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	A figure of merit to characterize the efficacy of evaporation from porous microstructured surfaces. International Journal of Heat and Mass Transfer, 2022, 182, 121964.	2.5	8
2	The effect of dynamic wetting behavior on boiling heat transfer mechanisms during bubble growth and departure. International Journal of Heat and Mass Transfer, 2022, 184, 122276.	2.5	6
3	Simultaneous Measurement of Temperature and Strain in Electronic Packages Using Multiframe Super-Resolution Infrared Thermography and Digital Image Correlation. Journal of Electronic Packaging, Transactions of the ASME, 2022, 144, .	1.2	1
4	Modeling the formation of efflorescence and subflorescence caused by salt solution evaporation from porous media. International Journal of Heat and Mass Transfer, 2022, 189, 122645.	2.5	6
5	Microlayer evaporation governs heat transfer enhancement during pool boiling from microstructured surfaces. Applied Physics Letters, 2022, 120, .	1.5	17
6	An experimental investigation of the effect of thermal coupling between parallel microchannels undergoing boiling on the Ledinegg instability-induced flow maldistribution. International Journal of Multiphase Flow, 2021, 139, 103536.	1.6	6
7	Effective Anisotropic Properties-Based Representation of Vapor Chambers. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2021, 11, 51-56.	1.4	1
8	Transient Flow Boiling and Maldistribution Characteristics in Heated Parallel Channels Induced by Flow Regime Oscillations. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2021, 11, 1615-1624.	1.4	2
9	Impact of Pressure Drop Oscillations on Surface Temperature and Critical Heat Flux During Flow Boiling in a Microchannel. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2021, 11, 1634-1644.	1.4	10
10	Measurement of flow maldistribution induced by the Ledinegg instability during boiling in thermally isolated parallel microchannels. International Journal of Multiphase Flow, 2021, 139, 103644.	1.6	4
11	The Role of Dynamic Wetting Behavior during Bubble Growth and Departure from a Solid Surface. International Journal of Heat and Mass Transfer, 2021, 172, 121167.	2.5	11
12	The Effect of Uneven Heating on the Flow Distribution Between Parallel Microchannels Undergoing Boiling. Journal of Electronic Packaging, Transactions of the ASME, 2021, 143, .	1.2	2
13	A semi-empirical model for thermal resistance and dryout during boiling in thin porous evaporators fed by capillary action. International Journal of Heat and Mass Transfer, 2021, 181, 121887.	2.5	7
14	The ICECool Fundamentals Effort on Evaporative Cooling of Microelectronics. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2021, 11, 1546-1564.	1.4	25
15	Role of nanoscale roughness in the heat transfer characteristics of thin film evaporation. International Journal of Heat and Mass Transfer, 2020, 150, 119306.	2.5	17
16	Heat pipe dryout and temperature hysteresis in response to transient heat pulses exceeding the capillary limit. International Journal of Heat and Mass Transfer, 2020, 148, 119135.	2.5	24
17	On the transient thermal response of thin vapor chamber heatÂspreaders: Optimized design and fluid selection. International Journal of Heat and Mass Transfer, 2020, 148, 119106.	2.5	19
18	The role of vapor venting and liquid feeding on the dryout limit of two-layer evaporator wicks. International Journal of Heat and Mass Transfer, 2020, 148, 119063.	2.5	22

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19	Soft Surface: Droplets on Soft Surfaces Exhibit a Reluctance to Coalesce due to an Intervening Wetting Ridge (Adv. Mater. Interfaces 17/2020). Advanced Materials Interfaces, 2020, 7, 2070098.	1.9	0
20	Droplets on Soft Surfaces Exhibit a Reluctance to Coalesce due to an Intervening Wetting Ridge. Advanced Materials Interfaces, 2020, 7, 2000731.	1.9	9
21	The effect of channel diameter on flow freezing in microchannels. International Journal of Heat and Mass Transfer, 2020, 157, 119718.	2.5	2
22	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
23	Time-resolved characterization of microchannel flow boiling during transient heating: Part 1 â€“ Dynamic response to a single heat flux pulse. International Journal of Heat and Mass Transfer, 2020, 154, 119643.	2.5	6
24	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
25	Time-resolved characterization of microchannel flow boiling during transient heating: Part 2 â€“ Dynamic response to time-periodic heat flux pulses. International Journal of Heat and Mass Transfer, 2020, 154, 119686.	2.5	8
26	Multiscale Concentrated Solar Power. Lecture Notes in Energy, 2020, , 87-132.	0.2	0
27	Design of an Area-Scalable Two-Layer Evaporator Wick for High-Heat-Flux Vapor Chambers. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2019, 9, 458-472.	1.4	17
28	The Wetting State of Water on a Rose Petal. Advanced Materials Interfaces, 2019, 6, 1900652.	1.9	22
29	Experimental Demonstration of Heat Pipe Operation beyond the Capillary Limit during Brief Transient Heat Loads. , 2019, , .		1
30	Visualizing near-wall two-phase flow morphology during confined and submerged jet impingement boiling to the point of critical heat flux. International Journal of Heat and Mass Transfer, 2019, 142, 118407.	2.5	6
31	Petal Effect: The Wetting State of Water on a Rose Petal (Adv. Mater. Interfaces 17/2019). Advanced Materials Interfaces, 2019, 6, 1970110.	1.9	1
32	Three-dimensional liquid-vapor interface reconstruction from high-speed stereo images during pool boiling. International Journal of Heat and Mass Transfer, 2019, 136, 265-275.	2.5	8
33	On the transient thermal response of thin vapor chamber heat spreaders: Governing mechanisms and performance relative to metal spreaders. International Journal of Heat and Mass Transfer, 2019, 136, 995-1005.	2.5	26
34	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
35	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
36	Simultaneous wick and fluid selection for the design of minimized-thermal-resistance vapor chambers under different operating conditions. International Journal of Heat and Mass Transfer, 2019, 136, 842-850.	2.5	15

