

Borja GarcÃ-a de Soto

List of Publications by Year in descending order

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Version: 2024-02-01

61
papers

1,339
citations

430874

18
h-index

377865

34
g-index

63
all docs

63
docs citations

63
times ranked

903
citing authors

#	ARTICLE	IF	CITATIONS
1	Productivity of digital fabrication in construction: Cost and time analysis of a robotically built wall. <i>Automation in Construction</i> , 2018, 92, 297-311.	9.8	263
2	Construction automation: Research areas, industry concerns and suggestions for advancement. <i>Automation in Construction</i> , 2018, 94, 22-38.	9.8	137
3	BIM-based Last Planner System tool for improving construction project management. <i>Automation in Construction</i> , 2019, 104, 246-254.	9.8	105
4	Implications of Construction 4.0 to the workforce and organizational structures. <i>International Journal of Construction Management</i> , 2022, 22, 205-217.	3.2	74
5	Implementation of Scrum in the Construction Industry. <i>Procedia Engineering</i> , 2016, 164, 269-276.	1.2	49
6	A Bayesian network model to predict accidents on Swiss highways. <i>Infrastructure Asset Management</i> , 2015, 2, 145-158.	1.6	43
7	Predicting road traffic accidents using artificial neural network models. <i>Infrastructure Asset Management</i> , 2018, 5, 132-144.	1.6	42
8	Blockchain applied to the construction supply chain: A case study with threat model. <i>Frontiers of Engineering Management</i> , 2020, 7, 564-577.	6.1	42
9	Developing a conceptual framework for the application of digital twin technologies to revamp building operation and maintenance processes. <i>Journal of Building Engineering</i> , 2022, 49, 104028.	3.4	42
10	Revamping construction supply chain processes with circular economy strategies: A systematic literature review. <i>Journal of Cleaner Production</i> , 2022, 335, 130240.	9.3	37
11	Spatio-temporal planning for tower cranes in construction projects with simulated annealing. <i>Automation in Construction</i> , 2020, 111, 103060.	9.8	34
12	Cyber security challenges and vulnerability assessment in the construction industry. , 2019, , .		32
13	Connecting teams in modular construction projects using game engine technology. <i>Automation in Construction</i> , 2021, 132, 103887.	9.8	30
14	A systemic framework for addressing cybersecurity in construction. <i>Automation in Construction</i> , 2022, 133, 103988.	9.8	27
15	Analysis of Adverse Weather for Excusable Delays. <i>Journal of Construction Engineering and Management - ASCE</i> , 2010, 136, 1258-1267.	3.8	26
16	Operational Technology on Construction Sites: A Review from the Cybersecurity Perspective. <i>Journal of Construction Engineering and Management - ASCE</i> , 2021, 147, .	3.8	22
17	Using a Tabu-search Algorithm and 4D Models to Improve Construction Project Schedules. <i>Procedia Engineering</i> , 2017, 196, 698-705.	1.2	21
18	BIM-based Applications of Metaheuristic Algorithms to Support the Decision-making Process: Uses in the Planning of Construction Site Layout. <i>Procedia Engineering</i> , 2017, 196, 558-564.	1.2	20

#	ARTICLE	IF	CITATIONS
19	Supplier-contractor coordination approach to managing demand fluctuations of ready-mix concrete. Automation in Construction, 2021, 121, 103423.	9.8	20
20	Cyber security threat modeling in the AEC industry: An example for the commissioning of the built environment. Sustainable Cities and Society, 2021, 66, 102682.	10.4	19
21	Future of robotics and automation in construction. , 2020, , 289-306.		16
22	A Process for the Development and Evaluation of Preliminary Construction Material Quantity Estimation Models Using Backward Elimination Regression and Neural Networks. Journal of Cost Analysis and Parametrics, 2014, 7, 180-218.	0.3	15
23	Generalized task allocation and route planning for robots with multiple depots in indoor building environments. Automation in Construction, 2020, 119, 103359.	9.8	15
24	Preliminary Resource-based Estimates Combining Artificial Intelligence Approaches and Traditional Techniques. Procedia Engineering, 2016, 164, 261-268.	1.2	13
25	A hybrid methodology to estimate construction material quantities at an early project phase. International Journal of Construction Management, 2017, 17, 165-196.	3.2	12
26	Evaluating the operation and routine maintenance of municipal roads in Switzerland. Infrastructure Asset Management, 2017, 4, 96-108.	1.6	11
27	Investigation of the Case-based Reasoning Retrieval Process to Estimate Resources in Construction Projects. Procedia Engineering, 2015, 123, 169-181.	1.2	10
28	BIM-based estimation of vertical transportation demands during the construction of high-rise buildings. Automation in Construction, 2020, 110, 102985.	9.8	10
29	On-site factories to support lean principles and industrialized construction. Organization, Technology and Management in Construction, 2021, 13, 2353-2366.	1.1	10
30	Knowledge Areas Delivered in Project Management Programs: Exploratory Study. Journal of Management in Engineering - ASCE, 2017, 33, .	4.8	9
31	Where does the money go? Economic flow analysis of construction projects. Building Research and Information, 2018, 46, 348-366.	3.9	9
32	Last Planner System and Scrum: Comparative analysis and suggestions for adjustments. Frontiers of Engineering Management, 2020, 7, 359-372.	6.1	9
33	Use of Scrum in the rehabilitation of a commercial building in Peru. Construction Innovation, 2021, 21, 145-163.	2.7	9
34	Assessment of the cybersecurity vulnerability of construction networks. Engineering, Construction and Architectural Management, 2021, 28, 3078-3105.	3.1	8
35	Estdama and the Pearl Rating System: A Comprehensive Review and Alignment with LCA. Sustainability, 2021, 13, 5041.	3.2	7
36	Cyber threats and actors confronting the Construction 4.0. , 2020, , 441-459.		7

