

# Suresh V Garimella

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

392  
papers

15,203  
citations

70  
h-index

106  
g-index

437  
ext. papers

17,733  
ext. citations

3.7  
avg, IF

7.19  
L-index

#	Paper	IF	Citations
392	The effect of dynamic wetting behavior on boiling heat transfer mechanisms during bubble growth and departure. <i>International Journal of Heat and Mass Transfer</i> , <b>2022</b> , 184, 122276	4.9	1
391	A figure of merit to characterize the efficacy of evaporation from porous microstructured surfaces. <i>International Journal of Heat and Mass Transfer</i> , <b>2022</b> , 182, 121964	4.9	2
390	Modeling the formation of efflorescence and subflorescence caused by salt solution evaporation from porous media. <i>International Journal of Heat and Mass Transfer</i> , <b>2022</b> , 189, 122645	4.9	0
389	Microlayer evaporation governs heat transfer enhancement during pool boiling from microstructured surfaces. <i>Applied Physics Letters</i> , <b>2022</b> , 120, 221602	3.4	0
388	Measurement of flow maldistribution induced by the Ledinegg instability during boiling in thermally isolated parallel microchannels. <i>International Journal of Multiphase Flow</i> , <b>2021</b> , 139, 103644	3.6	1
387	The Role of Dynamic Wetting Behavior during Bubble Growth and Departure from a Solid Surface. <i>International Journal of Heat and Mass Transfer</i> , <b>2021</b> , 172, 121167	4.9	2
386	An experimental investigation of the effect of thermal coupling between parallel microchannels undergoing boiling on the Ledinegg instability-induced flow maldistribution. <i>International Journal of Multiphase Flow</i> , <b>2021</b> , 139, 103536	3.6	2
385	. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , <b>2021</b> , 11, 51-56	1.7	0
384	Transient Flow Boiling and Maldistribution Characteristics in Heated Parallel Channels Induced by Flow Regime Oscillations. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , <b>2021</b> , 1-1	1.7	0
383	Impact of Pressure Drop Oscillations on Surface Temperature and Critical Heat Flux during Flow Boiling in a Microchannel. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , <b>2021</b> , 1-1	1.7	1
382	A semi-empirical model for thermal resistance and dryout during boiling in thin porous evaporators fed by capillary action. <i>International Journal of Heat and Mass Transfer</i> , <b>2021</b> , 181, 121887	4.9	1
381	The effect of channel diameter on flow freezing in microchannels. <i>International Journal of Heat and Mass Transfer</i> , <b>2020</b> , 157, 119718	4.9	1
380	Two-phase flow morphology and local wall temperatures in high-aspect-ratio manifold microchannels. <i>International Journal of Heat and Mass Transfer</i> , <b>2020</b> , 153, 119551	4.9	10
379	Time-resolved characterization of microchannel flow boiling during transient heating: Part 1 □ Dynamic response to a single heat flux pulse. <i>International Journal of Heat and Mass Transfer</i> , <b>2020</b> , 154, 119643	4.9	4
378	Transport mechanisms during water droplet evaporation on heated substrates of different wettability. <i>International Journal of Heat and Mass Transfer</i> , <b>2020</b> , 152, 119524	4.9	17
377	Multiscale Concentrated Solar Power. <i>Lecture Notes in Energy</i> , <b>2020</b> , 87-132	0.4	
376	Time-resolved characterization of microchannel flow boiling during transient heating: Part 2 □ Dynamic response to time-periodic heat flux pulses. <i>International Journal of Heat and Mass Transfer</i> , <b>2020</b> , 154, 119686	4.9	4

