Xiaowei Luo

List of Publications by Year
in descending order

89	2,616	186265	214800
papers	citations	28	47
		h-index	g-index

89	89	89	1921
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Comparative evaluation of Received Signal-Strength Index (RSSI) based indoor localization techniques for construction jobsites. Advanced Engineering Informatics, 2011, 25, 355-363.	8.0	187
2	Transfer learning and deep convolutional neural networks for safety guardrail detection in 2D images. Automation in Construction, 2018, 89, 58-70.	9.8	178
3	An integrated approach to automatic pixel-level crack detection and quantification of asphalt pavement. Automation in Construction, 2020, 114, 103176.	9.8	143
4	Comprehensive assessment of embodied environmental impacts of buildings using normalized environmental impact factors. Journal of Cleaner Production, 2022, 334, 130083.	9.3	103
5	An overview of carbon sequestration of green roofs in urban areas. Urban Forestry and Urban Greening, 2020, 47, 126515.	5.3	99
6	Photovoltaic-green roofs: A review of benefits, limitations, and trends. Solar Energy, 2020, 202, 485-497.	6.1	88
7	Highly anisotropic and flexible piezoceramic kirigami for preventing joint disorders. Science Advances, 2021, 7, .	10.3	88
8	A Kalman filter-based bottom-up approach for household short-term load forecast. Applied Energy, 2019, 250, 882-894.	10.1	85
9	Environmental life cycle assessment of battery electric vehicles from the current and future energy mix perspective. Journal of Environmental Management, 2022, 303, 114050.	7.8	75
10	Measuring and Computing Cognitive Statuses of Construction Workers Based on Electroencephalogram: A Critical Review. IEEE Transactions on Computational Social Systems, 2022, 9, 1644-1659.	4.4	70
11	A Supervised Event-Based Non-Intrusive Load Monitoring for Non-Linear Appliances. Sustainability, 2018, 10, 1001.	3.2	69
12	An automatic literature knowledge graph and reasoning network modeling framework based on ontology and natural language processing. Advanced Engineering Informatics, 2019, 42, 100959.	8.0	69
13	Nanotechnology in Transportation Vehicles: An Overview of Its Applications, Environmental, Health and Safety Concerns. Materials, 2019, 12, 2493.	2.9	68
14	Virtual reality technology in construction safety training: Extended technology acceptance model. Automation in Construction, 2022, 135, 104113.	9.8	63
15	How to promote the sustainable development of prefabricated residential buildings in China: A tripartite evolutionary game analysis. Journal of Cleaner Production, 2022, 349, 131423.	9.3	52
16	Hierarchically Interconnected Piezoceramic Textile with a Balanced Performance in Piezoelectricity, Flexibility, Toughness, and Air Permeability. Advanced Functional Materials, 2021, 31, 2104737.	14.9	49
17	Development of Construction Workers Job Stress Scale to Study and the Relationship between Job Stress and Safety Behavior: An Empirical Study in Beijing. International Journal of Environmental Research and Public Health, 2018, 15, 2409.	2.6	48
18	Investigating the nexus among transport, economic growth and environmental degradation: Evidence from panel ARDL approach. Transport Policy, 2021, 109, 61-71.	6.6	47

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19	A new framework of industrialized construction in China: Towards on-site industrialization. Journal of Cleaner Production, 2020, 244, 118469.	9.3	46
20	Exploring the Emerging Evolution Trends of Urban Resilience Research by Scientometric Analysis. International Journal of Environmental Research and Public Health, 2018, 15, 2181.	2.6	42
21	A proactive workers' safety risk evaluation framework based on position and posture data fusion. Automation in Construction, 2019, 98, 275-288.	9.8	41
22	Managing stakeholder-associated risks and their interactions in the life cycle of prefabricated building projects: A social network analysis approach. Journal of Cleaner Production, 2021, 323, 129102.	9.3	41
23	Direction-adaptive energy harvesting with a guide wing under flow-induced oscillations. Energy, 2019, 187, 115983.	8.8	34
24	Investigating the influence of route turning angle on compliance behaviors and evacuation performance in a virtual-reality-based experiment. Advanced Engineering Informatics, 2021, 48, 101259.	8.0	34
25	Utilizing BIM and Carbon Estimating Methods for Meaningful Data Representation. Procedia Engineering, 2016, 145, 1242-1249.	1.2	33
26	New media data-driven measurement for the development level of prefabricated construction in China. Journal of Cleaner Production, 2019, 241, 118353.	9.3	32
27	Evaluating the Relationship between Freight Transport, Economic Prosperity, Urbanization, and CO_2 Emissions: Evidence from Hong Kong, Singapore, and South Korea. Sustainability, 2020, 12, 10664.	3.2	31
28	Spatial granularity analysis on electricity consumption prediction using LSTM recurrent neural network. Energy Procedia, 2019, 158, 2713-2718.	1.8	29
29	Collecting building occupancy data of high resolution based on WiFi and BLE network. Automation in Construction, 2019, 102, 183-194.	9.8	29
30	Prioritizing requirements for implementing blockchainÂtechnology in construction supply chain based on circular economy: Fuzzy Ordinal Priority Approach. International Journal of Environmental Science and Technology, 2023, 20, 4991-5012.	3.5	28
31	Impact of Safety Attitude on the Safety Behavior of Coal Miners in China. Sustainability, 2019, 11, 6382.	3.2	26
32	An integrated smart home energy management model based on a pyramid taxonomy for residential houses with photovoltaic-battery systems. Applied Energy, 2021, 298, 117159.	10.1	26
33	Mixed-mode thermal stress intensity factors from the finite element discretized symplectic method. International Journal of Solids and Structures, 2014, 51, 3798-3806.	2.7	21
34	Severity Prediction Models of Falling Risk for Workers at Height. Procedia Engineering, 2016, 164, 439-445.	1.2	20
35	Parallel computational building-chain model for rapid urban-scale energy simulation. Energy and Buildings, 2019, 201, 37-52.	6.7	19
36	Multi-objective Decision-Making for the Ecological Operation of Built Reservoirs Based on the Improved Comprehensive Fuzzy Evaluation Method. Water Resources Management, 2019, 33, 3949-3964.	3.9	19

