Yi Jiang

List of Publications by Year in Descending Order

131 papers	3,991 citations	37 h-index	57 g-index
135 ext. papers	4,661 ext. citations	6.7 avg, IF	5.91 L-index

#	Paper	IF	Citations
131	Energy saving potential for space heating in Chinese airport terminals: The impact of air infiltration. *Energy*, **2021**, 215, 119175	7.9	11
130	Process design and analysis of a flexibly adjusted zonal absorption heat exchanger for high-rise building heating systems. *Applied Thermal Engineering*, **2021**, 195, 117173	5.8	0
129	Low carbon district heating in China in 2025- a district heating mode with low grade waste heat as heat source. *Energy*, **2021**, 230, 120765	7.9	8
128	Dynamic response of gravity-driven flow in multi-section absorption heat pump. *Applied Thermal Engineering*, **2021**, 200, 117622	5.8	1
127	Confirmation and prevention of vapor bypass in absorption heat pump with U-pipe pressure separation device caused by upward side two-phase flow. *International Journal of Refrigeration*, **2021**, 130, 199-207	3.8	1
126	Design and experimental study of a second type absorption heat exchanger. *International Journal of Refrigeration*, **2020**, 118, 50-60	3.8	3
125	Vertical U-pipe flow characteristics in absorption heat pump: Experimental study under vacuum conditions. *Applied Thermal Engineering*, **2020**, 172, 115164	5.8	3
124	Machine learning-based leakage fault detection for district heating networks. *Energy and Buildings*, **2020**, 223, 110161	7	18
123	A two-stage vertical absorption heat exchanger for district heating system. *International Journal of Refrigeration*, **2020**, 114, 19-31	3.8	9
122	Effects of space heating on the pollutant emission intensities in 2+26 cities. *Building and Environment*, **2020**, 175, 106817	6.5	11
121	Cleaner heating in Northern China: potentials and regional balances. *Resources, Conservation and Recycling*, **2020**, 160, 104897	11.9	26
120	Characteristics Analysis of the Heat-to-Power Ratio from the Supply and Demand Sides of Cities in Northern China. *Energies*, **2020**, 13, 242	3.1	5
119	Field tests on the operational energy consumption of Chinese district heating systems and evaluation of typical associated problems. *Energy and Buildings*, **2020**, 224, 110269	7	10
118	Optimization of solution flow rate and heat transfer area allocation in the two-stage absorption heat exchanger system based on a complete heat and mass transfer simulation model. *Applied Thermal Engineering*, **2020**, 178, 115616	5.8	3
117	The influence of a vertical chevron corrugated plate on wetting and thermal performance of a detachable plate-type falling film absorber. *Applied Thermal Engineering*, **2020**, 179, 115704	5.8	7
116	Multi-step ahead forecasting of heat load in district heating systems using machine learning algorithms. *Energy*, **2019**, 188, 116085	7.9	51
115	Combined heat and water system for long-distance heat transportation. *Energy*, **2019**, 172, 401-408	7.9	10

