Wei Wu

List of Publications by Citations

92	1,861	26	40
papers	citations	h-index	g-index
96	2,442	7.6	5.89
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
92	Absorption heating technologies: A review and perspective. *Applied Energy*, **2014**, 130, 51-71	10.7	132
91	An overview of ammonia-based absorption chillers and heat pumps. *Renewable and Sustainable Energy Reviews*, **2014**, 31, 681-707	16.2	105
90	An overview of the problems and solutions of soil thermal imbalance of ground-coupled heat pumps in cold regions. *Applied Energy*, **2016**, 177, 515-536	10.7	91
89	A potential solution for thermal imbalance of ground source heat pump systems in cold regions: Ground source absorption heat pump. *Renewable Energy*, **2013**, 59, 39-48	8.1	81
88	Selecting HVAC Systems to Achieve Comfortable and Cost-effective Residential Net-Zero Energy Buildings. *Applied Energy*, **2018**, 212, 577-591	10.7	65
87	Comparisons of different working pairs and cycles on the performance of absorption heat pump for heating and domestic hot water in cold regions. *Applied Thermal Engineering*, **2012**, 48, 349-358	5.8	64
86	A new solution for underground thermal imbalance of ground-coupled heat pump systems in cold regions: Heat compensation unit with thermosyphon. *Applied Thermal Engineering*, **2014**, 64, 283-292	5.8	60
85	Simulation of a combined heating, cooling and domestic hot water system based on ground source absorption heat pump. *Applied Energy*, **2014**, 126, 113-122	10.7	59
84	Energy saving potential of low temperature hot water system based on air source absorption heat pump. *Applied Thermal Engineering*, **2012**, 48, 317-324	5.8	57
83	Net-zero Nation: HVAC and PV Systems for Residential Net-Zero Energy Buildings across the United States. *Energy Conversion and Management*, **2018**, 177,	10.6	56
82	Evaluation of ground source absorption heat pumps combined with borehole free cooling. *Energy Conversion and Management*, **2014**, 79, 334-343	10.6	48
81	A new ground-coupled heat pump system integrated with a multi-mode air-source heat compensator to eliminate thermal imbalance in cold regions. *Energy and Buildings*, **2015**, 107, 103-112	7	42
80	Residential Net-Zero Energy Buildings: Review and Perspective. *Renewable and Sustainable Energy Reviews*, **2021**, 142,	16.2	42
79	Combining ground source absorption heat pump with ground source electrical heat pump for thermal balance, higher efficiency and better economy in cold regions. *Renewable Energy*, **2015**, 84, 74-88	8.1	41
78	Performance analysis of hybrid ground-coupled heat pump system with multi-functions. *Energy Conversion and Management*, **2015**, 92, 47-59	10.6	39
77	Experimental investigation on NH3–H2O compression-assisted absorption heat pump (CAHP) for low temperature heating under lower driving sources. *Applied Energy*, **2016**, 176, 258-271	10.7	37
76	A new heating system based on coupled air source absorption heat pump for cold regions: Energy saving analysis. *Energy Conversion and Management*, **2013**, 76, 811-817	10.6	34

