Weihong Guo

List of Publications by Year
in descending order

53 papers	1,143 citations	471371 17 h-index	414303 32 g-index
53 all docs	53 docs citations	53 times ranked	1021 citing authors

#	Article	IF	Citations
1	Reconfigurable manufacturing systems: Principles, design, and future trends. Frontiers of Mechanical Engineering, 2018, 13, 121-136.	2.5	269
2	An Optimization Model and Solution Algorithms for the Vehicle Routing Problem With a â€œFactory-in-a-Boxâ€• IEEE Access, 2020, 8, 134743-134763.	2.6	83
3	Learn to Navigate: Cooperative Path Planning for Unmanned Surface Vehicles Using Deep Reinforcement Learning. IEEE Access, 2019, 7, 165262-165278.	2.6	82
4	Machine learning for metal additive manufacturing: Towards a physics-informed data-driven paradigm. Journal of Manufacturing Systems, 2022, 62, 145-163.	7.6	77
5	Online process monitoring with near-zero misdetection for ultrasonic welding of lithium-ion batteries: An integration of univariate and multivariate methods. Journal of Manufacturing Systems, 2016, 38, 141-150.	7.6	50
6	Deep Learning-Based Data Fusion Method for In Situ Porosity Detection in Laser-Based Additive Manufacturing. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2021, 143, .	1.3	47
7	Choosing the system configuration for high-volume manufacturing. International Journal of Production Research, 2018, 56, 476-490.	4.9	43
8	Effect of interfacial preheating on welded joints during ultrasonic composite welding. Journal of Materials Processing Technology, 2017, 246, 116-122.	3.1	35
9	Holistic tactical-level planning in liner shipping: an exact optimization approach. Journal of Shipping and Trade, 2020, 5, .	0.7	32
10	Allocation of maintenance resources in mixed model assembly systems. Journal of Manufacturing Systems, 2013, 32, 473-479.	7.6	30
11	Performance evaluation for manufacturing systems under control-limit maintenance policy. Journal of Manufacturing Systems, 2020, 55, 221-232.	7.6	28
12	A graph-based cost model for supply chain reconfiguration. Journal of Manufacturing Systems, 2018, 48, 55-63.	7.6	26
13	Reconfiguration of manufacturing supply chains considering outsourcing decisions and supply chain risks. Journal of Manufacturing Systems, 2019, 52, 217-226.	7.6	26
14	StressNet - Deep learning to predict stress with fracture propagation in brittle materials. Npj Materials Degradation, 2021, 5, .	2.6	26
15	Effect of Mg doping on magnetic induction heating of Znâ€“Co ferrite nanoparticles. Journal of Alloys and Compounds, 2021, 851, 156907.	2.8	25
16	Estimation of active maintenance opportunity windows in Bernoulli production lines. Journal of Manufacturing Systems, 2017, 45, 109-120.	7.6	22
17	Profile Monitoring and Fault Diagnosis Via Sensor Fusion for Ultrasonic Welding. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2019, 141, .	1.3	20
18	Effect of in vitro storage duration on measured mechanical properties of brain tissue. Scientific Reports, 2018, 8, 1247.	1.6	19

