Ning Gu

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5055559/publications.pdf

Version: 2024-02-01

84	1,890	566801	276539
papers	citations	15 h-index	41 g-index

87	87	87	1288
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Understanding and facilitating BIM adoption in the AEC industry. Automation in Construction, 2010, 19, 988-999.	4.8	607
2	A theoretical framework of a BIM-based multi-disciplinary collaboration platform. Automation in Construction, 2011, 20, 134-144.	4.8	439
3	Towards an integrated generative design framework. Design Studies, 2012, 33, 185-207.	1.9	161
4	Technological advancements in synchronous collaboration: The effect of 3D virtual worlds and tangible user interfaces on architectural design. Automation in Construction, 2011, 20, 270-278.	4.8	51
5	Information lifecycle management with RFID for material control on construction sites. Advanced Engineering Informatics, 2013, 27, 108-119.	4.0	51
6	Construction defect management using a telematic digital workbench. Automation in Construction, 2009, 18, 814-824.	4.8	41
7	An agent approach to supporting collaborative design in 3D virtual worlds. Automation in Construction, 2005, 14, 189-195.	4.8	32
8	Creativity and parametric design? Comparing designer's cognitive approaches with assessed levels of creativity. International Journal of Design Creativity and Innovation, 2015, 3, 78-94.	0.8	28
9	Parametric Design Strategies for the Generation of Creative Designs. International Journal of Architectural Computing, 2014, 12, 263-282.	0.9	27
10	Empirical support for problemâ€“solution coevolution in a parametric design environment. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 2015, 29, 33-44.	0.7	25
11	A syntactical and grammatical approach to architectural configuration, analysis and generation. Architectural Science Review, 2015, 58, 189-204.	1.1	24
12	The Identification, Development, and Evaluation of BIM-ARDM: A BIM-Based AR Defect Management System for Construction Inspections. Buildings, 2022, 12, 140.	1.4	23
13	Parametrically Generating New Instances of Traditional Chinese Private Gardens that Replicate Selected Socio-Spatial and Aesthetic Properties. Nexus Network Journal, 2015, 17, 807-829.	0.5	19
14	A Combined Plan Graph and Massing Grammar Approach to Frank Lloyd Wrightâ€™s Prairie Architecture. Nexus Network Journal, 2017, 19, 279-299.	0.5	17
15	The mathematics of spatial transparency and mystery: using syntactical data to visualise and analyse the properties of the Yuyuan Garden. Visualization in Engineering, 2016, 4, .	8.8	16
16	A Justified Plan Graph (JPG) grammar approach to identifying spatial design patterns in an architectural style. Environment and Planning B: Urban Analytics and City Science, 2018, 45, 67-89.	1.0	15
17	A shape grammar approach to computational creativity and procedural content generation in massively multiplayer online role playing games. Entertainment Computing, 2013, 4, 115-130.	1.8	14
18	Exploring the spatial pattern of historic Chinese towns and cities: A syntactical approach. Frontiers of Architectural Research, 2021, 10, 598-613.	1.3	14

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19	The role of spatial configuration in moderating the relationship between social sustainability and urban density. Cities, 2022, 121, 103519.	2.7	14
20	Comparing Designersâ€™ Problem-Solving Behavior in a Parametric Design Environment and a Geometric Modeling Environment. Buildings, 2013, 3, 621-638.	1.4	13
21	Architects' Cognitive Behaviour in Parametric Design. International Journal of Architectural Computing, 2015, 13, 83-101.	0.9	13
22	A syntactical comparative analysis of the spatial properties of Prairie style and Victorian domestic architecture. Journal of Architecture, 2016, 21, 348-374.	0.1	13
23	Explanatory defect causation model linking digital innovation, human error and quality improvement in residential construction. Automation in Construction, 2021, 123, 103505.	4.8	13
24	Dynamic Designs of 3D Virtual Worlds Using Generative Design Agents. , 2005, , 239-248.		13
25	Interactive Graphical Representation for Collaborative 3D Virtual Worlds. Computer-Aided Civil and Infrastructure Engineering, 2010, 25, 55-68.	6.3	12
26	Design Thinking: Creativity, Collaboration and Culture. , 2020, , .		12
27	Evaluating the effectiveness of online teaching in architecture courses. Architectural Science Review, 2022, 65, 89-100.	1.1	11
28	The language of design: Spatial cognition and spatial language in parametric design. International Journal of Architectural Computing, 2016, 14, 277-288.	0.9	10
29	Cognitive and linguistic differences in architectural design. Architectural Science Review, 2019, 62, 248-260.	1.1	10
30	Evaluating Creativity in Parametric Design Processes and Products: A Pilot Study. , 2014, , 165-183.		10
31	Constructivist Learning Theory in Virtual Design Studios. , 0, , 139-162.		10
32	Understanding Cognitive Activities in Parametric Design. Communications in Computer and Information Science, 2013, , 38-49.	0.4	9
33	Comparing Designers' Behavior in Responding to Unexpected Discoveries in Parametric Design Environments and Geometry Modeling Environments. International Journal of Architectural Computing, 2013, 11, 393-414.	0.9	8
34	A Critical Review of Computational Creativity in Built Environment Design. Buildings, 2021, 11, 29.	1.4	8
35	Pentexonomy. International Journal of Web-Based Learning and Teaching Technologies, 2014, 9, 41-59.	0.6	7
36	Walking distances from services and destinations for residential aged-care centres in Australian cities. Journal of Transport Geography, 2020, 85, 102707.	2.3	6