75	Comparisons of different ionic liquids combined with trans-1,3,3,3-tetrafluoropropene (R1234ze(E)) as absorption working fluids. *International Journal of Refrigeration*, **2018**, 88, 45-57	3.8	32
74	Heat recovery from Internet data centers for space heating based on an integrated air conditioner with thermosyphon. *Renewable Energy*, **2015**, 80, 396-406	8.1	31
73	Progress in Ground-source Heat Pumps Using Natural Refrigerants. *International Journal of Refrigeration*, **2018**, 92, 70-70	3.8	31
72	Thermodynamic Investigation and Comparison of Absorption Cycles Using Hydrofluoroolefins and Ionic Liquid. *Industrial & Engineering Chemistry Research*, **2017**, 56, 9906-9916	3.9	30
71	A novel internally hybrid absorption-compression heat pump for performance improvement. *Energy Conversion and Management*, **2018**, 168, 237-251	10.6	29
70	Hybrid ground source absorption heat pump in cold regions: Thermal balance keeping and borehole number reduction. *Applied Thermal Engineering*, **2015**, 90, 322-334	5.8	27
69	Annual performance investigation and economic analysis of heating systems with a compression-assisted air source absorption heat pump. *Energy Conversion and Management*, **2015**, 98, 290-302	10.6	27
68	Performance analysis of R1234yf/ionic liquid working fluids for single-effect and compression-assisted absorption refrigeration systems. *International Journal of Refrigeration*, **2020**, 109, 25-36	3.8	27
67	Performance comparison of absorption heating cycles using various low-GWP and natural refrigerants. *International Journal of Refrigeration*, **2017**, 82, 56-70	3.8	26
66	Comparative analysis of conventional and low-GWP refrigerants with ionic liquid used for compression-assisted absorption cooling cycles. *Applied Thermal Engineering*, **2020**, 172, 115145	5.8	25
65	Experimental investigation on NH3H2O compression-assisted absorption heat pump (CAHP) for low temperature heating in colder conditions. *International Journal of Refrigeration*, **2016**, 67, 109-124	3.8	25
64	Compression-assisted absorption cycles using ammonia and various ionic liquids for cleaner heating. *Journal of Cleaner Production*, **2018**, 195, 890-907	10.3	25
63	Techno-economic analysis of air source absorption heat pump: Improving economy from a design perspective. *Energy and Buildings*, **2014**, 81, 200-210	7	24
62	Performance analysis of an absorption-compression hybrid refrigeration system recovering condensation heat for generation. *Applied Thermal Engineering*, **2016**, 108, 54-65	5.8	22
61	Charging and discharging characteristics of absorption thermal energy storage using ionic-liquid-based working fluids. *Energy*, **2019**, 189, 116126	7.9	21
60	Air source absorption heat pump in district heating: Applicability analysis and improvement options. *Energy Conversion and Management*, **2015**, 96, 197-207	10.6	21
59	Coupled heating of ground-coupled heat pump system with heat compensation unit: Performance improvement and borehole reduction. *Energy Conversion and Management*, **2017**, 148, 57-67	10.6	20
58	NH3-H2O water source absorption heat pump (WSAHP) for low temperature heating: Experimental investigation on the off-design performance. *Energy*, **2016**, 115, 697-710	7.9	19

