Xing Shi

List of Publications by Year
in descending order

55 papers	1,526 citations	304602 22 h-index	315616 38 g-index
55 all docs	55 docs citations	55 times ranked	1285 citing authors

#	Article	IF	Citations
1	A review of multi-scale modelling, assessment, and improvement methods of the urban thermal and wind environment. Building and Environment, 2022, 213, 108860.	3.0	33
2	Data acquisition for urban building energy modeling: A review. Building and Environment, 2022, 217, 109056.	3.0	43
3	An action-based Markov chain modeling approach for predicting the window operating behavior in office spaces. Building Simulation, 2021, 14, 301-315.	3.0	31
4	Comparative analysis of window operating behavior in three different open-plan offices in Nanjing. Energy and Built Environment, 2021, 2, 175-187.	2.9	9
5	A 3D spatiotemporal morphological database for urban green infrastructure and its applications. Urban Forestry and Urban Greening, 2021, 58, 126935.	2.3	14
6	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.	4.5	9
7	A performance data integrated BIM framework for building life-cycle energy efficiency and environmental optimization design. Automation in Construction, 2021, 127, 103712.	4.8	59
8	A systematic method to develop three dimensional geometry models of buildings for urban building energy modeling. Sustainable Cities and Society, 2021, 71, 102998.	5.1	28
9	A review of data-driven building performance analysis and design on big on-site building performance data. Journal of Building Engineering, 2021, 41, 102706.	1.6	12
10	Exploring data-driven building energy-efficient design of envelopes based on their quantified impacts. Journal of Building Engineering, 2021, 42, 103018.	1.6	12
11	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.	4.6	10
12	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.	3.2	22
13	The Centre of City: Thermal Environment and Spatial Morphology. , 2020, , .		1
14	Dynamic occupant density models of commercial buildings for urban energy simulation. Building and Environment, 2020, 169, 106549.	3.0	18
15	A Cross-Scale Analysis of the Correlation between Daytime Air Temperature and Heterogeneous Urban Spaces. Sustainability, 2020, 12, 7663.	1.6	3
16	Developing data-driven models for energy-efficient heating design in office buildings. Journal of Building Engineering, 2020, 32, 101778.	1.6	8
17	Transformation of Urban Surfaces and Heat Islands in Nanjing during 1984â€"2018. Sustainability, 2020, 12, 6521.	1.6	6
18	Study on non-isothermal moisture transfer characteristics of hygroscopic building materials: From parameter characterization to model analysis. Energy, 2020, 212, 118788.	4.5	7

#	ARTICLE	IF	CITATIONS
19	A Comparison of Various Bottom-Up Urban Energy Simulation Methods Using a Case Study in Hangzhou, China. Energies, 2020, 13, 4781.	1.6	8
20	Multi-objective optimization model predictive dispatch precooling and ceiling fans in office buildings under different summer weather conditions. Building Simulation, 2019, 12, 999-1012.	3.0	9
21	An application of Bayesian Network approach for selecting energy efficient HVAC systems. Journal of Building Engineering, 2019, 25, 100796.	1.6	32
22	Implementation of energy conservation in a commercial building using BEM and sub-metering technology. IOP Conference Series: Earth and Environmental Science, 2019, 238, 012003.	0.2	0
23	Performance Assessment of Algorithms for Building Energy Optimization Problems with Different Properties. Sustainability, 2019, 11, 18.	1.6	24
24	Magnitude, Causes, and Solutions of the Performance Gap of Buildings: A Review. Sustainability, 2019, 11, 937.	1.6	33
25	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.	4.0	91
26	Ineffectiveness of optimization algorithms in building energy optimization and possible causes. Renewable Energy, 2019, 134, 1295-1306.	4.3	28
27	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.	1.7	5
28	Case study of window operating behavior patterns in an open-plan office in the summer. Energy and Buildings, 2018, 165, 15-24.	3.1	36
29	A new heat transfer model of phase change material based on energy asymmetry. Applied Energy, 2018, 212, 1409-1416.	5.1	23
30	Comparison of two numerical heat transfer models for phase change material board. Applied Thermal Engineering, 2018, 128, 1331-1339.	3.0	34
31	Towards adoption of building energy simulation and optimization for passive building design: A survey and a review. Energy and Buildings, 2018, 158, 1306-1316.	3.1	163
32	An improved heat transfer model for building phase change material wallboard. Journal of Thermal Analysis and Calorimetry, 2018, 134, 1757-1763.	2.0	9
33	Comparative study of air-conditioning energy use of four office buildings in China and USA. Energy and Buildings, 2018, 169, 344-352.	3.1	29
34	Comparative research on different air conditioning systems for residential buildings. Frontiers of Architectural Research, 2017, 6, 42-52.	1.3	12
35	Optimal location of PCM layer in building walls under Nanjing (China) weather conditions. Journal of Thermal Analysis and Calorimetry, 2017, 129, 1767-1778.	2.0	41
36	Influence of asynchronous demand behavior on overcooling in multiple zone AC systems. Building and Environment, 2016, 110, 65-75.	3.0	13

