Ping Jiang

List of Publications by Citations

128 papers	1,988 citations	26 h-index	35 g-index
143 ext. papers	2,578 ext. citations	3.9 avg, IF	5.3 L-index

#	Paper	IF	Citations
128	Morphologies, microstructures, and mechanical properties of samples produced using laser metal deposition with 316 L stainless steel wire. *Optics and Lasers in Engineering*, **2017**, 94, 1-11	4.6	75
127	Optimization of laser welding process parameters of stainless steel 316L using FEM, Kriging and NSGA-II. *Advances in Engineering Software*, **2016**, 99, 147-160	3.6	63
126	An adaptive global variable fidelity metamodeling strategy using a support vector regression based scaling function. *Simulation Modelling Practice and Theory*, **2015**, 59, 18-35	3.9	55
125	Research on microstructures and properties of Inconel 625 coatings obtained by laser cladding with wire. *Journal of Alloys and Compounds*, **2017**, 715, 362-373	5.7	52
124	A sequential multi-fidelity metamodeling approach for data regression. *Knowledge-Based Systems*, **2017**, 134, 199-212	7.3	51
123	Morphologies, microstructures and properties of TiC particle reinforced Inconel 625 coatings obtained by laser cladding with wire. *Journal of Alloys and Compounds*, **2018**, 740, 16-27	5.7	50
122	Effect of axial magnetic field in the laser beam welding of stainless steel to aluminum alloy. *Materials and Design*, **2016**, 109, 146-152	8.1	50
121	A hybrid variable-fidelity global approximation modelling method combining tuned radial basis function base and kriging correction. *Journal of Engineering Design*, **2013**, 24, 604-622	1.8	49
120	An active learning metamodeling approach by sequentially exploiting difference information from variable-fidelity models. *Advanced Engineering Informatics*, **2016**, 30, 283-297	7.4	43
119	Fabrication and characterization of carbon fiber reinforced SiC ceramic matrix composites based on 3D printing technology. *Journal of the European Ceramic Society*, **2018**, 38, 4604-4613	6	41
118	Application of sensing techniques and artificial intelligence-based methods to laser welding real-time monitoring: A critical review of recent literature. *Journal of Manufacturing Systems*, **2020**, 57, 1-18	9.1	40
117	Parameters optimization of hybrid fiber laser-arc butt welding on 316L stainless steel using Kriging model and GA. *Optics and Laser Technology*, **2016**, 83, 153-162	4.2	40
116	A three-dimensional numerical simulation model for weld characteristics analysis in fiber laser keyhole welding. *International Journal of Heat and Mass Transfer*, **2017**, 108, 614-626	4.9	39
115	A robust optimization approach based on multi-fidelity metamodel. *Structural and Multidisciplinary Optimization*, **2018**, 57, 775-797	3.6	38
114	An active learning variable-fidelity metamodelling approach based on ensemble of metamodels and objective-oriented sequential sampling. *Journal of Engineering Design*, **2016**, 27, 205-231	1.8	36
113	A variable fidelity information fusion method based on radial basis function. *Advanced Engineering Informatics*, **2017**, 32, 26-39	7.4	35
112	Investigation on the weld bead profile transformation with the keyhole and molten pool dynamic behavior simulation in high power laser welding. *International Journal of Heat and Mass Transfer*, **2018**, 116, 1304-1313	4.9	34