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37	A coupled wicking and evaporation model for prediction of pool boiling critical heat flux on structured surfaces. International Journal of Heat and Mass Transfer, 2019, 136, 373-382.	2.5	25
38	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
39	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
40	Limitations of the Axially Dispersed Plug-Flow Model in Predicting Breakthrough in Confined Geometries. Industrial & Engineering Chemistry Research, 2019, 58, 3853-3866.	1.8	6
41	Evaporation-Driven Micromixing in Sessile Droplets for Miniaturized Absorbance-Based Colorimetry. ACS Omega, 2019, 4, 22385-22391.	1.6	4
42	Evaluation of Additively Manufactured Microchannel Heat Sinks. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2019, 9, 446-457.	1.4	36
43	Ice formation modes during flow freezing in a small cylindrical channel. International Journal of Heat and Mass Transfer, 2019, 128, 836-848.	2.5	15
44	Ledinegg instability-induced temperature excursion between thermally isolated, heated parallel microchannels. International Journal of Heat and Mass Transfer, 2019, 132, 550-556.	2.5	25
45	A permeable-membrane microchannel heat sink made by additive manufacturing. International Journal of Heat and Mass Transfer, 2019, 131, 1174-1183.	2.5	76
46	Identification of nucleate boiling as the dominant heat transfer mechanism during confined two-phase jet impingement. International Journal of Heat and Mass Transfer, 2019, 128, 1095-1101.	2.5	25
47	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
48	The effect of lateral thermal coupling between parallel microchannels on two-phase flow distribution. International Journal of Heat and Mass Transfer, 2018, 124, 769-781.	2.5	26
49	A validated time-stepping analytical model for 3D transient vapor chamber transport. International Journal of Heat and Mass Transfer, 2018, 119, 867-879.	2.5	27
50	Enabling Highly Effective Boiling from Superhydrophobic Surfaces. Physical Review Letters, 2018, 120, 174501.	2.9	109
51	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
52	Re-entrant Cavities Enhance Resilience to the Cassie-to-Wenzel State Transition on Superhydrophobic Surfaces during Electrowetting. Langmuir, 2018, 34, 12787-12793.	1.6	14
53	Calibration and uncertainty analysis of a fixed-bed adsorption model for CO2 separation. Adsorption, 2018, 24, 781-802.	1.4	2
54	Error Reduction in Infrared Thermography by Multiframe Super-Resolution. Journal of Electronic Packaging, Transactions of the ASME, 2018, 140, .	1.2	3

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55	Experimental Characterization of a Microchannel Heat Sink Made by Additive Manufacturing. , 2018, , .		7
56	Identification of the Dominant Heat Transfer Mechanisms during Confined Two-phase Jet Impingement. , 2018, , .		0
57	Development and validation of a semi-empirical model for two-phase heat transfer from arrays of impinging jets. International Journal of Heat and Mass Transfer, 2018, 124, 782-793.	2.5	20
58	High-frequency thermal-fluidic characterization of dynamic microchannel flow boiling instabilities: Part 1 â€“ Rapid-bubble-growth instability at the onset of boiling. International Journal of Multiphase Flow, 2018, 106, 179-188.	1.6	23
59	High-frequency thermal-fluidic characterization of dynamic microchannel flow boiling instabilities: Part 2 â€“ Impact of operating conditions on instability type and severity. International Journal of Multiphase Flow, 2018, 106, 189-201.	1.6	15
60	Tears of an evaporating methanol meniscus on a silicon substrate. Applied Physics Letters, 2018, 113, .	1.5	2
61	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
62	Two-Phase Jet Impingement: Liquidâ€“Vapor Interactions and Heat Transfer Mapping for Multiscale Surface Enhancement Design. , 2018, , 221-278.		1
63	Design of electrode arrays for 3D capacitance tomography in a planar domain. International Journal of Heat and Mass Transfer, 2017, 106, 1251-1260.	2.5	8
64	Axisymmetric wall jet development in confined jet impingement. Physics of Fluids, 2017, 29, .	1.6	45
65	Spatiotemporal infrared measurement of interface temperatures during water droplet evaporation on a nonwetting substrate. Applied Physics Letters, 2017, 110, .	1.5	34
66	Numerical Simulation of Evaporating Two-Phase Flow in a High-Aspect-Ratio Microchannel with Bends. Journal of Heat Transfer, 2017, 139, .	1.2	7
67	Experimental study of flow boiling in a compact hierarchical manifold microchannel heat sink array. , 2017, , .		3
68	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
69	Numerical Simulation of Evaporating Two-Phase Flow in a High-Aspect-Ratio Microchannel with Bends. Journal of Heat Transfer, 2017, 139, .	1.2	5
70	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
71	Multiscale Modeling of the Three-Dimensional Meniscus Shape of a Wetting Liquid Film on Micro-/Nanostructured Surfaces. Langmuir, 2017, 33, 12028-12037.	1.6	9
72	Enhanced Antimicrobial Efficacy of Bimetallic Porous CuO Microspheres Decorated with Ag Nanoparticles. ACS Applied Materials & Interfaces, 2017, 9, 39165-39173.	4.0	41

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73	Characterization of liquid film thickness in slug-regime microchannel flows. International Journal of Heat and Mass Transfer, 2017, 115, 1137-1143.	2.5	13
74	A Wettability Metric for Characterization of Capillary Flow on Textured Superhydrophilic Surfaces. Langmuir, 2017, 33, 7847-7853.	1.6	20
75	Design of multifunctional lattice-frame materials for compact heat exchangers. International Journal of Heat and Mass Transfer, 2017, 115, 619-629.	2.5	81
76	Rapid-bubble-growth instability at the onset of microchannel flow boiling. , 2017, , .		1
77	A semi-empirical model for two-phase heat transfer from arrays of confined impinging jets. , 2017, , .		0
78	An area-scalable two-layer evaporator wick concept for high-heat-flux vapor chambers. , 2017, , .		4
79	A time-stepping analytical model for 3D transient vapor chamber transport. , 2017, , .		0
80	Mechanistic modeling of the liquid film shape and heat transfer coefficient in annular-regime microchannel flow boiling. International Journal of Heat and Mass Transfer, 2017, 114, 841-851.	2.5	7
81	Characterization of Coalescence-Induced Droplet Jumping Height on Hierarchical Superhydrophobic Surfaces. ACS Omega, 2017, 2, 2883-2890.	1.6	33
82	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
83	An experimental method for controlled generation and characterization of microchannel slug flow boiling. International Journal of Heat and Mass Transfer, 2017, 106, 619-628.	2.5	10
84	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
85	A Method for Thermal Performance Characterization of Ultrathin Vapor Chambers Cooled by Natural Convection. Journal of Electronic Packaging, Transactions of the ASME, 2016, 138, .	1.2	22
86	Visualization of Ice Formation Modes and Flow Blockage During Freezing of Water Flowing in a Microchannel. , 2016, , .		1
87	The challenge of thermal management. , 2016, , .		3
88	Coalescence-Induced Jumping of Multiple Condensate Droplets on Hierarchical Superhydrophobic Surfaces. Scientific Reports, 2016, 6, 18649.	1.6	97
89	The role of condensation from humid air on melting of ice. , 2016, , .		0
90	Short and long-term sensitivity of lab-scale thermocline based thermal storage to flow disturbances. Applied Thermal Engineering, 2016, 109, 936-948.	3.0	21

