

Tingxian Li

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9392602/publications.pdf>

Version: 2024-02-01

90
papers

4,664
citations

87888

38
h-index

102487

66
g-index

92
all docs

92
docs citations

92
times ranked

2370
citing authors

#	ARTICLE	IF	CITATIONS
1	High-Performance Thermally Conductive Phase Change Composites by Large-Size Oriented Graphite Sheets for Scalable Thermal Energy Harvesting. <i>Advanced Materials</i> , 2019, 31, e1905099.	21.0	298
2	A review of promising candidate reactions for chemical heat storage. <i>Renewable and Sustainable Energy Reviews</i> , 2015, 43, 13-31.	16.4	278
3	Efficient Solar-Driven Water Harvesting from Arid Air with Metal-Organic Frameworks Modified by Hygroscopic Salt. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 5202-5210.	13.8	231
4	Form-stable phase change composites: Preparation, performance, and applications for thermal energy conversion, storage and management. <i>Energy Storage Materials</i> , 2021, 42, 380-417.	18.0	182
5	Enhancement of heat transfer for thermal energy storage application using stearic acid nanocomposite with multi-walled carbon nanotubes. <i>Energy</i> , 2013, 55, 752-761.	8.8	181
6	Highly thermally conductive and flexible phase change composites enabled by polymer/graphite nanoplatelet-based dual networks for efficient thermal management. <i>Journal of Materials Chemistry A</i> , 2020, 8, 20011-20020.	10.3	178
7	Ultrahigh solar-driven atmospheric water production enabled by scalable rapid-cycling water harvester with vertically aligned nanocomposite sorbent. <i>Energy and Environmental Science</i> , 2021, 14, 5979-5994.	30.8	170
8	Experimental investigation on copper foam/hydrated salt composite phase change material for thermal energy storage. <i>International Journal of Heat and Mass Transfer</i> , 2017, 115, 148-157.	4.8	159
9	Highly conductive phase change composites enabled by vertically-aligned reticulated graphite nanoplatelets for high-temperature solar photo/electro-thermal energy conversion, harvesting and storage. <i>Nano Energy</i> , 2021, 89, 106338.	16.0	153
10	Performance analysis of an integrated energy storage and energy upgrade thermochemical solid-gas sorption system for seasonal storage of solar thermal energy. <i>Energy</i> , 2013, 50, 454-467.	8.8	132
11	Progress in the development of solid-gas sorption refrigeration thermodynamic cycle driven by low-grade thermal energy. <i>Progress in Energy and Combustion Science</i> , 2014, 40, 1-58.	31.2	106
12	High performance form-stable expanded graphite/stearic acid composite phase change material for modular thermal energy storage. <i>International Journal of Heat and Mass Transfer</i> , 2016, 102, 733-744.	4.8	105
13	Development and thermochemical characterizations of vermiculite/SrBr ₂ composite sorbents for low-temperature heat storage. <i>Energy</i> , 2016, 115, 120-128.	8.8	98
14	Renewable energy in Kenya: Resource potential and status of exploitation. <i>Renewable and Sustainable Energy Reviews</i> , 2011, 15, 2960-2973.	16.4	95
15	Heat transfer design in adsorption refrigeration systems for efficient use of low-grade thermal energy. <i>Energy</i> , 2011, 36, 5425-5439.	8.8	82
16	Heat transfer characteristics of phase change nanocomposite materials for thermal energy storage application. <i>International Journal of Heat and Mass Transfer</i> , 2014, 75, 1-11.	4.8	82
17	Ultrahigh-Energy-Density Sorption Thermal Battery Enabled by Graphene Aerogel-Based Composite Sorbents for Thermal Energy Harvesting from Air. <i>ACS Energy Letters</i> , 2021, 6, 1795-1802.	17.4	82
18	Near-Zero-Energy Smart Battery Thermal Management Enabled by Sorption Energy Harvesting from Air. <i>ACS Central Science</i> , 2020, 6, 1542-1554.	11.3	81

