Shengwei Wang

List of Publications by Year
in descending order

285 papers	14,284 citations	15495 65 h-index	30058 103 g-index
293 all docs	293 docs citations	293 times ranked	7608 citing authors

#	Article	IF	Citations
1	Development of prediction models for next-day building energy consumption and peak power demand using data mining techniques. Applied Energy, 2014, 127, 1-10.	5.1	414
2	Supervisory and Optimal Control of Building HVAC Systems: A Review. HVAC and R Research, 2008, 14, 3-32.	0.9	351
3	Intelligent building research: a review. Automation in Construction, 2005, 14, 143-159.	4.8	293
4	Dynamic characteristics and energy performance of buildings using phase change materials: A review. Energy Conversion and Management, 2009, 50, 3169-3181.	4.4	273
5	Peak load shifting control using different cold thermal energy storage facilities in commercial buildings: A review. Energy Conversion and Management, 2013, 71, 101-114.	4.4	259
6	Simplified building model for transient thermal performance estimation using GA-based parameter identification. International Journal of Thermal Sciences, 2006, 45, 419-432.	2.6	242
7	Quantitative energy performance assessment methods for existing buildings. Energy and Buildings, 2012, 55, 873-888.	3.1	240
8	Model-based optimal control of VAV air-conditioning system using genetic algorithm. Building and Environment, 2000, 35, 471-487.	3.0	225
9	Pattern recognition-based chillers fault detection method using Support Vector Data Description (SVDD). Applied Energy, 2013, 112, 1041-1048.	5.1	201
10	Design optimization and optimal control of grid-connected and standalone nearly/net zero energy buildings. Applied Energy, 2015, 155, 463-477.	5.1	186
11	AHU sensor fault diagnosis using principal component analysis method. Energy and Buildings, 2004, 36, 147-160.	3.1	180
12	An intelligent chiller fault detection and diagnosis methodology using Bayesian belief network. Energy and Buildings, 2013, 57, 278-288.	3.1	176
13	Sensor-fault detection, diagnosis and estimation for centrifugal chiller systems using principal-component analysis method. Applied Energy, 2005, 82, 197-213.	5.1	173
14	Parameter estimation of internal thermal mass of building dynamic models using genetic algorithm. Energy Conversion and Management, 2006, 47, 1927-1941.	4.4	169
15	A Dynamic User Authentication Scheme for Wireless Sensor Networks. , 0, , .		168
16	Optimal scheduling of buildings with energy generation and thermal energy storage under dynamic electricity pricing using mixed-integer nonlinear programming. Applied Energy, 2015, 147, 49-58.	5.1	157
17	An interactive building power demand management strategy for facilitating smart grid optimization. Applied Energy, 2014, 116, 297-310.	5.1	150
18	Research and application of evaporative cooling in China: A review (I) â€" Research. Renewable and Sustainable Energy Reviews, 2012, 16, 3535-3546.	8.2	146