375	Role of nanoscale roughness in the heat transfer characteristics of thin film evaporation. <i>International Journal of Heat and Mass Transfer</i> , <b>2020</b> , 150, 119306	4.9	8
374	Heat pipe dryout and temperature hysteresis in response to transient heat pulses exceeding the capillary limit. <i>International Journal of Heat and Mass Transfer</i> , <b>2020</b> , 148, 119135	4.9	9
373	On the transient thermal response of thin vapor chamber heat spreaders: Optimized design and fluid selection. <i>International Journal of Heat and Mass Transfer</i> , <b>2020</b> , 148, 119106	4.9	6
372	The role of vapor venting and liquid feeding on the dryout limit of two-layer evaporator wicks. <i>International Journal of Heat and Mass Transfer</i> , <b>2020</b> , 148, 119063	4.9	12
371	Soft Surface: Droplets on Soft Surfaces Exhibit a Reluctance to Coalesce due to an Intervening Wetting Ridge (Adv. Mater. Interfaces 17/2020). <i>Advanced Materials Interfaces</i> , <b>2020</b> , 7, 2070098	4.6	
370	Droplets on Soft Surfaces Exhibit a Reluctance to Coalesce due to an Intervening Wetting Ridge. <i>Advanced Materials Interfaces</i> , <b>2020</b> , 7, 2000731	4.6	2
369	Three-dimensional liquid-vapor interface reconstruction from high-speed stereo images during pool boiling. <i>International Journal of Heat and Mass Transfer</i> , <b>2019</b> , 136, 265-275	4.9	4
368	On the transient thermal response of thin vapor chamber heat spreaders: Governing mechanisms and performance relative to metal spreaders. <i>International Journal of Heat and Mass Transfer</i> , <b>2019</b> , 136, 995-1005	4.9	13
367	Area-scalable high-heat-flux dissipation at low thermal resistance using a capillary-fed two-layer evaporator wick. <i>International Journal of Heat and Mass Transfer</i> , <b>2019</b> , 135, 1346-1356	4.9	19
366	Experimental investigation of boiling regimes in a capillary-fed two-layer evaporator wick. <i>International Journal of Heat and Mass Transfer</i> , <b>2019</b> , 135, 1335-1345	4.9	20
365	Simultaneous wick and fluid selection for the design of minimized-thermal-resistance vapor chambers under different operating conditions. <i>International Journal of Heat and Mass Transfer</i> , <b>2019</b> , 136, 842-850	4.9	9
364	A coupled wicking and evaporation model for prediction of pool boiling critical heat flux on structured surfaces. <i>International Journal of Heat and Mass Transfer</i> , <b>2019</b> , 136, 373-382	4.9	13
363	. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , <b>2019</b> , 9, 1291-1300	1.7	16
362	The petal effect of parahydrophobic surfaces offers low receding contact angles that promote effective boiling. <i>International Journal of Heat and Mass Transfer</i> , <b>2019</b> , 135, 403-412	4.9	37
361	Limitations of the Axially Dispersed Plug-Flow Model in Predicting Breakthrough in Confined Geometries. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2019</b> , 58, 3853-3866	3.9	2
360	Design of an Area-Scalable Two-Layer Evaporator Wick for High-Heat-Flux Vapor Chambers. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , <b>2019</b> , 9, 458-472	1.7	9
359	The Wetting State of Water on a Rose Petal. <i>Advanced Materials Interfaces</i> , <b>2019</b> , 6, 1900652	4.6	9
358	Experimental Demonstration of Heat Pipe Operation beyond the Capillary Limit during Brief Transient Heat Loads <b>2019</b> ,		1