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91	Prediction of air-side particulate fouling of HVAC&R heat exchangers. Applied Thermal Engineering, 2016, 104, 720-733.	3.0	22
92	Marangoni Convection in Evaporating Organic Liquid Droplets on a Nonwetting Substrate. Langmuir, 2016, 32, 4729-4735.	1.6	46
93	Evaporative intrachip hotspot cooling with a hierarchical manifold microchannel heat sink array. , 2016, , .		27
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	In Vitro Multitissue Interface Model Supports Rapid Vasculogenesis and Mechanistic Study of Vascularization across Tissue Compartments. ACS Applied Materials & Interfaces, 2016, 8, 21848-21860.	4.0	14
96	Stereo-PIV measurements of vapor-induced flow modifications in confined jet impingement boiling. International Journal of Multiphase Flow, 2016, 84, 19-33.	1.6	14
97	A tomographic-PIV investigation of vapor-induced flow structures in confined jet impingement boiling. International Journal of Multiphase Flow, 2016, 84, 86-97.	1.6	7
98	Continuous Oilâ€“Water Separation Using Polydimethylsiloxane-Functionalized Melamine Sponge. Industrial & Engineering Chemistry Research, 2016, 55, 3596-3602.	1.8	170
99	Capacitive sensing of local bond layer thickness and coverage in thermal interface materials. International Journal of Heat and Mass Transfer, 2016, 97, 26-31.	2.5	4
100	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
101	Visualization of Confined Jet Impingement With Boiling Using Time-Resolved Stereo-PIV. , 2015, , .		0
102	A Cost-Effective Modeling Approach for Simulating Phase Change and Flow Boiling in Microchannels. , 2015, , .		5
103	Water and Ethanol Droplet Wetting Transition during Evaporation on Omniphobic Surfaces. Scientific Reports, 2015, 5, 17110.	1.6	45
104	Effect of Particle Morphology on Pool Boiling From Surfaces Coated With Sintered Particles. , 2015, , .		1
105	A Method for Thermal Performance Characterization of Ultra-Thin Vapor Chambers Cooled by Natural Convection. , 2015, , .		0
106	Boiling Heat Transfer From an Array of Round Jets With Hybrid Surface Enhancements. Journal of Heat Transfer, 2015, 137, .	1.2	21
107	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
108	Performance-Governing Transport Mechanisms for Heat Pipes at Ultrathin Form Factors. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2015, 5, 1618-1627.	1.4	26

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109	Quantitative Visualization of Vapor Bubble Growth in Diabatic Vapor-Liquid Microchannel Slug Flow. , 2015, , .		0
110	Comparative Analysis of Single- and Dual-Media Thermocline Tanks for Thermal Energy Storage in Concentrating Solar Power Plants. Journal of Solar Energy Engineering, Transactions of the ASME, 2015, 137, .	1.1	19
111	Superhydrophobic Surfaces: Exploiting Microscale Roughness on Hierarchical Superhydrophobic Copper Surfaces for Enhanced Dropwise Condensation (Adv. Mater. Interfaces 3/2015). Advanced Materials Interfaces, 2015, 2, n/a-n/a.	1.9	1
112	Exploiting Microscale Roughness on Hierarchical Superhydrophobic Copper Surfaces for Enhanced Dropwise Condensation. Advanced Materials Interfaces, 2015, 2, 1400480.	1.9	106
113	An optical approach for quantitative characterization of slug bubble interface profiles in a two-phase microchannel flow. International Journal of Heat and Mass Transfer, 2015, 86, 31-38.	2.5	9
114	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
115	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
116	Shape-energy evolutionary reconstruction algorithm for electrical capacitance tomography in a high-aspect-ratio domain. Sensors and Actuators A: Physical, 2015, 233, 349-359.	2.0	9
117	An explicit conditioning method for image reconstruction in electrical capacitance tomography. Flow Measurement and Instrumentation, 2015, 46, 155-162.	1.0	8
118	The effect of relative humidity on dropwise condensation dynamics. International Journal of Heat and Mass Transfer, 2015, 80, 759-766.	2.5	55
119	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
120	Buoyancy-induced on-the-spot mixing in droplets evaporating on nonwetting surfaces. Physical Review E, 2014, 90, 062407.	0.8	57
121	Design of a non-intrusive electrical impedance-based void fraction sensor for microchannel two-phase flows. Measurement Science and Technology, 2014, 25, 095301.	1.4	19
122	Hydrophilic CNT-Sintered Copper Composite Wick for Enhanced Cooling. , 2014, , 267-288.		0
123	Simulated Microstructural Evolution and Design of Porous Sintered Wicks. Journal of Heat Transfer, 2014, 136, .	1.2	8
124	Confined Jet Impingement With Boiling on a Variety of Enhanced Surfaces. Journal of Heat Transfer, 2014, 136, .	1.2	31
125	Void Detection in Dielectric Films Using a Floating Network of Substrate-Embedded Electrodes. Journal of Electronic Packaging, Transactions of the ASME, 2014, 136, .	1.2	4
126	Economic Optimization of a Concentrating Solar Power Plant With Molten-Salt Thermocline Storage. Journal of Solar Energy Engineering, Transactions of the ASME, 2014, 136, .	1.1	18

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127	Flow Visualization During Droplet Evaporation on Hydrophobic and Superhydrophobic Surfaces. Journal of Heat Transfer, 2014, 136, .	1.2	3
128	Optimization Under Uncertainty for Electronics Cooling Design. , 2014, , 233-265.		0
129	Hydrophilic CNT-Sintered Copper Composite Wick for Enhanced Cooling. , 2014, , 267-288.		0
130	Droplet evaporation on heated hydrophobic and superhydrophobic surfaces. Physical Review E, 2014, 89, 042402.	0.8	112
131	Level-set shape reconstruction of binary permittivity distributions using near-field focusing capacitance measurements. Measurement Science and Technology, 2014, 25, 105602.	1.4	5
132	A free-particles-based technique for boiling heat transfer enhancement in a wetting liquid. International Journal of Heat and Mass Transfer, 2014, 71, 808-817.	2.5	21
133	System-level simulation of a solar power tower plant with thermocline thermal energy storage. Applied Energy, 2014, 113, 86-96.	5.1	127
134	Technique for quantitative mapping of three-dimensional liquidâ€“gas phase boundaries in microchannel flows. International Journal of Multiphase Flow, 2014, 62, 45-51.	1.6	7
135	Numerical Analysis of Air Flow through Metal Foams. Energy Procedia, 2014, 45, 645-652.	1.8	33
136	Manifold microchannel heat sink design using optimization under uncertainty. International Journal of Heat and Mass Transfer, 2014, 69, 92-105.	2.5	83
137	Investigation of boiling heat transfer in water using a free-particles-based enhancement technique. International Journal of Heat and Mass Transfer, 2014, 71, 818-828.	2.5	15
138	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
139	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
140	Flat heat pipe performance thresholds at ultra-thin form factors. , 2014, , .		2
141	Influence of Surface Wettability on Transport Mechanisms Governing Water Droplet Evaporation. Langmuir, 2014, 30, 9726-9730.	1.6	67
142	Effect of superhydrophobic surface morphology on evaporative deposition patterns. Applied Physics Letters, 2014, 104, .	1.5	47
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	Local single- and two-phase heat transfer from an impinging cross-shaped jet. International Journal of Heat and Mass Transfer, 2014, 79, 432-436.	2.5	17

