

Lieyun Ding

List of Publications by Year in descending order

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Version: 2024-02-01

97
papers

5,075
citations

76196

40
h-index

91712

69
g-index

98
all docs

98
docs citations

98
times ranked

2915
citing authors

#	ARTICLE	IF	CITATIONS
1	Detecting non-hardhat-use by a deep learning method from far-field surveillance videos. Automation in Construction, 2018, 85, 1-9.	4.8	328
2	A deep hybrid learning model to detect unsafe behavior: Integrating convolution neural networks and long short-term memory. Automation in Construction, 2018, 86, 118-124.	4.8	321
3	Falls from heights: A computer vision-based approach for safety harness detection. Automation in Construction, 2018, 91, 53-61.	4.8	275
4	Building Information Modeling (BIM) application framework: The process of expanding from 3D to computable nD. Automation in Construction, 2014, 46, 82-93.	4.8	232
5	Automated detection of workers and heavy equipment on construction sites: A convolutional neural network approach. Advanced Engineering Informatics, 2018, 37, 139-149.	4.0	217
6	Computer vision for behaviour-based safety in construction: A review and future directions. Advanced Engineering Informatics, 2020, 43, 100980.	4.0	149
7	Improved Fuzzy Bayesian Network-Based Risk Analysis With Interval-Valued Fuzzy Sets and Dê€S Evidence Theory. IEEE Transactions on Fuzzy Systems, 2020, 28, 2063-2077.	6.5	130
8	Construction quality information management with blockchains. Automation in Construction, 2020, 120, 103373.	4.8	130
9	Computer vision applications in construction safety assurance. Automation in Construction, 2020, 110, 103013.	4.8	127
10	A deep learning-based method for detecting non-certified work on construction sites. Advanced Engineering Informatics, 2018, 35, 56-68.	4.0	109
11	Digital reproduction of historical building ornamental components: From 3D scanning to 3D printing. Automation in Construction, 2017, 76, 85-96.	4.8	108
12	Computer vision aided inspection on falling prevention measures for steeplejacks in an aerial environment. Automation in Construction, 2018, 93, 148-164.	4.8	104
13	Knowledge graph for identifying hazards on construction sites: Integrating computer vision with ontology. Automation in Construction, 2020, 119, 103310.	4.8	102
14	Dynamic prediction for attitude and position in shield tunneling: A deep learning method. Automation in Construction, 2019, 105, 102840.	4.8	98
15	An improved Dempsterê€Shafer approach to construction safety risk perception. Knowledge-Based Systems, 2017, 132, 30-46.	4.0	95
16	Hyperledger fabric-based consortium blockchain for construction quality information management. Frontiers of Engineering Management, 2020, 7, 512-527.	3.3	94
17	Machine learning in construction: From shallow to deep learning. Developments in the Built Environment, 2021, 6, 100045.	2.0	87
18	Decision support analysis for safety control in complex project environments based on Bayesian Networks. Expert Systems With Applications, 2013, 40, 4273-4282.	4.4	84