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19	Renewable energy system optimization of low/zero energy buildings using single-objective and multi-objective optimization methods. Energy and Buildings, 2015, 89, 61-75.	3.1	144
20	Supervisory and optimal control of central chiller plants using simplified adaptive models and genetic algorithm. Applied Energy, 2011, 88, 198-211.	5.1	142
21	Game theory based interactive demand side management responding to dynamic pricing in price-based demand response of smart grids. Applied Energy, 2019, 250, 118-130.	5.1	140
22	MPC-based optimal scheduling of grid-connected low energy buildings with thermal energy storages. Energy and Buildings, 2015, 86, 415-426.	3.1	139
23	Energy efficient control of variable speed pumps in complex building central air-conditioning systems. Energy and Buildings, 2009, 41, 197-205.	3.1	134
24	Exergy analysis and parametric study of concentrating type solar collectors. International Journal of Thermal Sciences, 2007, 46, 1304-1310.	2.6	131
25	Modelling and evaluation of cooling capacity of earth–air–pipe systems. Energy Conversion and Management, 2007, 48, 1462-1471.	4.4	127
26	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.	3.0	124
27	An optimal control strategy for complex building central chilled water systems for practical and real-time applications. Building and Environment, 2009, 44, 1188-1198.	3.0	119
28	In-situ implementation and validation of a CO_2-based adaptive demand-controlled ventilation strategy in a multi-zone office building. Building and Environment, 2011, 46, 124-133.	3.0	119
29	Experimental study on composite silica gel supported $CaCl_2$ sorbent for low grade heat storage. International Journal of Thermal Sciences, 2006, 45, 804-813.	2.6	115
30	Dynamic simulation of building VAV air-conditioning system and evaluation of EMCS on-line control strategies. Building and Environment, 1999, 34, 681-705.	3.0	114
31	A system-level fault detection and diagnosis strategy for HVAC systems involving sensor faults. Energy and Buildings, 2010, 42, 477-490.	3.1	114
32	A model-based online fault detection and diagnosis strategy for centrifugal chiller systems. International Journal of Thermal Sciences, 2005, 44, 986-999.	2.6	109
33	Dynamic simulation of a building central chilling system and evaluation of EMCS on-line control strategies. Building and Environment, 1998, 33, 1-20.	3.0	107
34	Experimental Validation of CO_2-Based Occupancy Detection for Demand-Controlled Ventilation. Indoor and Built Environment, 1999, 8, 377-391.	1.5	107
35	Model predictive control for thermal energy storage and thermal comfort optimization of building demand response in smart grids. Applied Energy, 2019, 242, 873-882.	5.1	106
36	Sensitivity analysis of design parameters and optimal design for zero/low energy buildings in subtropical regions. Applied Energy, 2018, 228, 1280-1291.	5.1	104

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37	A fast chiller power demand response control strategy for buildings connected to smart grid. Applied Energy, 2015, 137, 77-87.	5.1	103
38	Investigation of a novel thermoelectric radiant air-conditioning system. Energy and Buildings, 2013, 59, 123-132.	3.1	102
39	Enhanced chiller sensor fault detection, diagnosis and estimation using wavelet analysis and principal component analysis methods. Applied Thermal Engineering, 2008, 28, 226-237.	3.0	101
40	Bayesian network based FDD strategy for variable air volume terminals. Automation in Construction, 2014, 41, 106-118.	4.8	101
41	District cooling systems: Technology integration, system optimization, challenges and opportunities for applications. Renewable and Sustainable Energy Reviews, 2016, 53, 253-264.	8.2	101
42	A grey-box model of next-day building thermal load prediction for energy-efficient control. International Journal of Energy Research, 2008, 32, 1418-1431.	2.2	100
43	Diagnostic Bayesian networks for diagnosing air handling units faults – Part II: Faults in coils and sensors. Applied Thermal Engineering, 2015, 90, 145-157.	3.0	100
44	Probabilistic load forecasting for buildings considering weather forecasting uncertainty and uncertain peak load. Applied Energy, 2019, 237, 180-195.	5.1	100
45	A statistical fault detection and diagnosis method for centrifugal chillers based on exponentially-weighted moving average control charts and support vector regression. Applied Thermal Engineering, 2013, 51, 560-572.	3.0	99
46	CO_2-Based Occupancy Detection for On-Line Outdoor Air Flow Control. Indoor and Built Environment, 1998, 7, 165-181.	1.5	98
47	Robust optimal design of renewable energy system in nearly/net zero energy buildings under uncertainties. Applied Energy, 2017, 187, 62-71.	5.1	92
48	A model-based optimal ventilation control strategy of multi-zone VAV air-conditioning systems. Applied Thermal Engineering, 2009, 29, 91-104.	3.0	91
49	Development of grid-responsive buildings: Opportunities, challenges, capabilities and applications of HVAC systems in non-residential buildings in providing ancillary services by fast demand responses to smart grids. Applied Energy, 2019, 250, 697-712.	5.1	91
50	A fault detection and diagnosis strategy of VAV air-conditioning systems for improved energy and control performances. Energy and Buildings, 2005, 37, 1035-1048.	3.1	87
51	Active pipe-embedded structures in buildings for utilizing low-grade energy sources: A review. Energy and Buildings, 2010, 42, 1567-1581.	3.1	87
52	Flexibility categorization, sources, capabilities and technologies for energy-flexible and grid-responsive buildings: State-of-the-art and future perspective. Energy, 2021, 219, 119598.	4.5	85
53	Detection and diagnosis of AHU sensor faults using principal component analysis method. Energy Conversion and Management, 2004, 45, 2667-2686.	4.4	84
54	Optimal simplified thermal models of building envelope based on frequency domain regression using genetic algorithm. Energy and Buildings, 2007, 39, 525-536.	3.1	83

