Suresh V Garimella

List of Publications by Year
in descending order

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		6592	16605
434	20,056	79	123
papers	citations	h-index	g-index

437	437	437	9847
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Investigation of heat transfer in rectangular microchannels. International Journal of Heat and Mass Transfer, 2005, 48, 1688-1704.	2.5	703
2	Recent advances in microscale pumping technologies: a review and evaluation. Microfluidics and Nanofluidics, 2008, 5, 145-174.	1.0	402
3	Thermally developing flow and heat transfer in rectangular microchannels of different aspect ratios. International Journal of Heat and Mass Transfer, 2006, 49, 3060-3067.	2.5	369
4	A COMPARATIVE ANALYSIS OF STUDIES ON HEAT TRANSFER AND FLUID FLOW IN MICROCHANNELS. Microscale Thermophysical Engineering, 2001, 5, 293-311.	1.2	357
5	A composite heat transfer correlation for saturated flow boiling in small channels. International Journal of Heat and Mass Transfer, 2009, 52, 2110-2118.	2.5	357
6	Thermal Challenges in Next-Generation Electronic Systems. IEEE Transactions on Components and Packaging Technologies, 2008, 31, 801-815.	1.4	352
7	Characteristics of an evaporating thin film in a microchannel. International Journal of Heat and Mass Transfer, 2007, 50, 3933-3942.	2.5	326
8	Thermal analysis of solar thermal energy storage in a molten-salt thermocline. Solar Energy, 2010, 84, 974-985.	2.9	261
9	Microchannel size effects on local flow boiling heat transfer to a dielectric fluid. International Journal of Heat and Mass Transfer, 2008, 51, 3724-3735.	2.5	236
10	Characterization of evaporation and boiling from sintered powder wicks fed by capillary action. International Journal of Heat and Mass Transfer, 2010, 53, 4204-4215.	2.5	234
11	A hierarchical manifold microchannel heat sink array for high-heat-flux two-phase cooling of electronics. International Journal of Heat and Mass Transfer, 2018, 117, 319-330.	2.5	231
12	TRANSPORT IN MICROCHANNELS - A CRITICAL REVIEW. Annual Review of Heat Transfer, 2003, 13, 1-50.	0.3	224
13	Direct Simulation of Transport in Open-Cell Metal Foam. Journal of Heat Transfer, 2006, 128, 793-799.	1.2	223
14	The Influence of Surface Roughness on Nucleate Pool Boiling Heat Transfer. Journal of Heat Transfer, 2009, 131, .	1.2	222
15	Saturated flow boiling heat transfer and pressure drop in silicon microchannel arrays. International Journal of Heat and Mass Transfer, 2008, 51, 789-806.	2.5	217
16	A comprehensive flow regime map for microchannel flow boiling with quantitative transition criteria. International Journal of Heat and Mass Transfer, 2010, 53, 2694-2702.	2.5	203
17	Experimental and numerical study of melting in a cylinder. International Journal of Heat and Mass Transfer, 2006, 49, 2724-2738.	2.5	199
18	Hydrodynamic loading of microcantilevers vibrating in viscous fluids. Journal of Applied Physics, 2006, 99, 114906.	1.1	198

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19	Droplet Evaporation Dynamics on a Superhydrophobic Surface with Negligible Hysteresis. Langmuir, 2013, 29, 10785-10795.	1.6	193
20	Investigation of Liquid Flow in Microchannels. Journal of Thermophysics and Heat Transfer, 2004, 18, 65-72.	0.9	189
21	Effects of heat flux, mass flux, vapor quality, and saturation temperature on flow boiling heat transfer in microchannels. International Journal of Multiphase Flow, 2009, 35, 142-154.	1.6	186
22	Effects of channel dimension, heat flux, and mass flux on flow boiling regimes in microchannels. International Journal of Multiphase Flow, 2009, 35, 349-362.	1.6	183