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145	OPTIMIZATION UNDER UNCERTAINTY FOR ELECTRONICS COOLING DESIGN. WSPC Series in Advanced Integration and Packaging, 2014, , 267-305.	0.0	0
146	HYDROPHILIC CNT-SINTERED COPPER COMPOSITE WICK FOR ENHANCED COOLING. WSPC Series in Advanced Integration and Packaging, 2014, , 307-331.	0.0	0
147	Effects of Non-Uniform Heating on the Location and Magnitude of Critical Heat Flux in a Microchannel Heat Sink. International Journal of Micro-nano Scale Transport, 2014, 5, 95-108.	0.2	10
148	Numerical Investigation of Fluid Flow and Heat Transfer in Periodic Porous Lattice-Flame Materials. , 2014, , .		3
149	Optimization Under Uncertainty Applied to Heat Sink Design. Journal of Heat Transfer, 2013, 135, .	1.2	14
150	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
151	Experimental Characterization of Capillary-Fed Carbon Nanotube Vapor Chamber Wicks. Journal of Heat Transfer, 2013, 135, .	1.2	27
152	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
153	Evaporation analysis in sintered wick microstructures. International Journal of Heat and Mass Transfer, 2013, 61, 729-741.	2.5	64
154	Recent Advances in Vapor Chamber Transport Characterization for High-Heat-Flux Applications. Advances in Heat Transfer, 2013, , 209-301.	0.4	77
155	Droplet Evaporation Dynamics on a Superhydrophobic Surface with Negligible Hysteresis. Langmuir, 2013, 29, 10785-10795.	1.6	193
156	Metal functionalization of carbon nanotubes for enhanced sintered powder wicks. International Journal of Heat and Mass Transfer, 2013, 59, 372-383.	2.5	25
157	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
158	Technological drivers in data centers and telecom systems: Multiscale thermal, electrical, and energy management. Applied Energy, 2013, 107, 66-80.	5.1	99
159	Thermodynamic comparison of organic Rankine cycles employing liquid-flooded expansion or a solution circuit. Applied Thermal Engineering, 2013, 61, 859-865.	3.0	9
160	Sensitivity analysis of a comprehensive model for a miniature-scale linear compressor for electronics cooling. International Journal of Refrigeration, 2013, 36, 1998-2006.	1.8	25
161	Linear compressors for electronics cooling: Energy recovery and its benefits. International Journal of Refrigeration, 2013, 36, 2007-2013.	1.8	38
162	Evaporative heat transfer from an electrowetted liquid ribbon on a heated substrate. International Journal of Heat and Mass Transfer, 2013, 57, 73-81.	2.5	8

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163	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
164	Review of Molten-Salt Thermocline Tank Modeling for Solar Thermal Energy Storage. Heat Transfer Engineering, 2013, 34, 787-800.	1.2	78
165	Cyclic operation of molten-salt thermal energy storage in thermoclines for solar power plants. Applied Energy, 2013, 103, 256-265.	5.1	99
166	Assessment of Water Droplet Evaporation Mechanisms on Hydrophobic and Superhydrophobic Substrates. Langmuir, 2013, 29, 15831-15841.	1.6	130
167	Simulation of a Concentrating Solar Power Plant With Molten-Salt Thermocline Storage for Optimized Annual Performance. , 2013, , .		2
168	Effects of Non-Uniform Heating on Two-Phase Flow Through Microchannels. , 2013, , .		0
169	A Capacitance-Based Technique for Characterization of Dielectric Interfaces Using a Grid of Electrode Junctions. , 2013, , .		0
170	An Experimental Study of a Multi-Device Jet Impingement Cooler With Phase Change Using HFE-7100. , 2013, , .		3
171	Microstructural Evolution and Transport Properties of Sintered Porous Media. , 2013, , .		0
172	Advances in Fluid and Thermal Transport Property Analysis and Design of Sintered Porous Wick Microstructures. Journal of Heat Transfer, 2013, 135, .	1.2	22
173	Evaporative Particle Deposition on Superhydrophobic Surfaces. , 2013, , .		0
174	Numerical Study of Water Droplet Evaporation on a Superhydrophobic Surface. , 2013, , .		0
175	Diagnostic Technique for Quantitative Resolution of Three-Dimensional Liquid-Gas Phase Boundaries in Microchannel Flows. , 2013, , .		0
176	Carbon Nanotube Coatings for Enhanced Capillary-Fed Boiling from Porous Microstructures. Nanoscale and Microscale Thermophysical Engineering, 2012, 16, 1-17.	1.4	75
177	Bubble dynamics during capillary-fed nucleate boiling in porous media. , 2012, , .		5
178	A Study of Critical Heat Flux During Flow Boiling in Microchannel Heat Sinks. Journal of Heat Transfer, 2012, 134, .	1.2	27
179	Thermomechanical Simulation of the Solar One Thermocline Storage Tank. Journal of Solar Energy Engineering, Transactions of the ASME, 2012, 134, .	1.1	34
180	Direct Simulation of Thermal Transport Through Sintered Wick Microstructures. Journal of Heat Transfer, 2012, 134, .	1.2	30

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181	Analysis of Thin-Film Evaporation Through Sintered Wick Microstructures. , 2012, , .		0
182	Optimization Under Uncertainty of Manifold Microchannel Heat Sinks. , 2012, , .		0
183	Thermal Management Challenges in Telecommunication Systems and Data Centers. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2012, 2, 1307-1316.	1.4	82
184	Thermodynamic and kinetic investigation of a chemical reaction-based miniature heat pump. Energy Conversion and Management, 2012, 64, 222-231.	4.4	8
185	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
186	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
187	Characterization and nanostructured enhancement of boiling incipience in capillary-fed, ultra-thin sintered powder wicks. , 2012, , .		22
188	Development of a particle tracking-based measurement technique to map three-dimensional interfaces between transparent, immiscible fluids. , 2012, , .		2
189	Optimization under uncertainty for electronics cooling design applications. , 2012, , .		6
190	Dissipative Forces in the Electrowetted Cassie-Wenzel Transition on Hydrophobic Rough Surfaces. Nanoscale and Microscale Thermophysical Engineering, 2012, 16, 154-164.	1.4	3
191	Determination of Electrical Contact Resistivity in Thermoelectric Modules (TEMs) From Module-Level Measurements. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2012, 2, 668-676.	1.4	14
192	Hybrid Surface Design for Robust Superhydrophobicity. Langmuir, 2012, 28, 9606-9615.	1.6	91
193	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
194	Droplet retention on an incline. International Journal of Heat and Mass Transfer, 2012, 55, 1457-1465.	2.5	47
195	Numerical investigation of an evaporating meniscus in a channel. International Journal of Heat and Mass Transfer, 2012, 55, 915-924.	2.5	42
196	Prediction of droplet dynamics on an incline. International Journal of Heat and Mass Transfer, 2012, 55, 1466-1474.	2.5	32
197	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
198	Topological design of channels for squeeze flow optimization of thermal interface materials. International Journal of Heat and Mass Transfer, 2012, 55, 3560-3575.	2.5	10