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55	Energy performance and optimal control of air-conditioned buildings with envelopes enhanced by phase change materials. Energy Conversion and Management, 2011, 52, 3197-3205.	4.4	83
56	Performance analysis of hybrid ground source heat pump systems based on ANN predictive control. Applied Energy, 2014, 136, 1138-1144.	5.1	79
57	Integrating Building Management System and facilities management on the Internet. Automation in Construction, 2002, 11, 707-715.	4.8	78
58	A supervisory control strategy for building cooling water systems for practical and real time applications. Energy Conversion and Management, 2008, 49, 2324-2336.	4.4	78
59	A system-level fault detection and diagnosis method for low delta-T syndrome in the complex HVAC systems. Applied Energy, 2016, 164, 1028-1038.	5.1	77
60	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
61	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
62	A robust model predictive control strategy for improving the control performance of air-conditioning systems. Energy Conversion and Management, 2009, 50, 2650-2658.	4.4	72
63	A simplified dynamic model for existing buildings using CTF and thermal network models. International Journal of Thermal Sciences, 2008, 47, 1249-1262.	2.6	70
64	An isolation enhanced PCA method with expert-based multivariate decoupling for sensor FDD in air-conditioning systems. Applied Thermal Engineering, 2009, 29, 712-722.	3.0	66
65	Building energy research in Hong Kong: A review. Renewable and Sustainable Energy Reviews, 2009, 13, 1870-1883.	8.2	66
66	Building power demand response methods toward smart grid. HVAC and R Research, 2014, 20, 665-687.	0.9	66
67	Development of an adaptive Smith predictor-based self-tuning PI controller for an HVAC system in a test room. Energy and Buildings, 2008, 40, 2244-2252.	3.1	65
68	Progress and methodologies of lifecycle commissioning of HVAC systems to enhance building sustainability. Renewable and Sustainable Energy Reviews, 2009, 13, 1144-1149.	8.2	64
69	Impacts of cooling load calculation uncertainties on the design optimization of building cooling systems. Energy and Buildings, 2015, 94, 1-9.	3.1	64
70	Supply-based feedback control strategy of air-conditioning systems for direct load control of buildings responding to urgent requests of smart grids. Applied Energy, 2017, 201, 419-432.	5.1	64
71	Intelligent Buildings and Building Automation. , 0, , .		64
72	Sensor fault detection and validation of VAV terminals in air conditioning systems. Energy Conversion and Management, 2005, 46, 2482-2500.	4.4	62

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73	A Robust Fault Detection and Diagnosis Strategy for Centrifugal Chillers. HVAC and R Research, 2006, 12, 407-428.	0.9	61
74	A model-based fault detection and diagnosis strategy for HVAC systems. International Journal of Energy Research, 2009, 33, 903-918.	2.2	61
75	Effects of impregnating variables on dynamic sorption characteristics and storage properties of composite sorbent for solar heat storage. Solar Energy, 2007, 81, 864-871.	2.9	60
76	Transient heat flow calculation for multilayer constructions using a frequency-domain regression method. Building and Environment, 2003, 38, 45-61.	3.0	59
77	A fault detection and diagnosis strategy with enhanced sensitivity for centrifugal chillers. Applied Thermal Engineering, 2011, 31, 3963-3970.	3.0	59
78	A seasonal cold storage system based on separate type heat pipe for sustainable building cooling. Renewable Energy, 2016, 85, 880-889.	4.3	59
79	Neighborhood-level coordination and negotiation techniques for managing demand-side flexibility in residential microgrids. Renewable and Sustainable Energy Reviews, 2021, 135, 110248.	8.2	59
80	Online adaptive control for optimizing variable-speed pumps of indirect water-cooled chilling systems. Applied Thermal Engineering, 2001, 21, 1083-1103.	3.0	58
81	A diagnostic tool for online sensor health monitoring in air-conditioning systems. Automation in Construction, 2006, 15, 489-503.	4.8	58
82	Robust optimal design of building cooling systems considering cooling load uncertainty and equipment reliability. Applied Energy, 2015, 159, 265-275.	5.1	58
83	A simplified power consumption model of information technology (IT) equipment in data centers for energy system real-time dynamic simulation. Applied Energy, 2018, 222, 329-342.	5.1	58
84	A robust pattern recognition-based fault detection and diagnosis (FDD) method for chillers. HVAC and R Research, 2014, 20, 798-809.	0.9	57
85	A novel air-conditioning system for proactive power demand response to smart grid. Energy Conversion and Management, 2015, 102, 239-246.	4.4	56
86	A direct load control strategy of centralized air-conditioning systems for building fast demand response to urgent requests of smart grids. Automation in Construction, 2018, 87, 74-83.	4.8	56
87	Chiller sequencing control with enhanced robustness for energy efficient operation. Energy and Buildings, 2009, 41, 1246-1255.	3.1	55
88	Model-based optimal design of active cool thermal energy storage for maximal life-cycle cost saving from demand management in commercial buildings. Applied Energy, 2017, 201, 382-396.	5.1	55
89	A simplified energy performance assessment method for existing buildings based on energy bill disaggregation. Energy and Buildings, 2012, 55, 563-574.	3.1	54
90	Evaluation of a fast power demand response strategy using active and passive building cold storages for smart grid applications. Energy Conversion and Management, 2015, 102, 227-238.	4.4	54

