Zhenyuan Xu

List of Publications by Year
in descending order

42 papers	2,320 citations	218592 26 h-index	254106 43 g-index
43 all docs	43 docs citations	43 times ranked	1811 citing authors

#	Article	IF	Citations
1	Performance evaluation of absorption thermal energy storage/transmission using ionic liquid absorbents. Energy and Built Environment, 2023, 4, 259-269.	2.9	8
2	Multi-criterion comparison of compression and absorption heat pumps for ultra-low grade waste heat recovery. Energy, 2022, 238, 121804.	4.5	23
3	Distributed vacuum membrane distillation driven by direct-solar heating at ultra-low temperature. Energy, 2022, 239, 121891.	4.5	18
4	High-Performance Absorption Thermal Storage with Once-Through Discharging. ACS Sustainable Chemistry and Engineering, 2022, 10, 720-730.	3.2	8
5	Highly efficient and salt rejecting solar evaporation via a wick-free confined water layer. Nature Communications, 2022, 13, 849.	5.8	101
6	Thermodynamic evaluation of three-phase absorption thermal storage in humid air with energy storage density over 600ÂkWh/m3. Energy Conversion and Management, 2022, 258, 115476.	4.4	6
7	Energy grade splitting of hot water via a double effect absorption heat transformer. Energy Conversion and Management, 2021, 230, 113821.	4.4	6
8	Analysis and Perspective on Heat Pump for Industrial Steam Generation. Advanced Energy and Sustainability Research, 2021, 2, 2000108.	2.8	6
9	Enlarged temperature lift of hybrid compression-absorption heat transformer via deep thermal coupling. Energy Conversion and Management, 2021, 234, 113954.	4.4	14
10	Multi-functional three-phase sorption solar thermal energy storage cycles for cooling, heating, and heat transformer. Applied Thermal Engineering, 2021, 189, 116765.	3.0	19
11	An air-source hybrid absorption-compression heat pump with large temperature lift. Applied Energy, 2021, 291, 116810.	5.1	31
12	Distributed solar desalination by membrane distillation: current status and future perspectives. Water Research, 2021, 198, 117154.	5.3	50
13	Towards high-performance sorption cold energy storage and transmission with ionic liquid absorbents. Energy Conversion and Management, 2021, 241, 114296.	4.4	12
14	Passive, high-efficiency thermally-localized solar desalination. Energy and Environmental Science, 2021, 14, 1771-1793.	15.6	142
15	Jumping droplet condensation in internal convective vapor flow. International Journal of Heat and Mass Transfer, 2020, 163, 120398.	2.5	9
16	Nucleation Site Distribution Probed by Phase-Enhanced Environmental Scanning Electron Microscopy. Cell Reports Physical Science, 2020, 1, 100262.	2.8	13
17	Double-section absorption heat pump for the deep recovery of low-grade waste heat. Energy Conversion and Management, 2020, 220, 113072.	4.4	36
18	Experimental study on a double-stage absorption solar thermal storage system with enhanced energy storage density. Applied Energy, 2020, 262, 114476.	5.1	37

#	Article	IF	Citations
19	Thermal energy storage using absorption cycle and system: A comprehensive review. Energy Conversion and Management, 2020, 206, 112482.	4.4	79
20	Ultrahigh-efficiency desalination via a thermally-localized multistage solar still. Energy and Environmental Science, 2020, 13, 830-839.	15.6	317
21	Modeling and performance analysis of high-efficiency thermally-localized multistage solar stills. Applied Energy, 2020, 266, 114864.	5.1	52
22	Feasibility and economic analysis of solution transportation absorption system for long-distance thermal transportation under low ambient temperature. Energy Conversion and Management, 2019, 196, 793-806.	4.4	13
23	Highâ€Performance Thermally Conductive Phase Change Composites by Largeâ€Size Oriented Graphite Sheets for Scalable Thermal Energy Harvesting. Advanced Materials, 2019, 31, e1905099.	11.1	298
24	Enhanced sorption heat transportation cycles with large concentration glide. Energy Conversion and Management, 2019, 201, 112145.	4.4	10
25	Size distribution theory for jumping-droplet condensation. Applied Physics Letters, 2019, 114, .	1.5	27
26	Perspectives for low-temperature waste heat recovery. Energy, 2019, 176, 1037-1043.	4.5	189
27	Thermally-pressurized sorption heat storage cycle with low charging temperature. Energy, 2019, 189, 116304.	4.5	12
28	Absorption seasonal thermal storage cycle with high energy storage density through multi-stage output. Energy, 2019, 167, 1086-1096.	4.5	41
29	Enhanced Environmental Scanning Electron Microscopy Using Phase Reconstruction and Its Application in Condensation. ACS Nano, 2019, 13, 1953-1960.	7.3	11
30	Comparison of absorption refrigeration cycles for efficient air-cooled solar cooling. Solar Energy, 2018, 172, 14-23.	2.9	31
31	Solar heating and cooling: Present and future development. Renewable Energy, 2018, 126, 1126-1140.	4.3	139
32	Waste heat recovery of power plant with large scale serial absorption heat pumps. Energy, 2018, 165, 1097-1105.	4.5	74
33	Multiscale Dynamic Growth and Energy Transport of Droplets during Condensation. Langmuir, 2018, 34, 9085-9095.	1.6	29
34	Simulation of solar cooling system based on variable effect LiBr-water absorption chiller. Renewable Energy, 2017, 113, 907-914.	4.3	39
35	Comparison of CPC driven solar absorption cooling systems with single, double and variable effect absorption chillers. Solar Energy, 2017, 158, 511-519.	2.9	40
36	A sorption thermal storage system with large concentration glide. Energy, 2017, 141, 380-388.	4.5	31

#	Article	IF	Citations
37	Absorption heat pump for waste heat reuse: current states and future development. Frontiers in Energy, 2017, 11, 414-436.	1.2	47
38	Solar driven air conditioning and refrigeration systems corresponding to various heating source temperatures. Applied Energy, 2016, 169, 846-856.	5.1	63
39	Absorption refrigeration cycles: Categorized based on the cycle construction. International Journal of Refrigeration, 2016, 62, 114-136.	1.8	101
40	Experimental evaluation of a variable effect LiBrâ€“water absorption chiller designed for high-efficient solar cooling system. International Journal of Refrigeration, 2015, 59, 135-143.	1.8	46
41	Experimental verification of the variable effect absorption refrigeration cycle. Energy, 2014, 77, 703-709.	4.5	26
42	A novel variable effect LiBr-water absorption refrigeration cycle. Energy, 2013, 60, 457-463.	4.5	63