111	Experimental and numerical analysis of molten pool and keyhole profile during high-power deep-penetration laser welding. *International Journal of Heat and Mass Transfer*, **2018**, 126, 779-789	4.9	32
110	Welded joints integrity analysis and optimization for fiber laser welding of dissimilar materials. *Optics and Lasers in Engineering*, **2016**, 86, 62-74	4.6	31
109	Effects of back-diffusion on solidification cracking susceptibility of Al-Mg alloys during welding: A phase-field study. *Acta Materialia*, **2018**, 160, 85-96	8.4	30
108	An active learning radial basis function modeling method based on self-organization maps for simulation-based design problems. *Knowledge-Based Systems*, **2017**, 131, 10-27	7.3	29
107	Optimization of laser brazing onto galvanized steel based on ensemble of metamodels. *Journal of Intelligent Manufacturing*, **2018**, 29, 1417-1431	6.7	28
106	The influence of heat input on microstructure and mechanical properties for dissimilar welding of galvanized steel to 6061 aluminum alloy in a zero-gap lap joint configuration. *Journal of Alloys and Compounds*, **2017**, 726, 556-566	5.7	28
105	Analysis of gene expression programming for approximation in engineering design. *Structural and Multidisciplinary Optimization*, **2012**, 46, 399-413	3.6	28
104	Heat transfer and fluid flow and their effects on the solidification microstructure in full-penetration laser welding of aluminum sheet. *Journal of Materials Science and Technology*, **2020** , 46, 50-63	9.1	28
103	Optimization of welding process parameters by combining Kriging surrogate with particle swarm optimization algorithm. *International Journal of Advanced Manufacturing Technology*, **2016**, 86, 2473-2483	3.2	26
102	A generalised collaborative optimisation method and its combination with kriging metamodels for engineering design. *Journal of Engineering Design*, **2012**, 23, 379-399	1.8	26
101	Correlation of high power laser welding parameters with real weld geometry and microstructure. *Optics and Laser Technology*, **2017**, 94, 59-67	4.2	25
100	Comparison of solidification cracking susceptibility between Al-Mg and Al-Cu alloys during welding: A phase-field study. *Scripta Materialia*, **2018**, 150, 120-124	5.6	25
99	Improvement of low-temperature impact toughness for 304 weld joint produced by laser-MIG hybrid welding under magnetic field. *Journal of Materials Processing Technology*, **2017**, 247, 306-314	5.3	24
98	Multi-objective process parameters optimization of hot-wire laser welding using ensemble of metamodels and NSGA-II. *Robotics and Computer-Integrated Manufacturing*, **2018**, 53, 141-152	9.2	24
97	Investigation of the humping formation in the high power and high speed laser welding. *Optics and Lasers in Engineering*, **2018**, 107, 102-111	4.6	24
96	The prediction of the whole weld in fiber laser keyhole welding based on numerical simulation. *Applied Thermal Engineering*, **2017**, 113, 980-993	5.8	23
95	A multi-fidelity information fusion metamodeling assisted laser beam welding process parameter optimization approach. *Advances in Engineering Software*, **2017**, 110, 85-97	3.6	22
94	A prior-knowledge input LSSVR metamodeling method with tuning based on cellular particle swarm optimization for engineering design. *Expert Systems With Applications*, **2014**, 41, 2111-2125	7.8	22

93	Interoperability of Cross-organizational Workflows based on Process-view for Collaborative Product Development. *Concurrent Engineering Research and Applications*, **2008**, 16, 73-87	1.7	22
92	A deterministic robust optimisation method under interval uncertainty based on the reverse model. *Journal of Engineering Design*, **2015**, 26, 416-444	1.8	20
91	Multi-objective process parameters optimization of Laser-magnetic hybrid welding combining Kriging and NSGA-II. *Robotics and Computer-Integrated Manufacturing*, **2018**, 49, 253-262	9.2	20
90	A defect-responsive optimization method for the fiber laser butt welding of dissimilar materials. *Materials and Design*, **2016**, 90, 669-681	8.1	20
89	Sequential optimisation and reliability assessment for multidisciplinary design optimisation under hybrid uncertainty of randomness and fuzziness. *Journal of Engineering Design*, **2013**, 24, 363-382	1.8	20
88	Three-dimensional transient thermoelectric currents in deep penetration laser welding of austenite stainless steel. *Optics and Lasers in Engineering*, **2017**, 91, 196-205	4.6	19
87	Effect of magnetic field applied during laser-arc hybrid welding in improving the pitting resistance of the welded zone in austenitic stainless steel. *Corrosion Science*, **2017**, 126, 385-391	6.8	19
86	A Web services and process-view combined approach for process management of collaborative product development. *Computers in Industry*, **2009**, 60, 416-427	11.6	19
85	Process modeling and parameter optimization using radial basis function neural network and genetic algorithm for laser welding of dissimilar materials. *Applied Physics A: Materials Science and Processing*, **2015**, 121, 555-569	2.6	18
84	Optimization of Process Parameters of Hybrid Laser–Arc Welding onto 316L Using Ensemble of Metamodels. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2016**, 47, 2182-2196	2.5	18
83	Variable-Fidelity Lower Confidence Bounding Approach for Engineering Optimization Problems with Expensive Simulations. *AIAA Journal*, **2019**, 57, 5416-5430	2.1	17
82	A multi-objective robust optimization approach based on Gaussian process model. *Structural and Multidisciplinary Optimization*, **2018**, 57, 213-233	3.6	17
81	Microstructure and performance of hybrid laser-arc welded 40 mm thick 316 L steel plates. *Journal of Materials Processing Technology*, **2018**, 259, 312-319	5.3	17
80	Difference mapping method using least square support vector regression for variable-fidelity metamodelling. *Engineering Optimization*, **2015**, 47, 719-736	2	16
79	A New Multi-Objective Bayesian Optimization Formulation With the Acquisition Function for Convergence and Diversity. *Journal of Mechanical Design, Transactions of the ASME*, **2020**, 142,	3	15
78	Effect of static magnetic field on microstructures and mechanical properties of laser-MIG hybrid welding for 304 stainless steel. *International Journal of Advanced Manufacturing Technology*, **2017**, 91, 3437-3447	3.2	14
77	An on-line variable fidelity metamodel assisted Multi-objective Genetic Algorithm for engineering design optimization. *Applied Soft Computing Journal*, **2018**, 66, 438-448	7.5	14
76	An adaptive sampling method for variable-fidelity surrogate models using improved hierarchical kriging. *Engineering Optimization*, **2018**, 50, 145-163	2	14