#	ARTICLE	IF	CITATIONS
19	The present and future of residential refrigeration, power generation and energy storage. <i>Applied Thermal Engineering</i> , 2013, 53, 256-270.	6.0	79
20	A target-oriented solid-gas thermochemical sorption heat transformer for integrated energy storage and energy upgrade. <i>AIChE Journal</i> , 2013, 59, 1334-1347.	3.6	73
21	Dual-Encapsulated Highly Conductive and Liquid-Free Phase Change Composites Enabled by Polyurethane/Graphite Nanoplatelets Hybrid Networks for Efficient Energy Storage and Thermal Management. <i>Small</i> , 2022, 18, e2105647.	10.0	72
22	Thermochemical characterizations of high-stable activated alumina/LiCl composites with multistage sorption process for thermal storage. <i>Energy</i> , 2018, 156, 240-249.	8.8	61
23	High energy-density multi-form thermochemical energy storage based on multi-step sorption processes. <i>Energy</i> , 2019, 185, 1131-1142.	8.8	60
24	A novel solid-gas thermochemical multilevel sorption thermal battery for cascaded solar thermal energy storage. <i>Applied Energy</i> , 2016, 161, 1-10.	10.1	58
25	Solid-gas thermochemical sorption thermal battery for solar cooling and heating energy storage and heat transformer. <i>Energy</i> , 2015, 84, 745-758.	8.8	56
26	High energy-density and power-density thermal storage prototype with hydrated salt for hot water and space heating. <i>Applied Energy</i> , 2019, 248, 406-414.	10.1	56
27	Experimental investigation on a dual-mode thermochemical sorption energy storage system. <i>Energy</i> , 2017, 140, 383-394.	8.8	54
28	Dual-Functional Aligned and Interconnected Graphite Nanoplatelet Networks for Accelerating Solar Thermal Energy Harvesting and Storage within Phase Change Materials. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 19200-19210.	8.0	53
29	Integrated energy storage and energy upgrade, combined cooling and heating supply, and waste heat recovery with solid-gas thermochemical sorption heat transformer. <i>International Journal of Heat and Mass Transfer</i> , 2014, 76, 237-246.	4.8	50
30	Performance testing of a cross-flow membrane-based liquid desiccant dehumidification system. <i>Applied Thermal Engineering</i> , 2017, 119, 119-131.	6.0	46
31	Photoswitchable phase change materials for unconventional thermal energy storage and upgrade. <i>Matter</i> , 2021, 4, 3385-3399.	10.0	46
32	Development of sorption thermal battery for low-grade waste heat recovery and combined cold and heat energy storage. <i>Energy</i> , 2016, 107, 347-359.	8.8	45
33	Investigation of a 10 kWh sorption heat storage device for effective utilization of low-grade thermal energy. <i>Energy</i> , 2016, 113, 739-747.	8.8	45
34	Experimental investigation of a novel multifunction heat pipe solid sorption icemaker for fishing boats using CaCl ₂ /activated carbon compound-ammonia. <i>International Journal of Refrigeration</i> , 2007, 30, 76-85.	3.4	44
35	Experimental investigation on the ammonia adsorption and heat transfer characteristics of the packed multi-walled carbon nanotubes. <i>Applied Thermal Engineering</i> , 2015, 77, 20-29.	6.0	42
36	Thermochemical Characterizations of Novel Vermiculite-LiCl Composite Sorbents for Low-Temperature Heat Storage. <i>Energies</i> , 2016, 9, 854.	3.1	42