23	Experimental Investigation of the Thermal Performance of Piezoelectric Fans. Heat Transfer Engineering, 2004, 25, 4-14.	1.2	176
24	Continuous Oilâ€“Water Separation Using Polydimethylsiloxane-Functionalized Melamine Sponge. Industrial & Engineering Chemistry Research, 2016, 55, 3596-3602.	1.8	170
25	A microscale model for thin-film evaporation in capillary wick structures. International Journal of Heat and Mass Transfer, 2011, 54, 169-179.	2.5	165
26	Analysis and optimization of the thermal performance of microchannel heat sinks. International Journal of Numerical Methods for Heat and Fluid Flow, 2005, 15, 7-26.	1.6	164
27	Advances in mesoscale thermal management technologies for microelectronics. Microelectronics Journal, 2006, 37, 1165-1185.	1.1	164
28	Measurements and high-speed visualizations of flow boiling of a dielectric fluid in a silicon microchannel heat sink. International Journal of Multiphase Flow, 2006, 32, 957-971.	1.6	162
29	Refrigerant flow boiling heat transfer in parallel microchannels as a function of local vapor quality. International Journal of Heat and Mass Transfer, 2008, 51, 4775-4787.	2.5	162
30	A mathematical model for analyzing the thermal characteristics of a flat micro heat pipe with a grooved wick. International Journal of Heat and Mass Transfer, 2008, 51, 4637-4650.	2.5	162
31	Nozzle-geometry effects in liquid jet impingement heat transfer. International Journal of Heat and Mass Transfer, 1996, 39, 2915-2923.	2.5	161
32	A Two-Temperature Model for Solid-Liquid Phase Change in Metal Foams. Journal of Heat Transfer, 2005, 127, 995-1004.	1.2	155
33	Ionic winds for locally enhanced cooling. Journal of Applied Physics, 2007, 102, .	1.1	145
34	The development of a bubble rising in a viscous liquid. Journal of Fluid Mechanics, 1999, 387, 61-96.	1.4	144
35	Prediction of the onset of nucleate boiling in microchannel flow. International Journal of Heat and Mass Transfer, 2005, 48, 5134-5149.	2.5	143
36	Bubble nucleation characteristics in pool boiling of a wetting liquid on smooth and rough surfaces. International Journal of Multiphase Flow, 2010, 36, 249-260.	1.6	142

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37	Molten-salt thermal energy storage in thermoclines under different environmental boundary conditions. Applied Energy, 2010, 87, 3322-3329.	5.1	141
38	Microscale pumping technologies for microchannel cooling systems. Applied Mechanics Reviews, 2004, 57, 191-221.	4.5	136
39	An integrated thermal and mechanical investigation of molten-salt thermocline energy storage. Applied Energy, 2011, 88, 2098-2105.	5.1	134
40	Characterization and optimization of the thermal performance of miniature piezoelectric fans. International Journal of Heat and Fluid Flow, 2007, 28, 806-820.	1.1	132
41	Enhancement of external forced convection by ionic wind. International Journal of Heat and Mass Transfer, 2008, 51, 6047-6053.	2.5	131
42	Assessment of Water Droplet Evaporation Mechanisms on Hydrophobic and Superhydrophobic Substrates. Langmuir, 2013, 29, 15831-15841.	1.6	130
43	Electronics Thermal Management in Information and Communications Technologies: Challenges and Future Directions. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2017, 7, 1191-1205.	1.4	130
44	System-level simulation of a solar power tower plant with thermocline thermal energy storage. Applied Energy, 2014, 113, 86-96.	5.1	127
45	Analysis of the Wicking and Thin-Film Evaporation Characteristics of Microstructures. Journal of Heat Transfer, 2009, 131, .	1.2	126
46	Flow Boiling Heat Transfer in Microchannels. Journal of Heat Transfer, 2007, 129, 1321-1332.	1.2	125
