Qi Zhou

List of Publications by Year
in descending order

97 papers	2,212 citations	218677 26 h-index	289244 40 g-index
98 all docs	98 docs citations	98 times ranked	1069 citing authors

#	ARTICLE	IF	CITATIONS
1	In situ quality inspection with layer-wise visual images based on deep transfer learning during selective laser melting. Journal of Intelligent Manufacturing, 2023, 34, 853-867.	7.3	24
2	Real-time laser keyhole welding penetration state monitoring based on adaptive fusion images using convolutional neural networks. Journal of Intelligent Manufacturing, 2023, 34, 1259-1273.	7.3	11
3	A variable-fidelity multi-objective optimization method for aerospace structural design optimization. Engineering Optimization, 2023, 55, 1133-1148.	2.6	5
4	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
5	An ensemble weighted average conservative multi-fidelity surrogate modeling method for engineering optimization. Engineering With Computers, 2022, 38, 2221-2244.	6.1	5
6	A sequential multi-fidelity surrogate model-assisted contour prediction method for engineering problems with expensive simulations. Engineering With Computers, 2022, 38, 31-49.	6.1	9
7	A Transfer Learning-Based Multi-Fidelity Point-Cloud Neural Network Approach for Melt Pool Modeling in Additive Manufacturing. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part B: Mechanical Engineering, 2022, 8, .	1.1	9
8	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
9	A multi-fidelity surrogate modeling approach for incorporating multiple non-hierarchical low-fidelity data. Advanced Engineering Informatics, 2022, 51, 101430.	8.0	17
10	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.	5.9	20
11	Reply by the Authors to S. Yang and K. Yee. AIAA Journal, 2022, 60, 2716-2717.	2.6	0
12	Modified Multifidelity Surrogate Model Based on Radial Basis Function with Adaptive Scale Factor. Chinese Journal of Mechanical Engineering (English Edition), 2022, 35, .	3.7	6
13	An active-learning method based on multi-fidelity Kriging model for structural reliability analysis. Structural and Multidisciplinary Optimization, 2021, 63, 173-195.	3.5	37
14	A model validation framework based on parameter calibration under aleatory and epistemic uncertainty. Structural and Multidisciplinary Optimization, 2021, 63, 645-660.	3.5	21
15	A two-stage adaptive multi-fidelity surrogate model-assisted multi-objective genetic algorithm for computationally expensive problems. Engineering With Computers, 2021, 37, 623-639.	6.1	62
16	Optimization design of metamaterial vibration isolator with honeycomb structure based on multi-fidelity surrogate model. Structural and Multidisciplinary Optimization, 2021, 64, 423-439.	3.5	16
17	An adaptive space preselection method for the multi-fidelity global optimization. Aerospace Science and Technology, 2021, 113, 106728.	4.8	6
18	A parallel constrained lower confidence bounding approach for computationally expensive constrained optimization problems. Applied Soft Computing Journal, 2021, 106, 107276.	7.2	8

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19	A conservative multi-fidelity surrogate model-based robust optimization method for simulation-based optimization. Structural and Multidisciplinary Optimization, 2021, 64, 2525-2551.	3.5	9
20	A multi-fidelity surrogate model based on moving least squares: fusing different fidelity data for engineering design. Structural and Multidisciplinary Optimization, 2021, 64, 3637-3652.	3.5	21
21	Multi-objective process parameters optimization of SLM using the ensemble of metamodels. Journal of Manufacturing Processes, 2021, 68, 198-209.	5.9	33
22	Multi-output Gaussian process prediction for computationally expensive problems with multiple levels of fidelity. Knowledge-Based Systems, 2021, 227, 107151.	7.1	22
23	A multi-fidelity surrogate modeling method based on variance-weighted sum for theÂfusion of multiple non-hierarchical low-fidelity data. Structural and Multidisciplinary Optimization, 2021, 64, 3797-3818.	3.5	10
24	Optimization of surface roughness and dimensional accuracy in LPBF additive manufacturing. Optics and Laser Technology, 2021, 142, 107246.	4.6	74
25	A screening-based gradient-enhanced Gaussian process regression model for multi-fidelity data fusion. Advanced Engineering Informatics, 2021, 50, 101437.	8.0	8
26	Real-time monitoring of laser keyhole welding penetration state based on deep belief network. Journal of Manufacturing Processes, 2021, 72, 203-214.	5.9	19
27	An improved sequential multi-objective robust optimisation approach considering interval uncertainty reduction under mixed uncertainties. Journal of Engineering Design, 2021, 32, 61-89.	2.3	6
28	AÂsequential constraints updating approach for Kriging surrogate model-assisted engineering optimization design problem. Engineering With Computers, 2020, 36, 993-1009.	6.1	83
29	Surrogate Model-Based Engineering Design and Optimization. Springer Tracts in Mechanical Engineering, 2020, , .	0.3	47
30	Deep Transfer Convolutional Neural Network and Extreme Learning Machine for lung nodule diagnosis on CT images. Knowledge-Based Systems, 2020, 204, 106230.	7.1	55
31	Mechanism investigation of the influence of the magnetic field on the molten pool behavior during laser welding of aluminum alloy. International Journal of Heat and Mass Transfer, 2020, 162, 120390.	4.8	26
32	An active learning multi-fidelity metamodeling method based on the bootstrap estimator. Aerospace Science and Technology, 2020, 106, 106116.	4.8	14
33	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.	13.9	95
34	Editorial for the Special Issue: Computer-Aided Manufacturing and Design. Applied Sciences (Switzerland), 2020, 10, 5650.	2.5	1
35	Variable-fidelity probability of improvement method for efficient global optimization of expensive black-box problems. Structural and Multidisciplinary Optimization, 2020, 62, 3021-3052.	3.5	32
36	A generalized hierarchical co-Kriging model for multi-fidelity data fusion. Structural and Multidisciplinary Optimization, 2020, 62, 1885-1904.	3.5	39

