Zhimin Du

List of Publications by Year
in descending order

47 papers	1,832 citations	270111 25 h-index	286692 43 g-index
47 all docs	47 docs citations	47 times ranked	1068 citing authors

#	Article	IF	Citations
1	Diagnosis for multiple faults of chiller using ELM-KNN model enhanced by multi-label learning and specific feature combinations. Building and Environment, 2022, 214, 108904.	3.0	20
2	Digital twins model and its updating method for heating, ventilation and air conditioning system using broad learning system algorithm. Energy, 2022, 251, 124040.	4.5	27
3	Partial domain adaption based prediction calibration methodology for fault detection and diagnosis of chillers under variable operational condition scenarios. Building and Environment, 2022, 217, 109099.	3.0	8
4	Across working conditions fault diagnosis for chillers based on IoT intelligent agent with deep learning model. Energy and Buildings, 2022, 268, 112188.	3.1	10
5	Multi-sensor information fusion based control for VAV systems using thermal comfort constraints. Building Simulation, 2021, 14, 1047-1062.	3.0	17
6	Fault detection and diagnosis for the screw chillers using multi-region XGBoost model. Science and Technology for the Built Environment, 2021, 27, 608-623.	0.8	20
7	Adaptive data-driven optimization of chiller loading with domain knowledge. Science and Technology for the Built Environment, 2021, 27, 1269-1281.	0.8	1
8	Optimal control of chilled water systems based on collaboration of the equipment's near-optimal performance maps. Sustainable Energy Technologies and Assessments, 2021, 46, 101236.	1.7	3
9	Transfer learning based methodology for migration and application of fault detection and diagnosis between building chillers for improving energy efficiency. Building and Environment, 2021, 200, 107957.	3.0	51
10	Deep learning based reference model for operational risk evaluation of screw chillers for energy efficiency. Energy, 2020, 213, 118833.	4.5	26
11	Machine learning enhanced inverse modeling method for variable speed air conditioning systems. International Journal of Refrigeration, 2020, 118, 311-324.	1.8	4
12	Hybrid model based refrigerant charge fault estimation for the data centre air conditioning system. International Journal of Refrigeration, 2019, 106, 392-406.	1.8	23
13	Fault diagnosis based operation risk evaluation for air conditioning systems in data centers. Building and Environment, 2019, 163, 106319.	3.0	29
14	Development and application of hardware-in-the-loop simulation for the HVAC systems. Science and Technology for the Built Environment, 2019, 25, 1482-1493.	0.8	4
15	Evaluation of operation performance of a multi-chiller system using a data-based chiller model. Energy and Buildings, 2018, 172, 1-9.	3.1	26
16	Data-driven based reliability evaluation for measurements of sensors in a vapor compression system. Energy, 2017, 122, 237-248.	4.5	40
17	Evaluation of the design of chilled water system based on the optimal operation performance of equipments. Applied Thermal Engineering, 2017, 113, 435-448.	3.0	15
18	A dual-benchmark based energy analysis method to evaluate control strategies for building HVAC systems. Applied Energy, 2016, 183, 700-714.	5.1	25

