

Hayder I Mohammed

List of Publications by Year in descending order

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papers

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citations

304743

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all docs

39
docs citations

39
times ranked

626
citing authors

#	ARTICLE	IF	CITATIONS
1	Solidification enhancement with multiple PCMs, cascaded metal foam and nanoparticles in the shell-and-tube energy storage system. <i>Applied Energy</i> , 2020, 257, 113993.	10.1	219
2	Thermal performance evaluation of non-uniform fin array in a finned double-pipe latent heat storage system. <i>Energy</i> , 2020, 193, 116800.	8.8	127
3	Numerical study of a multiple-segment metal foam-PCM latent heat storage unit: Effect of porosity, pore density and location of heat source. <i>Energy</i> , 2019, 189, 116108.	8.8	123
4	A new approach for employing multiple PCMs in the passive thermal management of photovoltaic modules. <i>Solar Energy</i> , 2021, 222, 160-174.	6.1	73
5	Performance evaluation of melting/solidification mechanism in a variable wave-length wavy channel double-tube latent heat storage system. <i>Journal of Energy Storage</i> , 2020, 27, 101063.	8.1	61
6	An experimental investigation on the rheological behavior of nanofluids made by suspending multi-walled carbon nanotubes in liquid paraffin. <i>Journal of Molecular Liquids</i> , 2020, 300, 112269.	4.9	44
7	Consecutive charging and discharging of a PCM-based plate heat exchanger with zigzag configuration. <i>Applied Thermal Engineering</i> , 2021, 193, 116970.	6.0	42
8	Improved melting of latent heat storage via porous medium and uniform Joule heat generation. <i>Journal of Energy Storage</i> , 2020, 31, 101747.	8.1	40
9	CFD simulation of a concentrated salt nanofluid flow boiling in a rectangular tube. <i>International Journal of Heat and Mass Transfer</i> , 2018, 125, 218-228.	4.8	39
10	Intensifying the Charging Response of a Phase-Change Material with Twisted Fin Arrays in a Shell-And-Tube Storage System. <i>Energies</i> , 2021, 14, 1619.	3.1	39
11	Intensifying the thermal response of PCM via fin-assisted foam strips in the shell-and-tube heat storage system. <i>Journal of Energy Storage</i> , 2022, 45, 103733.	8.1	39
12	Simultaneous and consecutive charging and discharging of a PCM-based domestic air heater with metal foam. <i>Applied Thermal Engineering</i> , 2021, 197, 117408.	6.0	38
13	Effects of non-uniform fin arrangement and size on the thermal response of a vertical latent heat triple-tube heat exchanger. <i>Journal of Energy Storage</i> , 2022, 45, 103723.	8.1	36
14	Multiphase flow and boiling heat transfer modelling of nanofluids in horizontal tubes embedded in a metal foam. <i>International Journal of Thermal Sciences</i> , 2019, 146, 106099.	4.9	35
15	Effect of airflow channel arrangement on the discharge of a composite metal foam phase change material heat exchanger. <i>International Journal of Energy Research</i> , 2021, 45, 2593-2609.	4.5	35
16	Numerical study of circular-elliptical double-pipe thermal energy storage systems. <i>Journal of Energy Storage</i> , 2020, 30, 101440.	8.1	34
17	Investigation of Heat Transfer Enhancement in a Triple Tube Latent Heat Storage System Using Circular Fins with Inline and Staggered Arrangements. <i>Nanomaterials</i> , 2021, 11, 2647.	4.1	32
18	CFD multiphase modelling of the acetone condensation and evaporation process in a horizontal circular tube. <i>International Journal of Heat and Mass Transfer</i> , 2019, 134, 1159-1170.	4.8	28