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37	Efficient adaptive Kriging-based reliability analysis combining new learning function and error-based stopping criterion. Structural and Multidisciplinary Optimization, 2020, 62, 2517-2536.	3.5	33
38	Surrogate-Model-Based Design and Optimization. Springer Tracts in Mechanical Engineering, 2020, , 135-236.	0.3	11
39	Model Validation Methods for Multiple Correlated Responses via Covariance-Overlap Based Distance. Journal of Mechanical Design, Transactions of the ASME, 2020, 142, .	2.9	3
40	Multi-fidelity Surrogate Models. Springer Tracts in Mechanical Engineering, 2020, , 55-87.	0.3	0
41	Verification Methods for Surrogate Models. Springer Tracts in Mechanical Engineering, 2020, , 89-113.	0.3	2
42	Sampling Approaches. Springer Tracts in Mechanical Engineering, 2020, , 115-134.	0.3	0
43	Classic Types of Surrogate Models. Springer Tracts in Mechanical Engineering, 2020, , 7-34.	0.3	0
44	Robust optimization of a dual-stage bistable nonlinear vibration energy harvester considering parametric uncertainties. Smart Materials and Structures, 2019, 28, 115018.	3.5	14
45	Multi-physics simulation of dendritic growth in magnetic field assisted solidification. International Journal of Heat and Mass Transfer, 2019, 144, 118673.	4.8	25
46	A Three-Stage Surrogate Model Assisted Multi-Objective Genetic Algorithm for Computationally Expensive Problems. , 2019, , .		4
47	Variable-Fidelity Lower Confidence Bounding Approach for Engineering Optimization Problems with Expensive Simulations. AIAA Journal, 2019, 57, 5416-5430.	2.6	26
48	Novel Approach for Selecting Low-Fidelity Scale Factor in Multifidelity Metamodeling. AIAA Journal, 2019, 57, 5320-5330.	2.6	20
49	An online variable-fidelity optimization approach for multi-objective design optimization. Structural and Multidisciplinary Optimization, 2019, 60, 1059-1077.	3.5	16
50	A lower confidence bounding approach based on the coefficient of variation for expensive global design optimization. Engineering Computations, 2019, 36, 830-849.	1.4	14
51	An Improved Co-Kriging Multi-fidelity Surrogate Modeling Method for Non-nested Sampling Data. International Journal of Mechanical Engineering and Robotics Research, 2019, , 559-564.	1.0	5
52	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
53	Optimization of laser brazing onto galvanized steel based on ensemble of metamodels. Journal of Intelligent Manufacturing, 2018, 29, 1417-1431.	7.3	41
54	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