357	Visualizing near-wall two-phase flow morphology during confined and submerged jet impingement boiling to the point of critical heat flux. <i>International Journal of Heat and Mass Transfer</i> , <b>2019</b> , 142, 118407	4.9	1
356	Petal Effect: The Wetting State of Water on a Rose Petal (Adv. Mater. Interfaces 17/2019). <i>Advanced Materials Interfaces</i> , <b>2019</b> , 6, 1970110	4.6	0
355	Evaporation-Driven Micromixing in Sessile Droplets for Miniaturized Absorbance-Based Colorimetry. <i>ACS Omega</i> , <b>2019</b> , 4, 22385-22391	3.9	2
354	. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , <b>2019</b> , 9, 446-457	1.7	15
353	Ice formation modes during flow freezing in a small cylindrical channel. <i>International Journal of Heat and Mass Transfer</i> , <b>2019</b> , 128, 836-848	4.9	8
352	Ledinegg instability-induced temperature excursion between thermally isolated, heated parallel microchannels. <i>International Journal of Heat and Mass Transfer</i> , <b>2019</b> , 132, 550-556	4.9	14
351	A permeable-membrane microchannel heat sink made by additive manufacturing. <i>International Journal of Heat and Mass Transfer</i> , <b>2019</b> , 131, 1174-1183	4.9	40
350	Identification of nucleate boiling as the dominant heat transfer mechanism during confined two-phase jet impingement. <i>International Journal of Heat and Mass Transfer</i> , <b>2019</b> , 128, 1095-1101	4.9	8
349	Measurement and Prediction of the Heat of Adsorption and Equilibrium Concentration of CO <sub>2</sub> on Zeolite 13X. <i>Journal of Chemical &amp; Engineering Data</i> , <b>2018</b> , 63, 1663-1674	2.8	26
348	The effect of lateral thermal coupling between parallel microchannels on two-phase flow distribution. <i>International Journal of Heat and Mass Transfer</i> , <b>2018</b> , 124, 769-781	4.9	17
347	A validated time-stepping analytical model for 3D transient vapor chamber transport. <i>International Journal of Heat and Mass Transfer</i> , <b>2018</b> , 119, 867-879	4.9	21
346	Enabling Highly Effective Boiling from Superhydrophobic Surfaces. <i>Physical Review Letters</i> , <b>2018</b> , 120, 174501	7.4	57
345	A hierarchical manifold microchannel heat sink array for high-heat-flux two-phase cooling of electronics. <i>International Journal of Heat and Mass Transfer</i> , <b>2018</b> , 117, 319-330	4.9	124
344	Experimental Characterization of a Microchannel Heat Sink Made by Additive Manufacturing <b>2018</b> ,		3
343	Development and validation of a semi-empirical model for two-phase heat transfer from arrays of impinging jets. <i>International Journal of Heat and Mass Transfer</i> , <b>2018</b> , 124, 782-793	4.9	10
342	High-frequency thermal-fluidic characterization of dynamic microchannel flow boiling instabilities: Part 1 □Rapid-bubble-growth instability at the onset of boiling. <i>International Journal of Multiphase Flow</i> , <b>2018</b> , 106, 179-188	3.6	16
341	High-frequency thermal-fluidic characterization of dynamic microchannel flow boiling instabilities: Part 2 □Impact of operating conditions on instability type and severity. <i>International Journal of Multiphase Flow</i> , <b>2018</b> , 106, 189-201	3.6	10
340	Tears of an evaporating methanol meniscus on a silicon substrate. <i>Applied Physics Letters</i> , <b>2018</b> , 113, 083703	3.4	1

339	Characterization of hierarchical manifold microchannel heat sink arrays under simultaneous background and hotspot heating conditions. <i>International Journal of Heat and Mass Transfer</i> , <b>2018</b> , 126, 1289-1301	4.9	44
338	Two-Phase Jet Impingement: Liquid-Vapor Interactions and Heat Transfer Mapping for Multiscale Surface Enhancement Design <b>2018</b> , 221-278		0
337	Re-entrant Cavities Enhance Resilience to the Cassie-to-Wenzel State Transition on Superhydrophobic Surfaces during Electrowetting. <i>Langmuir</i> , <b>2018</b> , 34, 12787-12793	4	10
336	Calibration and uncertainty analysis of a fixed-bed adsorption model for CO2 separation. <i>Adsorption</i> , <b>2018</b> , 24, 781-802	2.6	2
335	Error Reduction in Infrared Thermography by Multiframe Super-Resolution. <i>Journal of Electronic Packaging, Transactions of the ASME</i> , <b>2018</b> , 140,	2	1
334	Design of electrode arrays for 3D capacitance tomography in a planar domain. <i>International Journal of Heat and Mass Transfer</i> , <b>2017</b> , 106, 1251-1260	4.9	3
333	Axisymmetric wall jet development in confined jet impingement. <i>Physics of Fluids</i> , <b>2017</b> , 29, 025102	4.4	34
332	Spatiotemporal infrared measurement of interface temperatures during water droplet evaporation on a nonwetting substrate. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 041605	3.4	27
331	Numerical Simulation of Evaporating Two-Phase Flow in a High-Aspect-Ratio Microchannel with Bends. <i>Journal of Heat Transfer</i> , <b>2017</b> , 139,	1.8	5
330	Experimental study of flow boiling in a compact hierarchical manifold microchannel heat sink array <b>2017</b> ,		2
329	Quantitative Evaluation of the Dependence of Pool Boiling Heat Transfer Enhancement on Sintered Particle Coating Characteristics. <i>Journal of Heat Transfer</i> , <b>2017</b> , 139,	1.8	20
328	Numerical Simulation of Evaporating Two-Phase Flow in a High-Aspect-Ratio Microchannel with Bends. <i>Journal of Heat Transfer</i> , <b>2017</b> , 139,	1.8	4
327	Predicting two-phase flow distribution and stability in systems with many parallel heated channels. <i>International Journal of Heat and Mass Transfer</i> , <b>2017</b> , 107, 557-571	4.9	39
326	Multiscale Modeling of the Three-Dimensional Meniscus Shape of a Wetting Liquid Film on Micro-/Nanostructured Surfaces. <i>Langmuir</i> , <b>2017</b> , 33, 12028-12037	4	7
325	Enhanced Antimicrobial Efficacy of Bimetallic Porous CuO Microspheres Decorated with Ag Nanoparticles. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 39165-39173	9.5	31
324	Characterization of liquid film thickness in slug-regime microchannel flows. <i>International Journal of Heat and Mass Transfer</i> , <b>2017</b> , 115, 1137-1143	4.9	8
323	A Wettability Metric for Characterization of Capillary Flow on Textured Superhydrophilic Surfaces. <i>Langmuir</i> , <b>2017</b> , 33, 7847-7853	4	17
322	Design of multifunctional lattice-frame materials for compact heat exchangers. <i>International Journal of Heat and Mass Transfer</i> , <b>2017</b> , 115, 619-629	4.9	48