57	Crystallization Analysis and Control of Ammonia-Based Air Source Absorption Heat Pump in Cold Regions. *Advances in Mechanical Engineering*, **2013**, 5, 140341	1.2	19
56	Configurations of solar air source absorption heat pump and comparisons with conventional solar heating. *Applied Thermal Engineering*, **2018**, 141, 630-641	5.8	19
55	Advanced/hybrid thermal energy storage technology: material, cycle, system and perspective. *Renewable and Sustainable Energy Reviews*, **2021**, 145, 111088	16.2	17
54	Dynamic simulation and parametric study of solar water heating system with phase change materials in different climate zones. *Solar Energy*, **2020**, 205, 399-408	6.8	16
53	Energy-saving analysis of a hybrid power-driven heat pump system. *Applied Thermal Engineering*, **2017**, 123, 1050-1059	5.8	15
52	Low-temperature compression-assisted absorption thermal energy storage using ionic liquids. *Energy and Built Environment*, **2020**, 1, 139-148	6.3	15
51	Screening of novel water/ionic liquid working fluids for absorption thermal energy storage in cooling systems. *International Journal of Energy Research*, **2020**, 44, 9367-9381	4.5	12
50	Performance comparisons of NH3/ionic liquid absorption□compression heat pump for increasing the utilization of geothermal energy. *International Journal of Refrigeration*, **2019**, 104, 19-33	3.8	11
49	A novel hybrid-energy heat pump with refrigerant injection: Performance characterization and injection optimization. *Energy Conversion and Management*, **2020**, 208, 112584	10.6	10
48	Performance investigation and enhancement of membrane-contactor microchannel absorber towards compact absorption cooling. *International Journal of Heat and Mass Transfer*, **2021**, 169, 120978	4.9	10
47	Heat and mass transfer performance comparison of various absorbers/desorbers towards compact and efficient absorption heat pumps. *International Journal of Refrigeration*, **2021**, 127, 203-220	3.8	10
46	Experimental comparisons on a gas engine heat pump using R134a and low-GWP refrigerant R152a. *International Journal of Refrigeration*, **2020**, 115, 73-82	3.8	10
45	A hybrid compression-assisted absorption thermal battery with high energy storage density/efficiency and low charging temperature. *Applied Energy*, **2021**, 282, 116068	10.7	10
44	Dynamic characteristics and performance improvement of a high-efficiency double-effect thermal battery for cooling and heating. *Applied Energy*, **2020**, 264, 114768	10.7	9
43	Dynamic Performance Analysis for an Absorption Chiller under Different Working Conditions. *Applied Sciences (Switzerland)*, **2017**, 7, 797	2.6	9
42	Performance analysis on compression-assisted absorption heat transformer: A new low-temperature heating system with higher heating capacity under lower ambient temperature. *Applied Thermal Engineering*, **2018**, 134, 419-427	5.8	8
41	Helmholtz free energy equation of state for propane and R134a binary mixture. *International Journal of Refrigeration*, **2018**, 89, 1-10	3.8	7
40	Comparative dynamic performance of hybrid absorption thermal batteries using H2O/1,3-dimethylimidazolium dimethylphosphate. *Energy Conversion and Management*, **2021**, 228, 113690	10.6	7

39	Geometry optimization of plate heat exchangers as absorbers in compact absorption refrigeration systems using H2O/ionic liquids. *Applied Thermal Engineering*, **2021**, 186, 116554	5.8	7
38	Novel ionic-liquid-based low-GWP working fluids used for hybrid low-temperature absorption cooling. *Energy Procedia*, **2019**, 158, 1620-1625	2.3	6
37	Performance Comparison between an Absorption-compression Hybrid Refrigeration System and a Double-effect Absorption Refrigeration Sys-tem. *Procedia Engineering*, **2017**, 205, 241-247		6
36	Combination principle of hybrid sources and three typical types of hybrid source heat pumps for year-round efficient operation. *Energy*, **2020**, 193, 116772	7.9	6
35	A novel distributed energy system using high-temperature proton exchange membrane fuel cell integrated with hybrid-energy heat pump. *Energy Conversion and Management*, **2021**, 235, 113990	10.6	6
34	Multicriteria comprehensive evaluation framework for industrial park-level distributed energy system considering weights uncertainties. *Journal of Cleaner Production*, **2021**, 282, 124530	10.3	6
33	Hybrid photovoltaic/thermal and ground source heat pump: Review and perspective. *Renewable and Sustainable Energy Reviews*, **2021**, 151, 111569	16.2	6
32	Assessing the energy and indoor-PM2.5-exposure impacts of control strategies for residential energy recovery ventilators. *Journal of Building Engineering*, **2020**, 29, 101137	5.2	5
31	Transient and seasonal performance evaluation of a novel flexible heat pump for solar cooling. *Energy Conversion and Management*, **2020**, 223, 113269	10.6	5
30	Ionic liquids for microchannel membrane-based absorption heat pumps: Performance comparison and geometry optimization. *Energy Conversion and Management*, **2021**, 239, 114213	10.6	5
29	Energetic, exergetic, economic, and environmental analysis of microchannel membrane-based absorption refrigeration system driven by various energy sources. *Energy*, **2021**, 239, 122193	7.9	4
28	Proton exchange membrane fuel cell integrated with microchannel membrane-based absorption cooling for hydrogen vehicles. *Renewable Energy*, **2021**, 178, 560-573	8.1	4
27	Experimental investigation on NH3H2O generator-absorber heat exchange (GAX) absorption heat pump. *Energy*, **2019**, 185, 337-349	7.9	3
26	Dynamic Soil Temperature of Ground-Coupled Heat Pump System in Cold Region. *Lecture Notes in Electrical Engineering*, **2014**, 439-448	0.2	3
25	Swirling flow for performance improvement of a microchannel membrane-based absorber with discrete inclined grooves. *International Journal of Refrigeration*, **2021**, 130, 382-391	3.8	3
24	Laboratory tests of a prototype carbon dioxide ground-source air conditioner		2
23	Gaseous densities of 2,3,3,3-tetrafluoroprop-1-ene (R1234yf) and isobutane (R600a) binary system: Measurements and a preliminary Helmholtz equation of state. *International Journal of Refrigeration* , **2018**, 95, 28-37	3.8	2
22	Performance optimization and comparison towards compact and efficient absorption refrigeration system with conventional and emerging absorbers/desorbers. *Energy*, **2021**, 229, 120669	7.9	2

