

# Wangda Zuo

## List of Publications by Year in descending order

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Version: 2024-02-01

63  
papers

1,951  
citations

293460

24  
h-index

299063

42  
g-index

66  
all docs

66  
docs citations

66  
times ranked

1540  
citing authors

#	ARTICLE	IF	CITATIONS
1	Assessing the use of portable air cleaners for reducing exposure to airborne diseases in a conference room with thermal stratification. <i>Building and Environment</i> , 2022, 207, 108441.	3.0	17
2	Investigation of HVAC operation strategies for office buildings during COVID-19 pandemic. <i>Building and Environment</i> , 2022, 207, 108519.	3.0	39
3	Long-term carbon emission reduction potential of building retrofits with dynamically changing electricity emission factors. <i>Building and Environment</i> , 2022, 210, 108683.	3.0	33
4	Daily power demand prediction for buildings at a large scale using a hybrid of physics-based model and generative adversarial network. <i>Building Simulation</i> , 2022, 15, 1685-1701.	3.0	13
5	Modelica-based modeling and simulation of district cooling systems: A case study. <i>Applied Energy</i> , 2022, 311, 118654.	5.1	10
6	Carbon emission responsive building control: A case study with an all-electric residential community in a cold climate. <i>Applied Energy</i> , 2022, 314, 118910.	5.1	15
7	A fast and accurate modeling approach for water and steam thermodynamics with practical applications in district heating system simulation. <i>Energy</i> , 2022, 254, 124227.	4.5	5
8	The economic impacts of carbon emission trading scheme on building retrofits: A case study with U.S. medium office buildings. <i>Building and Environment</i> , 2022, 221, 109311.	3.0	20
9	Evaluating performance of different generative adversarial networks for large-scale building power demand prediction. <i>Energy and Buildings</i> , 2022, 269, 112247.	3.1	14
10	Tradeoffs among indoor air quality, financial costs, and CO <sub>2</sub> emissions for HVAC operation strategies to mitigate indoor virus in U.S. office buildings. <i>Building and Environment</i> , 2022, 221, 109282.	3.0	7
11	Predictive Deployment of UAV Base Stations in Wireless Networks: Machine Learning Meets Contract Theory. <i>IEEE Transactions on Wireless Communications</i> , 2021, 20, 637-652.	6.1	54
12	An open source fast fluid dynamics model for data center thermal management. <i>Energy and Buildings</i> , 2021, 230, 110599.	3.1	19
13	An assessment of power flexibility from commercial building cooling systems in the United States. <i>Energy</i> , 2021, 221, 119571.	4.5	33
14	Evaluating the energy impact potential of energy efficiency measures for retrofit applications: A case study with U.S. medium office buildings. <i>Building Simulation</i> , 2021, 14, 1377-1393.	3.0	20
15	The effect of building retrofit measures on CO <sub>2</sub> emission reduction " A case study with U.S. medium office buildings. <i>Energy and Buildings</i> , 2021, 253, 111514.	3.1	25
16	Open-source Modelica models for the control performance simulation of chiller plants with water-side economizer. <i>Applied Energy</i> , 2021, 299, 117337.	5.1	12
17	Occupant preference-aware load scheduling for resilient communities. <i>Energy and Buildings</i> , 2021, 252, 111399.	3.1	3
18	Modelica-based system modeling for studying control-related faults in chiller plants and boiler plants serving large office buildings. <i>Journal of Building Engineering</i> , 2021, 44, 102654.	1.6	4

#	ARTICLE	IF	CITATIONS
19	An open-source virtual testbed for a real Net-Zero Energy Community. <i>Sustainable Cities and Society</i> , 2021, 75, 103255.	5.1	12
20	Assessments of data centers for provision of frequency regulation. <i>Applied Energy</i> , 2020, 277, 115621.	5.1	19
21	Optimal Renewable Resource Allocation and Load Scheduling of Resilient Communities. <i>Energies</i> , 2020, 13, 5683.	1.6	16
22	Accurate forecasting of building energy consumption via a novel ensembled deep learning method considering the cyclic feature. <i>Energy</i> , 2020, 201, 117531.	4.5	39
23	Development of new baseline models for U.S. medium office buildings based on commercial buildings energy consumption survey data. <i>Science and Technology for the Built Environment</i> , 2020, 26, 1321-1336.	0.8	5
24	How do electricity pricing programs impact the selection of energy efficiency measures? â€œ A case study with U.S. Medium office buildings. <i>Energy and Buildings</i> , 2020, 224, 110267.	3.1	9
25	An Accurate Fast Fluid Dynamics Model for Data Center Applications. , 2019, , .		8
26	Equation-based object-oriented modeling and simulation of data center cooling systems. <i>Energy and Buildings</i> , 2019, 198, 503-519.	3.1	19
27	An optimization platform based on coupled indoor environment and HVAC simulation and its application in optimal thermostat placement. <i>Energy and Buildings</i> , 2019, 199, 342-351.	3.1	22
28	Equation-based object-oriented modeling and simulation for data center cooling: A case study. <i>Energy and Buildings</i> , 2019, 186, 108-125.	3.1	27
29	A comprehensive review of energy-related data for U.S. commercial buildings. <i>Energy and Buildings</i> , 2019, 186, 126-137.	3.1	38
30	Model-based optimal operation of heating tower heat pump systems. <i>Building and Environment</i> , 2019, 160, 106199.	3.0	9
31	A methodology to create prototypical building energy models for existing buildings: A case study on U.S. religious worship buildings. <i>Energy and Buildings</i> , 2019, 194, 351-365.	3.1	37
32	An Open Source Modeling Framework for Interdependent Energy-Transportation-Communication Infrastructure in Smart and Connected Communities. <i>IEEE Access</i> , 2019, 7, 55458-55476.	2.6	11
33	Performance evaluation of heating tower heat pump systems over the world. <i>Energy Conversion and Management</i> , 2019, 186, 500-515.	4.4	18
34	Literature review on modeling and simulation of energy infrastructures from a resilience perspective. <i>Reliability Engineering and System Safety</i> , 2019, 183, 360-373.	5.1	85
35	Performance comparison of a heating tower heat pump and an air-source heat pump: A comprehensive modeling and simulation study. <i>Energy Conversion and Management</i> , 2019, 180, 1039-1054.	4.4	57
36	A simulation-based method for air loop balancing and fan sizing using uncertainty and sensitivity analysis. <i>Building Simulation</i> , 2019, 12, 247-258.	3.0	3

