

Choondal B Sobhan

List of Publications by Year in descending order

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69
papers

1,899
citations

516215

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264894

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docs citations

70
times ranked

1487
citing authors

#	ARTICLE	IF	CITATIONS
1	A COMPARATIVE ANALYSIS OF STUDIES ON HEAT TRANSFER AND FLUID FLOW IN MICROCHANNELS. <i>Microscale Thermophysical Engineering</i> , 2001, 5, 293-311.	1.2	357
2	Experimental Investigations on the Effects of Cerium Oxide Nanoparticle Fuel Additives on Biodiesel. <i>Advances in Mechanical Engineering</i> , 2010, 2, 581407.	0.8	295
3	TRANSPORT IN MICROCHANNELS - A CRITICAL REVIEW. <i>Annual Review of Heat Transfer</i> , 2003, 13, 1-50.	0.3	224
4	Application of TiO ₂ nanoparticles as a lubricant-additive for vapor compression refrigeration systems – An experimental investigation. <i>International Journal of Refrigeration</i> , 2012, 35, 1989-1996.	1.8	158
5	A review of experimental investigations on thermal phenomena in nanofluids. <i>Nanoscale Research Letters</i> , 2011, 6, 377.	3.1	98
6	A review and comparative study of the investigations on micro heat pipes. <i>International Journal of Energy Research</i> , 2007, 31, 664-688.	2.2	96
7	Molecular dynamics modeling of thermal conductivity enhancement in metal nanoparticle suspensions. <i>International Communications in Heat and Mass Transfer</i> , 2008, 35, 867-872.	2.9	88
8	Microscale and Nanoscale Heat Transfer. , 0, , .		63
9	A quasi-3D analysis of the thermal performance of a flat heat pipe. <i>International Journal of Heat and Mass Transfer</i> , 2007, 50, 4286-4296.	2.5	47
10	Thermal response of a flat heat pipe sandwich structure to a localized heat flux. <i>International Journal of Heat and Mass Transfer</i> , 2006, 49, 4070-4081.	2.5	44
11	Experimental studies on steady free convection heat transfer from fins and fin arrays. <i>Heat and Mass Transfer</i> , 1990, 25, 345-352.	0.2	37
12	Experimental analysis of unsteady free convection heat transfer from horizontal fin arrays. <i>Heat and Mass Transfer</i> , 1989, 24, 155-160.	0.2	34
13	Investigations on Transient and Steady-State Performance of a Micro Heat Pipe. <i>Journal of Thermophysics and Heat Transfer</i> , 2000, 14, 161-169.	0.9	33
14	Recent Advances in the Modeling and Applications of Nonconventional Heat Pipes. <i>Advances in Heat Transfer</i> , 2001, 35, 249-308.	0.4	27
15	Digital interferometry: techniques and trends for fluid measurement. <i>Heat and Mass Transfer</i> , 2008, 44, 535-546.	1.2	25
16	Digital Interferometric Measurement of Forced Convection Heat Transfer in a Miniature Rectangular Channel. <i>Experimental Heat Transfer</i> , 2008, 21, 314-333.	2.3	17
17	Molecular Dynamics Modeling of Latent Heat Enhancement in Nanofluids. <i>International Journal of Thermophysics</i> , 2010, 31, 1131-1144.	1.0	17
18	Stability and Transient Performance of Vertical Heater Vertical Cooler Natural Circulation Loops with Metal Oxide Nanoparticle Suspensions. <i>Heat Transfer Engineering</i> , 2018, 39, 861-873.	1.2	17

