

Josã© P Duarte

List of Publications by Year in descending order

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papers

1,503
citations

331670

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79
all docs

79
docs citations

79
times ranked

1008
citing authors

#	ARTICLE	IF	CITATIONS
1	Additive manufacturing as an enabling technology for digital construction: A perspective on Construction 4.0. Automation in Construction, 2019, 103, 251-267.	9.8	212
2	Building envelope shape design in early stages of the design process: Integrating architectural design systems and energy simulation. Automation in Construction, 2013, 32, 196-209.	9.8	136
3	A discursive grammar for customizing mass housing: the case of Siza's houses at Malagueira. Automation in Construction, 2005, 14, 265-275.	9.8	94
4	Towards the Mass Customization of Housing: The Grammar of Siza's Houses at Malagueira. Environment and Planning B: Planning and Design, 2005, 32, 347-380.	1.7	92
5	Usability studies on building early stage architectural models in virtual reality. Automation in Construction, 2019, 103, 104-116.	9.8	65
6	Envelope-related energy demand: A design indicator of energy performance for residential buildings in early design stages. Energy and Buildings, 2013, 61, 215-223.	6.7	59
7	An integrated system for providing mass customized housing. Automation in Construction, 2009, 18, 310-320.	9.8	52
8	Automatic generation and fabrication of designs. Automation in Construction, 2002, 11, 291-302.	9.8	47
9	A design tool for resource-efficient fabrication of 3d-graded structural building components using additive manufacturing. Automation in Construction, 2017, 82, 75-83.	9.8	45
10	Fresh and Hardened Properties of Extrusion-Based 3D-Printed Cementitious Materials: A Review. Sustainability, 2020, 12, 5628.	3.2	43
11	Unveiling the structure of the Marrakech Medina: A shape grammar and an interpreter for generating urban form. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 2007, 21, 317-349.	1.1	41
12	A review of additive manufacturing for ceramic production. Rapid Prototyping Journal, 2017, 23, 954-963.	3.2	40
13	Creating Specific Grammars with Generic Grammars: Towards Flexible Urban Design. Nexus Network Journal, 2011, 13, 73-111.	0.7	33
14	An automated system for 3D printing functionally graded concrete-based materials. Additive Manufacturing, 2020, 33, 101146.	3.0	32
15	A Transformation Grammar for Housing Rehabilitation. Nexus Network Journal, 2011, 13, 49-71.	0.7	28
16	Evaluating the relationship between deposition and layer quality in large-scale additive manufacturing of concrete. Virtual and Physical Prototyping, 2019, 14, 135-140.	10.4	28
17	Towards a Methodology for Flexible Urban Design: Designing with Urban Patterns and Shape Grammars. Environment and Planning B: Planning and Design, 2011, 38, 879-902.	1.7	27
18	A Land Use Planning Ontology: LBCS. Future Internet, 2012, 4, 65-82.	3.8	26

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19	A general indirect representation for optimization of generative design systems by genetic algorithms: Application to a shape grammar-based design system. <i>Automation in Construction</i> , 2013, 35, 374-382.	9.8	26
20	Strategies to control daylight in a responsive skylight system. <i>Automation in Construction</i> , 2012, 28, 91-105.	9.8	24
21	City Induction: A Model for Formulating, Generating, and Evaluating Urban Designs. <i>Communications in Computer and Information Science</i> , 2012, , 73-98.	0.5	23
22	State of the Art Review of Reinforcement Strategies and Technologies for 3D Printing of Concrete. <i>Energies</i> , 2022, 15, 360.	3.1	23
23	Combing Grammars and Space Syntax: Formulating, Generating and Evaluating Designs. <i>International Journal of Architectural Computing</i> , 2004, 2, 491-515.	1.5	20
24	Shape Grammar of steel cold-formed sections based on manufacturing rules. <i>Thin-Walled Structures</i> , 2014, 79, 218-232.	5.3	17
25	Inserting Computational Technologies in Architectural Curricula. , 0, , 390-411.		14
26	A New Palladian Shape Grammar. <i>International Journal of Architectural Computing</i> , 2012, 10, 521-540.	1.5	13
27	A transformation-grammar-based methodology for the adaptation of existing housetypes: the case of the "rabo-de-bacalhau"™. <i>Environment and Planning B: Planning and Design</i> , 2015, 42, 775-800.	1.7	12
28	Implementing a description grammar:generating housing programs online. <i>Construction Innovation</i> , 2006, 6, 203-216.	2.7	11
29	Decoding De re aedificatoria: Using Grammars to Trace Alberti's Influence on Portuguese Classical Architecture. <i>Nexus Network Journal</i> , 2011, 13, 171-182.	0.7	11
30	Designing with urban induction patterns: a methodological approach. <i>Environment and Planning B: Planning and Design</i> , 2012, 39, 665-682.	1.7	11
31	A Review of Predictive Software for the Design of Community Microgrids. <i>Journal of Engineering (United States)</i> , 2018, 2018, 1-13.	1.0	11
32	Formalizing shape-change: Three-dimensional printed shapes and hygroscopic material transformations. <i>International Journal of Architectural Computing</i> , 2020, 18, 67-83.	1.5	10
33	Mass Customization and Design Democratization. , 0, , .		10
34	Barbed-wire reinforcement for 3D concrete printing. <i>Automation in Construction</i> , 2022, 141, 104438.	9.8	10
35	The Grammar of Movement: A Step Towards a Corporeal Architecture. <i>Nexus Network Journal</i> , 2011, 13, 131-149.	0.7	9
36	Santa Marta Urban Grammar: Unraveling the spontaneous occupation of Brazilian informal settlements. <i>Environment and Planning B: Urban Analytics and City Science</i> , 2021, 48, 810-827.	2.0	9