114	Novel flue gas waste heat recovery system equipped with enthalpy wheel. *Energy Conversion and Management*, **2019**, 196, 649-663	10.6	15
113	Roadmap towards clean heating in 2035: Case study of inner Mongolia, China. *Energy*, **2019**, 189, 116152	7.9	18
112	A detachable plate falling film generator and condenser coupling using lithium bromide and water as working fluids. *International Journal of Refrigeration*, **2019**, 98, 120-128	3.8	6
111	Match property analysis of falling film absorption process. *International Journal of Refrigeration*, **2019**, 98, 194-201	3.8	7
110	Experimental and numerical analysis on total heat recovery performance of an enthalpy wheel under high temperature high humidity working conditions. *Applied Thermal Engineering*, **2019**, 146, 482-494	5.8	10
109	Systematic optimization for the utilization of low-temperature industrial excess heat for district heating. *Energy*, **2018**, 144, 984-991	7.9	15
108	Novel beverage heating and fast-cooling processes separately using an absorption chiller and using electric heat pumps. *International Journal of Refrigeration*, **2018**, 94, 87-101	3.8	1
107	Modular simulation of cogeneration system based on absorption heat exchange (Co-ah). *Energy*, **2018**, 153, 369-386	7.9	8
106	Novel method for the design of radiant floor cooling systems through homogenizing spatial solar radiation distribution. *Solar Energy*, **2018**, 170, 885-895	6.8	11
105	Exergy and entransy analyses in air-conditioning system part 2：Humid air handling process. *Energy and Buildings*, **2017**, 139, 10-21	7	12
104	Theoretical and experimental study of departure duration of condensate droplets from radiant cooling ceiling surfaces. *Building and Environment*, **2017**, 114, 445-454	6.5	12
103	IEA EBC Annex 59: High temperature cooling and low temperature heating in buildings. *Energy and Buildings*, **2017**, 145, 267-275	7	8
102	Performance investigation of terminal handling process in air-conditioning system from the perspective of entransy dissipation. *Energy and Buildings*, **2017**, 137, 27-37	7	2
101	Experimental study of the self-regulating performance of an R744 two-phase thermosyphon loop. *Applied Energy*, **2017**, 186, 1-12	10.7	33
100	Using air source heat pump air heater(ASHP-AH) for rural space heating and power peak load shifting. *Energy Procedia*, **2017**, 122, 631-636	2.3	10
99	Simulation research on a variable-lift absorption cycle and its application in waste heat recovery of combined heat and power system. *Energy*, **2017**, 140, 912-921	7.9	15
98	Three typical operating states of an R744 two-phase thermosyphon loop. *Applied Energy*, **2017**, 206, 181-192	10.7	17
97	Mapping potentials of low-grade industrial waste heat in Northern China. *Resources, Conservation and Recycling*, **2017**, 125, 335-348	11.9	31

96	Study on the pulsed flow control on radiant cooling and heating systems in part load. *Procedia Engineering*, **2017**, 205, 11-18		2
95	Absorption heat exchangers for long-distance heat transportation. *Energy*, **2017**, 141, 2242-2250	7.9	29
94	Performance investigation and exergy analysis of enthalpy recovery device using liquid desiccant. *Applied Thermal Engineering*, **2016**, 106, 76-86	5.8	8
93	Case study on industrial surplus heat of steel plants for district heating in Northern China. *Energy*, **2016**, 102, 397-405	7.9	49
92	Satisfaction based Q-learning for integrated lighting and blind control. *Energy and Buildings*, **2016**, 127, 43-55	7	66
91	Experimental study on the effect of fill ratio on an R744 two-phase thermosyphon loop. *Applied Thermal Engineering*, **2016**, 99, 302-312	5.8	45
90	Method for integrating low-grade industrial waste heat into district heating network. *Building Simulation*, **2016**, 9, 153-163	3.9	13
89	Application of radiant floor cooling in large space buildings □A review. *Renewable and Sustainable Energy Reviews*, **2016**, 55, 1083-1096	16.2	67
88	Recognition of air-conditioner operation from indoor air temperature and relative humidity by a data mining approach. *Energy and Buildings*, **2016**, 111, 233-241	7	16
87	A generalized probabilistic formula relating occupant behavior to environmental conditions. *Building and Environment*, **2016**, 95, 53-62	6.5	50
86	Outdoor thermal environments and activities in open space: An experiment study in humid subtropical climates. *Building and Environment*, **2016**, 103, 238-249	6.5	81
85	Influence of household air-conditioning use modes on the energy performance of residential district cooling systems. *Building Simulation*, **2016**, 9, 429-441	3.9	37
84	Influence of asynchronous demand behavior on overcooling in multiple zone AC systems. *Building and Environment*, **2016**, 110, 65-75	6.5	9
83	A multi-section vertical absorption heat exchanger for district heating systems. *International Journal of Refrigeration*, **2016**, 71, 69-84	3.8	24
82	Exergy and entransy analyses in air-conditioning system part 1□Similarity and distinction. *Energy and Buildings*, **2016**, 128, 876-885	7	16
81	Key issues and solutions in a district heating system using low-grade industrial waste heat. *Energy*, **2015**, 86, 589-602	7.9	107
80	Influence of the number of stages on the heat source temperature of□desiccant wheel dehumidification systems using exergy analysis. *Energy*, **2015**, 85, 379-391	7.9	20
79	Building energy use in China: Ceiling and scenario. *Energy and Buildings*, **2015**, 102, 307-316	7	33