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37	Designing a Reliable Fiducial Marker Network for Autonomous Indoor Robot Navigation. , 2019, , .		7
38	Understanding the Significance of Cybersecurity in the Construction Industry: Survey Findings. Journal of Construction Engineering and Management - ASCE, 2022, 148, .	3.8	7
39	Spatiotemporal Modeling of Lifting Task Scheduling for Tower Cranes With a Tabu Search and 4-D Simulation. Frontiers in Built Environment, 2020, 6, .	2.3	6
40	Transshipment approach to coordinate materials for a contractor's project portfolio. International Journal of Construction Management, 2022, 22, 3065-3076.	3.2	6
41	Cybersecurity in Construction: Where Do We Stand and How Do We Get Better Prepared. Frontiers in Built Environment, 2021, 7, .	2.3	6
42	Combining recorded failures and expert opinion in the development of ANN pipe failure prediction models. Sustainable and Resilient Infrastructure, 2020, , 1-23.	2.8	5
43	Threat Modeling in Construction: An Example of a 3D Concrete Printing System. , 2020, , .		5
44	Automatic Space Analysis Using Laser Scanning and a 3D Grid: Applications to Industrial Plant Facilities. Sustainability, 2020, 12, 9087.	3.2	4
45	Using Bayesian networks to estimate bridge characteristics in early road designs. Infrastructure Asset Management, 2022, 9, 40-56.	1.6	4
46	Rethinking the roles in the AEC industry to accommodate digital fabrication. , 2018, , .		4
47	Improving the planning and design phases of construction projects by using a Case-Based Digital Building System. International Journal of Construction Management, 2020, 20, 900-911.	3.2	3
48	Robots in indoor and outdoor environments. , 2020, , 307-325.		3
49	Implementation of a Robotic System for Overhead Drilling Operations: A Case Study of the Jaibot in the UAE. , 2022, 1, .		3
50	Construction cybersecurity and critical infrastructure protection: new horizons for Construction 4.0. Journal of Information Technology in Construction, 2022, 27, 571-594.	2.1	3
51	Lifting Sequence Optimization of Luffing Tower Cranes Considering Motion Paths with Dynamic Programming. Journal of Construction Engineering and Management - ASCE, 2021, 147, .	3.8	2
52	Automatic Generation of the Vertical Transportation Demands During the Construction of High-Rise Buildings Using BIM. , 2019, , .		2
53	Task Allocation and Route Planning for Robotic Service Networks with Multiple Depots in Indoor Environments. , 2019, , .		1
54	Preliminary Productivity Analysis of Conventional, Precast and 3D Printing Production Techniques for Concrete Columns with Simple Geometry. RILEM Bookseries, 2020, , 1031-1050.	0.4	1

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55	Editorial: Spatiotemporal Modelling for Construction Project Management. <i>Frontiers in Built Environment</i> , 2020, 6, .	2.3	1
56	Towards the Integration of Image-Based Appearance Information into BIM. , 2022, , .		1
57	Towards a Review of Building Energy Forecast Models. , 2019, , .		0
58	Determination of a classification tool for IFC data models based on a predefined classification system. , 2018, , .		0
59	Automatic Generation of the Consumption for Temporary Construction Structures Using BIM: Applications to Formwork. , 2018, , .		0
60	Preliminary Study of the Implications of 3D Printing on the Construction Supply Chain. <i>RILEM Bookseries</i> , 2020, , 1051-1063.	0.4	0
61	Determination of Optimal Rolling Planning Period for the Management of BIM-Based Construction Supply Chain Processes. , 2022, , .		0