47	Measurement and prediction of the cooling characteristics of a generalized vibrating piezoelectric fan. International Journal of Heat and Mass Transfer, 2009, 52, 4470-4478.	2.5	123
48	Towards a Thermal Moore's Law. IEEE Transactions on Advanced Packaging, 2007, 30, 462-474.	1.7	122
49	Low Reynolds number flow through nozzle-diffuser elements in valveless micropumps. Sensors and Actuators A: Physical, 2004, 113, 226-235.	2.0	121
50	Effect of particle size on surface-coating enhancement of pool boiling heat transfer. International Journal of Heat and Mass Transfer, 2015, 81, 103-113.	2.5	119
51	A study of the flow field of a confined and submerged impinging jet. International Journal of Heat and Mass Transfer, 1998, 41, 1025-1034.	2.5	118
52	Review and Comparative Analysis of Studies on Saturated Flow Boiling in Small Channels. Nanoscale and Microscale Thermophysical Engineering, 2008, 12, 187-227.	1.4	113
53	Droplet evaporation on heated hydrophobic and superhydrophobic surfaces. Physical Review E, 2014, 89, 042402.	0.8	112
54	Electrowetting-Based Control of Static Droplet States on Rough Surfaces. Langmuir, 2007, 23, 4918-4924.	1.6	111

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55	The importance of turbulence during condensation in a horizontal circular minichannel. International Journal of Heat and Mass Transfer, 2012, 55, 3470-3481.	2.5	109
56	Enabling Highly Effective Boiling from Superhydrophobic Surfaces. Physical Review Letters, 2018, 120, 174501.	2.9	109
57	Exploiting Microscale Roughness on Hierarchical Superhydrophobic Copper Surfaces for Enhanced Dropwise Condensation. Advanced Materials Interfaces, 2015, 2, 1400480.	1.9	106
58	Prandtl-number effects and generalized correlations for confined and submerged jet impingement. International Journal of Heat and Mass Transfer, 2001, 44, 3471-3480.	2.5	105
59	A numerical model for transport in flat heat pipes considering wick microstructure effects. International Journal of Heat and Mass Transfer, 2011, 54, 153-168.	2.5	105
60	Local Heat Transfer Coefficients Induced by Piezoelectrically Actuated Vibrating Cantilevers. Journal of Heat Transfer, 2007, 129, 1168-1176.	1.2	104
61	Single-Phase Flow and Heat Transport and Pumping Considerations in Microchannel Heat Sinks. Heat Transfer Engineering, 2004, 25, 15-25.	1.2	99
62	Technological drivers in data centers and telecom systems: Multiscale thermal, electrical, and energy management. Applied Energy, 2013, 107, 66-80.	5.1	99
63	Cyclic operation of molten-salt thermal energy storage in thermoclines for solar power plants. Applied Energy, 2013, 103, 256-265.	5.1	99
64	Effects of nozzle-inlet chamfering on pressure drop and heat transfer in confined air jet impingement. International Journal of Heat and Mass Transfer, 2000, 43, 1133-1139.	2.5	97
65	Coalescence-Induced Jumping of Multiple Condensate Droplets on Hierarchical Superhydrophobic Surfaces. Scientific Reports, 2016, 6, 18649.	1.6	97
66	Hybrid Surface Design for Robust Superhydrophobicity. Langmuir, 2012, 28, 9606-9615.	1.6	91
67	Characterization of hierarchical manifold microchannel heat sink arrays under simultaneous background and hotspot heating conditions. International Journal of Heat and Mass Transfer, 2018, 126, 1289-1301.	2.5	91
68	Preventing the Cassieâ^'Wenzel Transition Using Surfaces with Noncommunicating Roughness Elements. Langmuir, 2009, 25, 4815-4820.	1.6	90
69	Heat transfer in trapezoidal microchannels of various aspect ratios. International Journal of Heat and Mass Transfer, 2010, 53, 365-375.	2.5	88