78	Irreversible processes and performance improvement of desiccant wheel dehumidification and cooling systems using exergy. *Applied Energy*, **2015**, 145, 331-344	10.7	27
77	An on-off regulation method by predicting the valve on-time ratio in district heating system. *Building Simulation*, **2015**, 8, 665-672	3.9	4
76	Lowering the regeneration temperature of a rotary wheel dehumidification system using exergy analysis. *Energy Conversion and Management*, **2015**, 89, 162-174	10.6	36
75	Comparison of Two Kinds of Indirect Evaporative Cooling System: To Produce Cold Water and To Produce Cooling Air. *Procedia Engineering*, **2015**, 121, 881-890		10
74	Application of Lorenz Curve and Gini Index in the Analysis of Load Fea-ture in HVAC Systems. *Procedia Engineering*, **2015**, 121, 11-18		3
73	Cooling Performance Comparison of Radiant Floor System and All-air System with Solar Radiation. *Energy Procedia*, **2015**, 78, 2322-2327	2.3	3
72	Entransy analysis and application of a novel indoor cooling system in a large space building. *International Journal of Heat and Mass Transfer*, **2015**, 85, 228-238	4.9	24
71	Cooling capacity prediction of radiant floors in large spaces of an airport. *Solar Energy*, **2015**, 113, 221-235	3.58	14
70	Exergy analysis of parameter unmatched characteristic in coupled heat and mass transfer between humid air and water. *International Journal of Heat and Mass Transfer*, **2015**, 84, 327-338	4.9	8
69	A data-driven method to describe the personalized dynamic thermal comfort in ordinary office environment: From model to application. *Building and Environment*, **2014**, 72, 309-318	6.5	69
68	Development of temperature and humidity independent control (THIC) air-conditioning systems in China□A review. *Renewable and Sustainable Energy Reviews*, **2014**, 29, 793-803	16.2	55
67	Dynamic performance of water-based radiant floors during start-up and high-intensity solar radiation. *Solar Energy*, **2014**, 101, 232-244	6.8	36
66	On-site measured performance of a radiant floor cooling/heating system in Xi□n Xianyang International Airport. *Solar Energy*, **2014**, 108, 274-286	6.8	66
65	Optimization design of the large temperature lift/drop multi-stage vertical absorption temperature transformer based on entransy dissipation method. *Energy*, **2014**, 68, 712-721	7.9	30
64	Total heat recovery of gas boiler by absorption heat pump and direct-contact heat exchanger. *Applied Thermal Engineering*, **2014**, 71, 213-218	5.8	58
63	An operation strategy for using a ground heat exchanger system for industrial waste heat storage and extraction. *Building Simulation*, **2014**, 7, 197-204	3.9	19
62	Outdoor space quality: A field study in an urban residential community in central China. *Energy and Buildings*, **2014**, 68, 713-720	7	81
61	Exergy calculation and analysis of a dehumidification system using liquid desiccant. *Energy and Buildings*, **2014**, 69, 318-328	7	30