75	Multi-physics simulation of dendritic growth in magnetic field assisted solidification. *International Journal of Heat and Mass Transfer*, **2019**, 144, 118673	4.9	14
74	A process-view approach for cross-organizational workflows management. *Advanced Engineering Informatics*, **2010**, 24, 229-240	7.4	14
73	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	3.7	13
72	Enhancement of fatigue resistance for 316L welds produced by magnetic field assisted laser-MIG hybrid welding. *Journal of Materials Processing Technology*, **2018**, 254, 114-123	5.3	13
71	An adaptive sampling strategy for Kriging metamodel based on Delaunay triangulation and TOPSIS. *Applied Intelligence*, **2018**, 48, 1644-1656	4.9	13
70	Multi-scale simulation of grain/sub-grain structure evolution during solidification in laser welding of aluminum alloys. *International Journal of Heat and Mass Transfer*, **2020**, 149, 119252	4.9	13
69	Identification of nucleation mechanism in laser welds of aluminum alloy. *Applied Physics A: Materials Science and Processing*, **2019**, 125, 1	2.6	12
68	Advanced Multi-Objective Robust Optimization Under Interval Uncertainty Using Kriging Model and Support Vector Machine. *Journal of Computing and Information Science in Engineering*, **2018**, 18,	2.4	12
67	Study on droplet transfer and weld quality in laser-MIG hybrid welding of 316L stainless steel. *International Journal of Advanced Manufacturing Technology*, **2017**, 88, 483-493	3.2	11
66	An online variable-fidelity optimization approach for multi-objective design optimization. *Structural and Multidisciplinary Optimization*, **2019**, 60, 1059-1077	3.6	11
65	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	11
64	Effect of magnetic field on crystallographic orientation for stainless steel 316L laser-MIG hybrid welds and its strengthening mechanism on fatigue resistance. *International Journal of Fatigue*, **2018**, 112, 308-317	5	11
63	A novel sequential exploration-exploitation sampling strategy for global metamodeling. *IFAC-PapersOnLine*, **2015**, 48, 532-537	0.7	11
62	Surrogate Model-Based Engineering Design and Optimization. *Springer Tracts in Mechanical Engineering*, **2020**,	0.3	11
61	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	2.6	11
60	Metamodel-based design optimization employing a novel sequential sampling strategy. *Engineering Computations*, **2017**, 34, 2547-2564	1.4	10
59	Multi-physics multi-scale simulation of the solidification process in the molten pool during laser welding of aluminum alloys. *International Journal of Heat and Mass Transfer*, **2020**, 161, 120316	4.9	10
58	Novel Approach for Selecting Low-Fidelity Scale Factor in Multifidelity Metamodeling. *AIAA Journal*, **2019**, 57, 5320-5330	2.1	9