#	ARTICLE	IF	CITATIONS
19	Highly Efficient Amorphous Carbon Sphere-Based Superhydrophobic and Superoleophilic Sponges for Oil/Water Separation. <i>Langmuir</i> , 2021, 37, 12501-12511.	1.6	15
20	Review of Condensation Heat Transfer in Microgravity Environments. <i>Journal of Thermophysics and Heat Transfer</i> , 2006, 20, 353-360.	0.9	14
21	Characterization of thermophysical properties of nano-enhanced organic phase change materials using T-history method. <i>Journal of Thermal Analysis and Calorimetry</i> , 2020, 140, 2471-2484.	2.0	13
22	Computational Analysis of Fluid Flow and Heat Transfer in Wire-Sandwiched Microheat Pipes. <i>Journal of Thermophysics and Heat Transfer</i> , 2009, 23, 741-751.	0.9	11
23	An Experimental Investigation of the Boiling Performance of Water-Based Nanofluids. , 2008, , .		10
24	A molecular dynamics study of liquid layering and thermal conductivity enhancement in nanoparticle suspensions. <i>Heat and Mass Transfer</i> , 2018, 54, 785-791.	1.2	10
25	Differential interferometry in heat transfer. <i>Sadhana - Academy Proceedings in Engineering Sciences</i> , 1990, 15, 105-128.	0.8	9
26	An experimental investigation of the CO ₂ adsorption performance of graphene oxide forms. <i>International Journal of Refrigeration</i> , 2018, 96, 179-190.	1.8	9
27	Dimensionless Governing Equations for Vapor and Liquid Flow Analysis of Heat Pipes. <i>Journal of Thermophysics and Heat Transfer</i> , 2006, 20, 140-144.	0.9	8
28	Simulation and modeling of carbon nanotube synthesis: current trends and investigations. <i>Nanotechnology Reviews</i> , 2013, 2, 73-105.	2.6	8
29	Investigations on Replacement of Fins with Flat Heat Pipes for High Power LEDs. <i>Procedia Engineering</i> , 2015, 118, 654-661.	1.2	8
30	An Investigation Into the Effect of Inclusion of Cerium Oxide Nanoparticles on the Physicochemical Properties of Diesel Oil. , 2006, , 333.		7
31	An Investigation of the Effect of Addition of Nanoparticles on the Properties of Lubricating Oil. , 2007, , 329.		7
32	Numerical Study of Heat Pipe Heat Spreaders with Large Periodic Heat Input. <i>Journal of Thermophysics and Heat Transfer</i> , 2006, 20, 835-841.	0.9	6
33	Characterization of convective heat transfer in channels of small cross section using digital interferometry. <i>Heat and Mass Transfer</i> , 2011, 47, 505-518.	1.2	6
34	3D Heat Transfer Analysis of a Miniature Copper-Water Vapor Chamber with Wicked Pillars Array. <i>ISRN Mechanical Engineering</i> , 2013, 2013, 1-10.	0.9	6
35	Digital Interferometric Measurement of Forced Convection Fields in Compact Channels. <i>International Journal of Optomechatronics</i> , 2015, 9, 9-34.	3.3	6
36	Convective heat transfer studies in dilute alumina and silica nanofluids flowing through a channel using Mach-Zehnder interferometry. <i>Heat and Mass Transfer</i> , 2020, 56, 1793-1809.	1.2	6