#	Article	IF	Citations
19	The evaluation of operation performance of HVAC system based on the ideal operation level of system. Energy and Buildings, 2016, 110, 330-344.	3.1	20
20	Effect of common faults on the performance of different types of vapor compression systems. Applied Thermal Engineering, 2016, 98, 61-72.	3.0	25
21	Coordinated optimization of the variable refrigerant flow and variable air volume combined air-conditioning system in heating conditions. Science and Technology for the Built Environment, 2015, 21, 904-916.	0.8	4
22	Online optimal control of variable refrigerant flow and variable air volume combined air conditioning system for energy saving. Applied Thermal Engineering, 2015, 80, 87-96.	3.0	26
23	Evaluation of operation and control in HVAC (heating, ventilation andÂair conditioning) system using exergy analysis method. Energy, 2015, 89, 372-381.	4.5	29
24	Temperature sensor placement optimization for VAV control using CFDâ€“BES co-simulation strategy. Building and Environment, 2015, 85, 104-113.	3.0	46
25	The method of evaluating operation performance of HVAC system based on exergy analysis. Energy and Buildings, 2014, 77, 332-342.	3.1	25
26	Optimal control of combined air conditioning system with variable refrigerant flow and variable air volume for energy saving. International Journal of Refrigeration, 2014, 42, 14-25.	1.8	29
27	Sensor fault detection and its efficiency analysis in air handling unit using the combined neural networks. Energy and Buildings, 2014, 72, 157-166.	3.1	69
28	Fault detection and diagnosis for buildings and HVAC systems using combined neural networks and subtractive clustering analysis. Building and Environment, 2014, 73, 1-11.	3.0	229
29	Simulation of variable refrigerant flow air conditioning system in heating mode combined with outdoor air processing unit. Energy and Buildings, 2014, 68, 571-579.	3.1	32
30	Control and energy simulation of variable refrigerant flow air conditioning system combined with outdoor air processing unit. Applied Thermal Engineering, 2014, 64, 385-395.	3.0	44
31	Optimum operating performance based online fault-tolerant control strategy for sensor faults in air conditioning systems. Automation in Construction, 2014, 37, 145-154.	4.8	22
32	Generic simulation model of multi-evaporator variable refrigerant flow air conditioning system for control analysis. International Journal of Refrigeration, 2013, 36, 1602-1615.	1.8	54
33	A hybrid model-based fault detection strategy for air handling unit sensors. Energy and Buildings, 2013, 57, 132-143.	3.1	23
34	Fault diagnosis for sensors in air handling unit based on neural network pre-processed by wavelet and fractal. Energy and Buildings, 2012, 44, 7-16.	3.1	65
35	Optimal control strategies for multi-chiller system based on probability density distribution of cooling load ratio. Energy and Buildings, 2011, 43, 2813-2821.	3.1	48
36	A hybrid FDD strategy for local system of AHU based on artificial neural network and wavelet analysis. Building and Environment, 2010, 45, 2698-2708.	3.0	103

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37	Fault diagnosis for temperature, flow rate and pressure sensors in VAV systems using wavelet neural network. Applied Energy, 2009, 86, 1624-1631.	5.1	123
38	A robot fault diagnostic tool for flow rate sensors in air dampers and VAV terminals. Energy and Buildings, 2009, 41, 279-286.	3.1	50
39	Multiple faults diagnosis for sensors in air handling unit using Fisher discriminant analysis. Energy Conversion and Management, 2008, 49, 3654-3665.	4.4	69
40	Wavelet Neural Network-Based Fault Diagnosis in Air-Handling Units. HVAC and R Research, 2008, 14, 959-973.	0.9	29
41	PCA-FDA-Based Fault Diagnosis for Sensors in VAV Systems. HVAC and R Research, 2007, 13, 349-367.	0.9	30
42	Fault detection and diagnosis based on improved PCA with JAA method in VAV systems. Building and Environment, 2007, 42, 3221-3232.	3.0	94
43	Detection and diagnosis for multiple faults in VAV systems. Energy and Buildings, 2007, 39, 923-934.	3.1	29
44	Energy evaluation of optimal control strategies for central VWV chiller systems. Applied Thermal Engineering, 2007, 27, 934-941.	3.0	59
45	Tolerant control for multiple faults of sensors in VAV systems. Energy Conversion and Management, 2007, 48, 764-777.	4.4	24
46	Detection and diagnosis for sensor fault in HVAC systems. Energy Conversion and Management, 2007, 48, 693-702.	4.4	46
47	Fault tolerant control of outdoor air and AHU supply air temperature in VAV air conditioning systems using PCA method. Applied Thermal Engineering, 2006, 26, 1226-1237.	3.0	37