Xing Shi

List of Publications by Year
in descending order

55 papers	**1,526** citations	304743 **22** h-index	315739 **38** g-index
55 all docs	**55** docs citations	**55** times ranked	**1285** citing authors

#	Article	IF	Citations
1	A review on building energy efficient design optimization rom the perspective of architects. Renewable and Sustainable Energy Reviews, 2016, 65, 872-884.	16.4	177
2	Towards adoption of building energy simulation and optimization for passive building design: A survey and a review. Energy and Buildings, 2018, 158, 1306-1316.	6.7	163
3	Performance-driven architectural design and optimization technique from a perspective of architects. Automation in Construction, 2013, 32, 125-135.	9.8	115
4	Multi-objective optimization design of a complex building based on an artificial neural network and performance evaluation of algorithms. Advanced Engineering Informatics, 2019, 40, 93-109.	8.0	91
5	Design optimization of insulation usage and space conditioning load using energy simulation and genetic algorithm. Energy, 2011, 36, 1659-1667.	8.8	68
6	A performance data integrated BIM framework for building life-cycle energy efficiency and environmental optimization design. Automation in Construction, 2021, 127, 103712.	9.8	59
7	Performance indices and evaluation of algorithms in building energy efficient design optimization. Energy, 2016, 114, 100-112.	8.8	57
8	Assessment of pedestrian wind environment in urban planning design. Landscape and Urban Planning, 2015, 140, 17-28.	7.5	44
9	Data acquisition for urban building energy modeling: A review. Building and Environment, 2022, 217, 109056.	6.9	43
10	Optimal location of PCM layer in building walls under Nanjing (China) weather conditions. Journal of Thermal Analysis and Calorimetry, 2017, 129, 1767-1778.	3.6	41
11	Energy asymmetry in melting and solidifying processes of PCM. Energy Conversion and Management, 2015, 106, 608-614.	9.2	40
12	Performance-based and performance-driven architectural design and optimization. Frontiers of Architecture and Civil Engineering in China, 2010, 4, 512-518.	0.4	37
13	Case study of window operating behavior patterns in an open-plan office in the summer. Energy and Buildings, 2018, 165, 15-24.	6.7	36
14	Comparison of two numerical heat transfer models for phase change material board. Applied Thermal Engineering, 2018, 128, 1331-1339.	6.0	34
15	Magnitude, Causes, and Solutions of the Performance Gap of Buildings: A Review. Sustainability, 2019, 11, 937.	3.2	33
16	A review of multi-scale modelling, assessment, and improvement methods of the urban thermal and wind environment. Building and Environment, 2022, 213, 108860.	6.9	33
17	An application of Bayesian Network approach for selecting energy efficient HVAC systems. Journal of Building Engineering, 2019, 25, 100796.	3.4	32
18	An action-based Markov chain modeling approach for predicting the window operating behavior in office spaces. Building Simulation, 2021, 14, 301-315.	5.6	31

#	ARTICLE	IF	CITATIONS
19	Comparative study of air-conditioning energy use of four office buildings in China and USA. Energy and Buildings, 2018, 169, 344-352.	6.7	29
20	Ineffectiveness of optimization algorithms in building energy optimization and possible causes. Renewable Energy, 2019, 134, 1295-1306.	8.9	28
21	A systematic method to develop three dimensional geometry models of buildings for urban building energy modeling. Sustainable Cities and Society, 2021, 71, 102998.	10.4	28
22	Performance Assessment of Algorithms for Building Energy Optimization Problems with Different Properties. Sustainability, 2019, 11, 18.	3.2	24
23	A new heat transfer model of phase change material based on energy asymmetry. Applied Energy, 2018, 212, 1409-1416.	10.1	23
24	Control of exhaled SARS-CoV-2-laden aerosols in the interpersonal breathing microenvironment in a ventilated room with limited space air stability. Journal of Environmental Sciences, 2021, 108, 175-187.	6.1	22
25	Uncertainty Sources and Calculation Approaches for Building Energy Simulation Models. Energy Procedia, 2015, 78, 2566-2571.	1.8	18
26	Dynamic occupant density models of commercial buildings for urban energy simulation. Building and Environment, 2020, 169, 106549.	6.9	18
27	Thermal upgrading of Hui-style vernacular dwellings in China using foam concrete. Frontiers of Architectural Research, 2012, 1, 23-33.	2.8	16
28	Mechanics and test study of flexible membranes ballooning in three dimensions. Building and Environment, 2008, 43, 1871-1881.	6.9	14
29	A 3D spatiotemporal morphological database for urban green infrastructure and its applications. Urban Forestry and Urban Greening, 2021, 58, 126935.	5.3	14
30	Influence of asynchronous demand behavior on overcooling in multiple zone AC systems. Building and Environment, 2016, 110, 65-75.	6.9	13
31	Comparative research on different air conditioning systems for residential buildings. Frontiers of Architectural Research, 2017, 6, 42-52.	2.8	12
32	A review of data-driven building performance analysis and design on big on-site building performance data. Journal of Building Engineering, 2021, 41, 102706.	3.4	12
33	Exploring data-driven building energy-efficient design of envelopes based on their quantified impacts. Journal of Building Engineering, 2021, 42, 103018.	3.4	12
34	Mechanics and Test Study of Two-Dimensional Flexible Membranes. Journal of Architectural Engineering, 2006, 12, 93-99.	1.6	10
35	Methodology for developing economically efficient strategies for net zero energy buildings: A case study of a prototype building in the Yangtze River Delta, China. Journal of Cleaner Production, 2021, 320, 128849.	9.3	10
36	An improved heat transfer model for building phase change material wallboard. Journal of Thermal Analysis and Calorimetry, 2018, 134, 1757-1763.	3.6	9

