revisiting the intermetallic phases in high-pressure die-cast Mg-4Al-4Ce and Mg-4Al-4La alloys. <i>Materials Characterization</i> , 2019, 156, 109839.	1.9	12
8	An Analysis of the Tensile Deformation Behavior of Commercial Die-Cast Magnesium-Aluminum-Based Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 3827-3841.	1.1	13
9	Compressive Creep Behavior of High-Pressure Die-Cast Aluminum-Containing Magnesium Alloys Developed for Elevated Temperature Applications. <i>Frontiers in Materials</i> , 2019, 6, .	1.2	14
10	Creep properties of biodegradable Zn-0.1Li alloy at human body temperature: implications for its durability as stents. <i>Materials Research Letters</i> , 2019, 7, 347-353.	4.1	22
11	Quench Sensitivity in a Dispersoid-Containing Al-Mg-Si Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 1957-1969.	1.1	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. <i>Journal of Alloys and Compounds</i> , 2019, 784, 527-534.	2.8	7
13	Development of Magnesium-Rare Earth Die-Casting Alloys. <i>Minerals, Metals and Materials Series</i> , 2018, , 329-336.	0.3	5
14	(Al,Mg) <sub>3</sub> La: a new phase in the Mg-Al-La system. <i>Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials</i> , 2018, 74, 370-375.	0.5	11
15	Phase Stability and Formation in Mg-Gd-Zn Alloys—Key Data for ICME of Mg Alloys. <i>Minerals, Metals and Materials Series</i> , 2017, , 365-371.	0.3	0
16	Strain-rate sensitivity of die-cast magnesium-aluminium based alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 699, 239-246.	2.6	18
17	The mechanism of aqueous stress-corrosion cracking of $\beta$ + $\beta'$ titanium alloys. <i>Corrosion Science</i> , 2017, 125, 29-39.	3.0	36
18	Anelasticity of die-cast magnesium-aluminium based alloys under different strain rates. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 707, 101-109.	2.6	13

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19	Proof stress measurement of die-cast magnesium alloys. <i>Materials and Design</i> , 2016, 112, 402-409.	3.3	32
20	Atomic-scale study of {112} twin boundary structure in a $\beta$ -Ti alloy. <i>Philosophical Magazine Letters</i> , 2016, 96, 280-285.	0.5	7
21	Evaluation of Magnesium Die-Casting Alloys for Elevated Temperature Applications: Castability. <i>Advanced Engineering Materials</i> , 2016, 18, 953-962.	1.6	22
22	The Influence of Individual Rare Earth Elements (La, Ce, or Nd) on Creep Resistance of Die-Cast Magnesium Alloy AE44. <i>Advanced Engineering Materials</i> , 2016, 18, 932-937.	1.6	38
23	Metastable phase formation in ternary Mg-Gd-Zn alloys. <i>Journal of Alloys and Compounds</i> , 2016, 675, 149-157.	2.8	15
24	Effects of quench rate and natural ageing on the age hardening behaviour of aluminium alloy AA6060. <i>Materials Characterization</i> , 2016, 111, 43-52.	1.9	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. <i>Minerals, Metals and Materials Series</i> , 2016, , 39-45.	0.3	0
27	Evaluation of Magnesium Die-Casting Alloys for Elevated Temperature Applications: Microstructure, Tensile Properties, and Creep Resistance. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015, 46, 3543-3554.	1.1	116
28	Phase equilibria and transformations in ternary Mg-Gd-Zn alloys. <i>Acta Materialia</i> , 2015, 90, 400-416.	3.8	86
29	Microstructure and property evaluation of high-pressure die-cast Mg-La-rare earth (Nd, Y or Gd) alloys. <i>Journal of Alloys and Compounds</i> , 2014, 597, 21-29.	2.8	34
30	An A Priori Hot-Tearing Indicator Applied to Die-Cast Magnesium-Rare Earth Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2014, 45, 3586-3595.	1.1	55
31	The effect of HIPping pressure on phase transformations in Ti-5Al-5Mo-3V-3Cr. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 598, 207-216.	2.6	13
32	Precipitation process in a Mg-Gd-Y alloy grain-refined by Al addition. <i>Materials Characterization</i> , 2014, 88, 7-14.	1.9	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 Mg-Gd-Y alloy grain-refined by Al additions. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013, 576, 298-305.	2.6	57
35	Influences of Nickel and Vanadium Impurities on Microstructure of Aluminum Alloys. <i>Jom</i> , 2013, 65, 584-592.	0.9	20
36	Thermodynamics of phase formation in Mg-La-Ce-Nd alloys. , 2013, , 243-248.		0

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37	Grain refinement of Mg–10Gd alloy by Al additions. <i>Journal of Materials Research</i> , 2012, 27, 2790-2797.	1.2	49
38	Phase analysis of Mg–La–Nd and Mg–La–Ce alloys. <i>Intermetallics</i> , 2012, 28, 92-101.	1.8	33
39	Thermal analysis of precipitation reactions in a Ti–25Nb–3Mo–3Zr–2Sn alloy. <i>Applied Physics A: Materials Science and Processing</i> , 2012, 107, 835-841.	1.1	17
40	Microstructural characterization of high pressure die cast Mg-Zn-Al-RE alloys. <i>Materials Characterization</i> , 2012, 65, 28-36.	1.9	30
41	Compressive deformation behavior of a near-beta titanium alloy. <i>Materials &amp; Design</i> , 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. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 539, 177-184.	2.6	30
43	Casting Defects and Mechanical Properties of High Pressure Die Cast Mg–Zn–Al–RE Alloys. <i>Advanced Engineering Materials</i> , 2012, 14, 68-76.	1.6	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 Mg–Ce–Nd alloys. <i>Acta Materialia</i> , 2011, 59, 613-622.	3.8	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 Fe <sub>3</sub> Al and FeAl Intermetallic Alloys. <i>Materials Transactions</i> , 2002, 43, 36-41.	0.4	23
48	Effects of Titanium Addition on the Microstructure and Mechanical Behavior of Iron Aluminide Fe <sub>3</sub> Al. <i>Materials Transactions</i> , 2001, 42, 484-490.	0.4	32
49	Synthesis and Characterization of Mechanically Alloyed and HIP-Consolidated Fe-25Al-10Ti Intermetallic Alloy. <i>Materials Research Society Symposia Proceedings</i> , 2000, 646, 203.	0.1	0
50	Characterization of Fe <sub>3</sub> Al-based intermetallic alloys fabricated by mechanical alloying and HIP consolidation. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2000, 292, 83-89.	2.6	49
51	Characterization of mechanically alloyed ternary Fe–Ti–Al powders. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1999, 270, 170-177.	2.6	31
52	Microstructure and Mechanical Properties of Mechanically Alloyed and HIP-Consolidated Fe <sub>3</sub> Al. <i>Materials Transactions, JIM</i> , 1999, 40, 1461-1466.	0.9	9