#	ARTICLE	IF	CITATIONS
19	Melting Enhancement in a Triple-Tube Latent Heat Storage System with Sloped Fins. <i>Nanomaterials</i> , 2021, 11, 3153.	4.1	28
20	Improved Melting of Latent Heat Storage Using Fin Arrays with Non-Uniform Dimensions and Distinct Patterns. <i>Nanomaterials</i> , 2022, 12, 403.	4.1	28
21	Solidification Enhancement in a Triple-Tube Latent Heat Energy Storage System Using Twisted Fins. <i>Energies</i> , 2021, 14, 7179.	3.1	23
22	Localized heating element distribution in composite metal foamâ€¢phase change material: Fourier's law and creeping flow effects. <i>International Journal of Energy Research</i> , 2021, 45, 13380-13396.	4.5	22
23	Evaluation of Multiple Semi-Twisted Tape Inserts in a Heat Exchanger Pipe Using Al ₂ O ₃ Nanofluid. <i>Nanomaterials</i> , 2021, 11, 1570.	4.1	22
24	Optimum design of a double elliptical latent heat energy storage system during the melting process. <i>Journal of Energy Storage</i> , 2021, 44, 103384.	8.1	22
25	Experimental investigation of nanoparticles concentration, boiler temperature and flow rate on flow boiling of zinc bromide and acetone solution in a rectangular duct. <i>International Journal of Heat and Mass Transfer</i> , 2019, 130, 710-721.	4.8	21
26	Phase Change Process in a Zigzag Plate Latent Heat Storage System during Melting and Solidification. <i>Molecules</i> , 2020, 25, 4643.	3.8	19
27	Discharge improvement of a phase change materialâ€¢based thermal energy storage unit for space heating applications using metal foams in the air sides. <i>Heat Transfer</i> , 2022, 51, 3830-3852.	3.0	17
28	Solidification of a nano-enhanced phase change material (NePCM) in a double elliptical latent heat storage unit with wavy inner tubes. <i>Solar Energy</i> , 2022, 241, 39-53.	6.1	16
29	A new design to enhance the conductive and convective heat transfer of latent heat thermal energy storage units. <i>Applied Thermal Engineering</i> , 2022, 215, 118955.	6.0	14
30	Thermal behaviour of the flow boiling of a complex nanofluid in a rectangular channel: An experimental and numerical study. <i>International Communications in Heat and Mass Transfer</i> , 2020, 117, 104773.	5.6	13
31	CFD assessment of the effect of nanoparticles on the heat transfer properties of acetone/ZnBr ₂ solution. <i>Applied Thermal Engineering</i> , 2018, 128, 264-273.	6.0	12
32	Heat transfer of large Prandtl number fluids in porous media by a new lattice Boltzmann model. <i>International Communications in Heat and Mass Transfer</i> , 2021, 122, 105129.	5.6	11
33	Optimum Placement of Heating Tubes in a Multi-Tube Latent Heat Thermal Energy Storage. <i>Materials</i> , 2021, 14, 1232.	2.9	10
34	Solidification Enhancement in a Multi-Tube Latent Heat Storage System for Efficient and Economical Production: Effect of Number, Position and Temperature of the Tubes. <i>Nanomaterials</i> , 2021, 11, 3211.	4.1	10
35	Impact of Tube Bundle Placement on the Thermal Charging of a Latent Heat Storage Unit. <i>Energies</i> , 2021, 14, 1289.	3.1	9
36	Natural Convection Effect on Solidification Enhancement in a Multi-Tube Latent Heat Storage System: Effect of Tubesâ€™ Arrangement. <i>Energies</i> , 2021, 14, 7489.	3.1	9

#	ARTICLE	IF	CITATIONS
37	Thermo-physical properties of the nano-binary fluid (acetoneâ€“zinc bromide-ZnO) as a low temperature operating fluid for use in an absorption refrigeration machine. Heat and Mass Transfer, 2020, 56, 1037-1044.	2.1	7
38	Natural Convection Heat and Mass Transfer in the Vertical Cylindrical Porous Channel Under the Effects of Time-Periodic Boundary Condition. Journal of Heat Transfer, 2019, 141, .	2.1	4
39	CFD multiphase modelling for the nanofluid boiling of the salt solution in a symmetric rectangular boiler. , 2017, , .		1