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37	An OWL2 Land Use Ontology: LBCS. Lecture Notes in Computer Science, 2011, , 185-198.	1.3	9
38	Understanding the Impact of Walkability, Population Density, and Population Size on COVID-19 Spread: A Pilot Study of the Early Contagion in the United States. Entropy, 2021, 23, 1512.	2.2	9
39	A grammar-based optimization approach for walkable urban fabrics considering pedestrian accessibility and infrastructure cost. Environment and Planning B: Urban Analytics and City Science, 2022, 49, 1489-1506.	2.0	9
40	Bistable kinetic shades actuated with shape memory alloys: prototype development and daylight performance evaluation. Smart Materials and Structures, 2022, 31, 034001.	3.5	9
41	Experimental prediction of material deformation in large-scale additive manufacturing of concrete. Additive Manufacturing, 2021, 37, 101656.	3.0	8
42	Learning from historical structures under compression for concrete 3D printing construction. Journal of Building Engineering, 2021, 43, 103009.	3.4	8
43	Inferring a shape grammar: Translating designer's knowledge. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 2014, 28, 153-168.	1.1	7
44	Design and System Considerations for Construction-Scale Concrete Additive Manufacturing in Remote Environments via Robotic Arm Deposition. 3D Printing and Additive Manufacturing, 2022, 9, 35-45.	2.9	7
45	A Grammar-Based Model for the Mass Customisation of Chairs: Modelling the Optimisation Part. Nexus Network Journal, 2015, 17, 875-898.	0.7	6
46	Generic grammars for design domains. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 2018, 32, 225-239.	1.1	6
47	Masonry screen walls: a digital framework for design generation and environmental performance optimization. Architectural Science Review, 2021, 64, 262-274.	2.2	6
48	Mass customization of ceramic tableware through digital technology. , 2013, , 467-471.		6
49	Building envelope shape design using a shape grammar-based parametric design system integrating energy simulation. , 2011, , .		5
50	Generic Shape Grammars for Mass Customization of Ceramic Tableware. , 2015, , 437-454.		4
51	Introduction to generic rectangular floor plans. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 2018, 32, 331-350.	1.1	3
52	A Graph Theoretical Approach for Creating Building Floor Plans. Communications in Computer and Information Science, 2019, , 3-14.	0.5	3
53	Comparing Digital Tools for Implementing a Generative System for the Design of Customized Tableware. Computer-Aided Design and Applications, 2019, 16, 803-821.	0.6	3
54	From Massive to Mass Customization and Design Democratization. , 2018, , 1-12.		3

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55	Bauhaus Internationalism to College Town Modernism. Communications in Computer and Information Science, 2019, , 429-443.	0.5	3
56	Moving Forward to 3D/4D Printed Building Facades. Lecture Notes in Mechanical Engineering, 2020, , 277-282.	0.4	3
57	A Generic Shape Grammar for the Palladian Villa, Malagueira House, and Prairie House. , 2014, , 321-340.		2
58	Computational Design Research in Architecture: The Legacy of the Hochschule für Gestaltung, Ulm. International Journal of Architectural Computing, 2014, 12, 1-25.	1.5	2
59	Enabling parametric design space exploration by non-designers. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 2020, 34, 160-175.	1.1	2
60	A System for Providing Customized Housing. , 2007, , 153-166.		2
61	Automated Best Connected Rectangular Floorplans. , 2017, , 495-511.		2
62	A Grammar-Based Generative Urban Design Tool Considering Topographic Constraints The Case for American Urban Planning. , 0, , .		2
63	Rule-Based Systems in Adaptation Processes: A Methodological Framework for the Adaptation of Office Buildings into Housing. , 2019, , 499-517.		1
64	Shape Grammar as a Typology Defining Tool for Ancient Egyptian Funerary Monuments. Nexus Network Journal, 2021, 23, 319-336.	0.7	1
65	Experimental calibration and compensation for the continuous effect of time, number of layers and volume of material on shape deformation in small-scale additive manufacturing of concrete. Additive Manufacturing, 2021, 47, 102228.	3.0	1
66	Rectilinear Floor Plans. Communications in Computer and Information Science, 2017, , 395-411.	0.5	1
67	Customizing Mass Housing: Toward a Formalized Approach. , 2018, , 129-142.		1
68	Urban Street Retrofitting An Application Study on Bottom-Up Design. , 0, , .		1
69	A grammar-based algorithm for toolpath generation: compensating for material deformation in the additive manufacturing of concrete. Additive Manufacturing, 2022, , 102803.	3.0	1
70	Computationally Evaluating Street Retrofitting Interventions. Nexus Network Journal, 0, , 1.	0.7	1
71	Monitoring China's City Expansion in the Urban-Rural Fringe: A Grammar for Binjiang District in Hangzhou. , 2019, , 421-438.		0
72	Sortal Grammars for Urban Design: A Sortal Approach to Urban Data Modeling and Generation. Communications in Computer and Information Science, 2012, , 99-116.	0.5	0

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73	Modelação generativa de um capitel Albertiano. Arqitetura revista, 2012, 8, .	0.2	0
74	Decoding and recoding informal settlements in a design studio: an overview of the world studio project. Gestão & Tecnologia De Projetos, 2021, 17, 131-140.	0.1	0
75	A real-time predictive software prototype for simulating urban-scale energy consumption based on surrogate models. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 2021, 35, 353-368.	1.1	0
76	Kinetic bistable flaps actuated with magneto-active elastomers. , 2022, , .		0
77	Optimizing urban grid layouts using proximity metrics. , 2022, , 181-200.		0