Ghang Lee

List of Publications by Year
in descending order

75 papers	2,480 citations	257357 24 h-index	243529 44 g-index
81 all docs	81 docs citations	81 times ranked	1514 citing authors

#	Article	IF	Citations
1	Specifying parametric building object behavior (BOB) for a building information modeling system. Automation in Construction, 2006, 15, 758-776.	4.8	265
2	Parametric 3D modeling in building construction with examples from precast concrete. Automation in Construction, 2004, 13, 291-312.	4.8	164
3	Where to Focus for Successful Adoption of Building Information Modeling within Organization. Journal of Construction Engineering and Management - ASCE, 2013, 139, .	2.0	161
4	Quantification of construction waste prevented by BIM-based design validation: Case studies in South Korea. Waste Management, 2016, 49, 170-180.	3.7	130
5	A BIM- and sensor-based tower crane navigation system for blind lifts. Automation in Construction, 2012, 26, 1-10.	4.8	110
6	D3 City project â€" Economic impact of BIM-assisted design validation. Automation in Construction, 2012, 22, 577-586.	4.8	90
7	A laser-technology-based lifting-path tracking system for a robotic tower crane. Automation in Construction, 2009, 18, 865-874.	4.8	84
8	Process Model Perspectives on Management and Engineering Procedures in the Precast/Prestressed Concrete Industry. Journal of Construction Engineering and Management - ASCE, 2004, 130, 206-215.	2.0	67
9	An analysis of BIM jobs and competencies based on the use of terms in the industry. Automation in Construction, 2017, 81, 67-98.	4.8	65
10	How to tell if a BIM project is successful: A goal-driven approach. Automation in Construction, 2016, 69, 34-43.	4.8	64
11	Process, productivity, and economic analyses of BIMâ€"based multi-trade prefabricationâ€"A case study. Automation in Construction, 2018, 89, 86-98.	4.8	54
12	Parallel vs. Sequential Cascading MEP Coordination Strategies: A Pharmaceutical Building Case Study. Automation in Construction, 2014, 43, 170-179.	4.8	49
13	Automated classification of building information modeling (BIM) case studies by BIM use based on natural language processing (NLP) and unsupervised learning. Advanced Engineering Informatics, 2019, 41, 100917.	4.0	49
14	Extended Process to Product Modeling (xPPM) for integrated and seamless IDM and MVD development. Advanced Engineering Informatics, 2013, 27, 636-651.	4.0	40
15	A Target Benchmark of the Impact of Three-Dimensional Parametric Modeling in Precast Construction. PCI Journal, 2005, 50, 126-139.	0.4	39
16	Eliciting information for product modeling using process modeling. Data and Knowledge Engineering, 2007, 62, 292-307.	2.1	36
17	Design coordination strategies in a 2D and BIM mixed-project environment: social dynamics and productivity. Building Research and Information, 2017, 45, 631-648.	2.0	35
18	BIM policy and management. Construction Management and Economics, 2020, 38, 413-419.	1.8	35

