

Hubo Cai

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9349013/publications.pdf>

Version: 2024-02-01

50
papers

1,179
citations

361296

20
h-index

395590

33
g-index

51
all docs

51
docs citations

51
times ranked

870
citing authors

#	ARTICLE	IF	CITATIONS
1	Risk assessment and management via multi-source information fusion for undersea tunnel construction. <i>Automation in Construction</i> , 2020, 111, 103050.	4.8	90
2	WBS-based dynamic multi-dimensional BIM database for total construction as-built documentation. <i>Automation in Construction</i> , 2017, 77, 15-23.	4.8	88
3	Automatic Pavement-Crack Detection and Segmentation Based on Steerable Matched Filtering and an Active Contour Model. <i>Journal of Computing in Civil Engineering</i> , 2017, 31, .	2.5	71
4	Integrated Processing of Image and GPR Data for Automated Pothole Detection. <i>Journal of Computing in Civil Engineering</i> , 2016, 30, .	2.5	63
5	Uncertainty-aware geospatial system for mapping and visualizing underground utilities. <i>Automation in Construction</i> , 2015, 53, 105-119.	4.8	62
6	Integrating Natural Language Processing and Spatial Reasoning for Utility Compliance Checking. <i>Journal of Construction Engineering and Management - ASCE</i> , 2016, 142, .	2.0	57
7	Semantic approach to compliance checking of underground utilities. <i>Automation in Construction</i> , 2020, 109, 103006.	4.8	52
8	Government incentive impacts on private investment behaviors under demand uncertainty. <i>Transportation Research, Part E: Logistics and Transportation Review</i> , 2017, 101, 115-129.	3.7	51
9	Infrastructure financing with project bond and credit default swap under public-private partnerships. <i>International Journal of Project Management</i> , 2017, 35, 406-419.	2.7	45
10	GIS-based dynamic construction site material layout evaluation for building renovation projects. <i>Automation in Construction</i> , 2012, 27, 40-49.	4.8	44
11	Classification of construction hazard-related perceptions using: Wearable electroencephalogram and virtual reality. <i>Automation in Construction</i> , 2021, 132, 103975.	4.8	42
12	Two-step long short-term memory method for identifying construction activities through positional and attentional cues. <i>Automation in Construction</i> , 2019, 106, 102886.	4.8	35
13	Ontology and rule-based natural language processing approach for interpreting textual regulations on underground utility infrastructure. <i>Advanced Engineering Informatics</i> , 2021, 48, 101288.	4.0	32
14	Correlating Intelligent Compaction Data to In Situ Soil Compaction Quality Measurements. <i>Journal of Construction Engineering and Management - ASCE</i> , 2017, 143, .	2.0	31
15	Camera marker networks for articulated machine pose estimation. <i>Automation in Construction</i> , 2018, 96, 148-160.	4.8	31
16	GPR Signature Detection and Decomposition for Mapping Buried Utilities with Complex Spatial Configuration. <i>Journal of Computing in Civil Engineering</i> , 2018, 32, .	2.5	30
17	Government contracting with monopoly in infrastructure provision: Regulation or deregulation?. <i>Transportation Research, Part E: Logistics and Transportation Review</i> , 2019, 122, 506-523.	3.7	26
18	Impact of COVID-19 on the US Construction Industry as Revealed in the Purdue Index for Construction. <i>Journal of Management in Engineering - ASCE</i> , 2022, 38, .	2.6	25

