Shankar Krishnan

List of Publications by Year
in descending order

38 papers	1,438 citations	567281 15 h-index	414414 32 g-index
38 all docs	38 docs citations	38 times ranked	1030 citing authors

#	Article	IF	Citations
1	Direct Simulation of Transport in Open-Cell Metal Foam. Journal of Heat Transfer, 2006, 128, 793-799.	2.1	223
2	Enhancement of pool-boiling heat transfer using nanostructured surfaces on aluminum and copper. International Journal of Heat and Mass Transfer, 2010, 53, 3357-3365.	4.8	174
3	A Two-Temperature Model for Solid-Liquid Phase Change in Metal Foams. Journal of Heat Transfer, 2005, 127, 995-1004.	2.1	155
4	Towards a Thermal Moore's Law. IEEE Transactions on Advanced Packaging, 2007, 30, 462-474.	1.6	122
5	A novel hybrid heat sink using phase change materials for transient thermal management of electronics. IEEE Transactions on Components and Packaging Technologies, 2005, 28, 281-289.	1.3	111
6	Simulation of Thermal Transport in Open-Cell Metal Foams: Effect of Periodic Unit-Cell Structure. Journal of Heat Transfer, 2008, 130, .	2.1	86
7	Analysis of a Phase Change Energy Storage System for Pulsed Power Dissipation. IEEE Transactions on Components and Packaging Technologies, 2004, 27, 191-199.	1.3	79
8	Fluid flow and heat transfer characteristics of octet truss lattice geometry. International Journal of Thermal Sciences, 2019, 137, 253-261.	4.9	68
9	A Two-Temperature Model for the Analysis of Passive Thermal Control Systems. Journal of Heat Transfer, 2004, 126, 628.	2.1	65
10	Experimental investigation of heat transfer and fluid flow in octet-truss lattice geometry. International Journal of Thermal Sciences, 2019, 143, 64-75.	4.9	57
11	Analysis of Solidâ€“Liquid Phase Change Under Pulsed Heating. Journal of Heat Transfer, 2007, 129, 395-400.	2.1	49
12	Design of Complex Structured Monolithic Heat Sinks for Enhanced Air Cooling. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2012, 2, 266-277.	2.5	34
13	A Review On Transient Thermal Management of Electronic Devices. Journal of Electronic Packaging, Transactions of the ASME, 2021, , .	1.8	24
14	Experimental investigation on the local heat transfer with a circular jet impinging on a metal foamed flat plate. International Journal of Heat and Mass Transfer, 2020, 162, 120405.	4.8	21
15	Capillary Rise of Nanostructured Microwicks. Micromachines, 2018, 9, 153.	2.9	15
16	Experimental investigation on the local heat transfer with an unconfined slot jet impinging on a metal foamed flat plate. International Journal of Thermal Sciences, 2021, 169, 107065.	4.9	15
17	Towards Thermal-Acoustic Co-Design of Noise-Reducing Heat Sinks. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2018, 8, 1411-1419.	2.5	14
18	Selection of periodic cellular structures for multifunctional applications directly based on their unit cell geometry. International Journal of Mechanical Sciences, 2022, 220, 107133.	6.7	14

#	Article	IF	Citations
19	A similarity solution for heat transfer analysis during progressive freeze-concentration based desalination. International Journal of Thermal Sciences, 2022, 172, 107328.	4.9	11
20	A novel hybrid heat sink using phase change materials for transient thermal management of electronics. , 0, , .		10
21	Analysis of Fluid Flow and Heat Transfer in Corrugated Porous Fin Heat Sinks. Heat Transfer Engineering, 2021, 42, 1539-1556.	1.9	10
22	Experimental and theoretical investigation of a novel system for progressive freeze-concentration based desalination process. Chemical Engineering and Processing: Process Intensification, 2022, 173, 108821.	3.6	10
23	Economic analysis and experimental investigation of a direct absorption solar humidification-dehumidification system for decentralized water production. Sustainable Energy Technologies and Assessments, 2021, 46, 101306.	2.7	7
24	Separation of conduction and convection heat transfer effects for a metal foamed flat plate impinged by a circular jet. International Journal of Heat and Mass Transfer, 2022, 185, 122387.	4.8	7
25	Influence of metal foam thickness on the conduction and convective heat transfer for a flat plate with metal foam impinged by a rectangular slot jet. International Journal of Thermal Sciences, 2022, 179, 107665.	4.9	7
26	Impact of entryâ€“exit loss on the measurement of flow resistivity of porous materials. AIP Advances, 2020, 10, .	1.3	6
27	Experimental investigation of two-phase pumpless loop with aqueous anionic surfactant as working fluid. International Journal of Thermal Sciences, 2020, 154, 106400.	4.9	6
28	Evaluation of Stochastic and Periodic Cellular Materials for Combined Heat Dissipation and Noise Reduction: Experiments and Modeling. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2020, 10, 1185-1203.	2.5	6
29	A priori determination of the elastic and acoustic responses of periodic poroelastic materials. Applied Acoustics, 2020, 169, 107455.	3.3	6
30	Design and parametric study of macro-structure of foams for combined high absorption and low pressure drop. Applied Acoustics, 2020, 166, 107358.	3.3	6
31	Thermal Influence Coefficients-Based Electrothermal Modeling Approach for Power Electronics. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2021, 11, 1187-1196.	2.5	5
32	Performance analysis of a phase change energy storage system for pulsed power dissipation. , 0, , .		4
33	Control of Boiling Instabilities in a Two-Phase Pumpless Loop Using Water-Alcohol Mixtures. Journal of Thermal Science and Engineering Applications, 2021, 13, .	1.5	4
34	A Critical Review and Perspective on Thermal Management of Power Electronics Modules for Inverters and Converters. , 2022, 7, 47-60.		4
35	Analysis of Fluid Flow and Heat Transfer in Corrugated Perforated Plate Fin Heat Sinks. Journal of Thermal Science and Engineering Applications, 0, , 1-30.	1.5	2
36	Numerical Investigation of Heat Transfer Enhancement Due to Flow Agitators Between Fins. Journal of Thermal Science and Engineering Applications, 2022, 14, .	1.5	1

#	Article	IF	Citations
37	Thermal Characterization of Open-Celled Metal Foams by Direct Simulation. , 0, , 267-289.		0
38	Heat transfer during diffusion-controlled unidirectional solidification of binary mixtures: effect of material advection. Sadhana - Academy Proceedings in Engineering Sciences, 2021, 46, 1.	1.3	0