Cheng Zhang

List of Publications by Year
in descending order

47 papers	621 citations	758635 12 h-index	642321 23 g-index
47 all docs	47 docs citations	47 times ranked	485 citing authors

#	ARTICLE	IF	CITATIONS
1	A BIM based tool for assessing embodied energy for buildings. Energy and Buildings, 2018, 170, 1-14.	3.1	97
2	Improving lifting motion planning and re-planning of cranes with consideration for safety and efficiency. Advanced Engineering Informatics, 2012, 26, 396-410.	4.0	88
3	Crane Pose Estimation Using UWB Real-Time Location System. Journal of Computing in Civil Engineering, 2012, 26, 625-637.	2.5	84
4	Multiagent Approach for Real-Time Collision Avoidance and Path Replanning for Cranes. Journal of Computing in Civil Engineering, 2012, 26, 782-794.	2.5	55
5	Mobile Model-Based Bridge Lifecycle Management System. Computer-Aided Civil and Infrastructure Engineering, 2006, 21, 530-547.	6.3	33
6	Cell-based representation and analysis of spatial resources in construction simulation. Automation in Construction, 2007, 16, 436-448.	4.8	33
7	A satisfaction-range approach for achieving thermal comfort level in a shared office. Building and Environment, 2018, 142, 312-326.	3.0	30
8	BIM-based investigation of total energy consumption in delivering building products. Advanced Engineering Informatics, 2018, 38, 370-380.	4.0	19
9	Selecting Optimal Combination of Data Channels for Semantic Segmentation in City Information Modelling (CIM). Remote Sensing, 2021, 13, 1367.	1.8	16
10	Toward an Efficient Construction Process: What Drives BIM Professionals to Collaborate in BIM-Enabled Projects. Journal of Management in Engineering - ASCE, 2022, 38, .	2.6	16
11	Towards real-time simulation of construction activities considering spatio-temporal resolution requirements for improving safety and productivity. , 2011, , .		14
12	Equipment workspace analysis in infrastructure projects. Canadian Journal of Civil Engineering, 2007, 34, 1247-1256.	0.7	13
13	Resource Management of Bridge Deck Rehabilitation: Jacques Cartier Bridge Case Study. Journal of Construction Engineering and Management - ASCE, 2008, 134, 311-319.	2.0	13
14	Investigating Occupancy-Driven Air-Conditioning Control Based on Thermal Comfort Level. Journal of Architectural Engineering, 2018, 24, .	0.8	9
15	Water pipe failure prediction using AutoML. Facilities, 2021, 39, 36-49.	0.8	8
16	Collaborative Agent-Based System for Multiple Crane Operation. , 2007, , .		7
17	Path Re-Planning of Cranes Using Real-Time Location System. , 2009, , .		7
18	Investigating spatial impact on indoor personal thermal comfort. Journal of Building Engineering, 2022, 45, 103536.	1.6	7

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19	Monitoring road base course construction progress by photogrammetry-based 3D reconstruction. International Journal of Construction Management, 2023, 23, 2087-2101.	2.2	7
20	Automatic generation of Dynamic Virtual Fences as part of BIM-based prevention program for construction safety. , 2012, , .		6
21	Towards the smart construction site: Improving productivity and safety of construction projects using multi-agent systems, real-time simulation and automated machine control. , 2012, , .		6
22	Representation and Analysis of Spatial Resources in Construction Simulation. , 0, , .		5
23	Lifecycle evaluation of building sustainability using BIM and RTLS. , 2014, , .		5
24	As-Built BIM Updating Based on Image Processing and Artificial Intelligence. , 2019, , .		5
25	Semantic Segmentation of Terrestrial Laser Scanning Point Clouds Using Locally Enhanced Image-Based Geometric Representations. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-15.	2.7	5
26	Multi-Agent-Based Approach for Real-Time Collision Avoidance and Path Re-Planning on Construction Sites. , 2011, , .		4
27	Agent-based simulation for collaborative cranes. , 2007, , .		3
28	Comparative Study On The Ethical Perceptions Of Contractors And Designers In The China Construction Industry. IOP Conference Series: Materials Science and Engineering, 2017, 291, 012024.	0.3	3
29	Implementation of CIM-related technologies within transportation projects. International Journal of Construction Management, 2020, 20, 510-519.	2.2	3
30	Technical feasibility analysis on applying ultra-wide band technology in construction progress monitoring. International Journal of Construction Management, 2022, 22, 2951-2965.	2.2	3
31	Near real-time timetabling for metro system energy optimization considering passenger flow and random delays. Journal of Rail Transport Planning and Management, 2022, 21, 100292.	0.8	3
32	Simulating total embodied energy of building products through BIM. , 2017, , .		2
33	Structural design of concrete to EC2 and GB50010-2010: a comparison. MATEC Web of Conferences, 2018, 175, 01039.	0.1	2
34	Multiagent Systemâ€"Based Near-Real-Time Trajectory and Microscopic Timetable Optimization for Rail Transit Network. Journal of Transportation Engineering Part A: Systems, 2021, 147, 04020153.	0.8	2
35	Semantic Segmentation of Multispectral Images via Linear Compression of Bands: An Experiment Using RIT-18. Remote Sensing, 2022, 14, 2673.	1.8	2
36	Sensitivity Analysis of Construction Simulation using Cell-Devs and Microcyclone. , 2006, , .		1

#	Article	IF	Citations
37	Towards Supporting Construction Equipment Operation Using Collaborative Agent-Based Systems. , 2007, , .		1
38	Enhancing Sustainability of Rail Transit System by Applying Multi-Agent System. , 2019, , .		1
39	Case Studies of Using BIM for Infrastructure in Utility Tunnel Projects in Jiangsu, China. , 2020, , .		1
40	Semantic Enhanced As-Built BIM Updating Based on vSLAM and Image Processing. , 2020, , .		1
41	An overview of constructing geometric models of buildings using point clouds. , 2021, , .		1
42	Sensitivity Analysis of Construction Simulation Considering Site Layout Patterns. , 2007, , .		0
43	A decision-making approach for semi-decentralized rail transit control system. , 2018, , .		0
44	Real-time Railway Transit Management Based on Multi-Agent System (MAS). Journal of Physics: Conference Series, 2021, 1828, 012045.	0.3	0
45	The Ontology-Based Approach Supporting Holistic Energy-Tunnel Design considering Cost, Heat Flux, and System Feasibility. Advances in Materials Science and Engineering, 2021, 2021, 1-13.	1.0	0
46	Developing a Comprehensive 3D Point Cloud Dataset for Construction Projects. , 2022, , .		0
47	An Innovative Approach of Evaluating the Accuracy of Point Cloud Generated by Photogrammetry-Based 3D Reconstruction. , 2022, , .		0