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91	Frequency control of air conditioners in response to real-time dynamic electricity prices in smart grids. Applied Energy, 2019, 242, 92-106.	5.1	54
92	Law-Based Sensor Fault Diagnosis and Validation for Building Air-Conditioning Systems. HVAC and R Research, 1999, 5, 353-380.	0.9	53
93	A Novel Strategy for the Fault Detection and Diagnosis of Centrifugal Chiller Systems. HVAC and R Research, 2009, 15, 57-75.	0.9	53
94	An uncertainty-based design optimization method for district cooling systems. Energy, 2016, 102, 516-527.	4.5	53
95	A multi-agent based distributed approach for optimal control of multi-zone ventilation systems considering indoor air quality and energy use. Applied Energy, 2020, 275, 115371.	5.1	53
96	A CFD-based test method for control of indoor environment and space ventilation. Building and Environment, 2010, 45, 1441-1447.	3.0	52
97	Coordinated optimal design of zero/low energy buildings and their energy systems based on multi-stage design optimization. Energy, 2019, 189, 116202.	4.5	52
98	Performance assessment of district cooling systems for a new development district at planning stage. Applied Energy, 2015, 140, 33-43.	5.1	51
99	Numerical and experimental analysis of transient supercooling effect of voltage pulse on thermoelectric element. International Journal of Refrigeration, 2012, 35, 1156-1165.	1.8	50
100	A multi-level energy performance diagnosis method for energy information poor buildings. Energy, 2015, 83, 189-203.	4.5	50
101	Optimal and robust control of outdoor ventilation airflow rate for improving energy efficiency and IAQ. Building and Environment, 2004, 39, 763-773.	3.0	49
102	A middleware for web service-enabled integration and interoperation of intelligent building systems. Automation in Construction, 2007, 16, 112-121.	4.8	49
103	Multiple ARMAX modeling scheme for forecasting air conditioning system performance. Energy Conversion and Management, 2007, 48, 2276-2285.	4.4	49
104	Research and applications of evaporative cooling in China: A review (II)â€"Systems and equipment. Renewable and Sustainable Energy Reviews, 2012, 16, 3523-3534.	8.2	49
105	A simplified dynamic model of building structures integrated with shaped-stabilized phase change materials. International Journal of Thermal Sciences, 2010, 49, 1722-1731.	2.6	48
106	Robust sensor fault diagnosis and validation in HVAC systems. Transactions of the Institute of Measurement and Control, 2002, 24, 231-262.	1.1	47
107	An online adaptive optimal control strategy for complex building chilled water systems involving intermediate heat exchangers. Applied Thermal Engineering, 2013, 50, 614-628.	3.0	47
108	Research and application of active hollow core slabs in building systems for utilizing low energy sources. Applied Energy, 2014, 116, 424-435.	5.1	47