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37	A Grammar for the Dynamic Design of Virtual Architecture Using Rational Agents. International Journal of Architectural Computing, 2003, 1, 489-501.	0.9	5
38	Viraph: exploring the potentials of visibility graphs and their analysis. Visualization in Engineering, 2017, 5, .	8.8	5
39	Evaluating creativity in parametric design environments and geometric modelling environments. Architectural Science Review, 2018, 61, 443-453.	1.1	5
40	Impact of Using Rule Algorithms on Designersâ€™ Behavior in a Parametric Design Environment: Preliminary Result from a Pilot Study. Communications in Computer and Information Science, 2013, , 13-22.	0.4	5
41	Complexity, Human Agents, and Architectural Design: A Computational Framework. Design Principles and Practices, 2009, 3, 115-126.	0.7	5
42	Mathematically defining and parametrically generating Traditional Chinese Private Gardens of the Suzhou Region and Style. Environment and Planning B: Urban Analytics and City Science, 2018, 45, 44-66.	1.0	4
43	Representation in Design Communication: Meaning-Making in a Collective Context. Frontiers in Built Environment, 2018, 4, .	1.2	4
44	Linguistic and cultural perspectives on globalised design education. International Journal of Technology and Design Education, 2021, 31, 165-181.	1.7	4
45	Parametric Design: Theoretical Development and Algorithmic Foundation for Design Generation in Architecture. , 2021, , 1361-1383.		4
46	A Design Grammar for Identifying Spatial Uniqueness of Murcuttâ€™s Rural Houses. KAIST Research Series, 2018, , 189-203.	1.5	4
47	Spatial Configuration and Density. International Review for Spatial Planning and Sustainable Development, 2020, 8, 87-100.	0.6	4
48	VRGlare: A Virtual Reality Lighting Performance Simulator for real-time Three-Dimensional Glare Simulation and Analysis. , 2020, , .		4
49	Exploring the spatio-temporal characteristics and driving factors of urban expansion in Xi'an during 1930â€“2014. International Journal of Urban Sciences, 2023, 27, 39-64.	1.3	4
50	Cognitive Challenges for Teamwork in Design. Advances in Higher Education and Professional Development Book Series, 2017, , 55-75.	0.1	3
51	Design Thinking and Building Information Modelling. , 2020, , 147-163.		3
52	Representation in Collective Design: Are There Differences Between Expert Designers and the Crowd?. Lecture Notes in Computer Science, 2016, , 59-68.	1.0	2
53	Investigating the Social Impacts of High-Density Neighbourhoods Through Spatial Analysis. Communications in Computer and Information Science, 2019, , 264-278.	0.4	2
54	A statistical shape grammar approach to analysing and generating design instances of Murcuttâ€™s domestic architecture. Environment and Planning B: Urban Analytics and City Science, 2021, 48, 929-944.	1.0	2

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55	Designing Adaptive Virtual Worlds. , 2014, , .		2
56	Design Collaboration for Intelligent Construction Management in Mobilie Augmented Reality. , 2011, , .		2
57	Collaborative Design: Team Cognition and Communication. , 2020, , 113-145.		2
58	Computational Methods and Technologies. , 0, , 412-419.		2
59	Parametric Design: Theoretical Development and Algorithmic Foundation for Design Generation in Architecture. , 2018, , 1-22.		1
60	Shape Grammars: A Key Generative Design Algorithm. , 2018, , 1-21.		1
61	Impact of ecological security on urban sustainability in Western Chinaâ€”A case study of Xiâ€™an. Environment and Planning B: Urban Analytics and City Science, 2021, 48, 1314-1339.	1.0	1
62	Shape Grammars: A Key Generative Design Algorithm. , 2021, , 1385-1405.		1
63	What Architectural Historians can Learn from Augmented Reality Technologies?. , 0, , .		1
64	Historical building information model (BIM)+: sharing, preserving and reusing architectural design data. , 2018, , 123-144.		1
65	Interactive Graphical Representation for Architectural Style Study in 3D Virtual Worlds. Architectural Science Review, 2009, 52, 99-107.	1.1	0
66	Notice of Retraction: Exploring students' demonstration of professional work integrated learning through e-portfolios. , 2011, , .		0
67	Notice of Retraction: Examining the use of digital design and fabrication technologies in design education. , 2011, , .		0
68	Automation in construction: Special issue CONVR 2009. Automation in Construction, 2011, 20, 227.	4.8	0
69	Special double edition: socio-technological approaches to understanding and measuring building performance. Architectural Science Review, 2020, 63, 233-234.	1.1	0
70	Designing Virtual Worlds for 3D Electronic Institutions. , 2007, , 397-400.		0
71	Virtuality â€“ Offering Opportunities for Creativity?. , 2011, , 183-190.		0
72	Applying Augmented Reality to Preserving Industrial Heritage. , 0, , .		0

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73	Methods for Assessing 3D Virtual Worlds in Design Education. Advances in Game-based Learning Book Series, 2014, , 152-174.	0.2	0
74	Generative Design Grammars: An Intelligent Approach Towards Dynamic and Autonomous Design. , 2015, , 619-631.		0
75	Design Strategies and Creativity. , 2020, , 33-63.		0
76	Introduction: Exploring Design Thinking. , 2020, , 1-30.		0
77	Design Thinking Across Borders. , 2020, , 191-209.		0
78	Measuring Cognitive Complexity. , 2020, , 85-110.		0
79	The Language of Design Thinking. , 2020, , 211-233.		0
80	Design Thinking and the Digital Ecosystem. , 2020, , 165-188.		0
81	Conclusion: Three Câ€™s of Design Thinking. , 2020, , 237-245.		0
82	Creative Micro-processes in Parametric Design. , 2020, , 65-84.		0
83	Methods for Assessing 3D Virtual Worlds in Design Education. , 0, , 355-372.		0
84	The Introduction of a Problem-Based Learning Approach to the Implementation of a Virtual Reality Context. , 0, , 226-247.		0