57	A lower confidence bounding approach based on the coefficient of variation for expensive global design optimization. *Engineering Computations*, **2019**, 36, 830-849	1.4	9
56	An Enhanced Analytical Target Cascading and Kriging Model Combined Approach for Multidisciplinary Design Optimization. *Mathematical Problems in Engineering*, **2015**, 2015, 1-11	1.1	9
55	Numerical and experimental investigation of vacuum-assisted laser welding for DP590 galvanized steel lap joint without prescribed gap. *International Journal of Advanced Manufacturing Technology*, **2018**, 94, 4177-4185	3.2	9
54	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	3.2	8
53	An on-line Kriging metamodel assisted robust optimization approach under interval uncertainty. *Engineering Computations*, **2017**, 34, 420-446	1.4	8
52	Variable-fidelity probability of improvement method for efficient global optimization of expensive black-box problems. *Structural and Multidisciplinary Optimization*, **2020**, 62, 3021-3052	3.6	8
51	In situ Weak Magnetic-Assisted Thermal Stress Field Reduction Effect in Laser Welding. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2018**, 49, 198-209	2.3	8
50	Sub-microsecond vapor plume dynamics under different keyhole penetration regimes in deep penetration laser welding. *Journal Physics D: Applied Physics*, **2017**, 50, 205601	3	7
49	Parameters optimization and objective trend analysis for fiber laser keyhole welding based on Taguchi-FEA. *International Journal of Advanced Manufacturing Technology*, **2017**, 90, 1419-1432	3.2	7
48	Comparative studies of error metrics in variable fidelity model uncertainty quantification. *Journal of Engineering Design*, **2018**, 29, 512-538	1.8	7
47	Cellular automaton modeling for dendritic growth during laser beam welding solidification process. *Journal of Laser Applications*, **2018**, 30, 032406	2.1	7
46	A multi-objective robust optimization approach for engineering design under interval uncertainty. *Engineering Computations*, **2018**, 35, 580-603	1.4	6
45	A modified BLISCO method and its combination with variable fidelity metamodel for engineering design. *Engineering Computations*, **2016**, 33, 1353-1377	1.4	6
44	Analysis of crack tip transformation zone in austenitic stainless steel laser-MIG hybrid welded joint. *Materials Characterization*, **2017**, 132, 260-268	3.9	6
43	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	2.1	6
42	Effects of energy density attenuation on the stability of keyhole and molten pool during deep penetration laser welding process: A combined numerical and experimental study. *International Journal of Heat and Mass Transfer*, **2021**, 176, 121410	4.9	6
41	Fine Grains Reduce Cracking Susceptibility During Solidification: Insights from Phase-Field Simulations. *Jom*, **2019**, 71, 3223-3229	2.1	5
40	Variable fidelity metamodel-based analytical target cascading method for green design. *International Journal of Advanced Manufacturing Technology*, **2016**, 87, 1203-1216	3.2	5

39	Metamodel Assisted Robust Optimization under Interval Uncertainly Based on Reverse Model. *IFAC-PapersOnLine*, **2015**, 48, 1178-1183	0.7	5
38	Surrogate-Model-Based Design and Optimization. *Springer Tracts in Mechanical Engineering*, **2020**, 135-236	0.3	5
37	A space mapping method based on Gaussian process model for variable fidelity metamodeling. *Simulation Modelling Practice and Theory*, **2018**, 81, 64-84	3.9	5
36	An optimization method for defects reduction in fiber laser keyhole welding. *Applied Physics A: Materials Science and Processing*, **2016**, 122, 1	2.6	4
35	An On-Line Multi-Fidelity Metamodel Assisted Multi-Objective Genetic Algorithm **2017**,		4
34	An Improved Bi-Level Integrated System Collaborative Optimization method for multidisciplinary design optimization **2014**,		4
33	Numerical and experimental analysis for morphology evolution of 6061 aluminum alloy during nanosecond pulsed laser cleaning. *Surface and Coatings Technology*, **2022**, 432, 128056	4.4	3
32	A parallel constrained lower confidence bounding approach for computationally expensive constrained optimization problems. *Applied Soft Computing Journal*, **2021**, 106, 107276	7.5	3
31	Numerical analysis of hybrid plasma in fiber laser-arc welding. *Journal Physics D: Applied Physics*, **2019**, 52, 025206	3	3
30	Equipment and Machine Learning in Welding Monitoring **2019**,		2
29	A sequential multi-objective robust optimization approach under interval uncertainty based on support vector machines **2017**,		2
28	Collaborative execution mechanisms for the TCPN-enhanced process-view approach based inter-enterprises workflow **2009**,		2
27	The Simulation of the Ship Production Design Process Based on Hierarchical Timed Petri Net. *Advanced Materials Research*, **2012**, 544, 170-175	0.5	2
26	Workflow Modeling for Virtual Enterprise: a Petri Net Based Process-View Approach **2006**,		2
25	Real-time monitoring of laser keyhole welding penetration state based on deep belief network. *Journal of Manufacturing Processes*, **2021**, 72, 203-214	5	2
24	Multiphase-field simulation of grain coalescence behavior and its effects on solidification cracking susceptibility during welding of Al-Cu alloys. *Materials and Design*, **2021**, 211, 110146	8.1	2
23	Laser Welding Process Parameters Optimization Using Variable-Fidelity Metamodel and NSGA-II. *MATEC Web of Conferences*, **2017**, 95, 05002	0.3	1
22	A Sequential Sampling Strategy for Multiresponse Radial Basis Function **2016**,		1