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109	Optimal control strategy of central air-conditioning systems of buildings at morning start period for enhanced energy efficiency and peak demand limiting. Energy, 2018, 151, 771-781.	4.5	47
110	A game theory-based decentralized control strategy for power demand management of building cluster using thermal mass and energy storage. Applied Energy, 2019, 242, 809-820.	5.1	45
111	Energy flexibility quantification of grid-responsive buildings: Energy flexibility index and assessment of their effectiveness for applications. Energy, 2021, 221, 119756.	4.5	45
112	Neural network based prediction method for preventing condensation in chilled ceiling systems. Energy and Buildings, 2012, 45, 290-298.	3.1	44
113	Impacts of renewable energy system design inputs on the performance robustness of net zero energy buildings. Energy, 2015, 93, 1595-1606.	4.5	43
114	A real-time optimal control strategy for multi-zone VAV air-conditioning systems adopting a multi-agent based distributed optimization method. Applied Energy, 2021, 287, 116605.	5.1	43
115	Development and validation of an effective and robust chiller sequence control strategy using data-driven models. Automation in Construction, 2016, 65, 78-85.	4.8	42
116	A simplified method for optimal design of solar water heating systems based on life-cycle energy analysis. Renewable Energy, 2015, 74, 271-278.	4.3	41
117	Experimental investigation of contact resistance in adsorber of solar adsorption refrigeration. Solar Energy, 2002, 73, 177-185.	2.9	40
118	A demand limiting strategy for maximizing monthly cost savings of commercial buildings. Energy and Buildings, 2010, 42, 2219-2230.	3.1	40
119	Development and validation of a simplified online cooling load prediction strategy for a super high-rise building in Hong Kong. Energy Conversion and Management, 2013, 68, 20-27.	4.4	40
120	Building demand response and control methods for smart grids: A review. Science and Technology for the Built Environment, 2016, 22, 692-704.	0.8	40
121	Probabilistic approach for uncertainty-based optimal design of chiller plants in buildings. Applied Energy, 2017, 185, 1613-1624.	5.1	40
122	Coordinated demand-controlled ventilation strategy for energy-efficient operation in multi-zone cleanroom air-conditioning systems. Building and Environment, 2021, 191, 107588.	3.0	40
123	Online performance evaluation of alternative control strategies for building cooling water systems prior to in situ implementation. Applied Energy, 2009, 86, 712-721.	5.1	39
124	A fault-tolerant and energy efficient control strategy for primary–secondary chilled water systems in buildings. Energy and Buildings, 2011, 43, 3646-3656.	3.1	39
125	Effectiveness and life-cycle cost-benefit analysis of active cold storages for building demand management for smart grid applications. Applied Energy, 2015, 147, 523-535.	5.1	39
126	Robust optimal design of district cooling systems and the impacts of uncertainty and reliability. Energy and Buildings, 2016, 122, 11-22.	3.1	39

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127	A novel and simple building load calculation model for building and system dynamic simulation. Applied Thermal Engineering, 2001, 21, 683-702.	3.0	38
128	Investigation on intelligent building standard communication protocols and application of IT technologies. Automation in Construction, 2004, 13, 607-619.	4.8	38
129	Development and In-situ validation of a multi-zone demand-controlled ventilation strategy using a limited number of sensors. Building and Environment, 2012, 57, 28-37.	3.0	38
130	The step-change cooling performance of miniature thermoelectric module for pulse laser. Energy Conversion and Management, 2014, 80, 39-45.	4.4	38
131	A novel operation approach for the energy efficiency improvement of the HVAC system in office spaces through real-time big data analytics. Renewable and Sustainable Energy Reviews, 2020, 127, 109885.	8.2	37
132	Robust optimal design of chilled water systems in buildings with quantified uncertainty and reliability for minimized life-cycle cost. Energy and Buildings, 2016, 126, 159-169.	3.1	36
133	Sensor Fault Detection and Diagnosis of Air-Handling Units Using a Condition-Based Adaptive Statistical Method. HVAC and R Research, 2006, 12, 127-150.	0.9	35
134	In situ performance comparison and evaluation of three chiller sequencing control strategies in a super high-rise building. Energy and Buildings, 2013, 61, 333-343.	3.1	35
135	Robust MPC for temperature control of air-conditioning systems concerning on constraints and multitype uncertainties. Building Services Engineering Research and Technology, 2010, 31, 39-55.	0.9	34
136	Enhancing the performance of large primary-secondary chilled water systems by using bypass check valve. Energy, 2011, 36, 268-276.	4.5	34
137	Impacts of technology-guided occupant behavior on air-conditioning system control and building energy use. Building Simulation, 2021, 14, 209-217.	3.0	34
138	A power limiting control strategy based on adaptive utility function for fast demand response of buildings in smart grids. Science and Technology for the Built Environment, 2016, 22, 810-819.	0.8	33
139	Adaptive full-range decoupled ventilation strategy and air-conditioning systems for cleanrooms and buildings requiring strict humidity control and their performance evaluation. Energy, 2019, 168, 883-896.	4.5	33
140	Valve fault detection and diagnosis based on CMAC neural networks. Energy and Buildings, 2004, 36, 599-610.	3.1	32
141	A data fusion scheme for building automation systems of building central chilling plants. Automation in Construction, 2009, 18, 302-309.	4.8	32
142	A hierarchical optimal control strategy for continuous demand response of building HVAC systems to provide frequency regulation service to smart power grids. Energy, 2021, 230, 120741.	4.5	32
143	Multiplexed optimization for complex air conditioning systems. Building and Environment, 2013, 65, 99-108.	3.0	30
144	Energy efficient design and control of cleanroom environment control systems in subtropical regions â€" A comparative analysis and on-site validation. Applied Energy, 2017, 204, 582-595.	5.1	30