70	Local Heat Transfer Distributions in Confined Multiple Air Jet Impingement. Journal of Electronic Packaging, Transactions of the ASME, 2001, 123, 165-172.	1.2	87
71	An analytical solution for the total heat transfer in the thin-film region of an evaporating meniscus. International Journal of Heat and Mass Transfer, 2008, 51, 6317-6322.	2.5	86
72	Simulation of Thermal Transport in Open-Cell Metal Foams: Effect of Periodic Unit-Cell Structure. Journal of Heat Transfer, 2008, 130, .	1.2	86

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73	Microtomography-Based Simulation of Transport through Open-Cell Metal Foams. Numerical Heat Transfer; Part A: Applications, 2010, 58, 527-544.	1.2	86
74	Flow regime-based modeling of heat transfer and pressure drop in microchannel flow boiling. International Journal of Heat and Mass Transfer, 2012, 55, 1246-1260.	2.5	86
75	HEAT TRANSFER AND FLOW FIELDS IN CONFINED JET IMPINGEMENT. Annual Review of Heat Transfer, 2000, 11, 413-494.	0.3	86
76	The critical role of channel cross-sectional area in microchannel flow boiling heat transfer. International Journal of Multiphase Flow, 2009, 35, 904-913.	1.6	84
77	Manifold microchannel heat sink design using optimization under uncertainty. International Journal of Heat and Mass Transfer, 2014, 69, 92-105.	2.5	83
78	Transport in Flat Heat Pipes at High Heat Fluxes From Multiple Discrete Sources. Journal of Heat Transfer, 2004, 126, 347-354.	1.2	82
79	An experimentally validated thermo-mechanical model for the prediction of thermal contact conductance. International Journal of Heat and Mass Transfer, 2005, 48, 5446-5459.	2.5	82
80	Thermal Management Challenges in Telecommunication Systems and Data Centers. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2012, 2, 1307-1316.	1.4	82
81	Numerical investigation of pressure drop and heat transfer through reconstructed metal foams and comparison against experiments. International Journal of Heat and Mass Transfer, 2015, 88, 508-515.	2.5	82
82	Design of multifunctional lattice-frame materials for compact heat exchangers. International Journal of Heat and Mass Transfer, 2017, 115, 619-629.	2.5	81
83	Nonlinear aerodynamic damping of sharp-edged flexible beams oscillating at low Keuleganâ€“Carpenter numbers. Journal of Fluid Mechanics, 2009, 634, 269.	1.4	80
84	Visualization of vapor formation regimes during capillary-fed boiling in sintered-powder heat pipe wicks. International Journal of Heat and Mass Transfer, 2012, 55, 3498-3510.	2.5	79
85	Piezoelectric Fans Using Higher Flexural Modes for Electronics Cooling Applications. IEEE Transactions on Components and Packaging Technologies, 2007, 30, 119-128.	1.4	78
86	Review of Molten-Salt Thermocline Tank Modeling for Solar Thermal Energy Storage. Heat Transfer Engineering, 2013, 34, 787-800.	1.2	78
87	Recent Advances in Vapor Chamber Transport Characterization for High-Heat-Flux Applications. Advances in Heat Transfer, 2013, , 209-301.	0.4	77
88	A permeable-membrane microchannel heat sink made by additive manufacturing. International Journal of Heat and Mass Transfer, 2019, 131, 1174-1183.	2.5	76
89	A comprehensive model of a miniature-scale linear compressor for electronics cooling. International Journal of Refrigeration, 2011, 34, 63-73.	1.8	75
90	Carbon Nanotube Coatings for Enhanced Capillary-Fed Boiling from Porous Microstructures. Nanoscale and Microscale Thermophysical Engineering, 2012, 16, 1-17.	1.4	75

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91	Wicking and thermal characteristics of micropillared structures for use in passive heat spreaders. International Journal of Heat and Mass Transfer, 2012, 55, 586-596.	2.5	74