321	An area-scalable two-layer evaporator wick concept for high-heat-flux vapor chambers <b>2017</b> ,		3
320	Mechanistic modeling of the liquid film shape and heat transfer coefficient in annular-regime microchannel flow boiling. <i>International Journal of Heat and Mass Transfer</i> , <b>2017</b> , 114, 841-851	4.9	7
319	Characterization of Coalescence-Induced Droplet Jumping Height on Hierarchical Superhydrophobic Surfaces. <i>ACS Omega</i> , <b>2017</b> , 2, 2883-2890	3.9	25
318	Electronics Thermal Management in Information and Communications Technologies: Challenges and Future Directions. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , <b>2017</b> , 7, 1191-1205	1.7	71
317	An experimental method for controlled generation and characterization of microchannel slug flow boiling. <i>International Journal of Heat and Mass Transfer</i> , <b>2017</b> , 106, 619-628	4.9	8
316	Working-fluid selection for minimized thermal resistance in ultra-thin vapor chambers. <i>International Journal of Heat and Mass Transfer</i> , <b>2017</b> , 106, 648-654	4.9	31
315	In Vitro Multitissue Interface Model Supports Rapid Vasculogenesis and Mechanistic Study of Vascularization across Tissue Compartments. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 21848-60	9.5	13
314	Stereo-PIV measurements of vapor-induced flow modifications in confined jet impingement boiling. <i>International Journal of Multiphase Flow</i> , <b>2016</b> , 84, 19-33	3.6	9
313	A tomographic-PIV investigation of vapor-induced flow structures in confined jet impingement boiling. <i>International Journal of Multiphase Flow</i> , <b>2016</b> , 84, 86-97	3.6	6
312	Continuous Oil/Water Separation Using Polydimethylsiloxane-Functionalized Melamine Sponge. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2016</b> , 55, 3596-3602	3.9	115
311	Capacitive sensing of local bond layer thickness and coverage in thermal interface materials. <i>International Journal of Heat and Mass Transfer</i> , <b>2016</b> , 97, 26-31	4.9	4
310	A saturated-interface-volume phase change model for simulating flow boiling. <i>International Journal of Heat and Mass Transfer</i> , <b>2016</b> , 93, 945-956	4.9	33
309	A Method for Thermal Performance Characterization of Ultrathin Vapor Chambers Cooled by Natural Convection. <i>Journal of Electronic Packaging, Transactions of the ASME</i> , <b>2016</b> , 138,	2	18
308	Visualization of Ice Formation Modes and Flow Blockage During Freezing of Water Flowing in a Microchannel <b>2016</b> ,		1
307	Coalescence-Induced Jumping of Multiple Condensate Droplets on Hierarchical Superhydrophobic Surfaces. <i>Scientific Reports</i> , <b>2016</b> , 6, 18649	4.9	72
306	Short and long-term sensitivity of lab-scale thermocone based thermal storage to flow disturbances. <i>Applied Thermal Engineering</i> , <b>2016</b> , 109, 936-948	5.8	17
305	Prediction of air-side particulate fouling of HVAC&R heat exchangers. <i>Applied Thermal Engineering</i> , <b>2016</b> , 104, 720-733	5.8	18
304	Marangoni Convection in Evaporating Organic Liquid Droplets on a Nonwetting Substrate. <i>Langmuir</i> , <b>2016</b> , 32, 4729-35	4	39

