Zhiheng Hu

List of Publications by Year
in descending order

32 papers	2,368 citations	331259 21 h-index	395343 33 g-index
33 all docs	33 docs citations	33 times ranked	1572 citing authors

#	Article	IF	Citations
1	Micro laser powder bed fusion of stainless steel 316L: Cellular structure, grain characteristics, and mechanical properties. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 848, 143345.	2.6	7
2	Influence of geometric defects on the compression behaviour of thin shell lattices fabricated by micro laser powder bed fusion. Additive Manufacturing, 2022, 58, 103038.	1.7	2
3	Cracking criterion for high strength Alâ€“Cu alloys fabricated by selective laser melting. Additive Manufacturing, 2021, 37, 101709.	1.7	14
4	Aging responses of an Al-Cu alloy fabricated by selective laser melting. Additive Manufacturing, 2021, 37, 101635.	1.7	8
5	Top surface roughness evolution during selective laser melting of AlCu5MnCdVA aluminum alloy. Journal of Manufacturing Processes, 2021, 64, 1180-1195.	2.8	13
6	The Portevin-Le Chatelier (PLC) effect in an Al-Cu aluminum alloy fabricated by selective laser melting. Materials Characterization, 2021, 178, 111198.	1.9	26
7	Interfacial characteristics and mechanical properties of additive manufacturing martensite stainless steel on the Cu-Cr alloy substrate by directed energy deposition. Journal of Materials Science and Technology, 2021, 90, 121-132.	5.6	27
8	High strength Alâ€“Li alloy development for laser powder bed fusion. Additive Manufacturing, 2021, 47, 102249.	1.7	11
9	Hierarchical sheet triply periodic minimal surface lattices: Design, geometric and mechanical performance. Materials and Design, 2021, 209, 109931.	3.3	31
10	Effect of rescanning cycles on the characteristics of selective laser melting of Ti6Al4V. Optics and Laser Technology, 2020, 122, 105890.	2.2	35
11	Recrystallization-based grain boundary engineering of 316L stainless steel produced via selective laser melting. Acta Materialia, 2020, 200, 366-377.	3.8	132
12	A high strength Alâ€“Li alloy produced by laser powder bed fusion: Densification, microstructure, and mechanical properties. Additive Manufacturing, 2020, 35, 101346.	1.7	13
13	Micro selective laser melting of NiTi shape memory alloy: Defects, microstructures and thermal/mechanical properties. Optics and Laser Technology, 2020, 131, 106374.	2.2	61
14	Mechanical behavior and microstructure evolution of Al-Cu-Mg alloy produced by laser powder bed fusion: Effect of heat treatment. Materials Characterization, 2020, 165, 110364.	1.9	18
15	Study of residual stress in selective laser melting of Ti6Al4V. Materials and Design, 2020, 193, 108846.	3.3	94
16	Tailoring Surface Roughness of Micro Selective Laser Melted SS316L by In-Situ Laser Remelting. Lecture Notes in Mechanical Engineering, 2020, , 337-343.	0.3	2
17	Development of Micro Selective Laser Melting: The State of the Art and Future Perspectives. Engineering, 2019, 5, 702-720.	3.2	146
18	Microstructure, mechanical properties and strengthening mechanisms of AlCu5MnCdVA aluminum alloy fabricated by selective laser melting. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 759, 154-166.	2.6	65

#	Article	IF	Citations
19	On the role of Zr content into Portevin-Le Chatelier (PLC) effect of selective laser melted high strength Al-Cu-Mg-Mn alloy. Materials Letters, 2019, 248, 5-7.	1.3	66
20	Formation of SS316L Single Tracks in Micro Selective Laser Melting: Surface, Geometry, and Defects. Advances in Materials Science and Engineering, 2019, 2019, 1-9.	1.0	18
21	A comparative study on single-laser and multi-laser selective laser melting AlSi10Mg: defects, microstructure and mechanical properties. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 746, 416-423.	2.6	84
22	Selective Laser Melting of Cu 10Zn alloy powder using high laser power. Powder Technology, 2019, 342, 613-620.	2.1	76
23	On the role of atmospheric oxygen into mechanical properties and fracture behavior of selective laser melted AlCu5MnCdVA. Materials and Design, 2018, 150, 18-27.	3.3	39
24	Analysis of processing parameters and characteristics of selective laser melted high strength Al-Cu-Mg alloys: From single tracks to cubic samples. Journal of Materials Processing Technology, 2018, 256, 69-77.	3.1	115
25	Contact angle evolution during selective laser melting. Materials and Design, 2018, 139, 304-313.	3.3	42
26	Horizontal dimensional accuracy prediction of selective laser melting. Materials and Design, 2018, 160, 9-20.	3.3	68
27	Effect of heat treatments on fatigue property of selective laser melting AlSi10Mg. International Journal of Fatigue, 2018, 116, 513-522.	2.8	105
28	Effect of Zr content on formability, microstructure and mechanical properties of selective laser melted Zr modified Al-4.24Cu-1.97Mg-0.56Mn alloys. Journal of Alloys and Compounds, 2018, 764, 977-986.	2.8	143
29	Effect of Zirconium addition on crack, microstructure and mechanical behavior of selective laser melted Al-Cu-Mg alloy. Scripta Materialia, 2017, 134, 6-10.	2.6	324
30	Experimental investigation on selective laser melting of 17-4PH stainless steel. Optics and Laser Technology, 2017, 87, 17-25.	2.2	173
31	Fabrication and heat treatment of high strength Al-Cu-Mg alloy processed using selective laser melting. Proceedings of SPIE, 2016, , .	0.8	8
32	Selective laser melting of high strength Alâ€“Cuâ€“Mg alloys: Processing, microstructure and mechanical properties. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 656, 47-54.	2.6	399