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37	Analyzing the Land Leasing Behavior of the Government of Beijing, China, via the Multinomial Logit Model. Land, 2022, 11, 376.	2.9	19
38	Exploring approaches to improve the performance of autonomous monitoring with imperfect data in location-aware wireless sensor networks. Advanced Engineering Informatics, 2014, 28, 287-296.	8.0	18
39	Development and Evaluation of an Augmented Reality Learning Tool for Construction Engineering Education. , 2018, , .		18
40	Intelligent optimal design of floor tiles: A goal-oriented approach based on BIM and parametric design platform. Journal of Cleaner Production, 2021, 299, 126754.	9.3	18
41	A Systematic Review of Eye-Tracking Studies of Construction Safety. Frontiers in Neuroscience, 2022, 16, 891725.	2.8	18
42	Scientometric Analysis of Safety Sign Research: 1990â€"2019. International Journal of Environmental Research and Public Health, 2021, 18, 273.	2.6	17
43	RELIABILITY MODEL AND CRITICAL FACTORS IDENTIFICATION OF CONSTRUCTION SAFETY MANAGEMENT BASED ON SYSTEM THINKING. Journal of Civil Engineering and Management, 2019, 25, 362-379.	3.5	17
44	Proposing a multifaceted model forÂadopting prefabricated construction technology in the construction industry. Engineering, Construction and Architectural Management, 2023, 30, 755-786.	3.1	17
45	Interorganizational Diffusion of Prefabricated Construction Technology: Two-Stage Evolution Framework. Journal of Construction Engineering and Management - ASCE, 2020, 146, 04020114.	3.8	16
46	Study on Flow Field Characteristics of the 90Â° Rectangular Elbow in the Exhaust Hood of a Uniform Pushâ€"Pull Ventilation Device. International Journal of Environmental Research and Public Health, 2018, 15, 2884.	2.6	15
47	Decision framework for optimal installation of outriggers in tall buildings. Automation in Construction, 2018, 93, 200-213.	9.8	15
48	Factors Influence Chinaâ€™s Off-Site Construction Technology Innovation Diffusion. Sustainability, 2019, 11, 1849.	3.2	15
49	Major Knowledge Diffusion Paths of Megaproject Management: A Citation-Based Analysis. Project Management Journal, 2020, 51, 242-261.	4.3	14
50	Imageâ€based road crack riskâ€informed assessment using a convolutional neural network and an unmanned aerial vehicle. Structural Control and Health Monitoring, 2021, 28, e2749.	4.0	14
51	Evolution pathways of robotic technologies and applications in construction. Advanced Engineering Informatics, 2022, 51, 101529.	8.0	14
52	Built environment and management: exploring grand challenges and management issues in built environment. Frontiers of Engineering Management, 2019, 6, 313-326.	6.1	13
53	Comparative analysis of U-pipe location on the sizing of borehole heat exchangers. Applied Thermal Engineering, 2019, 150, 666-673.	6.0	13
54	Safety challenges and improvement strategies of ethnic minority construction workers: a case study in Hong Kong. International Journal of Occupational Safety and Ergonomics, 2020, 26, 80-90.	1.9	13