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145	Experimental study on desulfurization efficiency and gas–liquid mass transfer in a new liquid-screen desulfurization system. Applied Energy, 2010, 87, 1505-1512.	5.1	28
146	A robust control strategy for combining DCV control with economizer control. Energy Conversion and Management, 2002, 43, 2569-2588.	4.4	27
147	A simplified analytical model to evaluate the impact of radiant heat on building cooling load. Applied Thermal Engineering, 2015, 77, 30-41.	3.0	27
148	An agent-based distributed real-time optimal control strategy for building HVAC systems for applications in the context of future IoT-based smart sensor networks. Applied Energy, 2020, 274, 115322.	5.1	27
149	A model-based predictive dispatch strategy for unlocking and optimizing the building energy flexibilities of multiple resources in electricity markets of multiple services. Applied Energy, 2022, 305, 117889.	5.1	27
150	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
151	Frequency-domain regression method for estimating CTF models of building multilayer constructions. Applied Mathematical Modelling, 2001, 25, 579-592.	2.2	25
152	Numerical analysis and evaluation of an open-type thermal storage system using composite sorbents. International Journal of Heat and Mass Transfer, 2009, 52, 5262-5265.	2.5	25
153	Online sensor fault diagnosis for robust chiller sequencing control. International Journal of Thermal Sciences, 2010, 49, 589-602.	2.6	25
154	Performance enhancement of a complex chilled water system using a check valve: Experimental validation. Applied Thermal Engineering, 2010, 30, 2827-2832.	3.0	25
155	Robust optimal design of distributed energy systems based on life-cycle performance analysis using a probabilistic approach considering uncertainties of design inputs and equipment degradations. Applied Energy, 2018, 231, 615-627.	5.1	25
156	Optimal design of data center cooling systems concerning multi-chiller system configuration and component selection for energy-efficient operation and maximized free-cooling. Renewable Energy, 2019, 143, 1717-1731.	4.3	25
157	Robust Model Predictive Control of VAV Air-Handling Units Concerning Uncertainties and Constraints. HVAC and R Research, 2010, 16, 15-33.	0.9	24
158	Diagnosis of the low temperature difference syndrome in the chilled water system of a super high-rise building: A case study. Applied Energy, 2012, 98, 597-606.	5.1	24
159	A flexible-segment-model-based dynamics calculation method for free hanging marine risers in re-entry. China Ocean Engineering, 2012, 26, 139-152.	0.6	24
160	Online fault detection and robust control of condenser cooling water systems in building central chiller plants. Energy and Buildings, 2011, 43, 153-165.	3.1	23
161	Life-cycle cost benefit analysis and optimal design of small scale active storage system for building demand limiting. Energy, 2014, 73, 787-800.	4.5	23
162	Cooling Supply-based HVAC System Control for Fast Demand Response of Buildings to Urgent Requests of Smart Grids. Energy Procedia, 2016, 103, 34-39.	1.8	23

