Xiaohui She

List of Publications by Year
in descending order

61 papers	1,896 citations	279487 23 h-index	264894 42 g-index
61 all docs	61 docs citations	61 times ranked	1157 citing authors

#	Article	IF	Citations
1	Enhancement of round trip efficiency of liquid air energy storage through effective utilization of heat of compression. Applied Energy, 2017, 206, 1632-1642.	5.1	171
2	Energy-efficient and -economic technologies for air conditioning with vapor compression refrigeration: A comprehensive review. Applied Energy, 2018, 232, 157-186.	5.1	150
3	n-Alkanes Phase Change Materials and Their Microencapsulation for Thermal Energy Storage: A Critical Review. Energy & Fuels, 2018, 32, 7262-7293.	2.5	123
4	Thermodynamic study on the effect of cold and heat recovery on performance of liquid air energy storage. Applied Energy, 2018, 221, 86-99.	5.1	118
5	Flexible integration of liquid air energy storage with liquefied natural gas regasification for power generation enhancement. Applied Energy, 2019, 251, 113355.	5.1	107
6	Liquid air energy storage flexibly coupled with LNG regasification for improving air liquefaction. Applied Energy, 2019, 250, 1190-1201.	5.1	96
7	Skeleton materials for shape-stabilization of high temperature salts based phase change materials: A critical review. Renewable and Sustainable Energy Reviews, 2020, 119, 109539.	8.2	90
8	A novel low-grade heat-driven absorption refrigeration system with LiClâ€“H2O and LiBrâ€“H2O working pairs. International Journal of Refrigeration, 2015, 58, 219-234.	1.8	65
9	Significant photothermal conversion enhancement of nanofluids induced by Rayleigh-BÃ©nard convection for direct absorption solar collectors. Applied Energy, 2019, 254, 113706.	5.1	61
10	Bubble formation on solid surface with a cavity based on molecular dynamics simulation. International Journal of Heat and Mass Transfer, 2016, 95, 278-287.	2.5	54
11	Thermodynamic analysis of a novel energy-efficient refrigeration system subcooled by liquid desiccant dehumidification and evaporation. Energy Conversion and Management, 2014, 78, 286-296.	4.4	53
12	Performance study of phase change materials coupled with three-dimensional oscillating heat pipes with different structures for electronic cooling. Renewable Energy, 2020, 154, 636-649.	4.3	51
13	Liquid desiccant regeneration for advanced air conditioning: A comprehensive review on desiccant materials, regenerators, systems and improvement technologies. Applied Energy, 2022, 308, 118394.	5.1	51
14	Techno-economic analyses of multi-functional liquid air energy storage for power generation, oxygen production and heating. Applied Energy, 2020, 275, 115392.	5.1	46
15	A proposed subcooling method for vapor compression refrigeration cycle based on expansion power recovery. International Journal of Refrigeration, 2014, 43, 50-61.	1.8	41
16	Dynamic analysis of a novel standalone liquid air energy storage system for industrial applications. Energy Conversion and Management, 2021, 245, 114537.	4.4	38
17	Heat transfer of composite phase change material modules containing a eutectic carbonate salt for medium and high temperature thermal energy storage applications. Applied Energy, 2019, 238, 1074-1083.	5.1	34
18	Discharging performance enhancement of a phase change material based thermal energy storage device for transport air-conditioning applications. Applied Thermal Engineering, 2020, 165, 114582.	3.0	31

#	Article	IF	Citations
19	Comparative study on the liquid desiccant dehumidification performance of lithium chloride and potassium formate. Renewable Energy, 2021, 167, 841-852.	4.3	31
20	Experimental study of a novel double temperature chiller based on R32/R236fa. Energy Conversion and Management, 2016, 124, 618-626.	4.4	26
21	Liquid Air Energy Storage for Decentralized Micro Energy Networks with Combined Cooling, Heating, Hot Water and Power Supply. Journal of Thermal Science, 2021, 30, 1-17.	0.9	26
22	Experimental and theoretical study on a novel double evaporating temperature chiller applied in THICS using R32/R236fa. International Journal of Refrigeration, 2017, 75, 343-351.	1.8	25
23	System performance and economic assessment of a thermal energy storage based air-conditioning unit for transport applications. Applied Energy, 2019, 251, 113254.	5.1	25
24	A novel composite phase change material for medium temperature thermal energy storage manufactured with a scalable continuous hot-melt extrusion method. Applied Energy, 2021, 303, 117591.	5.1	23
25	Investigation on air flow patterns of evaporative cooling and dehumidification process for a hybrid refrigeration system. Applied Thermal Engineering, 2016, 95, 79-94.	3.0	22
26	Experimental study of charging a compact PCM energy storage device for transport application with dynamic exergy analysis. Energy Conversion and Management, 2019, 196, 536-544.	4.4	22
27	Theoretical analysis on performance enhancement of stand-alone liquid air energy storage from perspective of energy storage and heat transfer. Energy Procedia, 2017, 142, 3498-3504.	1.8	21
28	Suggested solution concentration for an energy-efficient refrigeration system combined with condensation heat-driven liquid desiccant cycle. Renewable Energy, 2015, 83, 553-564.	4.3	19
29	Analytical study on condensation heat distribution modes in a hybrid vapor compression refrigeration system. Energy and Buildings, 2015, 88, 288-302.	3.1	17
30	The effect of air purification on liquid air energy storage â€“ An analysis from molecular to systematic modelling. Applied Energy, 2021, 300, 117349.	5.1	17
31	Cryogenic thermoelectric generation using cold energy from a decoupled liquid air energy storage system for decentralised energy networks. Applied Energy, 2022, 305, 117749.	5.1	17
32	Fabrication of form stable composite phase change materials for thermal energy storage by direct powder incorporation with a preheating process. Powder Technology, 2021, 391, 544-556.	2.1	16
33	Heat transfer enhancement of a molten salt parabolic trough solar receiver with concentric and eccentric pipe inserts. Energy Procedia, 2017, 142, 624-629.	1.8	15
34	Thermodynamic analysis of Liquid Air Energy Storage integrated with a serial system of Organic Rankine and Absorption Refrigeration Cycles driven by compression heat. Energy Procedia, 2017, 142, 3440-3446.	1.8	15
35	Experimental study of a novel subcooling method based on liquid desiccant dehumidification for vapor-compression refrigeration systems. Applied Thermal Engineering, 2018, 130, 1460-1471.	3.0	14
36	Influences of the key characteristic parameters on the thermal performance of a water pit seasonal thermal storage. Energy Procedia, 2017, 142, 495-500.	1.8	13

