Ming Liu

List of Publications by Year
in descending order

63	3,084	201385 27	155451 55
papers	citations	h-index	g-index

64	64	64	2367
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Review on concentrating solar power plants and new developments in high temperature thermal energy storage technologies. Renewable and Sustainable Energy Reviews, 2016, 53, 1411-1432.	8.2	698
2	Review on storage materials and thermal performance enhancement techniques for high temperature phase change thermal storage systems. Renewable and Sustainable Energy Reviews, 2012, 16, 2118-2132.	8.2	673
3	Development of a novel refrigeration system for refrigerated trucks incorporating phase change material. Applied Energy, 2012, 92, 336-342.	5.1	156
4	Numerical study of melting performance enhancement for PCM in an annular enclosure with internal-external fins and metal foams. International Journal of Heat and Mass Transfer, 2020, 150, 119348.	2.5	129
5	Eutectic Na2CO3â€“NaCl salt: A new phase change material for high temperature thermal storage. Solar Energy Materials and Solar Cells, 2016, 152, 155-160.	3.0	97
6	Determination of thermo-physical properties and stability testing of high-temperature phase-change materials for CSP applications. Solar Energy Materials and Solar Cells, 2015, 139, 81-87.	3.0	90
7	Review on transportable phase change material in thermal energy storage systems. Renewable and Sustainable Energy Reviews, 2017, 75, 264-277.	8.2	86
8	Investigation of the effect of dynamic melting in a tube-in-tank PCM system using a CFD model. Applied Energy, 2015, 137, 738-747.	5.1	59
9	Validation of a mathematical model for encapsulated phase change material flat slabs for cooling applications. Applied Thermal Engineering, 2011, 31, 2340-2347.	3.0	55
10	Optimising PCM thermal storage systems for maximum energy storage effectiveness. Solar Energy, 2012, 86, 2263-2272.	2.9	54
11	A eutectic salt high temperature phase change material: Thermal stability and corrosion of SS316 with respect to thermal cycling. Solar Energy Materials and Solar Cells, 2017, 170, 1-7.	3.0	52
12	Review on the development of high temperature phase change material composites for solar thermal energy storage. Solar Energy Materials and Solar Cells, 2019, 203, 110164.	3.0	52
13	Impact of the heat transfer fluid in a flat plate phase change thermal storage unit for concentrated solar tower plants. Solar Energy, 2014, 101, 220-231.	2.9	51
14	Design of sensible and latent heat thermal energy storage systems for concentrated solar power plants: Thermal performance analysis. Renewable Energy, 2020, 151, 1286-1297.	4.3	50
15	Thermo-economic assessments of pumped-thermal electricity storage systems employing sensible heat storage materials. Renewable Energy, 2022, 186, 431-456.	4.3	47
16	Phase change behaviour study of PCM tanks partially filled with graphite foam. Applied Thermal Engineering, 2021, 196, 117313.	3.0	46
17	A review of high temperature (<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML") Tj ETQq1 1 0.784314 rgBT /Overloc thermal energy storage. Renewable and Sustainable Energy Reviews, 2022, 160, 112293.	8.2	43
18	Simulations of melting performance enhancement for a PCM embedded in metal periodic structures. International Journal of Heat and Mass Transfer, 2021, 168, 120853.	2.5	40

#	Article	IF	Citations
19	A review of numerical modelling of high-temperature phase change material composites for solar thermal energy storage. Journal of Energy Storage, 2020, 29, 101378.	3.9	39
20	Computer simulation with TRNSYS for a mobile refrigeration system incorporating a phase change thermal storage unit. Applied Energy, 2014, 132, 226-235.	5.1	36
21	Thermal performance analysis of a flat slab phase change thermal storage unit with liquid-based heat transfer fluid for cooling applications. Solar Energy, 2011, 85, 3017-3027.	2.9	35
22	Influence of cascaded graphite foams on thermal performance of high temperature phase change material storage systems. Applied Thermal Engineering, 2020, 180, 115618.	3.0	31
23	Characterisation of promising phase change materials for high temperature thermal energy storage. Journal of Energy Storage, 2019, 24, 100801.	3.9	30
24	Investigation of Cascaded Shell and Tube Latent Heat Storage Systems for Solar Tower Power Plants. Energy Procedia, 2015, 69, 913-924.	1.8	29
25	Effective tube-in-tank PCM thermal storage for CSP applications, Part 1: Impact of tube configuration on discharging effectiveness. Solar Energy, 2016, 139, 733-743.	2.9	29
26	Using renewables coupled with thermal energy storage to reduce natural gas consumption in higher temperature commercial/industrial applications. Renewable Energy, 2019, 131, 1035-1046.	4.3	28
27	Numerical investigation of phase change material thermal storage for space cooling. Applied Energy, 2019, 239, 526-535.	5.1	28
28	Computational efficiency in numerical modeling of high temperature latent heat storage: Comparison of selected software tools based on experimental data. Applied Energy, 2016, 161, 337-348.	5.1	26
29	Review of analytical studies of melting rate enhancement with fin and/or foam inserts. Applied Thermal Engineering, 2022, 207, 118154.	3.0	26
30	Novel solidâ€“solid phase-change cascade systems for high-temperature thermal energy storage. Solar Energy, 2019, 177, 274-283.	2.9	25
31	Review and characterisation of high-temperature phase change material candidates between 500ÂC and 700Â°C. Renewable and Sustainable Energy Reviews, 2021, 150, 111528.	8.2	24
32	Techno-economic analysis on the design of sensible and latent heat thermal energy storage systems for concentrated solar power plants. Renewable Energy, 2021, 178, 443-455.	4.3	24
33	Thermo-economic optimization of the thermal energy storage system extracting heat from the reheat steam for coal-fired power plants. Applied Thermal Engineering, 2022, 215, 119008.	3.0	21
34	Experimental investigation of specific heat capacity improvement of a binary nitrate salt by addition of nanoparticles/microparticles. Journal of Energy Storage, 2019, 22, 137-143.	3.9	19
35	A comprehensive study on a novel transcritical CO2 heat pump for simultaneous space heating and cooling â€“ Concepts and initial performance. Energy Conversion and Management, 2021, 243, 114397.	4.4	18
36	Corrosion of AISI316 as containment material for latent heat thermal energy storage systems based on carbonates. Solar Energy Materials and Solar Cells, 2018, 186, 1-8.	3.0	17