21	A hybrid H2O/IL absorption and CO2 compression air-source heat pump for ultra-low ambient temperatures. *Energy*, **2021**, 122180	7.9	2
20	Modeling and experiments for a CO2 ground-source heat pump with subcritical and transcritical operation. *Energy Conversion and Management*, **2021**, 243, 114420	10.6	2
19	Cascade heat utilisation via integrated organic Rankine cycle and compressor-assisted absorption heat pump system. *Energy Conversion and Management*, **2021**, 249, 114850	10.6	1
18	Absorption Heating Technologies **2020**,		1
17	Exploring low-grade heat in exhaust gases with moisture via power generation cycles. *Journal of Cleaner Production*, **2022**, 357, 131892	10.3	1
16	Parametric and comparative study on enhanced microchannel membrane-based absorber structures for compact absorption refrigeration. *Renewable Energy*, **2022**, 187, 109-122	8.1	0
15	Multi-objective optimization of a microchannel membrane-based absorber with inclined grooves based on CFD and machine learning. *Energy*, **2021**, 122809	7.9	0
14	Experiments and exergy analysis for a carbon dioxide ground-source heat pump in cooling mode. *International Journal of Refrigeration*, **2021**, 131, 920-920	3.8	0
13	Membrane-based absorption cooling and heating: Development and perspectives. *Renewable Energy*, **2021**, 177, 663-688	8.1	0
12	Multi-scale Computer-aided molecular design of Ionic liquid for absorption heat transformer based on Machine learning. *Energy Conversion and Management*, **2022**, 261, 115617	10.6	0
11	On the rational development of advanced thermochemical thermal batteries for short-term and long-term energy storage. *Renewable and Sustainable Energy Reviews*, **2022**, 164, 112557	16.2	0
10	Advances in Novel Working Fluids for Absorption Heat Pump **2020**, 211-236		
9	Absorption Heating Technologies: Summaries and Perspectives **2020**, 261-266		
8	Characteristics of Conventional Heating Technologies **2020**, 1-19		
7	Fundamentals of Absorption Heating Technologies **2020**, 21-74		
6	Advances in Waste Heat and Renewable Energy Utilization **2020**, 237-259		
5	Performance Improvement of Absorption Heat Pump **2020**, 109-145		
4	Hybrid Ground Source Absorption Heat Pump System **2020**, 167-210		

List of Publications

3	Low Evaporation Temperature Absorption Heat Pump **2020**, 75-108	
2	Energy-Efficient Heating and Domestic Hot Water Systems Suitable for Different Regions. *Lecture Notes in Electrical Engineering*, **2014**, 601-607	0.2
1	Performance of Ground Source Absorption Heat Pump **2020**, 147-165	