60	Performance analysis of a two-stage desiccant cooling system. *Applied Energy*, **2014**, 113, 1562-1574	10.7	62
59	Match Properties of Heat and Mass Transfer Processes in the Internally-Cooled Liquid Desiccant System. *Lecture Notes in Electrical Engineering*, **2014**, 609-618	0.2	
58	Application of Liquid Desiccant System **2014**, 249-281		
57	Application of radiant floor cooling in a large open space building with high-intensity solar radiation. *Energy and Buildings*, **2013**, 66, 246-257	7	54
56	Industrial waste heat utilization for low temperature district heating. *Energy Policy*, **2013**, 62, 236-246	7.2	140
55	Experimental and numerical analysis of a cross-flow closed wet cooling tower. *Applied Thermal Engineering*, **2013**, 61, 678-689	5.8	24
54	Performance analysis of the air-conditioning system in Xi□n Xianyang International Airport. *Energy and Buildings*, **2013**, 59, 11-20	7	36
53	Application of entransy in the analysis of HVAC systems in buildings. *Energy*, **2013**, 53, 332-342	7.9	35
52	Performance comparison of liquid desiccant air handling processes from the perspective of match properties. *Energy Conversion and Management*, **2013**, 75, 51-60	10.6	26
51	Performance comparison between enthalpy recovery wheels and dehumidification wheels. *International Journal of Refrigeration*, **2013**, 36, 2308-2322	3.8	35
50	Experimental analysis of an internally-cooled liquid desiccant dehumidifier. *Building and Environment*, **2013**, 63, 1-10	6.5	65
49	Performance analysis of a new kind of heat pump-driven outdoor air processor using solid desiccant. *Renewable Energy*, **2013**, 57, 101-110	8.1	13
48	Experimental evaluation of a suspended metal ceiling radiant panel with inclined fins. *Energy and Buildings*, **2013**, 62, 522-529	7	47
47	Temperature and Humidity Independent Control (THIC) of Air-conditioning System **2013**,		15
46	Key Components of the THIC System: High-Temperature Cooling Sources **2013**, 187-215		
45	Key Components of the THIC System: Indoor Terminals **2013**, 67-117		
44	Design and Operation of THIC Systems **2013**, 217-254		
43	Key Components of the THIC System: Outdoor Air Processor Using Liquid Desiccant **2013**, 155-185		

42	Application Cases of THIC Systems **2013**, 255-309		
41	A new concept for analyzing the energy efficiency of air-conditioning systems. *Energy and Buildings*, **2012**, 44, 45-53	7	4
40	Match properties of heat transfer and coupled heat and mass transfer processes in air-conditioning system. *Energy Conversion and Management*, **2012**, 59, 103-113	10.6	39
39	Ideal efficiency analysis and comparison of condensing and liquid desiccant dehumidification. *Energy and Buildings*, **2012**, 49, 575-583	7	19
38	The reality and statistical distribution of energy consumption in office buildings in China. *Energy and Buildings*, **2012**, 50, 259-265	7	50
37	Performance optimization of heat pump driven liquid desiccant dehumidification systems. *Energy and Buildings*, **2012**, 52, 132-144	7	53
36	Simplified calculation for cooling/heating capacity, surface temperature distribution of radiant floor. *Energy and Buildings*, **2012**, 55, 397-404	7	65
35	Quantitative description and simulation of human behavior in residential buildings. *Building Simulation*, **2012**, 5, 85-94	3.9	68
34	Research on a dynamic simulation method of atrium thermal environment based on neural network. *Building and Environment*, **2012**, 50, 214-220	6.5	22
33	A new □wireless on-off control□technique for adjusting and metering household heat in district heating system. *Applied Thermal Engineering*, **2012**, 36, 202-209	5.8	31
32	Preface to Special Topic: Low-Carbon Society for a Green Economy. *Journal of Renewable and Sustainable Energy*, **2012**, 4, 041301	2.5	3
31	A novel approach for building occupancy simulation. *Building Simulation*, **2011**, 4, 149-167	3.9	156
30	Energy performance analysis on telecommunication base station. *Energy and Buildings*, **2011**, 43, 315-325	7	34
29	Performance of temperature and humidity independent control air-conditioning system in an office building. *Energy and Buildings*, **2011**, 43, 1895-1903	7	107
28	Performance study of an innovative natural gas CHP system. *Energy Conversion and Management*, **2011**, 52, 321-328	10.6	28
27	A new type of district heating method with co-generation based on absorption heat exchange (co-ah cycle). *Energy Conversion and Management*, **2011**, 52, 1200-1207	10.6	87
26	Major issues and solutions in the heat-metering reform in China. *Renewable and Sustainable Energy Reviews*, **2011**, 15, 673-680	16.2	55
25	Case study of data-oriented approach for building energy performance investigation. *Frontiers of Energy and Power Engineering in China*, **2010**, 4, 22-34		3