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19	BIM-BASED RISK IDENTIFICATION SYSTEM IN TUNNEL CONSTRUCTION. Journal of Civil Engineering and Management, 2016, 22, 529-539.	1.9	83
20	Deep learning and network analysis: Classifying and visualizing accident narratives in construction. Automation in Construction, 2020, 113, 103089.	4.8	81
21	Characterizing time series of near-miss accidents in metro construction via complex network theory. Safety Science, 2017, 98, 145-158.	2.6	78
22	Predicting Safety Risks in Deep Foundation Pits in Subway Infrastructure Projects: Support Vector Machine Approach. Journal of Computing in Civil Engineering, 2017, 31, .	2.5	76
23	Mapping computer vision research in construction: Developments, knowledge gaps and implications for research. Automation in Construction, 2019, 107, 102919.	4.8	73
24	Cyber-physical-system-based safety monitoring for blind hoisting with the internet of things: A case study. Automation in Construction, 2019, 97, 138-150.	4.8	72
25	Safety management in tunnel construction: Case study of Wuhan metro construction in China. Safety Science, 2014, 62, 8-15.	2.6	70
26	Sustainable performance of just-in-time (JIT) management in time-dependent batch delivery scheduling of precast construction. Journal of Cleaner Production, 2018, 193, 684-701.	4.6	68
27	A novel model for risk assessment of adjacent buildings in tunneling environments. Building and Environment, 2013, 65, 185-194.	3.0	60
28	BIM-based task-level planning for robotic brick assembly through image-based 3D modeling. Advanced Engineering Informatics, 2020, 43, 100993.	4.0	58
29	A Framework for BIM-Enabled Life-Cycle Information Management of Construction Project. International Journal of Advanced Robotic Systems, 2014, 11, 126.	1.3	57
30	Integrating BIM with building performance analysis in project life-cycle. Automation in Construction, 2019, 106, 102861.	4.8	57
31	Combining association rules mining with complex networks to monitor coupled risks. Reliability Engineering and System Safety, 2019, 186, 194-208.	5.1	55
32	An IFC-inspection process model for infrastructure projects: Enabling real-time quality monitoring and control. Automation in Construction, 2017, 84, 96-110.	4.8	54
33	Volume-forming 3D concrete printing using a variable-size square nozzle. Automation in Construction, 2019, 104, 95-106.	4.8	48
34	A review of metro construction in China: Organization, market, cost, safety and schedule. Frontiers of Engineering Management, 2017, 4, 4.	3.3	47
35	UAV-based 3D reconstruction for hoist site mapping and layout planning in petrochemical construction. Automation in Construction, 2020, 113, 103137.	4.8	46
36	Non-linear description of ground settlement over twin tunnels in soil. Tunnelling and Underground Space Technology, 2014, 42, 144-151.	3.0	45

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37	Applicability of 4D modeling for resource allocation in mega liquefied natural gas plant construction. <i>Automation in Construction</i> , 2015, 50, 50-63.	4.8	45
38	Cyber physical system for safety management in smart construction site. <i>Engineering, Construction and Architectural Management</i> , 2020, 28, 788-808.	1.8	45
39	Optimal single-machine batch scheduling for the manufacture, transportation and JIT assembly of precast construction with changeover costs within due dates. <i>Automation in Construction</i> , 2017, 81, 34-43.	4.8	44
40	Effects of long-term household air pollution exposure from solid fuel use on depression: Evidence from national longitudinal surveys from 2011 to 2018. <i>Environmental Pollution</i> , 2021, 283, 117350.	3.7	43
41	Development of a BIM-based Automated Construction System. <i>Procedia Engineering</i> , 2014, 85, 123-131.	1.2	42
42	Utilizing IFC for shield segment assembly in underground tunneling. <i>Automation in Construction</i> , 2018, 93, 178-191.	4.8	39
43	Knowledge dynamics-integrated map as a blueprint for system development: Applications to safety risk management in Wuhan metro project. <i>Automation in Construction</i> , 2018, 93, 112-122.	4.8	39
44	Tiny noise, big mistakes: adversarial perturbations induce errors in brain-computer interface spellers. <i>National Science Review</i> , 2021, 8, nwaa233.	4.6	37
45	Feedforward Analysis for Shield-Ground System. <i>Journal of Computing in Civil Engineering</i> , 2013, 27, 231-242.	2.5	36
46	Modeling tunnel construction risk dynamics: Addressing the production versus protection problem. <i>Safety Science</i> , 2016, 87, 101-115.	2.6	33
47	Formulating project-level building information modeling evaluation framework from the perspectives of organizations: A review. <i>Automation in Construction</i> , 2017, 81, 44-55.	4.8	33
48	Unsupervised spectral clustering for shield tunneling machine monitoring data with complex network theory. <i>Automation in Construction</i> , 2019, 107, 102924.	4.8	32
49	Hybrid Support Vector Machine Optimization Model for Prediction of Energy Consumption of Cutter Head Drives in Shield Tunneling. <i>Journal of Computing in Civil Engineering</i> , 2019, 33, .	2.5	32
50	Visibility graph analysis on time series of shield tunneling parameters based on complex network theory. <i>Tunnelling and Underground Space Technology</i> , 2019, 89, 10-24.	3.0	31
51	Automation and Robotics in Construction and Civil Engineering. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2015, 79, 347-350.	2.0	28
52	In-situ construction method for lunar habitation: Chinese Super Mason. <i>Automation in Construction</i> , 2019, 104, 66-79.	4.8	28
53	Wavelet Analysis for tunneling-induced ground settlement based on a stochastic model. <i>Tunnelling and Underground Space Technology</i> , 2011, 26, 619-628.	3.0	27
54	Global sensitivity analysis of influential parameters for excavation stability of metro tunnel. <i>Automation in Construction</i> , 2020, 113, 103080.	4.8	27

