Ning Gu

List of Publications by Year
in descending order

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

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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	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
2	Evaluating the effectiveness of online teaching in architecture courses. Architectural Science Review, 2022, 65, 89-100.	1.1	11
3	The role of spatial configuration in moderating the relationship between social sustainability and urban density. Cities, 2022, 121, 103519.	2.7	14
4	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
5	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
6	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
7	Explanatory defect causation model linking digital innovation, human error and quality improvement in residential construction. Automation in Construction, 2021, 123, 103505.	4.8	13
8	Linguistic and cultural perspectives on globalised design education. International Journal of Technology and Design Education, 2021, 31, 165-181.	1.7	4
9	Parametric Design: Theoretical Development and Algorithmic Foundation for Design Generation in Architecture. , 2021, , 1361-1383.		4
10	A Critical Review of Computational Creativity in Built Environment Design. Buildings, 2021, 11, 29.	1.4	8
11	Shape Grammars: A Key Generative Design Algorithm. , 2021, , 1385-1405.		1
12	Exploring the spatial pattern of historic Chinese towns and cities: A syntactical approach. Frontiers of Architectural Research, 2021, 10, 598-613.	1.3	14
13	Special double edition: socio-technological approaches to understanding and measuring building performance. Architectural Science Review, 2020, 63, 233-234.	1.1	0
14	Design Thinking: Creativity, Collaboration and Culture. , 2020, , .		12
15	Walking distances from services and destinations for residential aged-care centres in Australian cities. Journal of Transport Geography, 2020, 85, 102707.	2.3	6
16	Design Strategies and Creativity. , 2020, , 33-63.		0
17	Collaborative Design: Team Cognition and Communication. , 2020, , 113-145.		2
18	Introduction: Exploring Design Thinking. , 2020, , 1-30.		0

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19	Design Thinking and Building Information Modelling. , 2020, , 147-163.		3
20	Design Thinking Across Borders. , 2020, , 191-209.		0
21	Measuring Cognitive Complexity. , 2020, , 85-110.		0
22	The Language of Design Thinking. , 2020, , 211-233.		0
23	Design Thinking and the Digital Ecosystem. , 2020, , 165-188.		0
24	Conclusion: Three Câ€™s of Design Thinking. , 2020, , 237-245.		0
25	Creative Micro-processes in Parametric Design. , 2020, , 65-84.		0
26	Spatial Configuration and Density. International Review for Spatial Planning and Sustainable Development, 2020, 8, 87-100.	0.6	4
27	VRGlare: A Virtual Reality Lighting Performance Simulator for real-time Three-Dimensional Glare Simulation and Analysis. , 2020, , .		4
28	Investigating the Social Impacts of High-Density Neighbourhoods Through Spatial Analysis. Communications in Computer and Information Science, 2019, , 264-278.	0.4	2
29	Cognitive and linguistic differences in architectural design. Architectural Science Review, 2019, 62, 248-260.	1.1	10
30	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
31	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
32	Representation in Design Communication: Meaning-Making in a Collective Context. Frontiers in Built Environment, 2018, 4, .	1.2	4
33	Evaluating creativity in parametric design environments and geometric modelling environments. Architectural Science Review, 2018, 61, 443-453.	1.1	5
34	Parametric Design: Theoretical Development and Algorithmic Foundation for Design Generation in Architecture. , 2018, , 1-22.		1
35	Shape Grammars: A Key Generative Design Algorithm. , 2018, , 1-21.		1
36	A Design Grammar for Identifying Spatial Uniqueness of Murcuttâ€™s Rural Houses. KAIST Research Series, 2018, , 189-203.	1.5	4