#	Article	IF	Citations
199	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
200	Alternative heat rejection methods for power plants. Applied Energy, 2012, 92, 17-25.	5.1	26
201	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
202	Multi-objective optimization of sustainable single-effect water/Lithium Bromide absorption cycle. Renewable Energy, 2012, 46, 100-110.	4.3	45
203	Second-law analysis of molten-salt thermal energy storage in thermoclines. Solar Energy, 2012, 86, 1621-1631.	2.9	65
204	Dynamics of Droplet Motion under Electrowetting Actuation. Langmuir, 2011, 27, 8198-8204.	1.6	56
205	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
206	Electrowetting-Induced Dewetting Transitions on Superhydrophobic Surfaces. Langmuir, 2011, 27, 10342-10346.	1.6	42
207	Droplet Shapes on Superhydrophobic Surfaces Under Electrowetting Actuation. , 2011, , .		1
208	A Study of Critical Heat Flux During Flow Boiling in Microchannel Heat Sinks. , 2011, , .		1
209	Single-Step Fabrication and Characterization of Ultrahydrophobic Surfaces With Hierarchical Roughness. , 2011, , .		0
210	Impedance-Based Void Fraction Measurement and Flow Regime Identification in Microchannel Flows. , 2011, , .		1
211	An Experimentally Validated Model for Transport in Thin, High Thermal Conductivity, Low CTE Heat Spreaders. , 2011, , .		3
212	Dependence of Flow Boiling Heat Transfer Coefficient on Location and Vapor Quality in a Microchannel Heat Sink. , 2011, , .		1
213	Wicking and Thermal Characteristics of Micropillared Structures for Use in Passive Heat Spreaders. , 2011, , .		6
214	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
215	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
216	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

#	Article	IF	Citations
217	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
218	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
219	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
220	Evaporative heat and mass transfer from the free surface of a liquid wicked into a bed of spheres. International Journal of Heat and Mass Transfer, 2011, 54, 3440-3447.	2.5	7
221	A comprehensive model of a miniature-scale linear compressor for electronics cooling. International Journal of Refrigeration, 2011, 34, 63-73.	1.8	75
222	An integrated thermal and mechanical investigation of molten-salt thermocline energy storage. Applied Energy, 2011, 88, 2098-2105.	5.1	134
223	Assessment of Nanostructured Capillary Wicks for Passive Two-Phase Heat Transport. Nanoscale and Microscale Thermophysical Engineering, 2011, 15, 179-194.	1.4	35
224	Transport in Passive, High Thermal, Conductivity Heat Spreaders. Journal of Heat Transfer, 2011, 133, .	1.2	1
225	Thermocline Energy Storage in the Solar One Power Plant: An Experimentally Validated Thermomechanical Investigation. , 2011, , .		8
226	Boiling Heat Transfer and Flow Regimes in Microchannelsâ€"A Comprehensive Understanding. Journal of Electronic Packaging, Transactions of the ASME, 2011, 133, .	1.2	35
227	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
228	Nano-Structured Two-Phase Heat Spreader for Cooling Ultra-High Heat Flux Sources. , 2010, , .		10
229	Analysis of evaporating mist flow for enhanced convective heat transfer. International Journal of Heat and Mass Transfer, 2010, 53, 3346-3356.	2.5	61
230	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
231	Dynamic analysis of an electrostatic compressor. International Journal of Refrigeration, 2010, 33, 889-896.	1.8	12
232	Molten-salt thermal energy storage in thermoclines under different environmental boundary conditions. Applied Energy, 2010, 87, 3322-3329.	5.1	141
233	Heat transfer in trapezoidal microchannels of various aspect ratios. International Journal of Heat and Mass Transfer, 2010, 53, 365-375.	2.5	88
234	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

#	Article	IF	Citations
235	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
236	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
237	Thermal analysis of solar thermal energy storage in a molten-salt thermocline. Solar Energy, 2010, 84, 974-985.	2.9	261
238	Note: Thermal analog to atomic force microscopy force-displacement measurements for nanoscale interfacial contact resistance. Review of Scientific Instruments, 2010, 81, 036111.	0.6	6
239	Squeeze flow characterization of particle-filled polymeric materials through image correlation. , 2010, , .		0
240	Optimization of mass transport in integrated nanostructured wicking surfaces for the reduction of evaporative thermal resistance. , 2010, , .		0
241	Heat and Mass Transfer in the Corner Flow Region of Vertical Microgrooves. , 2010, , .		0
242	Melting of Phase Change Materials With Volume Change in Metal Foams. Journal of Heat Transfer, 2010, 132, .	1.2	42
243	Marangoni Convection and Thin-Film Evaporation in Microstructured Wicks for Heat Pipes. Journal of Heat Transfer, 2010, 132, .	1.2	1
244	Thermal Performance of Carbon Nanotube Enhanced Vapor Chamber Wicks. , 2010, , .		15
245	Experimental Investigation of Evaporation from Low-Contact-Angle Sessile Droplets. Langmuir, 2010, 26, 880-888.	1.6	52
246	Resistance network-based thermal conductivity model for metal foams. Computational Materials Science, 2010, 50, 622-632.	1.4	37
247	Microtomography-Based Simulation of Transport through Open-Cell Metal Foams. Numerical Heat Transfer; Part A: Applications, 2010, 58, 527-544.	1.2	86
248	Prediction of electrical contact resistivity in thermoelectric modules (TEMs) from module-level measurements. , 2010, , .		0
249	A numerical model for transport in heat pipes considering wick microstructure effects. , 2010, , .		3
250	Thermal Management of a Soft Starter: Transient Thermal Impedance Model and Performance Enhancements Using Phase Change Materials. IEEE Transactions on Power Electronics, 2010, 25, 1395-1405.	5.4	19
251	XMT-based direct simulation of flow and heat transfer through open-cell aluminum foams. , 2010, , .		3
252	A two-phase heat spreader for cooling high heat flux sources. , 2010, , .		4

#	Article	IF	Citations
253	Electrical actuation-induced droplet transport on smooth and superhydrophobic surfaces. International Journal of Micro-nano Scale Transport, 2010, 1, 1-26.	0.2	5
254	Topological Design Optimization of Nested Channels for Squeeze Flow of Thermal Interface Materials. , 2010, , .		0
255	Experimental characterization of induction electrohydrodynamics for integrated microchannel pumping. Journal of Micromechanics and Microengineering, 2009, 19, 055015.	1.5	16
256	Analysis and Prediction of the Thermal Performance of Piezoelectrically Actuated Fans. Heat Transfer Engineering, 2009, 30, 487-498.	1.2	43
257	The Influence of Surface Roughness on Nucleate Pool Boiling Heat Transfer. Journal of Heat Transfer, 2009, 131, .	1.2	222
258	Analysis of the Wicking and Thin-Film Evaporation Characteristics of Microstructures. Journal of Heat Transfer, 2009, 131, .	1.2	126
259	Microscale Temperature Measurements Near the Triple Line of an Evaporating Thin Liquid Film. Journal of Heat Transfer, 2009, 131, .	1.2	36
260	Cooling Performance of Arrays of Vibrating Cantilevers. Journal of Heat Transfer, 2009, 131, .	1.2	49
261	Surface Roughness Effects on Flow Boiling in Microchannels. Journal of Thermal Science and Engineering Applications, 2009, 1, .	0.8	53
262	Numerical Study of Evaporation Heat Transfer From the Liquid-Vapor Interface in Wick Microstructures. , 2009, , .		5
263	Forces Acting on Sessile Droplet on Inclined Surfaces. , 2009, , .		0
264	Microfluidic Pumping Based on Traveling-Wave Dielectrophoresis. Nanoscale and Microscale Thermophysical Engineering, 2009, 13, 109-133.	1.4	11
265	Effects of discrete-electrode configuration on traveling-wave electrohydrodynamic pumping. Microfluidics and Nanofluidics, 2009, 6, 221-230.	1.0	18
266	Non-intrusive temperature measurement using microscale visualization techniques. Experiments in Fluids, 2009, 47, 159-170.	1.1	20
267	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
268	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
269	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
270	Optimization of electrostatically actuated miniature compressors for electronics cooling. International Journal of Refrigeration, 2009, 32, 1517-1525.	1.8	13