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55	Application of Cloud Storage on BIM Life-Cycle Management. International Journal of Advanced Robotic Systems, 2014, 11, 129.	1.3	26
56	Optimization strategies to eliminate interface conflicts in complex supply chains of construction projects. Journal of Civil Engineering and Management, 2017, 23, 712-726.	1.9	26
57	Highway Planning and Design in the Qinghai-Tibet Plateau of China: A Cost-Safety Balance Perspective. Engineering, 2019, 5, 337-349.	3.2	26
58	Knowledge representation using non-parametric Bayesian networks for tunneling risk analysis. Reliability Engineering and System Safety, 2019, 191, 106529.	5.1	25
59	Time-statistical laws of workers' unsafe behavior in the construction industry: A case study. Physica A: Statistical Mechanics and Its Applications, 2019, 515, 419-429.	1.2	25
60	Digital twin: Stability analysis for tower crane hoisting safety with a scale model. Automation in Construction, 2022, 138, 104257.	4.8	25
61	Topological mapping and assessment of multiple settlement time series in deep excavation: A complex network perspective. Advanced Engineering Informatics, 2018, 36, 1-19.	4.0	22
62	Houston, we have a problem! Understanding the tensions between quality and safety in construction. Production Planning and Control, 2019, 30, 1354-1365.	5.8	22
63	Inspecting manufacturing precision of 3D printed concrete parts based on geometric dimensioning and tolerancing. Automation in Construction, 2020, 117, 103233.	4.8	22
64	Quantifying the evolution of settlement risk for surrounding environments in underground construction via complex network analysis. Tunnelling and Underground Space Technology, 2020, 103, 103490.	3.0	22
65	Automated bughole detection and quality performance assessment of concrete using image processing and deep convolutional neural networks. Construction and Building Materials, 2021, 281, 122576.	3.2	21
66	Time-dependent resilience analysis of a road network in an extreme environment. Transportation Research, Part D: Transport and Environment, 2020, 85, 102395.	3.2	20
67	Proactive struck-by risk detection with movement patterns and randomness. Automation in Construction, 2018, 91, 246-255.	4.8	18
68	The Influence of the Built Environment on People's Mental Health: An Empirical Classification of Causal Factors. Sustainable Cities and Society, 2021, 74, 103185.	5.1	18
69	Planning of Deep Foundation Construction Technical Specifications Using Improved Case-Based Reasoning with Weighted k-Nearest Neighbors. Journal of Computing in Civil Engineering, 2017, 31, .	2.5	17
70	A Dynamic Decision Approach for Risk Analysis in Complex Projects. Journal of Intelligent and Robotic Systems: Theory and Applications, 2015, 79, 591-601.	2.0	16
71	Three-dimensional (3D) reconstruction of structures and landscapes: A new point-and-line fusion method. Advanced Engineering Informatics, 2019, 42, 100961.	4.0	16
72	Near real-time circular tunnel shield segment assembly quality inspection using point cloud data: A case study. Tunnelling and Underground Space Technology, 2019, 91, 102998.	3.0	16

