Jin Wen

List of Publications by Citations

59 papers	1,750 citations	21 h-index	41 g-index
62 ext. papers	2,167 ext. citations	6.5 avg, IF	5.61 L-index

#	Paper	IF	Citations
59	Review of building energy modeling for control and operation. *Renewable and Sustainable Energy Reviews*, **2014**, 37, 517-537	16.2	319
58	A model-based fault detection and diagnostic methodology based on PCA method and wavelet transform. *Energy and Buildings*, **2014**, 68, 63-71	7	130
57	Simulating the human-building interaction: Development and validation of an agent-based model of office occupant behaviors. *Building and Environment*, **2015**, 88, 27-45	6.5	122
56	Reducing energy consumption in low income public housing: Interviewing residents about energy behaviors. *Applied Energy*, **2013**, 102, 1358-1370	10.7	91
55	Tracking the human-building interaction: A longitudinal field study of occupant behavior in air-conditioned offices. *Journal of Environmental Psychology*, **2015**, 42, 94-115	6.7	85
54	Diagnostic Bayesian networks for diagnosing air handling units faults part I: Faults in dampers, fans, filters and sensors. *Applied Thermal Engineering*, **2017**, 111, 1272-1286	5.8	84
53	Diagnostic Bayesian networks for diagnosing air handling units faults Part II: Faults in coils and sensors. *Applied Thermal Engineering*, **2015**, 90, 145-157	5.8	79
52	Bayesian network based FDD strategy for variable air volume terminals. *Automation in Construction*, **2014**, 41, 106-118	9.6	71
51	A review of machine learning in building load prediction. *Applied Energy*, **2021**, 285, 116452	10.7	67
50	Building energy consumption on-line forecasting using physics based system identification. *Energy and Buildings*, **2014**, 82, 1-12	7	62
49	Developing a whole building cooling energy forecasting model for on-line operation optimization using proactive system identification. *Applied Energy*, **2016**, 164, 69-88	10.7	59
48	Modeling thermal comfort holistically: Bayesian estimation of thermal sensation, acceptability, and preference distributions for office building occupants. *Building and Environment*, **2013**, 69, 206-226	6.5	56
47	Application of pattern matching method for detecting faults in air handling unit system. *Automation in Construction*, **2014**, 43, 49-58	9.6	51
46	A systematic feature selection procedure for short-term data-driven building energy forecasting model development. *Energy and Buildings*, **2019**, 183, 428-442	7	49
45	An operation optimization and decision framework for a building cluster with distributed energy systems. *Applied Energy*, **2016**, 178, 98-109	10.7	48
44	A robust pattern recognition-based fault detection and diagnosis (FDD) method for chillers. *HVAC and R Research*, **2014**, 20, 798-809		41
43	Quantifying the human Building interaction: Considering the active, adaptive occupant in building performance simulation. *Energy and Buildings*, **2016**, 117, 372-386	7	37

42	Sensor system design for building indoor air protection. *Building and Environment*, **2008**, 43, 1278-1285	6.5	36
41	Comparison of sensor systems designed using multizone, zonal, and CFD data for protection of indoor environments. *Building and Environment*, **2010**, 45, 1061-1071	6.5	24
40	Net-zero energy building clusters emulator for energy planning and operation evaluation. *Computers, Environment and Urban Systems*, **2017**, 62, 168-181	5.9	22
39	Absorption of solar energy in a room. *Solar Energy*, **2002**, 72, 283-297	6.8	22
38	Improving airflow measurement accuracy in VAV terminal units using flow conditioners. *Building and Environment*, **2014**, 71, 81-94	6.5	17
37	A model for the dynamic response of a cooling coil. *Energy and Buildings*, **2005**, 37, 1278-1289	7	17
36	A tool for evaluating fault detection and diagnostic methods for fan coil units. *Energy and Buildings*, **2017**, 136, 151-160	7	16
35	Development and validation of online models with parameter estimation for a building zone with VAV system. *Energy and Buildings*, **2007**, 39, 13-22	7	15
34	The selection of the most appropriate airflow model for designing indoor air sensor systems. *Building and Environment*, **2012**, 50, 34-43	6.5	14
33	Stability and accuracy of variable air volume box control at low flows. Part 1: Laboratory test setup and variable air volume sensor test. *HVAC and R Research*, **2014**, 20, 3-18		11
32	System identification and data fusion for on-line adaptive energy forecasting in virtual and real commercial buildings. *Energy and Buildings*, **2016**, 129, 227-237	7	11
31	Estimating building airflow using CO2 measurements from a distributed sensor network. *HVAC and R Research*, **2011**, 17, 344-365		10
30	Commercial building cooling energy forecasting using proactive system identification: A whole building experiment study. *Science and Technology for the Built Environment*, **2016**, 22, 674-691	1.8	9
29	Stability and accuracy of variable air volume box control at low flows. Part 2: Controller test, system test, and field test. *HVAC and R Research*, **2014**, 20, 19-35		8
28	Efficient and Robust Optimization for Building Energy Simulation. *Energy and Buildings*, **2016**, 122, 53-627		8
27	Development and Validation of Online Parameter Estimation for HVAC Systems. *Journal of Solar Energy Engineering, Transactions of the ASME*, **2003**, 125, 324-330	2.3	7
26	**2015**,		6
25	Comparison of time-frequency-analysis techniques applied in building energy data noise cancellation for building load forecasting: A real-building case study. *Energy and Buildings*, **2021**, 231, 110592	7	6

