Qilin Guo

List of Publications by Year
in descending order

23 papers	1,411 citations	516710 16 h-index	580821 25 g-index
25 all docs	25 docs citations	25 times ranked	994 citing authors

#	Article	IF	Citations
1	Uncertainties Induced by Processing Parameter Variation in Selective Laser Melting of Ti6Al4V Revealed by In-Situ X-ray Imaging. Materials, 2022, 15, 530.	2.9	6
2	Effects of Particle Size Distribution with Efficient Packing on Powder Flowability and Selective Laser Melting Process. Materials, 2022, 15, 705.	2.9	7
3	Defects and anomalies in powder bed fusion metal additive manufacturing. Current Opinion in Solid State and Materials Science, 2022, 26, 100974.	11.5	157
4	Revealing melt flow instabilities in laser powder bed fusion additive manufacturing of aluminum alloy via in-situ high-speed X-ray imaging. International Journal of Machine Tools and Manufacture, 2022, 175, 103861.	13.4	26
5	Controlling process instability for defect lean metal additive manufacturing. Nature Communications, 2022, 13, 1079.	12.8	59
6	An instrument for <i>in situ</i> characterization of powder spreading dynamics in powder-bed-based additive manufacturing processes. Review of Scientific Instruments, 2022, 93, 043707.	1.3	5
7	Mitigating keyhole pore formation by nanoparticles during laser powder bed fusion additive manufacturing. Additive Manufacturing Letters, 2022, 3, 100068.	2.1	8
8	In-Situ Characterization of Pore Formation Dynamics in Pulsed Wave Laser Powder Bed Fusion. Materials, 2021, 14, 2936.	2.9	13
9	Quantitative investigation of gas flow, powder-gas interaction, and powder behavior under different ambient pressure levels in laser powder bed fusion. International Journal of Machine Tools and Manufacture, 2021, 170, 103797.	13.4	21
10	In-situ full-field mapping of melt flow dynamics in laser metal additive manufacturing. Additive Manufacturing, 2020, 31, 100939.	3.0	69
11	Types of spatter and their features and formation mechanisms in laser powder bed fusion additive manufacturing process. Additive Manufacturing, 2020, 36, 101438.	3.0	48
12	Direct observation of pore formation mechanisms during LPBF additive manufacturing process and high energy density laser welding. International Journal of Machine Tools and Manufacture, 2020, 153, 103555.	13.4	143
13	Pore elimination mechanisms during 3D printing of metals. Nature Communications, 2019, 10, 3088.	12.8	158
14	Investigation of dynamic fracture behavior of additively manufactured Al-10Si-Mg using high-speed synchrotron X-ray imaging. Additive Manufacturing, 2019, 30, 100878.	3.0	12
15	Bulk-Explosion-Induced Metal Spattering During Laser Processing. Physical Review X, 2019, 9, .	8.9	34
16	In-situ characterization and quantification of melt pool variation under constant input energy density in laser powder bed fusion additive manufacturing process. Additive Manufacturing, 2019, 28, 600-609.	3.0	103
17	High-speed Synchrotron X-ray Imaging of Laser Powder Bed Fusion Process. Synchrotron Radiation News, 2019, 32, 4-8.	0.8	17
18	Investigating Powder Spreading Dynamics in Additive Manufacturing Processes by <i>In-situ</i> High-speed X-ray Imaging. Synchrotron Radiation News, 2019, 32, 9-13.	0.8	16

#	Article	IF	Citations
19	Transient dynamics of powder spattering in laser powder bed fusion additive manufacturing process revealed by in-situ high-speed high-energy x-ray imaging. Acta Materialia, 2018, 151, 169-180.	7.9	276
20	Revealing particle-scale powder spreading dynamics in powder-bed-based additive manufacturing process by high-speed x-ray imaging. Scientific Reports, 2018, 8, 15079.	3.3	85
21	Preparation and thermal properties of short carbon fibers/erythritol phase change materials. Energy Conversion and Management, 2017, 136, 220-228.	9.2	116
22	Structural responses of metallic glasses under neutron irradiation. Scientific Reports, 2017, 7, 16739.	3.3	28
23	Preparation and characterisation of Al2O3film on hollow glass microspheres by the solâ€"gel process. Materials Research Innovations, 2014, 18, S4-524-S4-527.	2.3	1