Hengyun Zhang

List of Publications by Citations

37 papers	841 citations	14 h-index	29 g-index
45 ext. papers	1,262 ext. citations	5.4 avg, IF	5.2 L-index

#	Paper	IF	Citations
37	Single-phase liquid cooled microchannel heat sink for electronic packages. *Applied Thermal Engineering*, **2005**, 25, 1472-1487	5.8	111
36	Analysis of thermoelectric cooler performance for high power electronic packages. *Applied Thermal Engineering*, **2010**, 30, 561-568	5.8	107
35	Thermal analysis of conjugated cooling configurations using phase change material and liquid cooling techniques for a battery module. *International Journal of Heat and Mass Transfer*, **2019**, 133, 827-841	4.9	80
34	Experimental investigation on the thermal behavior of cylindrical battery with composite paraffin and fin structure. *International Journal of Heat and Mass Transfer*, **2017**, 109, 958-970	4.9	76
33	A general approach in evaluating and optimizing thermoelectric coolers. *International Journal of Refrigeration*, **2010**, 33, 1187-1196	3.8	60
32	Thermal performance of a cylindrical battery module impregnated with PCM composite based on thermoelectric cooling. *Energy*, **2019**, 188, 116048	7.9	43
31	Experimental investigation of thermal performance of large-sized battery module using hybrid PCM and bottom liquid cooling configuration. *Applied Thermal Engineering*, **2019**, 159, 113968	5.8	42
30	Numerical analysis and experimental visualization of phase change material melting process for thermal management of cylindrical power battery. *Applied Thermal Engineering*, **2018**, 128, 489-499	5.8	42
29	A review of air-cooling battery thermal management systems for electric and hybrid electric vehicles. *Journal of Power Sources*, **2021**, 501, 230001	8.9	41
28	An improved calorimetric method for characterizations of the specific heat and the heat generation rate in a prismatic lithium ion battery cell. *Energy Conversion and Management*, **2019**, 180, 724-732	10.6	37
27	Experimental determination on thermal parameters of prismatic lithium ion battery cells. *International Journal of Heat and Mass Transfer*, **2019**, 139, 231-239	4.9	33
26	Thermal characteristics of power battery module with composite phase change material and external liquid cooling. *International Journal of Heat and Mass Transfer*, **2020**, 156, 119820	4.9	32
25	Effect analysis on thermal profile management of a cylindrical lithium-ion battery utilizing a cellular liquid cooling jacket. *Energy*, **2021**, 220, 119725	7.9	22
24	Structural optimization of light-weight battery module based on hybrid liquid cooling with high latent heat PCM. *International Journal of Heat and Mass Transfer*, **2020**, 163, 120495	4.9	17
23	Multi-objective optimization of a liquid cooled battery module with collaborative heat dissipation in both axial and radial directions. *International Journal of Heat and Mass Transfer*, **2020**, 155, 119701	4.9	14
22	Lightweight liquid cooling based thermal management to a prismatic hard-cased lithium-ion battery. *International Journal of Heat and Mass Transfer*, **2021**, 170, 120998	4.9	12
21	Experimental evaluation of a compact two-phase cooling system for high heat flux electronic packages. *Applied Thermal Engineering*, **2019**, 163, 114338	5.8	11

20	Numerical analysis and surrogate model optimization of air-cooled battery modules using double-layer heat spreading plates. *International Journal of Heat and Mass Transfer*, **2021**, 176, 121380	4.9	10
19	Microchannel Thermal Management System With Two-Phase Flow for Power Electronics Over 500 W/cm2 Heat Dissipation. *IEEE Transactions on Power Electronics*, **2020**, 1-1	7.2	7
18	Quasi steady state method to measure thermophysical parameters of cylindrical lithium ion batteries. *Journal of Power Sources*, **2021**, 485, 229342	8.9	6
17	Effect of Surface Texturing Parameters on the Lubrication Characteristics of an Axial Piston Pump Valve Plate. *Lubricants*, **2018**, 6, 49	3.1	6
16	A calibration calorimetry method to investigate the thermal characteristics of a cylindrical lithium-ion battery. *International Journal of Thermal Sciences*, **2021**, 165, 106891	4.1	5
15	Warpage simulation and experiment for panel level fan-out package **2016**,		5
14	Experimental and numerical approach for analyzing thermal behaviors of a prismatic hard-cased lithium-ion battery. *Journal of Energy Storage*, **2021**, 35, 102313	7.8	5
13	A study on the transient heat generation rate of lithium-ion battery based on full matrix orthogonal experimental design with mixed levels. *Journal of Energy Storage*, **2021**, 36, 102446	7.8	4
12	Cross-Flow Heat Exchanger: Volume-Averaging Formulation of a Unit Cell Model and Thermal Performance Analysis. *Journal of Heat Transfer*, **2017**, 139,	1.8	1
11	Design analysis of minichannel heat sink with indented fins under impingement flow condition **2017**,		1
10	Development and characterization of large silicon microchannel heat sink packages for thermal management of high power microelectronics modules		1
9	Thermal modeling, analysis, and design **2020**, 59-129		1
8	Air-Side Fin Geometry of a Tube-Strip Heat Exchanger for Fuel Cell Vehicles. *Automotive Innovation*, **2021**, 4, 176-188	1.7	1
7	Experimental investigations on the performance of mini-channel evaporator refrigeration system for thermal management of power batteries. *International Journal of Refrigeration*, **2021**, 130, 117-127	3.8	1
6	Thermal management of lithium-ion batteries under high ambient temperature and rapid discharging using composite PCM and liquid cooling. *Applied Thermal Engineering*, **2022**, 210, 118230	5.8	1
5	Performance Improvement of a Novel Trapezoid Air-Cooling Battery Thermal Management System for Electric Vehicles. *Sustainability*, **2022**, 14, 4975	3.6	1
4	Topology optimization of anisotropy hierarchical honeycomb acoustic metamaterials for extreme multi-broad band gaps. *Mechanics of Advanced Materials and Structures*,1-13	1.8	1
3	Thermal performance of cylindrical battery module with both axial and radial thermal paths: Numerical simulation and thermal resistance network analysis. *Journal of Energy Storage*, **2022**, 49, 104197	7.8	0

2	Heat generation and surrogate model for large-capacity nickel-rich prismatic lithium-ion battery as against 18650 battery. *Journal of Loss Prevention in the Process Industries*, **2022**, 104783	3.5	0
1	Surrogate models for lithium-ion battery heat generation based on orthogonal experiments by eliminating external wire connection effect. *Applied Thermal Engineering*, **2022**, 118655	5.8	0