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73	Wavelet prediction method for ground deformation induced by tunneling. <i>Tunnelling and Underground Space Technology</i> , 2014, 41, 137-151.	3.0	15
74	On spectral representation method and Karhunen-Loève expansion in modelling construction material properties. <i>Archives of Civil and Mechanical Engineering</i> , 2018, 18, 768-783.	1.9	15
75	Preparation of autoclave concrete from basaltic lunar regolith simulant: Effect of mixture and manufacture process. <i>Construction and Building Materials</i> , 2019, 207, 373-386.	3.2	15
76	Hybrid Recommendation Approach for Behavior Modification in the Chinese Construction Industry. <i>Journal of Construction Engineering and Management - ASCE</i> , 2019, 145, .	2.0	14
77	Human dynamics in near-miss accidents resulting from unsafe behavior of construction workers. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2019, 530, 121495.	1.2	12
78	Design and automated assembly of Planetary LEGO Brick for lunar in-situ construction. <i>Automation in Construction</i> , 2020, 118, 103282.	4.8	12
79	Sintering of HUST-1 lunar regolith simulant. <i>Construction and Building Materials</i> , 2022, 324, 126655.	3.2	10
80	Risk-informed knowledge-based design for road infrastructure in an extreme environment. <i>Knowledge-Based Systems</i> , 2021, 216, 106741.	4.0	7
81	Maintenance Strategy of Multi-equipment Network Systems Based on Topology Vulnerability Analysis. <i>Procedia Engineering</i> , 2016, 164, 127-134.	1.2	5
82	Systems thinking in workplace safety and health in construction: Bridging the gap between theory and practice. <i>Accident Analysis and Prevention</i> , 2016, 93, 227-229.	3.0	5
83	Risk analysis and management for highway operations safety using a covariate-balanced determinant detector. <i>Accident Analysis and Prevention</i> , 2019, 133, 105290.	3.0	5
84	End-to-end deep learning for reverse driving trajectory of autonomous bulldozer. <i>Knowledge-Based Systems</i> , 2022, 252, 109402.	4.0	5
85	Empirical Study on Impact of Information Technology on Construction Firm Performance. , 2008, , .		3
86	Falling Objects Detection for Near Miss Incidents Identification on Construction Site. , 2019, , .		3
87	Risk Identification Expert System for Metro Construction Based on BIM. , 2013, , .		2
88	Simulation of the effects of different skill learning pathways in heterogeneous construction crews. <i>Journal of Industrial and Management Optimization</i> , 2015, 11, 381-397.	0.8	2
89	An Agent-based Integrated Negotiation Framework of Material Procurement for Lean Construction Material Delivery. , 2007, , .		1
90	The Dynamic Coupling Model of the Coordinative Development Between Regional Resource-Environment and Society-Economy. , 2008, , .		1

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91	Association Between Community Environment and Depressive Symptoms Among Chinese Middle-aged and Older Adults: Evidence From National Longitudinal Surveys From 2011 to 2018. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2022, 77, 2265-2271.	1.7	1
92	Application of 4D Technologies on Shenyang MTC. , 2009, , .		0
93	Project Cost Control System Based on Data Mining. , 2009, , .		0
94	Editorial: nD applications. Automation in Construction, 2014, 46, 51.	4.8	0
95	Editorial on Robotics in Building and Infrastructure. International Journal of Advanced Robotic Systems, 2014, 11, 134.	1.3	0
96	A 3D Model Compression Method for Large Scenes. , 2018, , .		0
97	Dynamic Simulation of the Probable Propagation of a Disaster in an Engineering System Using a Scenario-Based Hybrid Network Model. IEEE Transactions on Engineering Management, 2024, 71, 1490-1503.	2.4	0