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	Ultrahigh-efficiency desalination via a thermally-localized multistage solar still. Energy and Environmental Science, 2020, 13, 830-839.	15.6	317
2	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
3	Perspectives for low-temperature waste heat recovery. Energy, 2019, 176, 1037-1043.	4.5	189
4	Passive, high-efficiency thermally-localized solar desalination. Energy and Environmental Science, 2021, 14, 1771-1793.	15.6	142
5	Solar heating and cooling: Present and future development. Renewable Energy, 2018, 126, 1126-1140.	4.3	139
6	Absorption refrigeration cycles: Categorized based on the cycle construction. International Journal of Refrigeration, 2016, 62, 114-136.	1.8	101
7	Highly efficient and salt rejecting solar evaporation via a wick-free confined water layer. Nature Communications, 2022, 13, 849.	5.8	101
8	Thermal energy storage using absorption cycle and system: A comprehensive review. Energy Conversion and Management, 2020, 206, 112482.	4.4	79
9	Waste heat recovery of power plant with large scale serial absorption heat pumps. Energy, 2018, 165, 1097-1105.	4.5	74
10	A novel variable effect LiBr-water absorption refrigeration cycle. Energy, 2013, 60, 457-463.	4.5	63
11	Solar driven air conditioning and refrigeration systems corresponding to various heating source temperatures. Applied Energy, 2016, 169, 846-856.	5.1	63
12	Modeling and performance analysis of high-efficiency thermally-localized multistage solar stills. Applied Energy, 2020, 266, 114864.	5.1	52
13	Distributed solar desalination by membrane distillation: current status and future perspectives. Water Research, 2021, 198, 117154.	5.3	50
14	Absorption heat pump for waste heat reuse: current states and future development. Frontiers in Energy, 2017, 11, 414-436.	1.2	47
15	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
16	Absorption seasonal thermal storage cycle with high energy storage density through multi-stage output. Energy, 2019, 167, 1086-1096.	4.5	41
17	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
18	Simulation of solar cooling system based on variable effect LiBr-water absorption chiller. Renewable Energy, 2017, 113, 907-914.	4.3	39

#	Article	IF	Citations
19	Experimental study on a double-stage absorption solar thermal storage system with enhanced energy storage density. Applied Energy, 2020, 262, 114476.	5.1	37
20	Double-section absorption heat pump for the deep recovery of low-grade waste heat. Energy Conversion and Management, 2020, 220, 113072.	4.4	36
21	A sorption thermal storage system with large concentration glide. Energy, 2017, 141, 380-388.	4.5	31
22	Comparison of absorption refrigeration cycles for efficient air-cooled solar cooling. Solar Energy, 2018, 172, 14-23.	2.9	31
23	An air-source hybrid absorption-compression heat pump with large temperature lift. Applied Energy, 2021, 291, 116810.	5.1	31
24	Multiscale Dynamic Growth and Energy Transport of Droplets during Condensation. Langmuir, 2018, 34, 9085-9095.	1.6	29
25	Size distribution theory for jumping-droplet condensation. Applied Physics Letters, 2019, 114, .	1.5	27
26	Experimental verification of the variable effect absorption refrigeration cycle. Energy, 2014, 77, 703-709.	4.5	26
27	Multi-criterion comparison of compression and absorption heat pumps for ultra-low grade waste heat recovery. Energy, 2022, 238, 121804.	4.5	23
28	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
29	Distributed vacuum membrane distillation driven by direct-solar heating at ultra-low temperature. Energy, 2022, 239, 121891.	4.5	18
30	Enlarged temperature lift of hybrid compression-absorption heat transformer via deep thermal coupling. Energy Conversion and Management, 2021, 234, 113954.	4.4	14
31	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
32	Nucleation Site Distribution Probed by Phase-Enhanced Environmental Scanning Electron Microscopy. Cell Reports Physical Science, 2020, 1, 100262.	2.8	13
33	Thermally-pressurized sorption heat storage cycle with low charging temperature. Energy, 2019, 189, 116304.	4.5	12
34	Towards high-performance sorption cold energy storage and transmission with ionic liquid absorbents. Energy Conversion and Management, 2021, 241, 114296.	4.4	12
35	Enhanced Environmental Scanning Electron Microscopy Using Phase Reconstruction and Its Application in Condensation. ACS Nano, 2019, 13, 1953-1960.	7.3	11
36	Enhanced sorption heat transportation cycles with large concentration glide. Energy Conversion and Management, 2019, 201, 112145.	4.4	10

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37	Jumping droplet condensation in internal convective vapor flow. International Journal of Heat and Mass Transfer, 2020, 163, 120398.	2.5	9
38	High-Performance Absorption Thermal Storage with Once-Through Discharging. ACS Sustainable Chemistry and Engineering, 2022, 10, 720-730.	3.2	8
39	Performance evaluation of absorption thermal energy storage/transmission using ionic liquid absorbents. Energy and Built Environment, 2023, 4, 259-269.	2.9	8
40	Energy grade splitting of hot water via a double effect absorption heat transformer. Energy Conversion and Management, 2021, 230, 113821.	4.4	6
41	Analysis and Perspective on Heat Pump for Industrial Steam Generation. Advanced Energy and Sustainability Research, 2021, 2, 2000108.	2.8	6
42	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