#	ARTICLE	IF	CITATIONS
37	Experimental investigation on thermochemical heat storage using manganese chloride/ammonia. Energy, 2018, 143, 562-574.	8.8	41
38	Experimental study of the ammonia adsorption characteristics on the composite sorbent of CaCl ₂ and multi-walled carbon nanotubes. International Journal of Refrigeration, 2014, 46, 165-172.	3.4	40
39	Experimental investigation on an open sorption thermal storage system for space heating. Energy, 2017, 141, 2421-2433.	8.8	40
40	A new target-oriented methodology of decreasing the regeneration temperature of solid-gas thermochemical sorption refrigeration system driven by low-grade thermal energy. International Journal of Heat and Mass Transfer, 2011, 54, 4719-4729.	4.8	36
41	Experimental study on an adsorption icemaker driven by parabolic trough solar collector. Renewable Energy, 2013, 57, 223-233.	8.9	36
42	Experimental investigation on a novel solid-gas thermochemical sorption heat transformer for energy upgrade with a large temperature lift. Energy Conversion and Management, 2017, 148, 330-338.	9.2	36
43	Dehydration kinetics and thermodynamics of magnesium chloride hexahydrate for thermal energy storage. Solar Energy Materials and Solar Cells, 2021, 219, 110819.	6.2	36
44	Resorption system for cold storage and long-distance refrigeration. Applied Energy, 2012, 93, 479-487.	10.1	35
45	Performance analysis of an innovative multimode, multisalt and multieffect chemisorption refrigeration system. AIChE Journal, 2007, 53, 3222-3230.	3.6	33
46	A combined double-way chemisorption refrigeration cycle based on adsorption and resorption processes. International Journal of Refrigeration, 2009, 32, 47-57.	3.4	33
47	Ultralow-temperature-driven water-based sorption refrigeration enabled by low-cost zeolite-like porous aluminophosphate. Nature Communications, 2022, 13, 193.	12.8	33
48	Latent heat thermal storage using salt hydrates for distributed building heating: A multi-level scale-up research. Renewable and Sustainable Energy Reviews, 2020, 121, 109712.	16.4	31
49	High temperature hot water heat pump with non-azeotropic refrigerant mixture HCFC-22/HCFC-141b. Energy Conversion and Management, 2002, 43, 2033-2040.	9.2	29
50	Performance study of a consolidated manganese chloride-expanded graphite compound for sorption deep-freezing processes. Applied Energy, 2009, 86, 1201-1209.	10.1	28
51	Thermally conductive and form-stable phase change composite for building thermal management. Energy, 2022, 239, 121938.	8.8	28
52	Lithium chloride - Expanded graphite composite sorbent for solar powered ice maker. Solar Energy, 2010, 84, 1587-1594.	6.1	27
53	Performance study of a high efficient multifunction heat pipe type adsorption ice making system with novel mass and heat recovery processes. International Journal of Thermal Sciences, 2007, 46, 1267-1274.	4.9	26
54	Water sorption properties, diffusion and kinetics of zeolite NaX modified by ion-exchange and salt impregnation. International Journal of Heat and Mass Transfer, 2019, 139, 990-999.	4.8	24

#	ARTICLE	IF	CITATIONS
55	Experimental study and comparison of thermochemical resorption refrigeration cycle and adsorption refrigeration cycle. Chemical Engineering Science, 2010, 65, 4222-4230.	3.8	23
56	Understanding the transition process of phase change and dehydration reaction of salt hydrate for thermal energy storage. Applied Thermal Engineering, 2020, 166, 114655.	6.0	23
57	A conceptual design and performance analysis of a triple-effect solid-gas thermochemical sorption refrigeration system with internal heat recovery. Chemical Engineering Science, 2009, 64, 3376-3384.	3.8	22
58	A rechargeable molecular solar thermal system below 0 °C. Chemical Science, 2022, 13, 6950-6958.	7.4	21
59	Experimental study on an innovative multifunction heat pipe type heat recovery two-stage sorption refrigeration system. Energy Conversion and Management, 2008, 49, 2505-2512.	9.2	20
60	Experimental identification and thermodynamic analysis of ammonia sorption equilibrium characteristics on halide salts. Energy, 2018, 161, 955-962.	8.8	19
61	Advanced thermochemical resorption heat transformer for high-efficiency energy storage and heat transformation. Energy, 2019, 175, 1222-1233.	8.8	19
62	ENHANCEMENT OF HEAT AND MASS TRANSFER IN SOLID GAS SORPTION SYSTEMS. International Journal of Air-Conditioning and Refrigeration, 2012, 20, 1130001.	0.7	18
63	Experimental study on the effects of the operation conditions on the performance of a chemisorption air conditioner powered by low grade heat. Applied Energy, 2013, 103, 571-580.	10.1	18
64	Experimental investigation on a thermochemical sorption refrigeration prototype using EG/SrCl ₂ -NH ₃ working pair. International Journal of Refrigeration, 2018, 88, 8-15.	3.4	18
65	Study on the heat transfer and sorption characteristics of a consolidated composite sorbent for solar-powered thermochemical cooling systems. Solar Energy, 2009, 83, 1742-1755.	6.1	17
66	Adsorption Characteristic of Methanol in Activated Carbon Impregnated with Lithium Chloride. Chemical Engineering and Technology, 2010, 33, 1679-1686.	1.5	17
67	Transient Analysis of a Chemisorption Air Conditioning System Operating under Different Kinds of Cycle. Industrial & Engineering Chemistry Research, 2008, 47, 1102-1110.	3.7	14
68	Thermodynamic study of a combined double-way solid-gas thermochemical sorption refrigeration cycle. International Journal of Refrigeration, 2009, 32, 1570-1578.	3.4	14
69	Influence of mass recovery on the performance of a heat pipe type ammonia sorption refrigeration system using CaCl ₂ /activated carbon as compound adsorbent. Applied Thermal Engineering, 2008, 28, 1638-1646.	6.0	12
70	Experimental study on the performance of double-effect and double-way thermochemical sorption refrigeration cycle. Applied Thermal Engineering, 2011, 31, 3658-3663.	6.0	12
71	Composite LiCl/MWCNT/PVA for adsorption thermal battery: Dynamics of methanol sorption. Renewable and Sustainable Energy Reviews, 2020, 123, 109748.	16.4	12
72	Thermal conductivity measurement of an individual millimeter-long expanded graphite ribbon using a variable-length T-type method. International Journal of Heat and Mass Transfer, 2021, 171, 121115.	4.8	12