92	Nanotextured superhydrophobic electrodes enable detection of attomolar-scale DNA concentration within a droplet by non-faradaic impedance spectroscopy. Lab on A Chip, 2013, 13, 4248.	3.1	71
93	Heat and Mass Transport in Heat Pipe Wick Structures. Journal of Thermophysics and Heat Transfer, 2007, 21, 392-404.	0.9	68
94	Patterning the condenser-side wick in ultra-thin vapor chamber heat spreaders to improve skin temperature uniformity of mobile devices. International Journal of Heat and Mass Transfer, 2016, 101, 927-936.	2.5	68
95	Pool Boiling Performance Comparison of Smooth and Sintered Copper Surfaces with and Without Carbon Nanotubes. Nanoscale and Microscale Thermophysical Engineering, 2011, 15, 133-150.	1.4	67
96	Influence of Surface Wettability on Transport Mechanisms Governing Water Droplet Evaporation. Langmuir, 2014, 30, 9726-9730.	1.6	67
97	Two-dimensional streaming flows induced by resonating, thin beams. Journal of the Acoustical Society of America, 2003, 114, 1785-1795.	0.5	66
98	Electrowetting-Based Control of Droplet Transition and Morphology on Artificially Microstructured Surfaces. Langmuir, 2008, 24, 8338-8345.	1.6	66
99	Pressure and Flow Rate Performance of Piezoelectric Fans. IEEE Transactions on Components and Packaging Technologies, 2009, 32, 766-775.	1.4	66
100	A Two-Temperature Model for the Analysis of Passive Thermal Control Systems. Journal of Heat Transfer, 2004, 126, 628.	1.2	65
101	Second-law analysis of molten-salt thermal energy storage in thermoclines. Solar Energy, 2012, 86, 1621-1631.	2.9	65
102	Evaporation analysis in sintered wick microstructures. International Journal of Heat and Mass Transfer, 2013, 61, 729-741.	2.5	64
103	The petal effect of parahydrophobic surfaces offers low receding contact angles that promote effective boiling. International Journal of Heat and Mass Transfer, 2019, 135, 403-412.	2.5	63
104	Latent heat augmentation of thermocline energy storage for concentrating solar power â€“ A system-level assessment. Applied Energy, 2014, 116, 278-287.	5.1	62
105	Analysis of evaporating mist flow for enhanced convective heat transfer. International Journal of Heat and Mass Transfer, 2010, 53, 3346-3356.	2.5	61
106	Experimental investigation of steady buoyant-thermocapillary convection near an evaporating meniscus. Physics of Fluids, 2007, 19, 082103.	1.6	60
107	Induction electrohydrodynamics micropump for high heat flux cooling. Sensors and Actuators A: Physical, 2007, 134, 650-659.	2.0	58
108	Transport from a volatile meniscus inside an open microtube. International Journal of Heat and Mass Transfer, 2008, 51, 3007-3017.	2.5	58

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109	Measurement of the temperature non-uniformity in a microchannel heat sink using microscale laser-induced fluorescence. International Journal of Heat and Mass Transfer, 2010, 53, 3275-3283.	2.5	58
110	Microfluidic delivery of small molecules into mammalian cells based on hydrodynamic focusing. Biotechnology and Bioengineering, 2008, 100, 150-158.	1.7	57
111	Buoyancy-induced on-the-spot mixing in droplets evaporating on nonwetting surfaces. Physical Review E, 2014, 90, 062407.	0.8	57
112	Dynamics of Droplet Motion under Electrowetting Actuation. Langmuir, 2011, 27, 8198-8204.	1.6	56
113	Characterization of the heat transfer accompanying electrowetting or gravity-induced droplet motion. International Journal of Heat and Mass Transfer, 2011, 54, 4037-4050.	2.5	55
114	The effect of relative humidity on dropwise condensation dynamics. International Journal of Heat and Mass Transfer, 2015, 80, 759-766.	2.5	55
