Holden Hyer

List of Publications by Year
in descending order

24 papers	949 citations	471371 17 h-index	642610 23 g-index
27 all docs	27 docs citations	27 times ranked	542 citing authors

#	Article	IF	Citations
1	Elimination of extraordinarily high cracking susceptibility of aluminum alloy fabricated by laser powder bed fusion. Journal of Materials Science and Technology, 2022, 103, 50-58.	5.6	21
2	Microstructural Development in Inconel 718 Nickel-Based Superalloy Additively Manufactured by Laser Powder Bed Fusion. Metallography, Microstructure, and Analysis, 2022, 11, 88-107.	0.5	16
3	High strength aluminum-cerium alloy processed by laser powder bed fusion. Additive Manufacturing, 2022, 52, 102657.	1.7	4
4	Microstructural characteristics and mechanical properties of additively manufactured Cuâ€“10Sn alloys by laser powder bed fusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 838, 142775.	2.6	12
5	Effects of Alloy Composition and Solid-State Diffusion Kinetics on Powder Bed Fusion Cracking Susceptibility. Journal of Phase Equilibria and Diffusion, 2021, 42, 5-13.	0.5	17
6	ZrB2, HfB2, OsB2 and IrB2 Boride Ceramics: Processing, Structure, and Properties. , 2021, , 200-215.		0
7	Microstructural Development in As Built and Heat Treated IN625 Component Additively Manufactured by Laser Powder Bed Fusion. Journal of Phase Equilibria and Diffusion, 2021, 42, 14-27.	0.5	21
8	Composition-dependent solidification cracking of aluminum-silicon alloys during laser powder bed fusion. Acta Materialia, 2021, 208, 116698.	3.8	97
9	High strength WE43 microlattice structures additively manufactured by laser powder bed fusion. Materialia, 2021, 16, 101067.	1.3	18
10	Process Optimization and Microstructure Analysis to Understand Laser Powder Bed Fusion of 316L Stainless Steel. Metals, 2021, 11, 832.	1.0	26
11	Additive manufacturing and mechanical properties of the dense and crack free Zr-modified aluminum alloy 6061 fabricated by the laser-powder bed fusion. Additive Manufacturing, 2021, 41, 101966.	1.7	28
12	Effect of direct aging on the microstructure and tensile properties of AlSi10Mg alloy manufactured by selective laser melting process. Materials Characterization, 2021, 176, 111113.	1.9	79
13	Design of heterogeneous structured Al alloys with wide processing window for laser-powder bed fusion additive manufacturing. Additive Manufacturing, 2021, 42, 102002.	1.7	10
14	Microstructure, mechanical performance, and corrosion behavior of additively manufactured aluminum alloy 5083 with 0.7 and 1.0Âwt% Zr addition. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 823, 141679.	2.6	36
15	Mechanical Behavior Assessment of Ti-6Al-4V ELI Alloy Produced by Laser Powder Bed Fusion. Metals, 2021, 11, 1671.	1.0	15
16	An integrated computational materials engineering-anchored closed-loop method for design of aluminum alloys for additive manufacturing. Materialia, 2020, 9, 100574.	1.3	40
17	Laser powder bed fusion of Alâ€“10 wt% Ce alloys: microstructure and tensile property. Journal of Materials Science, 2020, 55, 14611-14625.	1.7	51
18	Understanding the Laser Powder Bed Fusion of AlSi10Mg Alloy. Metallography, Microstructure, and Analysis, 2020, 9, 484-502.	0.5	67

#	Article	IF	Citations
19	Additive manufacturing of dense WE43 Mg alloy by laser powder bed fusion. Additive Manufacturing, 2020, 33, 101123.	1.7	30
20	Process-Dependent Composition, Microstructure, and Printability of Al-Zn-Mg and Al-Zn-Mg-Sc-Zr Alloys Manufactured by Laser Powder Bed Fusion. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 3215-3227.	1.1	48
21	Spark Plasma Sintered B4Câ€"Structural, Thermal, Electrical and Mechanical Properties. Materials, 2020, 13, 1612.	1.3	22
22	Microstructure and tensile property of a novel AlZnMgScZr alloy additively manufactured by gas atomization and laser powder bed fusion. Scripta Materialia, 2019, 158, 24-28.	2.6	158
23	Structure-property relationship in high strength and lightweight AlSi10Mg microlattices fabricated by selective laser melting. Materials and Design, 2019, 182, 108062.	3.3	70
24	Microstructure and mechanical properties of Zr-modified aluminum alloy 5083 manufactured by laser powder bed fusion. Additive Manufacturing, 2019, 28, 485-496.	1.7	60