#	ARTICLE	IF	CITATIONS
73	Experimental investigation of an innovative dual-mode chemisorption refrigeration system based on multifunction heat pipes. International Journal of Refrigeration, 2008, 31, 1104-1112.	3.4	11
74	Efficient Solar-Driven Water Harvesting from Arid Air with Metal-Organic Frameworks Modified by Hygroscopic Salt. Angewandte Chemie, 2020, 132, 5240-5248.	2.0	11
75	Experimental study on a combined double-way chemisorption refrigeration system. International Journal of Refrigeration, 2011, 34, 914-921.	3.4	9
76	Performance analysis of a multi-mode thermochemical sorption refrigeration system for solar-powered cooling. International Journal of Refrigeration, 2012, 35, 532-542.	3.4	9
77	Demonstration of Mg(NO ₃) ₂ ·6H ₂ O-based composite phase change material for practical-scale medium-low temperature thermal energy storage. Energy, 2020, 201, 117711.	8.8	9
78	Ammoniated salt based solid sorption thermal batteries: A comparative study. Applied Thermal Engineering, 2021, 191, 116875.	6.0	7
79	High-efficient thermochemical sorption refrigeration driven by low-grade thermal energy. Science Bulletin, 2009, 54, 885-905.	9.0	5
80	Studies on a metal hydride based year-round comfort heating and cooling system for extreme climates. Energy and Buildings, 2021, 244, 111042.	6.7	5
81	Performance improvement of a combined double-way thermochemical sorption refrigeration cycle with reheating process. AIChE Journal, 2010, 56, 477-484.	3.6	4
82	Preparation and thermal performance of form-stable expanded graphite/stearic acid composite phase change materials with high thermal conductivity. Chinese Science Bulletin, 2018, 63, 674-683.	0.7	4
83	Enhanced thermal conductivity and adsorption rate of zeolite 13X adsorbent by compression-induced molding method for sorption thermal battery. Energy, 2022, 240, 122797.	8.8	4
84	Heat Transfer Design in Adsorption Refrigeration Systems for Efficient Use of Low Grade Thermal Energy. , 2010, , .		2
85	Thermochemical heat storage for solar heating and cooling systems. , 2016, , 491-522.		1
86	Progress in Sorption Thermal Energy Storage. Lecture Notes in Energy, 2017, , 541-572.	0.3	1
87	Sorption Thermal Energy Storage. , 2018, , 1109-1161.		1
88	AN EXPERIMENTAL INVESTIGATION OF AN ADSORPTION ICE-MAKER DRIVEN BY PARABOLIC TROUGH COLLECTOR. Heat Transfer Research, 2015, 46, 347-368.	1.6	1
89	Performance of a Multifunctional Heat Pipe Type Adsorption Ice Maker Machine Driven by Waste Heat. Jixie Gongcheng Xuebao/Chinese Journal of Mechanical Engineering, 2008, 44, 101.	0.5	1
90	The implementation of software and hardware for dynamic thermal management of electronic devices. Zhongguo Kexue Jishu Kexue/Scientia Sinica Technologica, 2020, 50, 1298-1315.	0.5	1