115	Prediction of effective thermo-mechanical properties of particulate composites. Computational Materials Science, 2007, 40, 255-266.	1.4	54
116	FIXED-GRID FRONT-TRACKING ALGORITHM FOR SOLIDIFICATION PROBLEMS, PART I: METHOD AND VALIDATION. Numerical Heat Transfer, Part B: Fundamentals, 2003, 43, 117-141.	0.6	53
117	Thermal Management of Transient Power Spikes in Electronicsâ€"Phase Change Energy Storage or Copper Heat Sinks?. Journal of Electronic Packaging, Transactions of the ASME, 2004, 126, 308-316.	1.2	53
118	Surface Roughness Effects on Flow Boiling in Microchannels. Journal of Thermal Science and Engineering Applications, 2009, 1, .	0.8	53
119	Local two-phase heat transfer from arrays of confined and submerged impinging jets. International Journal of Heat and Mass Transfer, 2013, 67, 487-498.	2.5	53
120	Predicting two-phase flow distribution and stability in systems with many parallel heated channels. International Journal of Heat and Mass Transfer, 2017, 107, 557-571.	2.5	53
121	Experimental Investigation of Evaporation from Low-Contact-Angle Sessile Droplets. Langmuir, 2010, 26, 880-888.	1.6	52
122	Design of Integrated Nanostructured Wicks for High-Performance Vapor Chambers. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2011, 1, 859-867.	1.4	52
123	Local heat transfer distribution and effect of instabilities during flow boiling in a silicon microchannel heat sink. International Journal of Heat and Mass Transfer, 2011, 54, 3179-3190.	2.5	52
124	Analysis of Solidâ€"Liquid Phase Change Under Pulsed Heating. Journal of Heat Transfer, 2007, 129, 395-400.	1.2	49
125	Infrared micro-particle image velocimetry measurements and predictions of flow distribution in a microchannel heat sink. International Journal of Heat and Mass Transfer, 2008, 51, 1877-1887.	2.5	49
126	Cooling Performance of Arrays of Vibrating Cantilevers. Journal of Heat Transfer, 2009, 131, .	1.2	49

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127	Electrical impedance-based void fraction measurement and flow regime identification in microchannel flows under adiabatic conditions. International Journal of Multiphase Flow, 2012, 42, 175-183.	1.6	49
128	Dynamic Response Optimization of Piezoelectrically Excited Thin Resonant Beams. Journal of Vibration and Acoustics, Transactions of the ASME, 2005, 127, 18-27.	1.0	48
129	Numerical investigation of heat and mass transfer from an evaporating meniscus in a heated open groove. International Journal of Heat and Mass Transfer, 2011, 54, 3015-3023.	2.5	48
130	Gas dynamics and electromagnetic processes in high-current arc plasmas. Part I. Model formulation and steady-state solutions. Journal of Applied Physics, 1999, 85, 2540-2546.	1.1	47
131	Modeling and Design Optimization of Ultrathin Vapor Chambers for High Heat Flux Applications. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2012, 2, 1465-1479.	1.4	47
132	Droplet retention on an incline. International Journal of Heat and Mass Transfer, 2012, 55, 1457-1465.	2.5	47
133	Effect of superhydrophobic surface morphology on evaporative deposition patterns. Applied Physics Letters, 2014, 104, .	1.5	47
134	A saturated-interface-volume phase change model for simulating flow boiling. International Journal of Heat and Mass Transfer, 2016, 93, 945-956.	2.5	47
135	Marangoni Convection in Evaporating Organic Liquid Droplets on a Nonwetting Substrate. Langmuir, 2016, 32, 4729-4735.	1.6	46
136	Working-fluid selection for minimized thermal resistance in ultra-thin vapor chambers. International Journal of Heat and Mass Transfer, 2017, 106, 648-654.	2.5	46