#	Article	IF	Citations
271	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
272	Experimental and numerical study of melting of particle-laden materials in a cylinder. International Journal of Heat and Mass Transfer, 2009, 52, 2966-2978.	2.5	13
273	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
274	Preventing the Cassieâ^'Wenzel Transition Using Surfaces with Noncommunicating Roughness Elements. Langmuir, 2009, 25, 4815-4820.	1.6	90
275	Nonlinear aerodynamic damping of sharp-edged flexible beams oscillating at low Keuleganâ€"Carpenter numbers. Journal of Fluid Mechanics, 2009, 634, 269.	1.4	80
276	Pressure and Flow Rate Performance of Piezoelectric Fans. IEEE Transactions on Components and Packaging Technologies, 2009, 32, 766-775.	1.4	66
277	A Systematic Investigation of the Effects of Microchannel Width, Depth, and Aspect Ratio on Convective Boiling Heat Transfer and Flow Regimes in Parallel Microchannels. , 2009, , .		3
278	Surface Roughness Effects on Flow Boiling in Microchannels. , 2009, , .		5
279	An Experimental Investigation of Microchannel Size Effects on Flow Boiling With De-Ionized Water. , 2009, , .		3
280	Numerical Analysis of Mist-Cooled High Power Components in Cabinets. , 2009, , .		4
281	Microscale Thermal Transport and Electromechanical Microfluidic Actuation. Journal of Enhanced Heat Transfer, 2009, 16, 237-266.	0.5	3
282	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
283	Enhancement of external forced convection by ionic wind. International Journal of Heat and Mass Transfer, 2008, 51, 6047-6053.	2.5	131
284	Visualization of convection patterns near an evaporating meniscus using Î¼PIV. Experiments in Fluids, 2008, 44, 431-438.	1.1	37
285	Recent advances in microscale pumping technologies: a review and evaluation. Microfluidics and Nanofluidics, 2008, 5, 145-174.	1.0	402
286	Microfluidic delivery of small molecules into mammalian cells based on hydrodynamic focusing. Biotechnology and Bioengineering, 2008, 100, 150-158.	1.7	57
287	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
288	Transport from a volatile meniscus inside an open microtube. International Journal of Heat and Mass Transfer, 2008, 51, 3007-3017.	2.5	58

#	Article	IF	Citations
289	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
290	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
291	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
292	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
293	Measurements of Bubble Nucleation Characteristics in Pool Boiling of a Wetting Liquid on Smooth and Roughened Surfaces. , 2008, , .		11
294	Simulation of Thermal Transport in Open-Cell Metal Foams: Effect of Periodic Unit-Cell Structure. Journal of Heat Transfer, 2008, 130, .	1.2	86
295	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
296	Thermal Challenges in Next-Generation Electronic Systems. IEEE Transactions on Components and Packaging Technologies, 2008, 31, 801-815.	1.4	352
297	Electrothermally bonded carbon nanotube interfaces. Intersociety Conference on Thermal and Thermomechanical Phenomena in Electronic Systems, 2008, , .	0.0	2
298	Flow Boiling in Silicon Microchannel Heat Sinks. , 2008, , .		3
299	Quantification of piezoelectric fan flow rate performance and experimental identification of installation effects. Intersociety Conference on Thermal and Thermomechanical Phenomena in Electronic Systems, 2008, , .	0.0	11
300	Enhanced cooling in a sealed cabinet using an evaporating-condensing dielectric mist. Intersociety Conference on Thermal and Thermomechanical Phenomena in Electronic Systems, 2008, , .	0.0	5
301	Ionic Winds for Enhanced Cooling in Portable Platforms. , 2008, , .		3
302	Metal Foams as Passive Thermal Control Systems. , 2008, , 261-282.		2
303	Electrowetting-Based Control of Droplet Transition and Morphology on Artificially Microstructured Surfaces. Langmuir, 2008, 24, 8338-8345.	1.6	66
304	Analysis and Suppression of Base Separation in the Casting of a Cylindrical Ingot. Heat Transfer Engineering, 2008, 29, 385-394.	1.2	1
305	Characterization of Microstructures for Heat Transfer Performance in Passive Cooling Devices. , 2008, , .		3
306	Selected Papers from the 18th National & 7th ISHMT-ASME Heat and Mass Transfer Conference. Heat Transfer Engineering, 2008, 29, 341-342.	1.2	0

#	Article	IF	Citations
307	Permeability and Thermal Transport in Compressed Open-Celled Foams. Numerical Heat Transfer, Part B: Fundamentals, 2008, 54, 1-22.	0.6	16
308	Electrothermal Bonding of Carbon Nanotubes to Glass. Journal of the Electrochemical Society, 2008, 155, K161.	1.3	10
309	Analytical model for an electrostatically actuated miniature diaphragm compressor. Journal of Micromechanics and Microengineering, 2008, 18, 035010.	1.5	20
310	An investigation of flow boiling regimes in microchannels of different sizes by means of high-speed visualization. Intersociety Conference on Thermal and Thermomechanical Phenomena in Electronic Systems, 2008, , .	0.0	7
311	Microfluidic pumping based on dielectrophoresis for thermal management of microelectronics. Intersociety Conference on Thermal and Thermomechanical Phenomena in Electronic Systems, 2008, , .	0.0	0
312	Permeability and Thermal Transport in Compressed Open-Celled Foams. , 2008, , .		0
313	A Thermal Quadrupole-Based Model for Heat Diffusion in a Multilayered System: Application to Determination of Transient Performance of a Medium-Voltage Soft Starter. , 2008, , .		0
314	Analysis of the Total Heat Transfer in an Evaporating Thin Film. , 2008, , .		0
315	Performance Characterization of a Traveling-Wave Electrohydrodynamic Micropump. , 2008, , .		0
316	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
317	Experimental investigation of steady buoyant-thermocapillary convection near an evaporating meniscus. Physics of Fluids, 2007, 19, 082103.	1.6	60
318	Analysis and Performance Comparison of Competing Desktop Cooling Technologies. , 2007, , 1019.		1
319	Microscale Temperature Measurements at the Triple Line of an Evaporating Thin Film. , 2007, , 1575.		0
320	Effects of Surface Roughness on the Pool Boiling of Water. , 2007, , 219.		9
321	Microchannel Size Effects on Two-Phase Local Heat Transfer and Pressure Drop in Silicon Microchannel Heat Sinks With a Dielectric Fluid. , 2007, , 437.		3
322	Flow Boiling Heat Transfer in Microchannels. Journal of Heat Transfer, 2007, 129, 1321-1332.	1.2	125
323	Analysis of Solidâ€“Liquid Phase Change Under Pulsed Heating. Journal of Heat Transfer, 2007, 129, 395-400.	1.2	49
324	Local Heat Transfer Coefficients Induced by Piezoelectrically Actuated Vibrating Cantilevers. Journal of Heat Transfer, 2007, 129, 1168-1176.	1.2	104