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55	An on-line variable fidelity metamodel assisted Multi-objective Genetic Algorithm for engineering design optimization. Applied Soft Computing Journal, 2018, 66, 438-448.	7.2	18
56	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.	9.9	45
57	A multi-objective robust optimization approach for engineering design under interval uncertainty. Engineering Computations, 2018, 35, 580-603.	1.4	9
58	A kriging metamodel-assisted robust optimization method based on a reverse model. Engineering Optimization, 2018, 50, 253-272.	2.6	20
59	An adaptive sampling method for variable-fidelity surrogate models using improved hierarchical kriging. Engineering Optimization, 2018, 50, 145-163.	2.6	25
60	A multi-objective robust optimization approach based on Gaussian process model. Structural and Multidisciplinary Optimization, 2018, 57, 213-233.	3.5	27
61	Multi-objective process parameters optimization of Laser-magnetic hybrid welding combining Kriging and NSGA-II. Robotics and Computer-Integrated Manufacturing, 2018, 49, 253-262.	9.9	28
62	An adaptive sampling strategy for Kriging metamodel based on Delaunay triangulation and TOPSIS. Applied Intelligence, 2018, 48, 1644-1656.	5.3	18
63	Robust optimization for reducing welding-induced angular distortion in fiber laser keyhole welding under process parameter uncertainty. Applied Thermal Engineering, 2018, 129, 893-906.	6.0	25
64	A robust optimization approach based on multi-fidelity metamodel. Structural and Multidisciplinary Optimization, 2018, 57, 775-797.	3.5	51
65	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
66	A Multi-Objective Robust Optimization Approach Under Interval Uncertainty Based on Kriging and Support Vector Machine. , 2018, , .		0
67	Comparative studies of error metrics in variable fidelity model uncertainty quantification. Journal of Engineering Design, 2018, 29, 512-538.	2.3	9
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, .	2.7	20
69	Accurate Prediction of the Weld Bead Characteristic in Laser Keyhole Welding Based on the Stochastic Kriging Model. Metals, 2018, 8, 486.	2.3	10
70	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.	3.0	16
71	A variable fidelity information fusion method based on radial basis function. Advanced Engineering Informatics, 2017, 32, 26-39.	8.0	59
72	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

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73	A multi-fidelity information fusion metamodeling assisted laser beam welding process parameter optimization approach. Advances in Engineering Software, 2017, 110, 85-97.	3.8	27
74	Aggregate multiple radial basis function models for identifying promising process parameters in magnetic field assisted laser welding. Journal of Manufacturing Processes, 2017, 28, 21-32.	5.9	5
75	Metamodel-based design optimization employing a novel sequential sampling strategy. Engineering Computations, 2017, 34, 2547-2564.	1.4	17
76	A sequential multi-fidelity metamodeling approach for data regression. Knowledge-Based Systems, 2017, 134, 199-212.	7.1	79
77	An On-Line Multi-Fidelity Metamodel Assisted Multi-Objective Genetic Algorithm. , 2017, , .		5
78	An on-line Kriging metamodel assisted robust optimization approach under interval uncertainty. Engineering Computations, 2017, 34, 420-446.	1.4	9
79	A sequential multi-objective robust optimization approach under interval uncertainty based on support vector machines. , 2017, , .		2
80	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
81	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.	7.1	41
82	Optimization of laser welding process parameters of stainless steel 316L using FEM, Kriging and NSGA-II. Advances in Engineering Software, 2016, 99, 147-160.	3.8	84
83	A variable-fidelity modeling method based on self-organizing maps spatial reduction. , 2016, , .		0
84	Multi-objective optimization of laser brazing with the crimping joint using ANN and NSGA-II. International Journal of Advanced Manufacturing Technology, 2016, 85, 1239-1247.	3.0	15
85	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
86	An active learning metamodeling approach by sequentially exploiting difference information from variable-fidelity models. Advanced Engineering Informatics, 2016, 30, 283-297.	8.0	62
87	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.	4.6	57
88	A modified BLISCO method and its combination with variable fidelity metamodel for engineering design. Engineering Computations, 2016, 33, 1353-1377.	1.4	7
89	Optimization of Process Parameters of Hybrid Laserâ€"Arc Welding onto 316L Using Ensemble of Metamodels. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2016, 47, 2182-2196.	2.1	22
90	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.	2.3	50

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91	Optimization of welding process parameters by combining Kriging surrogate with particle swarm optimization algorithm. International Journal of Advanced Manufacturing Technology, 2016, 86, 2473-2483.	3.0	37
92	A novel sequential exploration-exploitation sampling strategy for global metamodeling. IFAC-PapersOnLine, 2015, 48, 532-537.	0.9	18
93	Metamodel Assisted Robust Optimization under Interval Uncertainly Based on Reverse Model. IFAC-PapersOnLine, 2015, 48, 1178-1183.	0.9	5
94	An active learning variable-fidelity metamodeling approach for engineering design. , 2015, , .		2
95	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
96	An adaptive global variable fidelity metamodeling strategy using a support vector regression based scaling function. Simulation Modelling Practice and Theory, 2015, 59, 18-35.	3.8	70
97	A deterministic robust optimisation method under interval uncertainty based on the reverse model. Journal of Engineering Design, 2015, 26, 416-444.	2.3	26