137	Effects of Dissolved Air on Subcooled Flow Boiling of a Dielectric Coolant in a Microchannel Heat Sink. Journal of Electronic Packaging, Transactions of the ASME, 2006, 128, 398-404.	1.2	45
138	Multi-objective optimization of sustainable single-effect water/Lithium Bromide absorption cycle. Renewable Energy, 2012, 46, 100-110.	4.3	45
139	Nucleate boiling from smooth and rough surfaces â€“ Part 2: Analysis of surface roughness effects on nucleate boiling. Experimental Thermal and Fluid Science, 2013, 44, 439-455.	1.5	45
140	Water and Ethanol Droplet Wetting Transition during Evaporation on Omniphobic Surfaces. Scientific Reports, 2015, 5, 17110.	1.6	45
141	Axisymmetric wall jet development in confined jet impingement. Physics of Fluids, 2017, 29, .	1.6	45
142	Analysis and Prediction of the Thermal Performance of Piezoelectrically Actuated Fans. Heat Transfer Engineering, 2009, 30, 487-498.	1.2	43
143	3D reconstruction and design of porous media from thin sections. International Journal of Heat and Mass Transfer, 2014, 73, 250-264.	2.5	43
144	Melting of Phase Change Materials With Volume Change in Metal Foams. Journal of Heat Transfer, 2010, 132, .	1.2	42

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145	Electrowetting-Induced Dewetting Transitions on Superhydrophobic Surfaces. Langmuir, 2011, 27, 10342-10346.	1.6	42
146	Numerical investigation of an evaporating meniscus in a channel. International Journal of Heat and Mass Transfer, 2012, 55, 915-924.	2.5	42
147	Enhanced Antimicrobial Efficacy of Bimetallic Porous CuO Microspheres Decorated with Ag Nanoparticles. ACS Applied Materials & Interfaces, 2017, 9, 39165-39173.	4.0	41
148	Area-scalable high-heat-flux dissipation at low thermal resistance using a capillary-fed two-layer evaporator wick. International Journal of Heat and Mass Transfer, 2019, 135, 1346-1356.	2.5	41
149	Nucleate boiling from smooth and rough surfaces â€“ Part 1: Fabrication and characterization of an optically transparent heaterâ€“sensor substrate with controlled surface roughness. Experimental Thermal and Fluid Science, 2013, 44, 456-467.	1.5	38
150	Linear compressors for electronics cooling: Energy recovery and its benefits. International Journal of Refrigeration, 2013, 36, 2007-2013.	1.8	38
151	Local measurement of flow boiling heat transfer in an array of non-uniformly heated microchannels. International Journal of Heat and Mass Transfer, 2014, 71, 206-216.	2.5	38
152	Measurement and Prediction of the Heat of Adsorption and Equilibrium Concentration of CO₂ on Zeolite 13X. Journal of Chemical & Engineering Data, 2018, 63, 1663-1674.	1.0	38
153	Visualization of convection patterns near an evaporating meniscus using Î¼PIV. Experiments in Fluids, 2008, 44, 431-438.	1.1	37
154	Resistance network-based thermal conductivity model for metal foams. Computational Materials Science, 2010, 50, 622-632.	1.4	37
155	Infrared micro-particle image velocimetry in silicon-based microdevices. Experiments in Fluids, 2005, 38, 385-392.	1.1	36
156	Microscale Temperature Measurements Near the Triple Line of an Evaporating Thin Liquid Film. Journal of Heat Transfer, 2009, 131, .	1.2	36
157	Spurious Current Suppression in VOF-CSF Simulation of Slug Flow through Small Channels. Numerical Heat Transfer; Part A: Applications, 2015, 67, 1-12.	1.2	36
158	Evaluation of Additively Manufactured Microchannel Heat Sinks. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2019, 9, 446-457.	1.4	36
159	Assessment of Nanostructured Capillary Wicks for Passive Two-Phase Heat Transport. Nanoscale and Microscale Thermophysical Engineering, 2011, 15, 179-194.	1.4	35