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37	Historical building information model (BIM)+: sharing, preserving and reusing architectural design data. , 2018, , 123-144.		1
38	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
39	Viraph: exploring the potentials of visibility graphs and their analysis. Visualization in Engineering, 2017, 5, .	8.8	5
40	Cognitive Challenges for Teamwork in Design. Advances in Higher Education and Professional Development Book Series, 2017, , 55-75.	0.1	3
41	The language of design: Spatial cognition and spatial language in parametric design. International Journal of Architectural Computing, 2016, 14, 277-288.	0.9	10
42	Representation in Collective Design: Are There Differences Between Expert Designers and the Crowd?. Lecture Notes in Computer Science, 2016, , 59-68.	1.0	2
43	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
44	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
45	Architects' Cognitive Behaviour in Parametric Design. International Journal of Architectural Computing, 2015, 13, 83-101.	0.9	13
46	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
47	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
48	A syntactical and grammatical approach to architectural configuration, analysis and generation. Architectural Science Review, 2015, 58, 189-204.	1.1	24
49	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
50	Generative Design Grammars: An Intelligent Approach Towards Dynamic and Autonomous Design. , 2015, , 619-631.		0
51	Pentexonomy. International Journal of Web-Based Learning and Teaching Technologies, 2014, 9, 41-59.	0.6	7
52	Parametric Design Strategies for the Generation of Creative Designs. International Journal of Architectural Computing, 2014, 12, 263-282.	0.9	27
53	Evaluating Creativity in Parametric Design Processes and Products: A Pilot Study. , 2014, , 165-183.		10
54	Designing Adaptive Virtual Worlds. , 2014, , .		2

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55	Methods for Assessing 3D Virtual Worlds in Design Education. Advances in Game-based Learning Book Series, 2014, , 152-174.	0.2	0
56	Information lifecycle management with RFID for material control on construction sites. Advanced Engineering Informatics, 2013, 27, 108-119.	4.0	51
57	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
58	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
59	Comparing Designersâ€™ Problem-Solving Behavior in a Parametric Design Environment and a Geometric Modeling Environment. Buildings, 2013, 3, 621-638.	1.4	13
60	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
61	Understanding Cognitive Activities in Parametric Design. Communications in Computer and Information Science, 2013, , 38-49.	0.4	9
62	Towards an integrated generative design framework. Design Studies, 2012, 33, 185-207.	1.9	161
63	Notice of Retraction: Exploring students' demonstration of professional work integrated learning through e-portfolios. , 2011, , .		0
64	Notice of Retraction: Examining the use of digital design and fabrication technologies in design education. , 2011, , .		0
65	Automation in construction: Special issue CONVR 2009. Automation in Construction, 2011, 20, 227.	4.8	0
66	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
67	A theoretical framework of a BIM-based multi-disciplinary collaboration platform. Automation in Construction, 2011, 20, 134-144.	4.8	439
68	Virtuality â€“ Offering Opportunities for Creativity?. , 2011, , 183-190.		0
69	Design Collaboration for Intelligent Construction Management in Mobilie Augmented Reality. , 2011, , .		2
70	Understanding and facilitating BIM adoption in the AEC industry. Automation in Construction, 2010, 19, 988-999.	4.8	607
71	Interactive Graphical Representation for Collaborative 3D Virtual Worlds. Computer-Aided Civil and Infrastructure Engineering, 2010, 25, 55-68.	6.3	12
72	Interactive Graphical Representation for Architectural Style Study in 3D Virtual Worlds. Architectural Science Review, 2009, 52, 99-107.	1.1	0

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73	Construction defect management using a telematic digital workbench. Automation in Construction, 2009, 18, 814-824.	4.8	41
74	Complexity, Human Agents, and Architectural Design: A Computational Framework. Design Principles and Practices, 2009, 3, 115-126.	0.7	5
75	Designing Virtual Worlds for 3D Electronic Institutions. , 2007, , 397-400.		0
76	An agent approach to supporting collaborative design in 3D virtual worlds. Automation in Construction, 2005, 14, 189-195.	4.8	32
77	Dynamic Designs of 3D Virtual Worlds Using Generative Design Agents. , 2005, , 239-248.		13
78	A Grammar for the Dynamic Design of Virtual Architecture Using Rational Agents. International Journal of Architectural Computing, 2003, 1, 489-501.	0.9	5
79	Constructivist Learning Theory in Virtual Design Studios. , 0, , 139-162.		10
80	What Architectural Historians can Learn from Augmented Reality Technologies?. , 0, , .		1
81	Applying Augmented Reality to Preserving Industrial Heritage. , 0, , .		0
82	Methods for Assessing 3D Virtual Worlds in Design Education. , 0, , 355-372.		0
83	The Introduction of a Problem-Based Learning Approach to the Implementation of a Virtual Reality Context. , 0, , 226-247.		0
84	Computational Methods and Technologies. , 0, , 412-419.		2