Jack Cp Cheng

List of Publications by Year
in descending order

49 papers	4,659 citations	94269 37 h-index	205818 48 g-index
49 all docs	49 docs citations	49 times ranked	3429 citing authors

#	Article	IF	Citations
1	Comparative environmental evaluation of aggregate production from recycled waste materials and virgin sources by LCA. Resources, Conservation and Recycling, 2016, 109, 67-77.	5.3	320
2	A BIM-based system for demolition and renovation waste estimation and planning. Waste Management, 2013, 33, 1539-1551.	3.7	289
3	Data-driven predictive maintenance planning framework for MEP components based on BIM and IoT using machine learning algorithms. Automation in Construction, 2020, 112, 103087.	4.8	237
4	Automated detection of sewer pipe defects in closed-circuit television images using deep learning techniques. Automation in Construction, 2018, 95, 155-171.	4.8	224
5	Mapping between BIM and 3D GIS in different levels of detail using schema mediation and instance comparison. Automation in Construction, 2016, 67, 1-21.	4.8	199
6	A framework for dimensional and surface quality assessment of precast concrete elements using BIM and 3D laser scanning. Automation in Construction, 2015, 49, 225-238.	4.8	175
7	A service oriented framework for construction supply chain integration. Automation in Construction, 2010, 19, 245-260.	4.8	171
8	Automated dimensional quality assurance of full-scale precast concrete elements using laser scanning and BIM. Automation in Construction, 2016, 72, 102-114.	4.8	166
9	Comparative LCA on using waste materials in the cement industry: A Hong Kong case study. Resources, Conservation and Recycling, 2017, 120, 199-208.	5.3	160
10	BIM-based framework for automatic scheduling of facility maintenance work orders. Automation in Construction, 2018, 91, 15-30.	4.8	160
11	Improving air quality prediction accuracy at larger temporal resolutions using deep learning and transfer learning techniques. Atmospheric Environment, 2019, 214, 116885.	1.9	154
12	Estimation of the building energy use intensity in the urban scale by integrating GIS and big data technology. Applied Energy, 2016, 183, 182-192.	5.1	151
13	A BIM-based automated site layout planning framework for congested construction sites. Automation in Construction, 2015, 59, 24-37.	4.8	142
14	Identifying potential opportunities of building information modeling for construction and demolition waste management and minimization. Automation in Construction, 2017, 79, 3-18.	4.8	134
15	A temporal-spatial interpolation and extrapolation method based on geographic Long Short-Term Memory neural network for PM2.5. Journal of Cleaner Production, 2019, 237, 117729.	4.6	133
16	Quantification of construction waste prevented by BIM-based design validation: Case studies in South Korea. Waste Management, 2016, 49, 170-180.	3.7	130
17	A financial decision making framework for construction projects based on 5D Building Information Modeling (BIM). International Journal of Project Management, 2016, 34, 3-21.	2.7	124
18	Automated quality assessment of precast concrete elements with geometry irregularities using terrestrial laser scanning. Automation in Construction, 2016, 68, 170-182.	4.8	109