21	An active learning variable-fidelity metamodeling approach for engineering design **2015**,		1
20	Modeling of cutting forces in a face-milling operation with Gene Expression Programming **2012**,		1
19	Analytical Target Cascading Based on the Quadratic Exterior Penalty Method for Complex System Design. *Advanced Materials Research*, **2012**, 544, 164-169	0.5	1
18	Real-time laser keyhole welding penetration state monitoring based on adaptive fusion images using convolutional neural networks. *Journal of Intelligent Manufacturing*,1	6.7	1
17	Verification Methods for Surrogate Models. *Springer Tracts in Mechanical Engineering*, **2020**, 89-113	0.3	1
16	An improved sequential multi-objective robust optimisation approach considering interval uncertainty reduction under mixed uncertainties. *Journal of Engineering Design*, **2021**, 32, 61-89	1.8	1
15	The Interaction between Grains during Columnar-to-Equiaxed Transition in Laser Welding: A Phase-Field Study. *Metals*, **2020**, 10, 1647	2.3	1
14	A sequential sampling strategy for Kriging metamodel based on Delaunay triangulation and TOPSIS **2016**,		1
13	A multi-fidelity Bayesian optimization approach based on the expected further improvement. *Structural and Multidisciplinary Optimization*, **2021**, 63, 1709-1719	3.6	1
12	A multi-fidelity surrogate modeling method based on variance-weighted sum for the fusion of multiple non-hierarchical low-fidelity data. *Structural and Multidisciplinary Optimization*, **2021**, 64, 3797	3.6	1
11	Process parameter selection for laser welding of aluminium alloy from the perspective of energy effectiveness. *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*,095440542210780	2.4	1
10	A multi-fidelity surrogate modeling approach for incorporating multiple non-hierarchical low-fidelity data. *Advanced Engineering Informatics*, **2022**, 51, 101430	7.4	0
9	Multi-fidelity surrogate model-assisted fatigue analysis of welded joints. *Structural and Multidisciplinary Optimization*, **2021**, 63, 2771-2787	3.6	0
8	Real-time identification of molten pool and keyhole using a deep learning-based semantic segmentation approach in penetration status monitoring. *Journal of Manufacturing Processes*, **2022**, 76, 695-707	5	0
7	EBSD study on magnetic field altering crystal texture and grain growth during laser-hybrid welding. *Materials and Design*, **2022**, 216, 110587	8.1	0
6	Dendrite remelting during arc oscillation welding of magnesium alloys: a phase-field study. *Applied Physics A: Materials Science and Processing*, **2022**, 128, 1	2.6	0
5	Influence of the wrinkle surface structures on the vapor flow and keyhole stability in 20 kW high power laser welding. *International Journal of Heat and Mass Transfer*, **2022**, 193, 122958	4.9	0
4	Numerical study of keyhole dynamics and porosity formation during high-power oscillating laser welding of medium-thick aluminum alloy plates. *International Journal of Heat and Mass Transfer*, **2022**, 194, 123084	4.9	0

3 Multi-fidelity Surrogate Models. *Springer Tracts in Mechanical Engineering*, **2020**, 55-87 0.3

2 Sampling Approaches. *Springer Tracts in Mechanical Engineering*, **2020**, 115-134 0.3

1 Classic Types of Surrogate Models. *Springer Tracts in Mechanical Engineering*, **2020**, 7-34 0.3