24	Development and verification of the open source platform, HAM-Tools, for hygrothermal performance simulation of buildings using a stochastic approach. *Building Simulation*, **2020**, 13, 497-514	3.9	5
23	Active learning strategy for high fidelity short-term data-driven building energy forecasting. *Energy and Buildings*, **2021**, 244, 111026	7	5
22	A whole building fault detection using weather based pattern matching and feature based PCA method **2017**,		4
21	Inverse estimation of indoor airflow patterns using singular value decomposition. *Applied Mathematical Modelling*, **2012**, 36, 2627-2641	4.5	4
20	Radiant cooling of an enclosure. *Energy Conversion and Management*, **2006**, 47, 229-252	10.6	3
19	An experimental study of energy consumption and thermal comfort for electric and hydronic reheats. *Energy and Buildings*, **2005**, 37, 203-214	7	3
18	Adaptive Energy Optimization Toward Net-Zero Energy Building Clusters. *Journal of Mechanical Design, Transactions of the ASME*, **2016**, 138,	3	3
17	From occupants to occupants: A review of the occupant information understanding for building HVAC occupant-centric control.. *Building Simulation*, **2021**, 15, 1-20	3.9	3
16	Development and validation of adaptive optimal operation methodology for building HVAC systems **2004**,		2
15	Energy Optimization in Net-Zero Energy Building Clusters **2014**,		1
14	Whole building system fault detection based on weather pattern matching and PCA method **2017**,		1
13	Building Energy Consumption On-Line Forecasting Using System Identification and Data Fusion **2014**,		1
12	An Agent Based Simulation for Building Energy System Modeling **2010**,		1
11	Real vs. simulated: Questions on the capability of simulated datasets on building fault detection for energy efficiency from a data-driven perspective. *Energy and Buildings*, **2022**, 259, 111872	7	1
10	Using Weather and Schedule based Pattern Matching and Feature based PCA for Whole Building Fault Detection Part I Development of the Method. *ASME Journal of Engineering for Sustainable Buildings and Cities*,1-23	0.4	1
9	A holistic fault impact analysis of the high-performance sequences of operation for HVAC systems: Modelica-based case study in a medium-office building. *Energy and Buildings*, **2021**, 252, 111448	7	1
8	Utilizing commercial heating, ventilating, and air conditioning systems to provide grid services: A review. *Applied Energy*, **2021**, 307, 118133	10.7	0
7	A simulation-based evaluation of fan coil unit fault effects. *Energy and Buildings*, **2022**, 263, 112041	7	0

6	Evaluating the performance of an Inexact Newton method with a preconditioner for dynamic building system simulation. *Journal of Building Performance Simulation*, **2022**, 15, 112-127	2.8	0
5	A Cosine-based Correlation Information Entropy Approach for Building Automatic Fault Detection Baseline Construction. *Science and Technology for the Built Environment*,1-16	1.8	0
4	Development and Validation of Online Models With Parameter Estimation for a Building Zone With VAV System **2004**, 863		
3	Partitioning Climate, Users, and Thermophysical Uncertainties from Building Energy Use: A Monte Carlo & ANOVA Approach. *Buildings*, **2022**, 12, 95	3.2	
2	Using Weather and Schedule based Pattern Matching and Feature based PCA for Whole Building Fault Detection Part II Field Evaluation. *ASME Journal of Engineering for Sustainable Buildings and Cities*,1-16	0.4	
1	Development of a new reduced order model for predicting the energy savings of multi-ECM permutations. *Energy and Buildings*, **2019**, 182, 287-299	7	