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37	Formulation and Characterisation of Ternary Salt Based Solutions as Phase Change Materials for Cold Chain Applications. Energy Procedia, 2019, 158, 5103-5108.	1.8	12
38	Liquid Air Energy Storage with LNG cold recovery for air liquefaction improvement. Energy Procedia, 2019, 158, 4759-4764.	1.8	11
39	Development of a heat transfer coefficient based design method of a thermal energy storage device for transport air-conditioning applications. Energy, 2020, 196, 117083.	4.5	11
40	Investigation on transient cooling process in a water heat storage tank with inclined sidewalls. Energy Procedia, 2017, 142, 142-147.	1.8	10
41	The optimal design and operation of a hybrid renewable micro-grid with the decoupled liquid air energy storage. Journal of Cleaner Production, 2022, 334, 130189.	4.6	10
42	Charging properties of a compact energy storage device for transport air conditioning applications. Energy Procedia, 2017, 142, 3531-3536.	1.8	9
43	Preliminary study of Liquid Air Energy Storage integrated with LNG cold recovery. Energy Procedia, 2019, 158, 4903-4908.	1.8	9
44	Evaluation of thermal performance in cold storage applications using EG-water based nano-composite PCMs. Energy Procedia, 2019, 158, 4840-4845.	1.8	9
45	A power plant for integrated waste energy recovery from liquid air energy storage and liquefied natural gas. Chinese Journal of Chemical Engineering, 2021, 34, 242-257.	1.7	9
46	Performance investigation of a liquid desiccant regenerator with CFD technology. Applied Thermal Engineering, 2021, 184, 116055.	3.0	7
47	Liquid air energy storage with effective recovery, storage and utilization of cold energy from liquid air evaporation. Energy Conversion and Management, 2022, 267, 115708.	4.4	7
48	Enhancement of therminol-based nanofluids with reverse-irradiation for medium-temperature direct absorption solar collection. Materials Today Energy, 2020, 17, 100480.	2.5	6
49	Performance analysis of liquid air energy storage with enhanced cold storage density for combined heating and power generation. Journal of Energy Storage, 2022, 46, 103836.	3.9	6
50	Development and application of a dynamic model for a solar assisted liquid desiccant air conditioning system. Science and Technology for the Built Environment, 2019, 25, 128-138.	0.8	5
51	Cryogenic Energy Storage and Its Integration With Nuclear Power Generation for Load Shift. , 2019, , 249-273.		5
52	Molecular investigation on the anomalous phenomenon at liquid desiccant surfaces for air conditioning. Building Simulation, 2020, 13, 599-608.	3.0	5
53	Mechanism of Specific Heat Capacity Enhancement of Molten Salts Based Nanofluids for Thermal Energy Storage - A Molecular Study. , 2019, , .		4
54	Configuration optimization of stand-alone Liquid Air Energy Storage for efficiency improvement. IOP Conference Series: Materials Science and Engineering, 0, 502, 012015.	0.3	4

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55	Integrated Cryogenic and Thermal Energy Storage for Decarbonizing Energy Consumption: Development and Challenges. ES Energy & Environments, 2019, , .	0.5	4
56	Experimental Study of Thermo-Physical Characteristics of Molten Nitrate Salts Based Nanof luids for Thermal Energy Storage. ES Energy & Environments, 2019, , .	0.5	3
57	Molecular dynamics simulation on LiCl-H2O interfacial phenomenon for liquid desiccant dehumidification. Energy Procedia, 2019, 158, 2106-2111.	1.8	2
58	Cryogenic Energy Storage. , 2022, , 94-107.		2
59	A novel method to predict thermal conductivity of NaCl/water based MCNT nano-suspesnion for cold energy storage. Energy Procedia, 2019, 158, 4834-4839.	1.8	1
60	Performance Evaluation of Liquid Air Energy Storage with Air Purification. , 2021, , 757-771.		1
61	Integrated Cryogenic and Thermal Energy Storage for Decarbonizing Energy Consumption: Development and Challenges. ES Energy & Environments, 0, , .	0.5	0