#	ARTICLE	IF	CITATIONS
19	Bringing Information to the Field: Automated Photo Registration and 4D BIM. Journal of Computing in Civil Engineering, 2018, 32, .	2.5	23
20	Life Cycle Approach to Construction Workspace Modeling and Planning. Journal of Construction Engineering and Management - ASCE, 2014, 140, 04014019.	2.0	22
21	Ontology-Based Knowledge Management System for Digital Highway Construction Inspection. Transportation Research Record, 2019, 2673, 52-65.	1.0	22
22	Approach to Determine Extent and Depth of Highway Flooding. Journal of Infrastructure Systems, 2007, 13, 157-167.	1.0	20
23	Empirical Analysis of Capital Structure Determinants in Infrastructure Projects under Public-Private Partnerships. Journal of Construction Engineering and Management - ASCE, 2019, 145, .	2.0	20
24	Robust Hybrid Approach of Vision-Based Tracking and Radio-Based Identification and Localization for 3D Tracking of Multiple Construction Workers. Journal of Computing in Civil Engineering, 2020, 34, .	2.5	20
25	Multi-class classification of construction hazards via cognitive states assessment using wearable EEG. Advanced Engineering Informatics, 2022, 53, 101646.	4.0	20
26	Assessment of the Computing Component of Civil Engineering Education. Journal of Computing in Civil Engineering, 2004, 18, 187-195.	2.5	16
27	Transportation Distance Measurement Data Quality. Journal of Computing in Civil Engineering, 2003, 17, 75-87.	2.5	13
28	A field theory based model for identifying the effect of organizational structure on the formation of organizational culture in construction projects. KSCE Journal of Civil Engineering, 2017, 21, 45-53.	0.9	12
29	Automating Utility Permitting within Highway Right-of-Way via a Generic UML/OCL Model and Natural Language Processing. Journal of Construction Engineering and Management - ASCE, 2020, 146, 04020135.	2.0	11
30	Extraction of Construction Quality Requirements from Textual Specifications via Natural Language Processing. Transportation Research Record, 2021, 2675, 222-237.	1.0	10
31	Spatial Autocorrelation in Soil Compaction and Its Impact on Earthwork Acceptance Testing. Transportation Research Record, 2019, 2673, 332-342.	1.0	9
32	Identification of Metrics for the Purdue Index for Construction Using Latent Dirichlet Allocation. Journal of Management in Engineering - ASCE, 2021, 37, .	2.6	8
33	Accuracy Assessment of Interstate Highway Length Using Digital Elevation Model. Journal of Surveying Engineering, - ASCE, 2004, 130, 142-150.	1.0	7
34	Geographic Information Systems/National Elevation Data Route Mileage Verification. Journal of Surveying Engineering, - ASCE, 2006, 132, 40-49.	1.0	7
35	Towards Sensor-Based Health Monitoring Systems for Bridge Decks: A Full-Depth Precast Deck Panels Case Study. Advances in Civil Engineering, 2010, 2010, 1-14.	0.4	7
36	Infrastructure privatization analysis: A public-private duopoly game. Transport Policy, 2019, 83, 80-87.	3.4	7

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37	Real option-based optimization for financial incentive allocation in infrastructure projects under public-private partnerships. <i>Frontiers of Engineering Management</i> , 2020, 7, 413-425.	3.3	6
38	Quantifying Time and User Cost Savings for Rapid Bridge Construction Technique. <i>Transportation Research Record</i> , 2010, 2151, 11-20.	1.0	5
39	Enabling Construction 4D Topological Analysis for Effective Construction Planning. <i>Journal of Computing in Civil Engineering</i> , 2016, 30, .	2.5	5
40	Spatial reasoning mechanism to enable automated adaptive trajectory planning in ground penetrating radar survey. <i>Automation in Construction</i> , 2020, 114, 103157.	4.8	5
41	Verification and Validation Framework for Purdue Index for Construction. <i>Journal of Management in Engineering - ASCE</i> , 2021, 37, 04020090.	2.6	5
42	Automatic Generation of Customized Checklists for Digital Construction Inspection. <i>Transportation Research Record</i> , 0, , 036119812199582.	1.0	5
43	Integrating GIS and Microscopic Traffic Simulation to Analyze Impacts of Transportation Infrastructure Construction. <i>Journal of Computing in Civil Engineering</i> , 2012, 26, 478-487.	2.5	4
44	Modeling 3D Spatial Constraints to Support Utility Compliance Checking. , 2019, , .		4
45	Domain Ontology for Utility Infrastructure: Coupling the Semantics of CityGML Utility Network ADE and Domain Glossaries. <i>Journal of Computing in Civil Engineering</i> , 2021, 35, .	2.5	4
46	A Framework for EEG-Based Ubiquitous Hazard Identification and Proactive Safety Management. , 2022, , .		3
47	Framework of Dynamic Daily 4D BIM for Tracking Construction Progress through a Web Environment. , 2017, , .		2
48	An Ontology Approach to Utility Knowledge Representation. , 2018, , .		1
49	Toward Integrated Human-Machine Intelligence for Civil Engineering: An Interdisciplinary Perspective. , 2022, , .		1
50	Life-Cycle Cost-Based Decision Framework for Failed Portland Cement Concrete Pavement Materials in Indiana. <i>Transportation Research Record</i> , 2015, 2524, 33-41.	1.0	0