#	Article	IF	Citations
325	Piezoelectric Fans Using Higher Flexural Modes for Electronics Cooling Applications. IEEE Transactions on Components and Packaging Technologies, 2007, 30, 119-128.	1.4	78
326	Prediction of effective thermo-mechanical properties of particulate composites. Computational Materials Science, 2007, 40, 255-266.	1.4	54
327	Numerical and Experimental Investigation of Solidification Shrinkage. Numerical Heat Transfer; Part A: Applications, 2007, 52, 145-162.	1.2	30
328	Electrowetting-Based Control of Static Droplet States on Rough Surfaces. Langmuir, 2007, 23, 4918-4924.	1.6	111
329	Analysis of Gap Formation in the Casting of Energetic Materials. Numerical Heat Transfer; Part A: Applications, 2007, 51, 415-444.	1.2	25
330	Ionic winds for locally enhanced cooling. Journal of Applied Physics, 2007, 102, .	1.1	145
331	Towards a Thermal Moore's Law. IEEE Transactions on Advanced Packaging, 2007, 30, 462-474.	1.7	122
332	Heat and Mass Transport in Heat Pipe Wick Structures. Journal of Thermophysics and Heat Transfer, 2007, 21, 392-404.	0.9	68
333	Local Heat Transfer Coefficients Under Flows Induced by Vibrating Cantilevers. Journal of Heat Transfer, 2007, 129, 933-933.	1.2	2
334	Microbubble return phenomena during subcooled boiling on small wires. International Journal of Heat and Mass Transfer, 2007, 50, 163-172.	2.5	24
335	Characteristics of an evaporating thin film in a microchannel. International Journal of Heat and Mass Transfer, 2007, 50, 3933-3942.	2.5	326
336	Induction electrohydrodynamics micropump for high heat flux cooling. Sensors and Actuators A: Physical, 2007, 134, 650-659.	2.0	58
337	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
338	External Forced Convection Enhancement Using a Corona Discharge. , 2007, , .		1
339	Microscale Laser-Induced Fluorescence Method for Non-Intrusive Temperature Measurement. , 2007, , .		0
340	Direct Simulation of Transport in Open-Cell Metal Foam. Journal of Heat Transfer, 2006, 128, 793-799.	1.2	223
341	Hydrodynamic loading of microcantilevers vibrating in viscous fluids. Journal of Applied Physics, 2006, 99, 114906.	1.1	198
342	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

#	Article	IF	Citations
343	Experimental Mapping of Local Heat Transfer Coefficients Under Multiple Piezoelectric Fans. , 2006, , 635.		4
344	Transport From a Volatile Meniscus in a Microtube. , 2006, , 585.		1
345	Simulation of Thermal Transport in Open-Cell Metal Foams: Effect of Periodic Unit Cell Structure. , 2006, , 409.		3
346	Prediction of Effective Thermo-Mechanical Properties of Particulate Composites. , 2006, , 593.		3
347	Experimental and numerical study of melting in a cylinder. International Journal of Heat and Mass Transfer, 2006, 49, 2724-2738.	2.5	199
348	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
349	Subcooled boiling incipience on a highly smooth microheater. International Journal of Heat and Mass Transfer, 2006, 49, 4399-4406.	2.5	34
350	Advances in mesoscale thermal management technologies for microelectronics. Microelectronics Journal, 2006, 37, 1165-1185.	1.1	164
351	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
352	Enhanced Electrohydrodynamic Pumping at the Microscale. , 2006, , 239.		0
353	Analysis and Prediction of Constriction Resistance Between Coated Surfaces. Journal of Thermophysics and Heat Transfer, 2006, 20, 346-348.	0.9	3
354	Characterization of Rough Engineering Surfaces for Use in Thermal Contact Conductance Modeling. Journal of Thermophysics and Heat Transfer, 2006, 20, 817-824.	0.9	9
355	Flow Boiling in a Silicon Microchannel Array. , 2006, , .		3
356	INFRARED MICRO-PARTICLE IMAGE VELOCIMETRY IN A SILICON MICROCHANNEL HEAT SINK. , 2006, , .		1
357	Direct Simulation of Transport in Open-Cell Metal Foams. , 2005, , 597.		8
358	Flow Boiling in a Microchannel Heat Sink. , 2005, , 633.		6
359	Jet Flows Around Microbubbles in Subcooled Boiling. Journal of Heat Transfer, 2005, 127, 802-802.	1.2	13
360	Piezoelectric Actuators for Low-Form-Factor Electronics Cooling. , 2005, , 439.		11

#	Article	IF	Citations
361	Towards a Thermal Mooreâ€™s Law. , 2005, , 591.		6
362	Analysis of Solid-Liquid Phase Change Under Pulsed Heating. , 2005, , 791.		0
363	Flow Boiling Heat Transfer to a Dielectric Coolant in a Microchannel Heat Sink. , 2005, , 627.		3
364	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
365	Prediction of the onset of nucleate boiling in microchannel flow. International Journal of Heat and Mass Transfer, 2005, 48, 5134-5149.	2.5	143
366	Infrared micro-particle image velocimetry in silicon-based microdevices. Experiments in Fluids, 2005, 38, 385-392.	1.1	36
367	Investigation of heat transfer in rectangular microchannels. International Journal of Heat and Mass Transfer, 2005, 48, 1688-1704.	2.5	703
368	Numerical and Experimental Investigation of the Melt Casting of Explosives. Propellants, Explosives, Pyrotechnics, 2005, 30, 369-380.	1.0	29
369	Nucleate Boiling in Microchannels. Journal of Heat Transfer, 2005, 127, 803-803.	1.2	10
370	Hydrodynamic Loading of Vibrating Micro-Cantilevers. , 2005, , 443.		0
371	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
372	A Two-Temperature Model for Solid-Liquid Phase Change in Metal Foams. Journal of Heat Transfer, 2005, 127, 995-1004.	1.2	155
373	Transport in Mesoscale Cooling Systems. , 2005, , 285.		1
374	Influence of Bulk Fluid Velocity on the Efficiency of Electrohydrodynamic Pumping. Journal of Fluids Engineering, Transactions of the ASME, 2005, 127, 484-494.	0.8	21
375	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
376	Hot-Spot Thermal Management With Flow Modulation in a Microchannel Heat Sink. , 2005, , 643.		13
377	Solidification Heat Transfer and Base Separation Analysis in the Casting of an Energetic Material in a Projectile. , 2005, , .		3
378	Analysis and Prediction of Constriction Resistance for Contact Between Rough Engineering Surfaces. Journal of Thermophysics and Heat Transfer, 2004, 18, 30-36.	0.9	16