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19	Usability principles and best practices for the user interface design of complex 3D architectural design and engineering tools. International Journal of Human Computer Studies, 2010, 68, 90-104.	3.7	34
20	No-Schema Algorithm for Extracting a Partial Model from an IFC Instance Model. Journal of Computing in Civil Engineering, 2013, 27, 585-592.	2.5	34
21	Metrics for Quantifying the Similarities and Differences between IFC Files. Journal of Computing in Civil Engineering, 2011, 25, 172-181.	2.5	29
22	Query Performance of the IFC Model Server Using an Object-Relational Database Approach and a Traditional Relational Database Approach. Journal of Computing in Civil Engineering, 2014, 28, 210-222.	2.5	28
23	Requirements for computational rule checking of requests for proposals (RFPs) for building designs in South Korea. Advanced Engineering Informatics, 2015, 29, 602-615.	4.0	27
24	Enhancing Subcontractors' Participation in BIM-Based Design Coordination under a DBB Contract. Journal of Management in Engineering - ASCE, 2019, 35, .	2.6	27
25	Case Study of Mass Customization of Double-Curved Metal Façade Panels Using a New Hybrid Sheet Metal Processing Technique. Journal of Construction Engineering and Management - ASCE, 2012, 138, 1322-1330.	2.0	25
26	Grammatical rules for specifying information for automated product data modeling. Advanced Engineering Informatics, 2006, 20, 155-170.	4.0	24
27	An automated direction setting algorithm for a smart exit sign. Automation in Construction, 2015, 59, 139-148.	4.8	24
28	Life-Cycle Cost Analysis on Glass Type of High-Rise Buildings for Increasing Energy Efficiency and Reducing CO_2 Emissions in Korea. Journal of Construction Engineering and Management - ASCE, 2012, 138, 897-904.	2.0	22
29	Avoiding design errors: a case study of redesigning an architectural studio. Design Studies, 2003, 24, 411-435.	1.9	19
30	What Information Can or Cannot Be Exchanged?. Journal of Computing in Civil Engineering, 2011, 25, 1-9.	2.5	18
31	Concept-Based Method for Extracting Valid Subsets from an EXPRESS Schema. Journal of Computing in Civil Engineering, 2009, 23, 128-135.	2.5	16
32	Slim BIM Charts for Rapidly Visualizing and Quantifying Levels of BIM Adoption and Implementation. Journal of Computing in Civil Engineering, 2016, 30, .	2.5	15
33	A cost-plus estimating framework for BIM related design and engineering services. KSCE Journal of Civil Engineering, 2017, 21, 2558-2566.	0.9	15
34	Product data modeling using GTPPM â€" A case study. Automation in Construction, 2007, 16, 392-407.	4.8	14
35	Decision tree for selecting retaining wall systems based on logistic regression analysis. Automation in Construction, 2010, 19, 917-928.	4.8	14
36	Unscented information filtering method for reducing multiple sensor registration error. , 2008, , .		13

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37	Analysis of field applicability of the rotation-controllable tower-crane hook block. Automation in Construction, 2012, 21, 81-88.	4.8	13
38	Framework for technical specifications of 3D concrete printers. Automation in Construction, 2021, 127, 103732.	4.8	11
39	Natural Language Processing–Driven Model to Extract Contract Change Reasons and Altered Work Items for Advanced Retrieval of Change Orders. Journal of Construction Engineering and Management - ASCE, 2021, 147, .	2.0	11
40	Process Improvements in Precast Concrete Construction Using Top-Down Parametric 3-D Computer Modeling. PCI Journal, 2003, 48, 46-55.	0.4	11
41	Impact of organizational factors on delays in BIM-based coordination from a decision-making view: a case study. Journal of Civil Engineering and Management, 2018, 24, 19-30.	1.9	10
42	A Quantitative Analysis of Fatal Accidents Related to Cranes Using the FMEA Method. Journal of the Korea Institute of Building Construction, 2007, 7, 115-122.	0.1	10
43	Learning in Global Teams: BIM Planning and Coordination. International Journal of Automation and Smart Technology, 2015, 5, 119-135.	0.4	10
44	Prototype development and test of a server-independent smart exit sign system: An algorithm, a hardware configuration, and its communication reliability. Automation in Construction, 2018, 90, 213-222.	4.8	9
45	Strategies for Realizing the Benefits of 3D Integrated Modeling of Buildings for the AEC Industry. , 2002, , .		9
46	Feasibility of beam erection with a motorized hook-block. Automation in Construction, 2014, 41, 25-32.	4.8	8
47	Algorithm for Efficiently Extracting IFC Building Elements from an IFC Building Model. , 2011, , .		7
48	Time-Based Joining Method for Generating Phylogenetic Trees of Architectural Plans. Journal of Computing in Civil Engineering, 2017, 31, .	2.5	6
49	Classification of Images from Construction Sites Using a Deep-Learning Algorithm. , 2018, , .		6
50	Development of a Real-time Lifting-path Tracking System of a Tower-crane for Steel Members based on an Integrated Wireless RF Modem and GPS System. Journal of the Korea Institute of Building Construction, 2010, 10, 65-70.	0.1	5
51	Twelve Design Patterns for Integrating and Normalizing Product Model Schemas. Computer-Aided Civil and Infrastructure Engineering, 2007, 22, 163-181.	6.3	4
52	Field applicability and feasibility of the automated non-powered multi-beam lifting system. Automation in Construction, 2012, 28, 26-35.	4.8	4
53	Adoption of Virtual Technology to the Development of a BIM based PMIS. Journal of the Korea Institute of Building Construction, 2013, 13, 333-340.	0.1	4
54	A Study on Practical Ways to Improve Pricing Criteria for Technical Service Contracts. Korean Journal of Construction Engineering and Management, 2014, 15, 33-43.	0.1	4