24	Research progress in liquid desiccant air-conditioning devices and systems. *Frontiers of Energy and Power Engineering in China*, **2010**, 4, 55-65		9
23	Energy and environment in Chinese rural housing: Current status and future perspective. *Frontiers of Energy and Power Engineering in China*, **2010**, 4, 35-46		22
22	A district heating system based on absorption heat exchange with CHP systems. *Frontiers of Energy and Power Engineering in China*, **2010**, 4, 77-83		12
21	Comparative analysis of energy use in China building sector: current status, existing problems and solutions. *Frontiers of Energy and Power Engineering in China*, **2010**, 4, 2-21		16
20	Theoretical and testing performance of an innovative indirect evaporative chiller. *Solar Energy*, **2010**, 84, 2041-2055	6.8	37
19	In situ performance of independent humidity control air-conditioning system driven by heat pumps. *Energy and Buildings*, **2010**, 42, 1747-1752	7	27
18	Analysis on the ideal energy efficiency of dehumidification process from buildings. *Energy and Buildings*, **2010**, 42, 2014-2020	7	22
17	Similarity of coupled heat and mass transfer between air–water and air–liquid desiccant direct-contact systems. *Building and Environment*, **2009**, 44, 2501-2509	6.5	39
16	A novel on-off TRV adjustment model and simulation of its thermal dynamic performance. *Building Simulation*, **2009**, 2, 109-118	3.9	7
15	Investigating a safe ventilation rate for the prevention of indoor SARS transmission: An attempt based on a simulation approach. *Building Simulation*, **2009**, 2, 281-289	3.9	45
14	An information sharing building automation system. *Intelligent Buildings International*, **2009**, 1, 195-208	1.7	7
13	The Steady and Dynamic Performance of an Innovative Natural Gas CHP System **2008**,		1
12	Analytical solution of combined heat and mass transfer performance in a cross-flow packed bed liquid desiccant air dehumidifier. *International Journal of Heat and Mass Transfer*, **2008**, 51, 4563-4572	4.9	42
11	DeST—An integrated building simulation toolkit Part I: Fundamentals. *Building Simulation*, **2008**, 1, 95-110	3.9	183
10	DeST—An integrated building simulation toolkit Part II: Applications. *Building Simulation*, **2008**, 1, 193-209	3.9	77
9	A new approach to compute heat transfer of ground-coupled envelope in building thermal simulation software. *Energy and Buildings*, **2008**, 40, 476-485	7	13
8	Analytical solutions of coupled heat and mass transfer processes in liquid desiccant air dehumidifier/regenerator. *Energy Conversion and Management*, **2007**, 48, 2221-2232	10.6	89
7	Experimental research on a kind of novel high temperature phase change storage heater. *Energy Conversion and Management*, **2006**, 47, 2211-2222	10.6	86

6	Annual performance of liquid desiccant based independent humidity control HVAC system. *Applied Thermal Engineering*, **2006**, 26, 1198-1207	5.8	84
5	New type of fresh air processor with liquid desiccant total heat recovery. *Energy and Buildings*, **2005** , 37, 587-593	7	55
4	Experimental Research on High-temperature Phase Change Thermal Energy Storage Heater **2004**,		1
3	Energy Conservation Using Variable-speed Chilled Water Pumps for Single-loop Chilled Water Systems with Fan-coil Units. *Energy Engineering: Journal of the Association of Energy Engineers*, **2003** , 100, 22-36	0.6	10
2	A new multizone model for the simulation of building thermal performance. *Building and Environment*, **1997**, 32, 123-128	6.5	48
1	IISABRE: An integrated building simulation environment. *Building and Environment*, **1997**, 32, 219-224	6.5	23