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37	NSF BIGDATA PI Meeting - Domain-Specific Research Directions and Data Sets. SIGMOD Record, 2019, 47, 32-35.	0.7	2
38	Building energy simulation coupled with CFD for indoor environment: A critical review and recent applications. Energy and Buildings, 2018, 165, 184-199.	3.1	87
39	Fast and self-learning indoor airflow simulation based on <i>in situ</i> adaptive tabulation. Journal of Building Performance Simulation, 2018, 11, 99-112.	1.0	11
40	A Bayesian network model for the optimization of a chiller plant's condenser water set point. Journal of Building Performance Simulation, 2018, 11, 36-47.	1.0	8
41	A Bayesian Network model for predicting cooling load of commercial buildings. Building Simulation, 2018, 11, 87-101.	3.0	23
42	Fast and efficient prediction of finned-tube heat exchanger performance using wet-dry transformation method with nominal data. Applied Thermal Engineering, 2018, 145, 133-146.	3.0	6
43	An agent-based hardware-in-the-loop simulation framework for building controls. Energy and Buildings, 2018, 181, 26-37.	3.1	13
44	Genetic Algorithm for Building Optimization. , 2017, , .		25
45	Coupling fast fluid dynamics and multizone airflow models in Modelica Buildings library to simulate the dynamics of HVAC systems. Building and Environment, 2017, 122, 269-286.	3.0	35
46	A systematic evaluation of accelerating indoor airflow simulations using cross-platform parallel computing. Journal of Building Performance Simulation, 2017, 10, 243-255.	1.0	16
47	A state-space method for real-time transient simulation of indoor airflow. Building and Environment, 2017, 126, 184-194.	3.0	10
48	Improved cooling tower control of legacy chiller plants by optimizing the condenser water set point. Building and Environment, 2017, 111, 33-46.	3.0	56
49	A Virtual Testbed for Net Zero Energy Communities. , 2016, , .		1
50	Amelioration of the cooling load based chiller sequencing control. Applied Energy, 2016, 168, 204-215.	5.1	85
51	Coupling indoor airflow, HVAC, control and building envelope heat transfer in the Modelica Buildings library. Journal of Building Performance Simulation, 2016, 9, 366-381.	1.0	38
52	A Combinational Clustering Based Method for cDNA Microarray Image Segmentation. PLoS ONE, 2015, 10, e0133025.	1.1	11
53	Acceleration of the matrix multiplication of Radiance three phase daylighting simulations with parallel computing on heterogeneous hardware of personal computer. Journal of Building Performance Simulation, 2014, 7, 152-163.	1.0	15
54	Modelica Buildings library. Journal of Building Performance Simulation, 2014, 7, 253-270.	1.0	375

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55	Functional mock-up unit for co-simulation import in EnergyPlus. Journal of Building Performance Simulation, 2014, 7, 192-202.	1.0	78
56	Novel simulation concepts for buildings and community energy systems based on the Functional Mock-up Interface specification. , 2014, , .		3
57	Simulating Natural Ventilation in and Around Buildings by Fast Fluid Dynamics. Numerical Heat Transfer; Part A: Applications, 2013, 64, 273-289.	1.2	50
58	Improvements of Fast Fluid Dynamics for Simulating Air Flow in Buildings. Numerical Heat Transfer, Part B: Fundamentals, 2012, 62, 419-438.	0.6	33
59	Reduction of Numerical Diffusion in FFD Model. Engineering Applications of Computational Fluid Mechanics, 2012, 6, 234-247.	1.5	25
60	Validation and Application of the Room Model of the Modelica Buildings Library. , 2012, , .		18
61	Fast and informative flow simulations in a building by using fast fluid dynamics model on graphics processing unit. Building and Environment, 2010, 45, 747-757.	3.0	82
62	Improvements in FFD Modeling by Using Different Numerical Schemes. Numerical Heat Transfer, Part B: Fundamentals, 2010, 58, 1-16.	0.6	26
63	Simulations of Air Distributions in Buildings by FFD on GPU. HVAC and R Research, 2010, 16, 785-798.	0.9	39