

Longchao Cao

List of Publications by Year in descending order

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33
papers

912
citations

394421

19
h-index

477307

29
g-index

33
all docs

33
docs citations

33
times ranked

591
citing authors

#	ARTICLE	IF	CITATIONS
1	Application of sensing techniques and artificial intelligence-based methods to laser welding real-time monitoring: A critical review of recent literature. <i>Journal of Manufacturing Systems</i> , 2020, 57, 1-18.	13.9	95
2	Optimization of surface roughness and dimensional accuracy in LPBF additive manufacturing. <i>Optics and Laser Technology</i> , 2021, 142, 107246.	4.6	74
3	Parameters optimization of hybrid fiber laser-arc butt welding on 316L stainless steel using Kriging model and GA. <i>Optics and Laser Technology</i> , 2016, 83, 153-162.	4.6	57
4	Investigation on the weld bead profile transformation with the keyhole and molten pool dynamic behavior simulation in high power laser welding. <i>International Journal of Heat and Mass Transfer</i> , 2018, 116, 1304-1313.	4.8	52
5	Multi-objective process parameters optimization of hot-wire laser welding using ensemble of metamodels and NSGA-II. <i>Robotics and Computer-Integrated Manufacturing</i> , 2018, 53, 141-152.	9.9	45
6	Optimization of laser brazing onto galvanized steel based on ensemble of metamodels. <i>Journal of Intelligent Manufacturing</i> , 2018, 29, 1417-1431.	7.3	41
7	An active learning radial basis function modeling method based on self-organization maps for simulation-based design problems. <i>Knowledge-Based Systems</i> , 2017, 131, 10-27.	7.1	41
8	Improvement of low-temperature impact toughness for 304 weld joint produced by laser-MIG hybrid welding under magnetic field. <i>Journal of Materials Processing Technology</i> , 2017, 247, 306-314.	6.3	39
9	Optimization of welding process parameters by combining Kriging surrogate with particle swarm optimization algorithm. <i>International Journal of Advanced Manufacturing Technology</i> , 2016, 86, 2473-2483.	3.0	37
10	Multi-objective process parameters optimization of SLM using the ensemble of metamodels. <i>Journal of Manufacturing Processes</i> , 2021, 68, 198-209.	5.9	33
11	Multi-objective process parameters optimization of Laser-magnetic hybrid welding combining Kriging and NSGA-II. <i>Robotics and Computer-Integrated Manufacturing</i> , 2018, 49, 253-262.	9.9	28
12	A multi-fidelity information fusion metamodeling assisted laser beam welding process parameter optimization approach. <i>Advances in Engineering Software</i> , 2017, 110, 85-97.	3.8	27
13	A deterministic robust optimisation method under interval uncertainty based on the reverse model. <i>Journal of Engineering Design</i> , 2015, 26, 416-444.	2.3	26
14	Mechanism investigation of the influence of the magnetic field on the molten pool behavior during laser welding of aluminum alloy. <i>International Journal of Heat and Mass Transfer</i> , 2020, 162, 120390.	4.8	26
15	Robust optimization for reducing welding-induced angular distortion in fiber laser keyhole welding under process parameter uncertainty. <i>Applied Thermal Engineering</i> , 2018, 129, 893-906.	6.0	25
16	Multi-physics simulation of dendritic growth in magnetic field assisted solidification. <i>International Journal of Heat and Mass Transfer</i> , 2019, 144, 118673.	4.8	25
17	In situ quality inspection with layer-wise visual images based on deep transfer learning during selective laser melting. <i>Journal of Intelligent Manufacturing</i> , 2023, 34, 853-867.	7.3	24
18	Optimization of Process Parameters of Hybrid Laser-Arc Welding onto 316L Using Ensemble of Metamodels. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2016, 47, 2182-2196.	2.1	22

#	ARTICLE	IF	CITATIONS
19	Optimization of processing parameters of AISI 316L laser welding influenced by external magnetic field combining RBFNN and GA. Results in Physics, 2017, 7, 1329-1338.	4.1	22
20	In situ porosity intelligent classification of selective laser melting based on coaxial monitoring and image processing. Measurement: Journal of the International Measurement Confederation, 2022, 187, 110232.	5.0	21
21	Identifying optimal process parameters in deep penetration laser welding by adopting Hierarchical-Kriging model. Infrared Physics and Technology, 2018, 92, 443-453.	2.9	20
22	Multi-objective optimization of weld geometry in hybrid fiber laser-arc butt welding using Kriging model and NSGA-II. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	17
23	A space mapping method based on Gaussian process model for variable fidelity metamodeling. Simulation Modelling Practice and Theory, 2018, 81, 64-84.	3.8	15
24	Effects of Welding Speed on Microstructure and Mechanical Property of Fiber Laser Welded Dissimilar Butt Joints between AISI316L and EH36. Metals, 2017, 7, 270.	2.3	14
25	Cellular automaton modeling for dendritic growth during laser beam welding solidification process. Journal of Laser Applications, 2018, 30, .	1.7	14
26	Prediction of angular distortion in the fiber laser keyhole welding process based on a variable-fidelity approximation modeling approach. Journal of Intelligent Manufacturing, 2018, 29, 719-736.	7.3	12
27	Deep Learning Based Monitoring of Spatter Behavior by the Acoustic Signal in Selective Laser Melting. Sensors, 2021, 21, 7179.	3.8	12
28	Predicting the weld width from high-speed successive images of the weld zone using different machine learning algorithms during laser welding. Mathematical Biosciences and Engineering, 2019, 16, 5595-5612.	1.9	11
29	Influence of axial magnetic field on shape and microstructure of stainless steel laser welding joint. International Journal of Advanced Manufacturing Technology, 2017, 91, 3051-3060.	3.0	10
30	Accurate Prediction of the Weld Bead Characteristic in Laser Keyhole Welding Based on the Stochastic Kriging Model. Metals, 2018, 8, 486.	2.3	10
31	A prediction approach of SLM based on the ensemble of metamodels considering material efficiency, energy consumption, and tensile strength. Journal of Intelligent Manufacturing, 2022, 33, 687-702.	7.3	7
32	Metamodel Assisted Robust Optimization under Interval Uncertainty Based on Reverse Model. IFAC-PapersOnLine, 2015, 48, 1178-1183.	0.9	5
33	A data-driven model for weld bead monitoring during the laser welding assisted by magnetic field. International Journal of Advanced Manufacturing Technology, 2020, 107, 475-487.	3.0	5