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37	Multi-objective optimization model predictive dispatch precooling and ceiling fans in office buildings under different summer weather conditions. Building Simulation, 2019, 12, 999-1012.	5.6	9
38	Comparative analysis of window operating behavior in three different open-plan offices in Nanjing. Energy and Built Environment, 2021, 2, 175-187.	5.9	9
39	A transient heat and moisture transfer model for building materials based on phase change criterion under isothermal and non-isothermal conditions. Energy, 2021, 224, 120112.	8.8	9
40	Developing data-driven models for energy-efficient heating design in office buildings. Journal of Building Engineering, 2020, 32, 101778.	3.4	8
41	A Comparison of Various Bottom-Up Urban Energy Simulation Methods Using a Case Study in Hangzhou, China. Energies, 2020, 13, 4781.	3.1	8
42	Study on non-isothermal moisture transfer characteristics of hygroscopic building materials: From parameter characterization to model analysis. Energy, 2020, 212, 118788.	8.8	7
43	PORE STRUCTURE RECONSTRUCTION AND MOISTURE MIGRATION IN POROUS MEDIA. Fractals, 2014, 22, 1440007.	3.7	6
44	Transformation of Urban Surfaces and Heat Islands in Nanjing during 1984â€"2018. Sustainability, 2020, 12, 6521.	3.2	6
45	Generative design method of the facade of traditional architecture and settlement based on knowledge discovery and digital generation: a case study of Gunanjie Street in China. International Journal of Architectural Heritage, 2019, 13, 679-690.	3.1	5
46	Potential Use of Foamed Mortar (FM) for Thermal Upgrading of Chinese Traditional Hui-Style Residences. International Journal of Architectural Heritage, 2015, 9, 775-793.	3.1	3
47	A Cross-Scale Analysis of the Correlation between Daytime Air Temperature and Heterogeneous Urban Spaces. Sustainability, 2020, 12, 7663.	3.2	3
48	Uncertainty Analysis for Vapor Pressure Measurement. Journal of Building Physics, 2007, 30, 317-336.	2.4	2
49	Hourly occupant density prediction in commercial buildings for urban energy simulation. IOP Conference Series: Earth and Environmental Science, 0, 238, 012039.	0.3	2
50	Effect of membrane ballooning on screen pressure equalization: A short literature review. Journal of Building Physics, 2013, 37, 185-199.	2.4	1
51	The Centre of City: Thermal Environment and Spatial Morphology. , 2020, , .		1
52	Uncertainty Analysis in Hygrothermal Measurements and Its Effect on Experimental Conclusions. , 0, , 194-194-16.		1
53	Implementation of energy conservation in a commercial building using BEM and sub-metering technology. IOP Conference Series: Earth and Environmental Science, 2019, 238, 012003.	0.3	0
54	Moisture transfer characteristics of the wall with phase change material. Journal of Thermal Analysis and Calorimetry, 0, , 1.	3.6	0

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55	Uncertainty Analysis in Hygrothermal Measurements and Its Effect on Experimental Conclusions. Journal of ASTM International, 2009, 6, 1-12.	0.2	0