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55	Space-connector model for representing the geometric properties of connections between spaces. Architectural Science Review, 2018, 61, 429-442.	1.1	3
56	Prototype development of responsive kinetic faÃ§ade control system for the elderly based on Ambient Assisted Living. Architectural Science Review, 2019, 62, 273-285.	1.1	3
57	Classification of the Requirement Sentences of the US DOT Standard Specification Using Deep Learning Algorithms. Lecture Notes in Civil Engineering, 2021, , 89-97.	0.3	3
58	Effectiveness of a Simplified Pullout Test Using a Post-Installable Break-Off Bolt. Research in Nondestructive Evaluation, 2013, 24, 1-17.	0.5	2
59	A relational framework for smart information delivery manual (IDM) specifications. Advanced Engineering Informatics, 2021, 49, 101319.	4.0	2
60	Information Requirements for Managing Higher Education Facilities Using Building Information Modeling: Triangular Study of US and Korean Cases. Journal of Computing in Civil Engineering, 2021, 35, 04021025.	2.5	2
61	A Study on the Development Direction of a BIM Performance Assessment Tool. Journal of Korea Spatial Information Society, 2013, 21, 53-62.	0.7	2
62	A Study on the Prediction of Referral Intension based on Customer Satisfaction in Construction Management. Korean Journal of Construction Engineering and Management, 2010, 11, 100-110.	0.1	2
63	Analysis of the Technology Adoption Impact Factors for Automated Construction Equipment. Korean Journal of Construction Engineering and Management, 2013, 14, 56-64.	0.1	2
64	Trends, Topics, Leaders, Influential Studies, and Future Challenges of Machine Learning Studies in the Rail Industry. Journal of Infrastructure Systems, 2022, 28, .	1.0	2
65	New faculty 101: an orientation to the profession [engineering teacher training]. , 0, , .		1
66	A Study of Sight Area Rate Analysis Algorithm on Theater Design. , 2011, , .		1
67	Creative process and experiences leading to creative achievement in the case of accomplished architects. Asia Pacific Education Review, 2017, 18, 253-268.	1.4	1
68	Development of an Intelligent 3D Parametric Modeling System for fhe North American Precast Concrete Industry: Phase II. , 2004, , .		1
69	An Analysis of the Duration of the Construction Document Phase of Large Public Building Projects Delivered by the Total Solution Service from 2009 to 2014. Korean Journal of Construction Engineering and Management, 2015, 16, 89-97.	0.1	1
70	Quantitative Model for Predicting the Referential Intention of Construction Management Services. Journal of Management in Engineering - ASCE, 2015, 31, 05014023.	2.6	0
71	A session-based collaboration environment for BIM-based project life-cycle management. , 2008, , .		0
72	Development of Post-installable Pullout Bolts and a Loading Device for Evaluating Concrete Strength. Journal of the Korea Institute of Building Construction, 2011, 11, 229-237.	0.1	0

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73	Method for Composing a Portfolio for REITs Investment Using Markowitz's Portfolio Model. Journal of Construction Engineering and Project Management, 2011, 1, 28-37.	0.6	0
74	A Priority and Impact Factor Analysis of Construction Management Tasks for Decreasing Change Orders and Defect Repairs in Cancer Treatment Center Projects. Korean Journal of Construction Engineering and Management, 2013, 14, 55-64.	0.1	0
75	Construction Field Management Using a Popular Text Messenger. Lecture Notes in Civil Engineering, 2021, , 971-979.	0.3	0