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19	Hierarchical spatial-temporal modeling and monitoring of melt pool evolution in laser-based additive manufacturing. IISE Transactions, 2020, 52, 977-997.	1.6	14
20	Leveraging simulated and empirical data-driven insight to supervised-learning for porosity prediction in laser metal deposition. Journal of Manufacturing Systems, 2022, 62, 875-885.	7.6	14
21	Anisotropic GPMP2: A Fast Continuous-Time Gaussian Processes Based Motion Planner for Unmanned Surface Vehicles in Environments With Ocean Currents. IEEE Transactions on Automation Science and Engineering, 2022, 19, 3914-3931.	3.4	13
22	Numerical Simulation Analysis of Microstructure of Dielectric Layers in Capacitive Pressure Sensors. IEEE Sensors Journal, 2019, 19, 3260-3266.	2.4	12
23	A Physics-Informed Convolutional Neural Network with Custom Loss Functions for Porosity Prediction in Laser Metal Deposition. Sensors, 2022, 22, 494.	2.1	10
24	Online Eccentricity Monitoring of Seamless Tubes in Cross-Roll Piercing Mill. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2015, 137, .	1.3	9
25	Manufacturing Process Monitoring With Nonparametric Change-Point Detection in Automotive Industry. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2019, 141, .	1.3	9
26	Predicting Nugget Size of Resistance Spot Welds Using Infrared Thermal Videos With Image Segmentation and Convolutional Neural Network. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2022, 144, .	1.3	9
27	Algebraic expression of system configurations and performance metrics for mixed-model assembly systems. IIE Transactions, 2014, 46, 230-248.	2.1	8
28	Changeâ€Point Detection on Solar Panel Performance Using Thresholded LASSO. Quality and Reliability Engineering International, 2016, 32, 2653-2665.	1.4	8
29	Joint decision-making of production and maintenance in mixed model assembly systems with delayed differentiation configurations. International Journal of Production Research, 2020, 58, 4071-4085.	4.9	8
30	Process Monitoring and Fault Prediction in Multivariate Time Series Using Bag-of-Words. IEEE Transactions on Automation Science and Engineering, 2022, 19, 230-242.	3.4	7
31	Tool Wear Characterization and Monitoring with Hierarchical Spatio-Temporal Models for Micro-Friction Stir Welding. Journal of Manufacturing Processes, 2020, 56, 1353-1365.	2.8	7
32	A hub-and-spoke design for ultra-cold COVID-19 vaccine distribution. Vaccine, 2021, 39, 6127-6136.	1.7	7
33	Co-Design of Supply Chain Network and Subassembly Planning Considering the Reconfiguration of Supply Chain Structure for Factory-in-a-Box Manufacturing. , 2018, , .		6
34	Comparison of Early Stopping Neural Network and Random Forest for In-Situ Quality Prediction in Laser Based Additive Manufacturing. Procedia Manufacturing, 2021, 53, 656-663.	1.9	6
35	Multimodal Data Fusion in 3-D Printing Quality Prediction. , 2019, 3, 1-4.		5
36	Optimal Integration of Supervised Tensor Decomposition and Ensemble Learning for In Situ Quality Evaluation in Friction Stir Blind Riveting. IEEE Transactions on Automation Science and Engineering, 2021, 18, 19-35.	3.4	5

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37	Identifying manufacturing operational conditions by physics-based feature extraction and ensemble clustering. Journal of Manufacturing Systems, 2021, 60, 162-175.	7.6	5
38	Data-Driven Gantry Health Monitoring and Process Status Identification Based on Texture Extraction. Journal of Computing and Information Science in Engineering, 2021, 21, .	1.7	5
39	A GENERALIZED STOCHASTIC PETRI-NET MODEL FOR PERFORMANCE ANALYSIS AND ALLOCATION OPTIMIZATION OF A PARTICULAR REPAIR SYSTEM. Asia-Pacific Journal of Operational Research, 2013, 30, 1250042.	0.9	4
40	A decision support system on surgical treatments for rotator cuff tears. IIE Transactions on Healthcare Systems Engineering, 2015, 5, 197-210.	0.8	4
41	Profile Monitoring and Fault Diagnosis via Sensor Fusion for Ultrasonic Welding. , 2016, , .		4
42	Tensor decomposition to compress convolutional layers in deep learning. IISE Transactions, 0, , 1-60.	1.6	4
43	A Data-Driven Diagnostic System Utilizing Manufacturing Data Mining and Analytics. SAE International Journal of Materials and Manufacturing, 2017, 10, 282-292.	0.3	3
44	Nonparametric, real-time detection of process deteriorations in manufacturing with parsimonious smoothing. IISE Transactions, 2021, 53, 568-581.	1.6	3
45	Multiscale Modeling of Sintering-Driven Conductivity in Large Nanowire Ensembles. ACS Applied Materials & Interfaces, 2021, 13, 56645-56654.	4.0	3
46	A Deep-Learning-Based Surrogate Model for Thermal Signature Prediction in Laser Metal Deposition. IEEE Transactions on Automation Science and Engineering, 2023, 20, 482-494.	3.4	3
47	Co-Optimization of Supply Chain Reconfiguration and Assembly Process Planning for Factory-in-a-Box Manufacturing. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2022, 144, .	1.3	3
48	Sensor Fusion and On-Line Monitoring of Friction Stir Blind Riveting for Lightweight Materials Manufacturing. , 2018, , .		2
49	Simulation and Analysis of Preventive Maintenance Scheduling Techniques for Fruit-Roll Packaging Line. Procedia Manufacturing, 2019, 39, 1762-1772.	1.9	2
50	UIR-Net: Object Detection in Infrared Imaging of Thermomechanical Processes in Automotive Manufacturing. IEEE Transactions on Automation Science and Engineering, 2022, 19, 3276-3287.	3.4	1
51	Estimation of Real-Time Active Maintenance Opportunity Windows in Manufacturing Systems With Bernoulli Machines. , 2016, , .		0
52	Joint Production and Maintenance Decision-Making in Mixed-Model Assembly Systems. , 2017, , .		0
53	Sensor Fusion and On-Line Monitoring of Friction Stir Blind Riveting for Lightweight Materials Manufacturing. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 0, , 1-36.	1.3	0