303	<b>2016,</b>		15
302	Patterning the condenser-side wick in ultra-thin vapor chamber heat spreaders to improve skin temperature uniformity of mobile devices. <i>International Journal of Heat and Mass Transfer</i> , <b>2016</b> , 101, 927-936	4.9	42
301	Exploiting Microscale Roughness on Hierarchical Superhydrophobic Copper Surfaces for Enhanced Dropwise Condensation. <i>Advanced Materials Interfaces</i> , <b>2015</b> , 2, 1400480	4.6	87
300	An optical approach for quantitative characterization of slug bubble interface profiles in a two-phase microchannel flow. <i>International Journal of Heat and Mass Transfer</i> , <b>2015</b> , 86, 31-38	4.9	7
299	A benefit-cost assessment of new vehicle technologies and fuel economy in the U.S. market. <i>Applied Energy</i> , <b>2015</b> , 157, 940-952	10.7	27
298	Spurious Current Suppression in VOF-CSF Simulation of Slug Flow through Small Channels. <i>Numerical Heat Transfer; Part A: Applications</i> , <b>2015</b> , 67, 1-12	2.3	22
297	Shape-energy evolutionary reconstruction algorithm for electrical capacitance tomography in a high-aspect-ratio domain. <i>Sensors and Actuators A: Physical</i> , <b>2015</b> , 233, 349-359	3.9	8
296	An explicit conditioning method for image reconstruction in electrical capacitance tomography. <i>Flow Measurement and Instrumentation</i> , <b>2015</b> , 46, 155-162	2.2	7
295	The effect of relative humidity on dropwise condensation dynamics. <i>International Journal of Heat and Mass Transfer</i> , <b>2015</b> , 80, 759-766	4.9	42
294	Effect of particle size on surface-coating enhancement of pool boiling heat transfer. <i>International Journal of Heat and Mass Transfer</i> , <b>2015</b> , 81, 103-113	4.9	90
293	A Cost-Effective Modeling Approach for Simulating Phase Change and Flow Boiling in Microchannels <b>2015</b> ,		4
292	Water and Ethanol Droplet Wetting Transition during Evaporation on Omniphobic Surfaces. <i>Scientific Reports</i> , <b>2015</b> , 5, 17110	4.9	39
291	Effect of Particle Morphology on Pool Boiling From Surfaces Coated With Sintered Particles <b>2015</b> ,		1
290	Boiling Heat Transfer From an Array of Round Jets With Hybrid Surface Enhancements. <i>Journal of Heat Transfer</i> , <b>2015</b> , 137,	1.8	13
289	Numerical investigation of pressure drop and heat transfer through reconstructed metal foams and comparison against experiments. <i>International Journal of Heat and Mass Transfer</i> , <b>2015</b> , 88, 508-515	4.9	54
288	Performance-Governing Transport Mechanisms for Heat Pipes at Ultrathin Form Factors. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , <b>2015</b> , 5, 1618-1627	1.7	20
287	Comparative Analysis of Single- and Dual-Media Thermocline Tanks for Thermal Energy Storage in Concentrating Solar Power Plants. <i>Journal of Solar Energy Engineering, Transactions of the ASME</i> , <b>2015</b> , 137,	2.3	12
286	Superhydrophobic Surfaces: Exploiting Microscale Roughness on Hierarchical Superhydrophobic Copper Surfaces for Enhanced Dropwise Condensation (Adv. Mater. Interfaces 3/2015). <i>Advanced Materials Interfaces</i> , <b>2015</b> , 2, n/a-n/a	4.6	1