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163	In-situ implementation and evaluation of an online robust pump speed control strategy for avoiding low delta- T syndrome in complex chilled water systems of high-rise buildings. Applied Energy, 2016, 171, 541-554.	5.1	23
164	A risk-based robust optimal chiller sequencing control strategy for energy-efficient operation considering measurement uncertainties. Applied Energy, 2020, 280, 115983.	5.1	23
165	Experimental study on the dynamics, quality and impacts of using variable-speed pumps in buildings for frequency regulation of smart power grids. Energy, 2020, 199, 117406.	4.5	23
166	Model-based multi-objective predictive scheduling and real-time optimal control of energy systems in zero/low energy buildings using a game theory approach. Automation in Construction, 2020, 113, 103139.	4.8	23
167	Use of uncertainty polytope to describe constraint processes with uncertain time-delay for robust model predictive control applications. ISA Transactions, 2009, 48, 503-511.	3.1	22
168	Performance of distributed energy systems in buildings in cooling dominated regions and the impacts of energy policies. Applied Thermal Engineering, 2017, 127, 281-291.	3.0	22
169	Reliability and availability assessment and enhancement of water-cooled multi-chiller cooling systems for data centers. Reliability Engineering and System Safety, 2019, 191, 106573.	5.1	22
170	Quantitative evaluation of the impact of building load characteristics on energy performance of district cooling systems. Applied Energy, 2017, 205, 635-643.	5.1	21
171	Coordinated robust optimal design of building envelope and energy systems for zero/low energy buildings considering uncertainties. Applied Energy, 2020, 265, 114779.	5.1	21
172	Model-based Optimal Control of Outdoor Air Flow Rate of an Air-Conditioning System with Primary Air-Handling Unit. Indoor and Built Environment, 2011, 20, 626-637.	1.5	20
173	Making buildings smarter, grid-friendly, and responsive to smart grids. Science and Technology for the Built Environment, 2016, 22, 629-632.	0.8	20
174	Optimal and near-optimal indoor temperature and humidity controls for direct load control and proactive building demand response towards smart grids. Automation in Construction, 2018, 96, 250-261.	4.8	20
175	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
176	The practical performance forecast and analysis of thermoelectric module from macro to micro. Energy Conversion and Management, 2015, 100, 23-29.	4.4	19
177	Probabilistic optimal design of cleanroom air-conditioning systems facilitating optimal ventilation control under uncertainties. Applied Energy, 2019, 253, 113576.	5.1	19
178	An event-driven multi-agent based distributed optimal control strategy for HVAC systems in IoT-enabled smart buildings. Automation in Construction, 2021, 132, 103919.	4.8	19
179	Flow meter fault isolation in building central chilling systems using wavelet analysis. Energy Conversion and Management, 2006, 47, 1700-1710.	4.4	18
180	Robust optimal design of building cooling systems concerning uncertainties using mini-max regret theory. Science and Technology for the Built Environment, 2015, 21, 789-799.	0.8	18

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181	Sequential Monte Carlo simulation for robust optimal design of cooling water system with quantified uncertainty and reliability. Energy, 2017, 118, 489-501.	4.5	18
182	Robust optimal design of zero/low energy buildings considering uncertainties and the impacts of objective functions. Applied Energy, 2019, 254, 113683.	5.1	18
183	Automatic sensor evaluation in BMS commissioning of building refrigeration systems. Automation in Construction, 2002, 11, 59-73.	4.8	17
184	A robust sequencing control strategy for air-handling units. Building Services Engineering Research and Technology, 2004, 25, 141-158.	0.9	17
185	Application of CFD in evaluation and energy-efficient design of air curtains for horizontal refrigerated display cases. International Journal of Thermal Sciences, 2004, 43, 993-1002.	2.6	17
186	Application of solar collectors to control the visible plume from wet cooling towers of a commercial building in Hong Kong: A case study. Applied Thermal Engineering, 2007, 27, 1394-1404.	3.0	17
187	Enhancing the Reliability of Chiller Control Using Fused Measurement of Building Cooling Load. HVAC and R Research, 2008, 14, 941-958.	0.9	17
188	Model-based optimal start control strategy for multi-chiller plants in commercial buildings. Building Services Engineering Research and Technology, 2010, 31, 113-129.	0.9	17
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