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37	A review on building energy efficient design optimization rom the perspective of architects. Renewable and Sustainable Energy Reviews, 2016, 65, 872-884.	8.2	177
38	Performance indices and evaluation of algorithms in building energy efficient design optimization. Energy, 2016, 114, 100-112.	4.5	57
39	Uncertainty Sources and Calculation Approaches for Building Energy Simulation Models. Energy Procedia, 2015, 78, 2566-2571.	1.8	18
40	Assessment of pedestrian wind environment in urban planning design. Landscape and Urban Planning, 2015, 140, 17-28.	3.4	44
41	Potential Use of Foamed Mortar (FM) for Thermal Upgrading of Chinese Traditional Hui-Style Residences. International Journal of Architectural Heritage, 2015, 9, 775-793.	1.7	3
42	Energy asymmetry in melting and solidifying processes of PCM. Energy Conversion and Management, 2015, 106, 608-614.	4.4	40
43	PORE STRUCTURE RECONSTRUCTION AND MOISTURE MIGRATION IN POROUS MEDIA. Fractals, 2014, 22, 1440007.	1.8	6
44	Performance-driven architectural design and optimization technique from a perspective of architects. Automation in Construction, 2013, 32, 125-135.	4.8	115
45	Effect of membrane ballooning on screen pressure equalization: A short literature review. Journal of Building Physics, 2013, 37, 185-199.	1.2	1
46	Thermal upgrading of Hui-style vernacular dwellings in China using foam concrete. Frontiers of Architectural Research, 2012, 1, 23-33.	1.3	16
47	Design optimization of insulation usage and space conditioning load using energy simulation and genetic algorithm. Energy, 2011, 36, 1659-1667.	4.5	68
48	Performance-based and performance-driven architectural design and optimization. Frontiers of Architecture and Civil Engineering in China, 2010, 4, 512-518.	0.4	37
49	Uncertainty Analysis in Hygrothermal Measurements and Its Effect on Experimental Conclusions. Journal of ASTM International, 2009, 6, 1-12.	0.2	0
50	Mechanics and test study of flexible membranes ballooning in three dimensions. Building and Environment, 2008, 43, 1871-1881.	3.0	14
51	Uncertainty Analysis for Vapor Pressure Measurement. Journal of Building Physics, 2007, 30, 317-336.	1.2	2
52	Mechanics and Test Study of Two-Dimensional Flexible Membranes. Journal of Architectural Engineering, 2006, 12, 93-99.	0.8	10
53	Hourly occupant density prediction in commercial buildings for urban energy simulation. IOP Conference Series: Earth and Environmental Science, 0, 238, 012039.	0.2	2
54	Moisture transfer characteristics of the wall with phase change material. Journal of Thermal Analysis and Calorimetry, 0, , 1.	2.0	0

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55	Uncertainty Analysis in Hygrothermal Measurements and Its Effect on Experimental Conclusions. , 0, , 194-194-16.		1