#	Article	IF	Citations
379	Transport in Flat Heat Pipes at High Heat Fluxes From Multiple Discrete Sources. Journal of Heat Transfer, 2004, 126, 347-354.	1.2	82
380	Numerical and Experimental Investigation of the Melt Casting of Explosives. , 2004, , 399.		2
381	Experimental Measurements of Heat and Mass Transport in Heat Pipe Wicks. , 2004, , 209.		2
382	A Two-Temperature Model for Solid/Liquid Phase Change in Metal Foams. , 2004, , 609.		7
383	Microscale Ion-Driven Air Flow Over a Flat Plate. , 2004, , 463.		19
384	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
385	A Two-Temperature Model for the Analysis of Passive Thermal Control Systems. Journal of Heat Transfer, 2004, 126, 628.	1.2	65
386	Microscale pumping technologies for microchannel cooling systems. Applied Mechanics Reviews, 2004, 57, 191-221.	4.5	136
387	Low Reynolds number flow through nozzle-diffuser elements in valveless micropumps. Sensors and Actuators A: Physical, 2004, 113, 226-235.	2.0	121
388	Single-Phase Flow and Heat Transport and Pumping Considerations in Microchannel Heat Sinks. Heat Transfer Engineering, 2004, 25, 15-25.	1.2	99
389	Investigation of Liquid Flow in Microchannels. Journal of Thermophysics and Heat Transfer, 2004, 18, 65-72.	0.9	189
390	Experimental Investigation of the Thermal Performance of Piezoelectric Fans. Heat Transfer Engineering, 2004, 25, 4-14.	1.2	176
391	A Novel Micropump for Electronics Cooling. , 2004, , .		3
392	Numerical Investigation of the Flow and Heat Transfer Due to a Miniature Piezoelectric Fan. , 2004, , 29.		1
393	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
394	Two-dimensional streaming flows induced by resonating, thin beams. Journal of the Acoustical Society of America, 2003, 114, 1785-1795.	0.5	66
395	FIXED-GRID FRONT-TRACKING ALGORITHM FOR SOLIDIFICATION PROBLEMS, PART II: DIRECTIONAL SOLIDIFICATION WITH MELT CONVECTION. Numerical Heat Transfer, Part B: Fundamentals, 2003, 43, 143-166.	0.6	18
396	Experimental Investigation of Heat Transfer in Microchannels. , 2003, , 391.		12

#	Article	IF	Citations
397	Single-Phase Flow and Heat Transport in Microchannel Heat Sinks. , 2003, , 159.		13
398	Transient Analysis of Flat Heat Pipes. , 2003, , 507.		32
399	Numerical Simulation of Microscale Ion-Driven Air Flow. , 2003, , 303.		15
400	Analysis of Pumping Requirements for Microchannel Cooling Systems. , 2003, , 473.		6
401	Prediction of Dryout in Flat Heat Pipes at High Heat Fluxes From Multiple Discrete Sources. , 2003, , 741.		4
402	Analysis and Optimization of the Thermal Performance of Microchannel Heat Sinks. , 2003, , 557.		3
403	TRANSPORT IN MICROCHANNELS - A CRITICAL REVIEW. Annual Review of Heat Transfer, 2003, 13, 1-50.	0.3	224
404	Modeling of Constriction Resistance in Coated Joints. Journal of Thermophysics and Heat Transfer, 2002, 16, 207-216.	0.9	12
405	Experimental and Numerical Investigation of the Bridgman Growth of a Transparent Material. Journal of Thermophysics and Heat Transfer, 2002, 16, 324-335.	0.9	14
406	A Two-Temperature Model for the Analysis of Passive Thermal Control Systems for Electronics. , 2002, , 105.		4
407	Investigation of Liquid Flow in Microchannels. , 2002, , .		6
408	Concentration fields in the solidification processing of metal matrix composites. International Journal of Heat and Mass Transfer, 2002, 45, 4251-4266.	2.5	5
409	A COMPARATIVE ANALYSIS OF STUDIES ON HEAT TRANSFER AND FLUID FLOW IN MICROCHANNELS. Microscale Thermophysical Engineering, 2001, 5, 293-311.	1.2	357
410	Bridgman Crystal Growth of an Alloy With Thermosolutal Convection Under Microgravity Conditions. Journal of Heat Transfer, 2001, 123, 990-998.	1.2	5
411	Effect of thermosolutal convection on directional solidification. Sadhana - Academy Proceedings in Engineering Sciences, 2001, 26, 121-138.	0.8	10
412	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
413	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
414	Recent Advances in the Modeling and Applications of Nonconventional Heat Pipes. Advances in Heat Transfer, 2001, 35, 249-308.	0.4	27

#	Article	IF	Citations
415	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
416	The influence of gravity levels on the horizontal Bridgman crystal growth of an alloy. International Journal of Heat and Mass Transfer, 2000, 43, 1905-1923.	2.5	9
417	Heat Transfer From a Finned Surface in Ducted Air Jet Suction and Impingement. Journal of Electronic Packaging, Transactions of the ASME, 2000, 122, 282-285.	1.2	2
418	HEAT TRANSFER AND FLOW FIELDS IN CONFINED JET IMPINGEMENT. Annual Review of Heat Transfer, 2000, 11, 413-494.	0.3	86
419	The development of a bubble rising in a viscous liquid. Journal of Fluid Mechanics, 1999, 387, 61-96.	1.4	144
420	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
421	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
422	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
423	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
424	RECONSTRUCTION AND ADVECTION OF A MOVING INTERFACE IN THREE DIMENSIONS ON A FIXED GRID. Numerical Heat Transfer, Part B: Fundamentals, 1998, 34, 121-138.	0.6	8
425	HEAT TRANSFER FROM A DISCRETE HEAT SOURCE IN CONFINED AIR JET IMPINGEMENT. , 1998, , .		10
426	MOTION OF INTERACTING GAS BUBBLES IN A VISCOUS LIQUID INCLUDING WALL EFFECTS AND EVAPORATION. Numerical Heat Transfer; Part A: Applications, 1997, 31, 629-654.	1.2	25
427	Composite correlations for convective heat transfer from arrays of three-dimensional obstacles. International Journal of Heat and Mass Transfer, 1997, 40, 493-498.	2.5	12
428	Nozzle-geometry effects in liquid jet impingement heat transfer. International Journal of Heat and Mass Transfer, 1996, 39, 2915-2923.	2.5	161
429	Thermal wake downstream of a three-dimensional obstacle. Experimental Thermal and Fluid Science, 1996, 12, 65-74.	1.5	14
430	Formation and suppression of channels during upward solidification of a binary mixture. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1995, 26, 971-981.	1.1	12
431	Nonlinear interface stability analysis of alloy solidification including effects of surface energy. Journal of Applied Physics, 1994, 76, 4863-4871.	1.1	8
432	HEAT TRANSFER FROM DISCRETE HEAT SOURCES USING AN AXISYMMETRIC, SUBMERGED AND CONFINED LIQUID JET. , 1994, , .		5

#	Article	IF	Citations
433	A modified Mullinsâ€“Sekerka stability analysis including surface energy effects. Journal of Applied Physics, 1993, 74, 2494-2500.	1.1	5
434	Thermal Characterization of Open-Celled Metal Foams by Direct Simulation. , 0, , 267-289.		0