Youming Chen

List of Publications by Year
in descending order

81 papers	2,319 citations	172207 29 h-index	233125 45 g-index
83 all docs	83 docs citations	83 times ranked	1494 citing authors

#	Article	IF	Citations
1	A review on applying ventilated double-skin facade to buildings in hot-summer and cold-winter zone in China. Renewable and Sustainable Energy Reviews, 2010, 14, 1321-1328.	8.2	141
2	A combined system of chilled ceiling, displacement ventilation and desiccant dehumidification. Building and Environment, 2007, 42, 3298-3308.	3.0	120
3	A new approach for measuring predicted mean vote (PMV) and standard effective temperature (SETâˆ—). Building and Environment, 2003, 38, 33-44.	3.0	89
4	Cooling capacity improvement for a radiant ceiling panel with uniform surface temperature distribution. Building and Environment, 2016, 102, 64-72.	3.0	79
5	Fault-tolerant control for outdoor ventilation air flow rate in buildings based on neural network. Building and Environment, 2002, 37, 691-704.	3.0	74
6	Sensor validation and reconstruction for building central chilling systems based on principal component analysis. Energy Conversion and Management, 2004, 45, 673-695.	4.4	74
7	Numerical investigation for thermal performance of exterior walls of residential buildings with moisture transfer in hot summer and cold winter zone of China. Energy and Buildings, 2015, 93, 259-268.	3.1	70
8	Transient heat flow calculation for multilayer constructions using a frequency-domain regression method. Building and Environment, 2003, 38, 45-61.	3.0	59
9	A fault detection technique for air-source heat pump water chiller/heaters. Energy and Buildings, 2009, 41, 881-887.	3.1	59
10	Online model-based fault detection and diagnosis strategy for VAV air handling units. Energy and Buildings, 2012, 55, 252-263.	3.1	59
11	Determination of optimum insulation thickness for building walls with moisture transfer in hot summer and cold winter zone of China. Energy and Buildings, 2015, 109, 361-368.	3.1	59
12	DeST 3.0: A new-generation building performance simulation platform. Building Simulation, 2022, 15, 1849-1868.	3.0	58
13	A robust online fault detection and diagnosis strategy of centrifugal chiller systems for building energy efficiency. Energy and Buildings, 2015, 108, 441-453.	3.1	56
14	An online fault diagnosis tool of VAV terminals for building management and control systems. Automation in Construction, 2012, 22, 203-211.	4.8	50
15	Dynamic modeling of the ventilated double skin faÃ§ade in hot summer and cold winter zone in China. Building and Environment, 2016, 106, 365-377.	3.0	49
16	Investigating potential of natural driving forces for ventilation in four major cities in China. Building and Environment, 2005, 40, 738-746.	3.0	48
17	Fault detection, diagnosis and data recovery for a real building heating/cooling billing system. Energy Conversion and Management, 2010, 51, 1015-1024.	4.4	48
18	A genetic-algorithm-based experimental technique for determining heat transfer coefficient of exterior wall surface. Applied Thermal Engineering, 2004, 24, 339-349.	3.0	46