285	Numerical Analysis of Air Flow through Metal Foams. <i>Energy Procedia</i> , <b>2014</b> , 45, 645-652	2.3	24
284	Manifold microchannel heat sink design using optimization under uncertainty. <i>International Journal of Heat and Mass Transfer</i> , <b>2014</b> , 69, 92-105	4.9	52
283	Investigation of boiling heat transfer in water using a free-particles-based enhancement technique. <i>International Journal of Heat and Mass Transfer</i> , <b>2014</b> , 71, 818-828	4.9	13
282	Latent heat augmentation of thermocline energy storage for concentrating solar power $\square$ system-level assessment. <i>Applied Energy</i> , <b>2014</b> , 116, 278-287	10.7	51
281	Local measurement of flow boiling heat transfer in an array of non-uniformly heated microchannels. <i>International Journal of Heat and Mass Transfer</i> , <b>2014</b> , 71, 206-216	4.9	31
280	Influence of surface wettability on transport mechanisms governing water droplet evaporation. <i>Langmuir</i> , <b>2014</b> , 30, 9726-30	4	54
279	Effect of superhydrophobic surface morphology on evaporative deposition patterns. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 201604	3.4	34
278	3D reconstruction and design of porous media from thin sections. <i>International Journal of Heat and Mass Transfer</i> , <b>2014</b> , 73, 250-264	4.9	37
277	Local single- and two-phase heat transfer from an impinging cross-shaped jet. <i>International Journal of Heat and Mass Transfer</i> , <b>2014</b> , 79, 432-436	4.9	15
276	OPTIMIZATION UNDER UNCERTAINTY FOR ELECTRONICS COOLING DESIGN. <i>WSPC Series in Advanced Integration and Packaging</i> , <b>2014</b> , 267-305		
275	HYDROPHILIC CNT-SINTERED COPPER COMPOSITE WICK FOR ENHANCED COOLING. <i>WSPC Series in Advanced Integration and Packaging</i> , <b>2014</b> , 307-331		
274	Effects of Non-Uniform Heating on the Location and Magnitude of Critical Heat Flux in a Microchannel Heat Sink. <i>International Journal of Micro-nano Scale Transport</i> , <b>2014</b> , 5, 95-108		9
273	Buoyancy-induced on-the-spot mixing in droplets evaporating on nonwetting surfaces. <i>Physical Review E</i> , <b>2014</b> , 90, 062407	2.4	48
272	Design of a non-intrusive electrical impedance-based void fraction sensor for microchannel two-phase flows. <i>Measurement Science and Technology</i> , <b>2014</b> , 25, 095301	2	17
271	Hydrophilic CNT-Sintered Copper Composite Wick for Enhanced Cooling <b>2014</b> , 267-288		
270	Simulated Microstructural Evolution and Design of Porous Sintered Wicks. <i>Journal of Heat Transfer</i> , <b>2014</b> , 136,	1.8	6
269	Confined Jet Impingement With Boiling on a Variety of Enhanced Surfaces. <i>Journal of Heat Transfer</i> , <b>2014</b> , 136,	1.8	21
268	Void Detection in Dielectric Films Using a Floating Network of Substrate-Embedded Electrodes. <i>Journal of Electronic Packaging, Transactions of the ASME</i> , <b>2014</b> , 136,	2	3