#	ARTICLE	IF	CITATIONS
19	Air quality prediction at new stations using spatially transferred bi-directional long short-term memory network. Science of the Total Environment, 2020, 705, 135771.	3.9	104
20	Analytical review and evaluation of civil information modeling. Automation in Construction, 2016, 67, 31-47.	4.8	100
21	Full body pose estimation of construction equipment using computer vision and deep learning techniques. Automation in Construction, 2020, 110, 103016.	4.8	98
22	A bi-directional missing data imputation scheme based on LSTM and transfer learning for building energy data. Energy and Buildings, 2020, 216, 109941.	3.1	96
23	Identification of high impact factors of air quality on a national scale using big data and machine learning techniques. Journal of Cleaner Production, 2020, 244, 118955.	4.6	87
24	A non-linear case-based reasoning approach for retrieval of similar cases and selection of target credits in LEED projects. Building and Environment, 2015, 93, 349-361.	3.0	80
25	A Lag-FLSTM deep learning network based on Bayesian Optimization for multi-sequential-variant PM2.5 prediction. Sustainable Cities and Society, 2020, 60, 102237.	5.1	68
26	Modeling and monitoring of construction supply chains. Advanced Engineering Informatics, 2010, 24, 435-455.	4.0	66
27	An integrated underground utility management and decision support based on BIM and GIS. Automation in Construction, 2019, 107, 102931.	4.8	66
28	Automated optimization of steel reinforcement in RC building frames using building information modeling and hybrid genetic algorithm. Automation in Construction, 2018, 90, 39-57.	4.8	63
29	Analyzing driving factors of land values in urban scale based on big data and non-linear machine learning techniques. Land Use Policy, 2020, 94, 104537.	2.5	59
30	Soft detection of 5-day BOD with sparse matrix in city harbor water using deep learning techniques. Water Research, 2020, 170, 115350.	5.3	53
31	Developing an evacuation evaluation model for offshore oil and gas platforms using BIM and agent-based model. Automation in Construction, 2018, 89, 214-224.	4.8	51
32	Transfer learning for long-interval consecutive missing values imputation without external features in air pollution time series. Advanced Engineering Informatics, 2020, 44, 101092.	4.0	50
33	Identification of the most influential areas for air pollution control using XGBoost and Grid Importance Rank. Journal of Cleaner Production, 2020, 274, 122835.	4.6	47
34	A BIM-based framework for lift planning in topsides disassembly of offshore oil and gas platforms. Automation in Construction, 2017, 79, 19-30.	4.8	45
35	An ontology-based web service framework for construction supply chain collaboration and management. Engineering, Construction and Architectural Management, 2015, 22, 551-572.	1.8	44
36	Automated semantic segmentation of industrial point clouds using ResPointNet++. Automation in Construction, 2021, 130, 103874.	4.8	43

#	Article	IF	Citations
37	A data-driven study of important climate factors on the achievement of LEED-EB credits. Building and Environment, 2015, 90, 232-244.	3.0	42
38	Towards an automated condition assessment framework of underground sewer pipes based on closed-circuit television (CCTV) images. Tunnelling and Underground Space Technology, 2021, 110, 103840.	3.0	37
39	Automated sewer pipe defect tracking in CCTV videos based on defect detection and metric learning. Automation in Construction, 2021, 121, 103438.	4.8	33
40	Real-time detection of wildfire risk caused by powerline vegetation faults using advanced machine learning techniques. Advanced Engineering Informatics, 2020, 44, 101070.	4.0	27
41	BIM-BVBS integration with openBIM standards for automatic prefabrication of steel reinforcement. Automation in Construction, 2021, 125, 103654.	4.8	22
42	BIM-supported 4D acoustics simulation approach to mitigating noise impact on maintenance workers on offshore oil and gas platforms. Automation in Construction, 2019, 100, 1-10.	4.8	18
43	A framework for synthetic image generation and augmentation for improving automatic sewer pipe defect detection. Automation in Construction, 2022, 137, 104213.	4.8	17
44	Development of high-accuracy edge line estimation algorithms using terrestrial laser scanning. Automation in Construction, 2019, 101, 59-71.	4.8	15
45	Cost and environmental impact estimation methodology and potential impact factors in offshore oil and gas platform decommissioning: A review. Environmental Impact Assessment Review, 2021, 87, 106536.	4.4	15
46	Automated clash-free optimization of steel reinforcement in RC frame structures using building information modeling and two-stage genetic algorithm. Automation in Construction, 2021, 126, 103676.	4.8	15
47	Global path planning based on BIM and physics engine for UGVs in indoor environments. Automation in Construction, 2022, 139, 104263.	4.8	11
48	DfMA-oriented design optimization for steel reinforcement using BIM and hybrid metaheuristic algorithms. Journal of Building Engineering, 2021, 44, 103310.	1.6	9
49	Digital modelling layer: two digital modelling methodsPART 1: SCAN-TO-BIM APPROACHES: REVIEW IN A HOLISTIC WORKFLOWPART 2: REVIEW OF GEOMETRIC DIGITAL TWINNING APPROACHES BASED ON PHOTOGRAMMETRY. , 2022, , 101-159.		0