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19	A robust fault detection and diagnosis strategy for multiple faults of VAV air handling units. Energy and Buildings, 2016, 127, 442-451.	3.1	45
20	Applicability of calculation methods for conduction transfer function of building constructions. International Journal of Thermal Sciences, 2009, 48, 1441-1451.	2.6	44
21	Indoor air quality in new hotelsâ€™ guest rooms of the major world factory region. International Journal of Hospitality Management, 2009, 28, 26-32.	5.3	43
22	A novel and simple building load calculation model for building and system dynamic simulation. Applied Thermal Engineering, 2001, 21, 683-702.	3.0	38
23	Comparative investigations on reference models for fault detection and diagnosis in centrifugal chiller systems. Energy and Buildings, 2016, 133, 246-256.	3.1	38
24	Airflow modeling based on zonal method for natural ventilated double skin faÃ§ade with Venetian blinds. Energy and Buildings, 2019, 191, 211-223.	3.1	37
25	A robust fault detection and diagnosis strategy for pressure-independent VAV terminals of real office buildings. Energy and Buildings, 2011, 43, 1774-1783.	3.1	36
26	An enhanced chiller FDD strategy based on the combination of the LSSVR-DE model and EWMA control charts. International Journal of Refrigeration, 2016, 72, 81-96.	1.8	36
27	Optimizing the pad thickness of evaporative air-cooled chiller for maximum energy saving. Energy and Buildings, 2013, 61, 146-152.	3.1	35
28	Dynamic simulation and parametric study of solar water heating system with phase change materials in different climate zones. Solar Energy, 2020, 205, 399-408.	2.9	33
29	Dynamic heat transfer model and applicability evaluation of aerogel glazing system in various climates of China. Energy, 2018, 163, 1115-1124.	4.5	32
30	A validation of dynamic hygrothermal model with coupled heat and moisture transfer in porous building materials and envelopes. Journal of Building Engineering, 2020, 32, 101484.	1.6	29
31	Energy performance and applicability of naturally ventilated double skin faÃ§ade with Venetian blinds in Yangtze River Area. Sustainable Cities and Society, 2020, 61, 102348.	5.1	27
32	A neural-network-based experimental technique for determining z-transfer function coefficients of a building envelope. Building and Environment, 2000, 35, 181-189.	3.0	26
33	A new procedure for calculating periodic response factors based on frequency domain regression method. International Journal of Thermal Sciences, 2005, 44, 382-392.	2.6	26
34	Role of BCHP in energy and environmental sustainable development and its prospects in China. Renewable and Sustainable Energy Reviews, 2007, 11, 1827-1842.	8.2	26
35	Determination of Optimum Insulation Thickness of Exterior Wall with Moisture Transfer in Hot Summer and Cold Winter Zone of China. Procedia Engineering, 2015, 121, 1008-1015.	1.2	26
36	Modeling and calculation of solar gains through multi-glazing facades with specular reflection of venetian blind. Solar Energy, 2016, 130, 33-45.	2.9	26

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37	Frequency-domain regression method for estimating CTF models of building multilayer constructions. Applied Mathematical Modelling, 2001, 25, 579-592.	2.2	25
38	Fault-tolerant control and data recovery in HVAC monitoring system. Energy and Buildings, 2005, 37, 175-180.	3.1	24
39	Gray predicting theory and application of energy consumption of building heat-moisture system. Building and Environment, 1999, 34, 417-420.	3.0	23
40	Verification for transient heat conduction calculation of multilayer building constructions. Energy and Buildings, 2006, 38, 340-348.	3.1	23
41	Transient simulation of coupled heat and moisture transfer through multi-layer walls exposed to future climate in the hot and humid southern China area. Sustainable Cities and Society, 2020, 52, 101812.	5.1	23
42	Cooling load dynamics and simplified calculation method for radiant ceiling panel and dedicated outdoor air system. Energy and Buildings, 2020, 207, 109631.	3.1	23
43	Dynamic characteristics and performance improvement of a high-efficiency double-effect thermal battery for cooling and heating. Applied Energy, 2020, 264, 114768.	5.1	23
44	Rational selection of near-extreme coincident weather data with solar irradiation for risk-based air-conditioning design. Energy and Buildings, 2007, 39, 1193-1201.	3.1	20
45	A simple procedure for calculating thermal response factors and conduction transfer functions of multilayer walls. Applied Thermal Engineering, 2002, 22, 333-338.	3.0	19
46	Modeling and numerical investigation for hygrothermal behavior of porous building envelope subjected to the wind driven rain. Energy and Buildings, 2021, 231, 110572.	3.1	19
47	Flow meter fault isolation in building central chilling systems using wavelet analysis. Energy Conversion and Management, 2006, 47, 1700-1710.	4.4	18
48	Transfer function method to calculate moisture absorption and desorption in buildings. Building and Environment, 1998, 33, 201-207.	3.0	17
49	Thermodynamic Analysis of a Mixed Refrigerant Ejector Refrigeration Cycle Operating with Two Vapor-liquid Separators. Journal of Thermal Science, 2018, 27, 230-240.	0.9	16
50	A model and method to determine solar extinction coefficient of aerogel granules layer through experiment under real climatic condition. Energy and Buildings, 2019, 190, 144-154.	3.1	16
51	A radiant and convective time series method for cooling load calculation of radiant ceiling panel system. Building and Environment, 2021, 188, 107411.	3.0	16
52	An average fluid temperature to estimate borehole thermal resistance of ground heat exchanger. Renewable Energy, 2011, 36, 1880-1885.	4.3	15
53	An improvement to frequency-domain regression method for calculating conduction transfer functions of building walls. Applied Thermal Engineering, 2008, 28, 661-667.	3.0	14
54	Experimental comparisons on optical and thermal performance between aerogel glazed skylight and double glazed skylight under real climate condition. Energy and Buildings, 2020, 222, 110028.	3.1	13