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55	Location-Aware Sensor Data Error Impact on Autonomous Crane Safety Monitoring. Journal of Computing in Civil Engineering, 2015, 29, .	4.7	12
56	Identifying Effective Collaborative Behaviors in Building Information Modeling–Enabled Construction Projects. Journal of Construction Engineering and Management - ASCE, 2022, 148, .	3.8	12
57	Multi-objective optimization in floor tile planning: Coupling BIM and parametric design. Automation in Construction, 2022, 140, 104384.	9.8	12
58	The finite element discretized symplectic method for composite mode III cracks. Engineering Fracture Mechanics, 2015, 140, 43-60.	4.3	11
59	The Spillover Effects on Employees' Life of Construction Enterprises' Safety Climate. Sustainability, 2017, 9, 2060.	3.2	11
60	Exploring the Quantitative Impact of Localization Accuracy on Localization-Based Safety Monitoring's Performance on a Construction Jobsite. Journal of Computing in Civil Engineering, 2019, 33, .	4.7	11
61	Modeling city-scale building energy dynamics through inter-connected distributed adjacency blocks. Energy and Buildings, 2019, 202, 109391.	6.7	11
62	Differences between inexperienced and experienced safety supervisors in identifying construction hazards: Seeking insights for training the inexperienced. Advanced Engineering Informatics, 2022, 52, 101602.	8.0	10
63	Location-based measurement and visualization for interdependence network on construction sites. Advanced Engineering Informatics, 2017, 34, 36-45.	8.0	9
64	Fusion Model for Hazard Association Network Development: A Case in Elevator Installation and Maintenance. KSCE Journal of Civil Engineering, 2019, 23, 1451-1465.	1.9	8
65	A Biomechanical Waist Comfort Model for Manual Material Lifting. International Journal of Environmental Research and Public Health, 2020, 17, 5948.	2.6	8
66	Automated Layout Design Approach of Floor Tiles: Based on Building Information Modeling (BIM) via Parametric Design (PD) Platform. Buildings, 2022, 12, 250.	3.1	8
67	Requirements for Autonomous Crane Safety Monitoring. , 2011, , .		7
68	Voice Endorsement and Employee Safety Voice Behavior in Construction Projects: The Mediating Role of Leader-Member Exchange. International Journal of Environmental Research and Public Health, 2022, 19, 3374.	2.6	6
69	Scientometric Analysis of Disaster Risk Perception: 2000–2020. International Journal of Environmental Research and Public Health, 2021, 18, 13003.	2.6	6
70	The finite element discretized symplectic method for direct computation of SIF of piezoelectric materials. Engineering Fracture Mechanics, 2016, 162, 21-37.	4.3	5
71	Multisource Fusion Framework for Environment Learning–Free Indoor Localization. Journal of Computing in Civil Engineering, 2018, 32, 04018040.	4.7	5
72	Development of event-driven optimal control for central air-conditioning systems. Journal of Building Performance Simulation, 2020, 13, 378-390.	2.0	5

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73	AN INTEGRATED MULTI-OBJECTIVES OPTIMIZATION APPROACH ON MODELLING PAVEMENT MAINTENANCE STRATEGIES FOR PAVEMENT SUSTAINABILITY. Journal of Civil Engineering and Management, 2020, 26, 717-732.	3.5	5
74	An Architecture for Local Decision Support in Ad Hoc Sensor Networks. , 2007, , .		4
75	Multi-Index Evaluation for Flood Disaster from Sustainable Perspective: A Case Study of Xinjiang in China. International Journal of Environmental Research and Public Health, 2018, 15, 1983.	2.6	4
76	Dynamic Evolution of Public's Positive Emotions and Risk Perception for the COVID-19 Pandemic: A Case Study of Hubei Province of China. Mathematical Problems in Engineering, 2021, 2021, 1-14.	1.1	4
77	Color-Dense Illumination Adjustment Network for Removing Haze and Smoke from Fire Scenario Images. Sensors, 2022, 22, 911.	3.8	4
78	Fabrication and Characterization of Superhydrophobic Al-Based Surface Used for Finned-Tube Heat Exchangers. Materials, 2022, 15, 3060.	2.9	4
79	Development and Validation of the Coping Capacity Measurement Scale of Public Health Emergencies in China. International Journal of Environmental Research and Public Health, 2022, 19, 94.	2.6	3
80	A Consensus-Based Distributed Temperature Priority Control of Air Conditioner Clusters for Voltage Regulation in Distribution Networks. IEEE Transactions on Smart Grid, 2023, 14, 290-301.	9.0	3
81	Evaluating the Impact of Location-Aware Sensor Data Imperfections on Autonomous Jobsite Safety Monitoring. , 2013, , .		2
82	HVAC Energy Saving in IPS-enabled Large Space: An Occupancy Distribution Based Demand-driven Control Approach. Energy Procedia, 2017, 105, 2083-2088.	1.8	2
83	A worker posture coding scheme to link automatic and manual coding. Automation in Construction, 2021, 125, 103630.	9.8	2
84	Development Strategy Optimization for Off-Site Construction Projects: Synergy of the Government and Developers. Journal of Management in Engineering - ASCE, 2022, 38, .	4.8	2
85	Improving RSSI-Based Indoor Localization Performance by Integrating BIM. , 2017, , .		1
86	The devil is in the detail: The link between building regulatory processes, on-site inspection, verification and technology. , 2018, , .		1
87	Electricity load decomposition prototype for household appliances: System Design and Development. Energy Procedia, 2019, 158, 3158-3163.	1.8	1
88	Mediating Role of Time Pressure on the Relationship between Organizational Psychology Safety and Motivation of Learning from Failure in Large-Scale Construction Project. Advances in Civil Engineering, 2022, 2022, 1-10.	0.7	1
89	Exploratory Study: A Modification Training Method of Attentional Bias Toward Safety. Safety and Health at Work, 2021, 12, 346-350.	0.6	0