Shang Sui

List of Publications by Year
in descending order

29 papers	1,432 citations	394421 19 h-index	501196 28 g-index
29 all docs	29 docs citations	29 times ranked	755 citing authors

#	Article	IF	Citations
1	The influence of Laves phases on the room temperature tensile properties of Inconel 718 fabricated by powder feeding laser additive manufacturing. Acta Materialia, 2019, 164, 413-427.	7.9	270
2	The influence of Laves phases on the high-cycle fatigue behavior of laser additive manufactured Inconel 718. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 695, 6-13.	5.6	171
3	Progress and perspectives in laser additive manufacturing of key aeroengine materials. International Journal of Machine Tools and Manufacture, 2021, 170, 103804.	13.4	156
4	A comparative study of Inconel 718 formed by High Deposition Rate Laser Metal Deposition with GA powder and PREP powder. Materials and Design, 2016, 107, 386-392.	7.0	81
5	The tensile deformation behavior of laser repaired Inconel 718 with a non-uniform microstructure. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 688, 480-487.	5.6	71
6	Microstructures and stress rupture properties of pulse laser repaired Inconel 718 superalloy after different heat treatments. Journal of Alloys and Compounds, 2019, 770, 125-135.	5.5	71
7	Laser solid forming additive manufacturing TiB2 reinforced 2024Al composite: Microstructure and mechanical properties. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 745, 319-325.	5.6	70
8	Influence of solution heat treatment on microstructure and tensile properties of Inconel 718 formed by high-deposition-rate laser metal deposition. Journal of Alloys and Compounds, 2018, 740, 389-399.	5.5	62
9	The failure mechanism of 50% laser additive manufactured Inconel 718 and the deformation behavior of Laves phases during a tensile process. International Journal of Advanced Manufacturing Technology, 2017, 91, 2733-2740.	3.0	55
10	Additive manufacturing of multi-scale heterostructured high-strength steels. Materials Research Letters, 2021, 9, 291-299.	8.7	49
11	Laves phase tuning for enhancing high temperature mechanical property improvement in laser directed energy deposited Inconel 718. Composites Part B: Engineering, 2021, 215, 108819.	12.0	33
12	Microstructure and room-temperature tensile property of Ti-5.7Al-4.0Sn-3.5Zr-0.4Mo-0.4Si-0.4Nb-1.0Ta-0.05C with near equiaxed Î² grain fabricated by laser directed energy deposition technique. Journal of Materials Science and Technology, 2022, 101, 308-320.	10.7	33
13	Surface morphology evolution during pulsed selective laser melting: Numerical and experimental investigations. Applied Surface Science, 2019, 496, 143649.	6.1	32
14	Achieving grain refinement and ultrahigh yield strength in laser aided additive manufacturing of Tiâ€˜6Alâ€˜4V alloy by trace Ni addition. Virtual and Physical Prototyping, 2021, 16, 417-427.	10.4	32
15	The microstructure evolution and tensile properties of Inconel 718 fabricated by high-deposition-rate laser directed energy deposition. Additive Manufacturing, 2020, 31, 100941.	3.0	28
16	Effects of laser pulse modulation on intermetallic compounds formation for welding of Ti-6Al-4V and AA7075 using AA4047 filler. Materials and Design, 2022, 213, 110325.	7.0	27
17	Investigation of dissolution behavior of laves phase in inconel 718 fabricated by laser directed energy deposition. Additive Manufacturing, 2020, 32, 101055.	3.0	26
18	Laser aided additive manufacturing of spatially heterostructured steels. International Journal of Machine Tools and Manufacture, 2022, 172, 103817.	13.4	26

#	Article	IF	Citations
19	Enhanced corrosion resistance of laser aided additive manufactured CoCrNi medium entropy alloys with oxide inclusion. Corrosion Science, 2022, 195, 109965.	6.6	26
20	Microstructure homogeneity and mechanical property improvement of Inconel 718 alloy fabricated by high-deposition-rate laser directed energy deposition. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 832, 142430.	5.6	21
21	Study of the intrinsic mechanisms of nickel additive for grain refinement and strength enhancement of laser aided additively manufactured Tiâ€“6Alâ€“4V. International Journal of Extreme Manufacturing, 2022, 4, 035102.	12.7	18
22	IN100 Ni-based superalloy fabricated by micro-laser aided additive manufacturing: Correlation of the microstructure and fracture mechanism. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 788, 139467.	5.6	16
23	Grain refinement and improved tensile properties of Ti5Al2Sn2Zr4Mo4Cr titanium alloy fabricated by laser solid forming. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 800, 140388.	5.6	14
24	Effect of cyclic heat treatment on microstructure and mechanical properties of laser aided additive manufacturing Tiâ€“6Alâ€“2Snâ€“4Zrâ€“2Mo alloy. , 2022, 1, 100002.		13
25	Evolution of Heterogeneous Microstructure and its Effects on Tensile Properties of Selective Laser Melted AlSi10Mg Alloy. Journal of Materials Engineering and Performance, 2021, 30, 4341-4355.	2.5	9
26	An enhanced finite element modelling based on self-regulation effect in directed energy deposition of Tiâ€“6Alâ€“4V. Journal of Materials Research and Technology, 2022, 17, 1187-1199.	5.8	7
27	Effects of Powder Feed Rate on Formation of Fully Equiaxed Î² Grains in Titanium Alloys Fabricated by Directed Energy Deposition. Metals, 2020, 10, 521.	2.3	6
28	Microstructures, tensile properties, and fracture mechanisms of Inconel 718 formed by HDR-LMD with PREP and GA powders. International Journal of Advanced Manufacturing Technology, 2018, 96, 2031-2041.	3.0	5
29	Introduction of a new method for regulating laves phases in inconel 718 superalloy during a laser-repairing process. Engineering, 2022, , .	6.7	4