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55	An approach to calculate transient heat flow through multilayer spherical structures. International Journal of Thermal Sciences, 2003, 42, 805-812.	2.6	12
56	Thermal response factors for fast parameterized design and long-term performance simulation of vertical GCHP systems. Renewable Energy, 2019, 136, 793-804.	4.3	12
57	Short time step heat flow calculation of building constructions based on frequency-domain regression method. International Journal of Thermal Sciences, 2009, 48, 2355-2364.	2.6	11
58	A procedure for calculating transient thermal load through multilayer cylindrical structures. Applied Thermal Engineering, 2003, 23, 2133-2145.	3.0	8
59	Transfer function model and frequency domain validation of moisture sorption in air-conditioned buildings. Building and Environment, 2001, 36, 579-588.	3.0	7
60	Development of a Solar Control Method of the Venetian Blinds. Procedia Engineering, 2015, 121, 1186-1192.	1.2	7
61	Investigation on the optical and energy performances of different kinds of monolithic aerogel glazing systems. Applied Energy, 2020, 261, 114487.	5.1	7
62	Applicability of the transfer function method and periodic response factors method in coincident design weather data generation. Energy and Buildings, 2021, 250, 111254.	3.1	7
63	Modeling and Simulation of Ventilated Double-Skin Facade Using EnergyPlus. Lecture Notes in Electrical Engineering, 2014, , 241-252.	0.3	7
64	Solar Extinction Coefficient of Silica Aerogel Calculated through Integral Model and Experimental Data. Procedia Engineering, 2017, 205, 1253-1258.	1.2	6
65	Analyze of laminar flow and boiling heat transfer characteristics of R134a in the horizontal micro-channel under low temperature condition. Procedia Engineering, 2017, 205, 2933-2939.	1.2	5
66	A normal distribution model for diffuse radiation versus incidence angle. Solar Energy, 2019, 186, 60-71.	2.9	5
67	Comprehensive clustering method to determine coincident design day for air-conditioning system design. Building and Environment, 2022, 216, 109019.	3.0	5
68	Development and experimental validation of a one-dimensional dynamic hygrothermal modeling based on air humidity ratio. Journal of Central South University, 2012, 19, 703-708.	1.2	4
69	Cooling load calculation for integrated operation of radiant and fresh air systems. Procedia Engineering, 2017, 205, 2987-2994.	1.2	4
70	A response factor method to quantify the dynamic performance for pipe-embedded radiant systems. Energy and Buildings, 2021, 250, 111311.	3.1	4
71	A revised radiant time series method (RTSM) to calculate the cooling load for pipe-embedded radiant systems. Energy and Buildings, 2022, 268, 112199.	3.1	4
72	Response to comments on â€œCalculation of wall conduction transfer coefficients by regression in the frequency domainâ€• Building and Environment, 2004, 39, 591-593.	3.0	3

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73	RESEARCH ON SYSTEM IDENTIFICATION OF WALL SURFACE HEAT TRANSFER PROCESSES. Experimental Heat Transfer, 2002, 15, 31-47.	2.3	2
74	A study on fault detection and diagnosis for VAV air handling units of real buildings. , 2011, , .		2
75	Development of experimental study on coupled heat and moisture transfer in porous building envelope. Journal of Central South University, 2012, 19, 669-674.	1.2	2
76	Evaluation of simulation models for predicting the energy performance of aerogel glazing system. Journal of Building Engineering, 2021, 42, 103058.	1.6	2
77	Coupled Heat and Moisture Transfer in Two Common Walls. Lecture Notes in Electrical Engineering, 2014, , 335-342.	0.3	2
78	Effects of structural and operating parameters of ECP fan on dust particles removed in the transition flow regime. International Journal of Coal Science and Technology, 2014, 1, 441-449.	2.7	0
79	The heat gain-based generation method of coincident weather data for walls with a large thermal lag. IOP Conference Series: Materials Science and Engineering, 2019, 609, 042007.	0.3	0
80	Fast computation approach for parameterized design and simulation of vertical ground heat exchangers and GCHP systems. IOP Conference Series: Materials Science and Engineering, 2019, 609, 072032.	0.3	0
81	Response to comment on â€œA validation of dynamic hygrothermal model with coupled heat and moisture transfer in porous building materials and envelopesâ€• Journal of Building Engineering, 2022, 47, 103936.	1.6	0