160	Boiling Heat Transfer and Flow Regimes in Microchannelsâ€”A Comprehensive Understanding. Journal of Electronic Packaging, Transactions of the ASME, 2011, 133, .	1.2	35
161	Subcooled boiling incipience on a highly smooth microheater. International Journal of Heat and Mass Transfer, 2006, 49, 4399-4406.	2.5	34
162	Temperature measurements near the contact line of an evaporating meniscus V-groove. International Journal of Heat and Mass Transfer, 2011, 54, 1520-1526.	2.5	34

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163	Thermomechanical Simulation of the Solar One Thermocline Storage Tank. Journal of Solar Energy Engineering, Transactions of the ASME, 2012, 134, .	1.1	34
164	Spatiotemporal infrared measurement of interface temperatures during water droplet evaporation on a nonwetting substrate. Applied Physics Letters, 2017, 110, .	1.5	34
165	Quantitative Evaluation of the Dependence of Pool Boiling Heat Transfer Enhancement on Sintered Particle Coating Characteristics. Journal of Heat Transfer, 2017, 139, .	1.2	34
166	Experimental investigation of boiling regimes in a capillary-fed two-layer evaporator wick. International Journal of Heat and Mass Transfer, 2019, 135, 1335-1345.	2.5	34
167	Design, Fabrication, and Characterization of a Compact Hierarchical Manifold Microchannel Heat Sink Array for Two-Phase Cooling. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2019, 9, 1291-1300.	1.4	34
168	Transport mechanisms during water droplet evaporation on heated substrates of different wettability. International Journal of Heat and Mass Transfer, 2020, 152, 119524.	2.5	34
169	Numerical Analysis of Air Flow through Metal Foams. Energy Procedia, 2014, 45, 645-652.	1.8	33
170	Characterization of Coalescence-Induced Droplet Jumping Height on Hierarchical Superhydrophobic Surfaces. ACS Omega, 2017, 2, 2883-2890.	1.6	33
171	An investigation of the solutal, thermal and flow fields in unidirectional alloy solidification. International Journal of Heat and Mass Transfer, 1998, 41, 2485-2502.	2.5	32
172	Transient Analysis of Flat Heat Pipes. , 2003, , 507.		32
173	Prediction of droplet dynamics on an incline. International Journal of Heat and Mass Transfer, 2012, 55, 1466-1474.	2.5	32
174	A benefit-cost assessment of new vehicle technologies and fuel economy in the U.S. market. Applied Energy, 2015, 157, 940-952.	5.1	32
175	Two-phase flow morphology and local wall temperatures in high-aspect-ratio manifold microchannels. International Journal of Heat and Mass Transfer, 2020, 153, 119551.	2.5	32
176	Flow Boiling Heat Transfer to a Dielectric Coolant in a Microchannel Heat Sink. IEEE Transactions on Components and Packaging Technologies, 2007, 30, 24-31.	1.4	31
177	Confined Jet Impingement With Boiling on a Variety of Enhanced Surfaces. Journal of Heat Transfer, 2014, 136, .	1.2	31
178	Numerical and Experimental Investigation of Solidification Shrinkage. Numerical Heat Transfer; Part A: Applications, 2007, 52, 145-162.	1.2	30
179	Direct Simulation of Thermal Transport Through Sintered Wick Microstructures. Journal of Heat Transfer, 2012, 134, .	1.2	30
180	Gas dynamics and electromagnetic processes in high-current arc plasmas. Part II. Effects of external magnetic fields and gassing materials. Journal of Applied Physics, 1999, 85, 2547-2555.	1.1	29

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181	Numerical and Experimental Investigation of the Melt Casting of Explosives. Propellants, Explosives, Pyrotechnics, 2005, 30, 369-380.	1.0	29
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