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37	Effective tube-in-tank PCM thermal storage for CSP applications, Part 2: Parametric assessment and impact of latent fraction. Solar Energy, 2016, 139, 744-756.	2.9	16
38	Investigation of the effect of thermal resistance on the performance of phase change materials. International Journal of Thermal Sciences, 2021, 164, 106852.	2.6	16
39	Investigation into the behaviour of aluminium and steel under melt/freeze cyclic conditions. Journal of Energy Storage, 2018, 17, 249-260.	3.9	9
40	An optimisation study on a real-world transcritical CO2 heat pump system with a flash gas bypass. Energy Conversion and Management, 2022, 251, 114995.	4.4	9
41	Assessment of exergy delivery of thermal energy storage systems for CSP plants: Cascade PCMs, graphite-PCMs and two-tank sensible heat storage systems. Sustainable Energy Technologies and Assessments, 2020, 42, 100823.	1.7	8
42	Technoeconomic Impacts of Storage System Design on the Viability of Concentrated Solar Power Plants. Journal of Energy Storage, 2021, 34, 101987.	3.9	8
43	Mathematical modelling of heat transmission in the temperature history apparatus by using inverse method to evaluate the latent heat of high temperature PCMs. International Journal of Heat and Mass Transfer, 2021, 167, 120825.	2.5	8
44	Modified T-history method for measuring thermophysical properties of phase change materials at high temperature. AIP Conference Proceedings, 2017, , .	0.3	7
45	Materials for Phase Change Material at High Temperature. , 2018, , 195-230.		7
46	Corrosion interface formation in thermally cycled stainless steel 316 with high-temperature phase change material. Solar Energy Materials and Solar Cells, 2021, 225, 111062.	3.0	6
47	Chemical degradation in Thermally Cycled Stainless Steel 316 with High-Temperature Phase Change Material. Solar Energy Materials and Solar Cells, 2021, 230, 111216.	3.0	4
48	Periodic structures for melting enhancement: observation of critical cell size and localized melting. International Journal of Heat and Mass Transfer, 2022, 195, 123107.	2.5	4
49	Solid-liquid phase change materials for thermal energy storage. , 2021, , 221-268.		3
50	SELECTION OF THE MELTING TEMPERATURE OF PHASE CHANGE MATERIALS CONSIDERING LOCAL CLIMATE. , 2017, , .		3
51	Investigation of lithium sulphate for high temperature thermal energy storage. AIP Conference Proceedings, 2017, , .	0.3	2
52	A new methodology for designing and assessing latent heat thermal energy storage systems. AIP Conference Proceedings, 2020, , .	0.3	2
53	Stability and corrosion testing of a high temperature phase change material for CSP applications. AIP Conference Proceedings, 2016, , .	0.3	1
54	Dynamic Concept at University of South Australia. , 2018, , 39-92.		1

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55	Static Concept at University of South Australia. , 2018, , 157-191.		1
56	A novel, low-cost and robust method for determining molten salt density at high temperatures. Journal of Energy Storage, 2021, 41, 102935.	3.9	1
57	Macroscopic investigation into the interaction of liquid sodium and a molten carbonate. AIP Conference Proceedings, 2020, , .	0.3	1
58	Thermal insulation for a high temperature molten salt storage tank in a CSP plant. AIP Conference Proceedings, 2020, , .	0.3	1
59	Investigating the effect of interstage pressure on cooling performance of a real-world CO2 heat pump system. IOP Conference Series: Earth and Environmental Science, 2022, 983, 012077.	0.2	1
60	Orientation impact on structural integrity of a shell and tube latent heat thermal energy storage system. Journal of Energy Storage, 2022, 52, 104829.	3.9	1
61	Using thermal energy storage to replace natural gas in commercial/industrial applications. AIP Conference Proceedings, 2018, , .	0.3	0
62	Thermal Performance Of A Pcm Thermal Storage Unit. , 2008, , 2766-2771.		0
63	Melt path formation in a high temperature molten salt horizontal shell and tube storage system for CSP plants. AIP Conference Proceedings, 2020, , .	0.3	0