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37	Experimental Investigation of Phase Change Phenomena in Nanofluids. , 2007, , 859.		5
38	Investigations on Transient Natural Convection in Boron Nitride-Mineral Oil Nanofluid Systems. , 2012, , .		5
39	Heat Transfer Studies in Thermally Conducting and Electrically Insulating Nano-Oils in a Natural Circulation Loop. , 2013, , .		5
40	Liquid Layering and the Enhanced Thermal Conductivity of Ar-Cu Nanofluids: A Molecular Dynamics Study. , 2016, , .		5
41	Convective heat transfer estimation of dilute metal oxide nanofluids in VUV surface tuned minichannel using Mach-Zehnder interferometry. Applied Thermal Engineering, 2021, 196, 117259.	3.0	5
42	Numerical and experimental investigations on forced convection in meso-channels with irregular geometry of cross-section. International Journal of Heat and Mass Transfer, 2014, 70, 276-288.	2.5	4
43	Natural convection heat transfer from a thin rectangular fin with a line source at the base " a finite difference solution. Heat and Mass Transfer, 1996, 31, 127-135.	1.2	3
44	Investigations on Forced Convection in Compact Passages With Surface Irregularities. Heat Transfer Engineering, 2012, 33, 1105-1119.	1.2	3
45	Flow Measurements in Metal Oxide-Nanoparticle Suspensions in a Rectangular Natural Circulation Loop. Advanced Materials Research, 2013, 685, 145-149.	0.3	3
46	Computational Analysis of Wire-Bonded Micro Heat Pipe: Influence of Thermophysical Parameters. Journal of Thermophysics and Heat Transfer, 2018, 32, 925-932.	0.9	3
47	SYMMETRICAL POROUS SURFACES FOR BOILING ENHANCEMENT IN MINI-CHANNELS: EFFECTS ON LIQUID PRESSURE DROP. Journal of Enhanced Heat Transfer, 2013, 20, 73-81.	0.5	3
48	Thermophysical characterization and melting heat transfer analysis of an organic phase change material dispersed with GNP- Ag hybrid nanoparticles. Heat and Mass Transfer, 2022, 58, 1811-1828.	1.2	3
49	Molecular Dynamic Simulation of Thermal Conductivity of Electrically Insulating Thermal Nano-Oil. , 2012, , .		2
50	An Experimental Investigation of the Refrigerant Adsorption Performance of Carbon Nanotube-Activated Carbon Mixtures. International Journal of Air-Conditioning and Refrigeration, 2017, 25, 1750017.	0.8	2
51	An investigation of Marangoni-Benard convection in water based nanofluids. Heat and Mass Transfer, 2019, 55, 791-809.	1.2	2
52	Development of an Interferometric Method for Measurement of Thermal Conductivity of a Transparent Medium. , 2006, , .		2
53	OPTIMUM DESIGN OF MICROCHANNEL HEAT SINKS FOR ANNULAR FLOW WITH PHASE CHANGE. Journal of Enhanced Heat Transfer, 2014, 21, 373-395.	0.5	2
54	Experimental investigations on a "2 heat exchanger with wire-wound tubes. Heat and Mass Transfer, 1994, 29, 211-217.	0.2	1

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55	Experimental Investigations on Fluid Flow and Heat Transfer Through Rectangular Mini Channels. , 2005, , 113.		1
56	Microchannel Optimization for Heat Dissipation From a Solid Substrate. , 2008, , .		1
57	Investigations on Forced Convection in a Mesochannel with Irregular Cross Section. Journal of Thermophysics and Heat Transfer, 2013, 27, 70-79.	0.9	1
58	Measurement of Open Flame Temperature of Nano Particle Additive Dispersed Diesel Using Digital Interferometry. Combustion Science and Technology, 2017, 189, 1813-1831.	1.2	1
59	Analysis of the Evaporation Process in a High Heat Flux Flat Plate Heat Pipe. , 2005, , 27.		0
60	An Investigation of the Effect of Nanoparticles on the Effectiveness of a Heat Exchanger. , 2007, , 589.		0
61	Comparison of Performance of Aluminum and Titanium Heat Pipes. , 2007, , 873.		0
62	Molecular Dynamics Modeling of the Effect of Thermal Interface Material on Thermal Contact Conductance. , 2008, , .		0
63	Convective Heat Transfer Studies in Mini-Channels Using Digital Interferometry. , 2009, , .		0
64	Experimental Analysis of the Nusselt Number for Jet Impingement on a Flat Plate. , 2009, , .		0
65	A computational model for predicting the mass transport in a CVD reactor for carbon nanotube synthesis. Proceedings of SPIE, 2013, , .	0.8	0
66	A Computational Model for Predicting the Temperature Distribution Inside a CVD Reactor for Carbon Nanotube Synthesis. , 2013, , .		0
67	Numerical Modeling of Micro Fin Arrays Using Slip Flow and Temperature Jump Boundary Conditions. , 2008, , .		0
68	A Hybrid Heat Flux Distribution Model for Jet Impingement on a Flat Plate. , 2008, , .		0
69	Natural convection heat transfer from a thin rectangular fin with a line source at the base - a finite difference solution. Heat and Mass Transfer, 1996, 31, 127-135.	1.2	0