267	Economic Optimization of a Concentrating Solar Power Plant With Molten-Salt Thermocline Storage. <i>Journal of Solar Energy Engineering, Transactions of the ASME</i> , <b>2014</b> , 136,	2.3	17
266	Flow Visualization During Droplet Evaporation on Hydrophobic and Superhydrophobic Surfaces. <i>Journal of Heat Transfer</i> , <b>2014</b> , 136,	1.8	2
265	Optimization Under Uncertainty for Electronics Cooling Design <b>2014</b> , 233-265		
264	Hydrophilic CNT-Sintered Copper Composite Wick for Enhanced Cooling <b>2014</b> , 267-288		
263	Droplet evaporation on heated hydrophobic and superhydrophobic surfaces. <i>Physical Review E</i> , <b>2014</b> , 89, 042402	2.4	85
262	Level-set shape reconstruction of binary permittivity distributions using near-field focusing capacitance measurements. <i>Measurement Science and Technology</i> , <b>2014</b> , 25, 105602	2	4
261	A free-particles-based technique for boiling heat transfer enhancement in a wetting liquid. <i>International Journal of Heat and Mass Transfer</i> , <b>2014</b> , 71, 808-817	4.9	19
260	System-level simulation of a solar power tower plant with thermocline thermal energy storage. <i>Applied Energy</i> , <b>2014</b> , 113, 86-96	10.7	103
259	Technique for quantitative mapping of three-dimensional liquid-gas phase boundaries in microchannel flows. <i>International Journal of Multiphase Flow</i> , <b>2014</b> , 62, 45-51	3.6	7
258	Numerical Investigation of Fluid Flow and Heat Transfer in Periodic Porous Lattice-Flame Materials <b>2014</b> ,		3
257	Optimization Under Uncertainty Applied to Heat Sink Design. <i>Journal of Heat Transfer</i> , <b>2013</b> , 135,	1.8	11
256	Nanotextured superhydrophobic electrodes enable detection of attomolar-scale DNA concentration within a droplet by non-faradaic impedance spectroscopy. <i>Lab on A Chip</i> , <b>2013</b> , 13, 4248-56	7.2	59
255	Experimental Characterization of Capillary-Fed Carbon Nanotube Vapor Chamber Wicks. <i>Journal of Heat Transfer</i> , <b>2013</b> , 135,	1.8	20
254	Nucleate boiling from smooth and rough surfaces [Part 1: Fabrication and characterization of an optically transparent heater/sensor substrate with controlled surface roughness. <i>Experimental Thermal and Fluid Science</i> , <b>2013</b> , 44, 456-467	3	24
253	Evaporation analysis in sintered wick microstructures. <i>International Journal of Heat and Mass Transfer</i> , <b>2013</b> , 61, 729-741	4.9	55
252	Recent Advances in Vapor Chamber Transport Characterization for High-Heat-Flux Applications. <i>Advances in Heat Transfer</i> , <b>2013</b> , 209-301	1.9	49
251	Droplet evaporation dynamics on a superhydrophobic surface with negligible hysteresis. <i>Langmuir</i> , <b>2013</b> , 29, 10785-95	4	147
250	Metal functionalization of carbon nanotubes for enhanced sintered powder wicks. <i>International Journal of Heat and Mass Transfer</i> , <b>2013</b> , 59, 372-383	4.9	18

249	Nucleate boiling from smooth and rough surfaces [Part 2: Analysis of surface roughness effects on nucleate boiling. <i>Experimental Thermal and Fluid Science</i> , <b>2013</b> , 44, 439-455	3	33
248	Technological drivers in data centers and telecom systems: Multiscale thermal, electrical, and energy management. <i>Applied Energy</i> , <b>2013</b> , 107, 66-80	10.7	78
247	Thermodynamic comparison of organic Rankine cycles employing liquid-flooded expansion or a solution circuit. <i>Applied Thermal Engineering</i> , <b>2013</b> , 61, 859-865	5.8	9
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242	Review of Molten-Salt Thermocline Tank Modeling for Solar Thermal Energy Storage. <i>Heat Transfer Engineering</i> , <b>2013</b> , 34, 787-800	1.7	62
241	Cyclic operation of molten-salt thermal energy storage in thermoclines for solar power plants. <i>Applied Energy</i> , <b>2013</b> , 103, 256-265	10.7	81
240	Assessment of water droplet evaporation mechanisms on hydrophobic and superhydrophobic substrates. <i>Langmuir</i> , <b>2013</b> , 29, 15831-41	4	95
239	Simulation of a Concentrating Solar Power Plant With Molten-Salt Thermocline Storage for Optimized Annual Performance <b>2013</b> ,		2
238	An Experimental Study of a Multi-Device Jet Impingement Cooler With Phase Change Using HFE-7100 <b>2013</b> ,		3
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228	Development of a particle tracking-based measurement technique to map three-dimensional interfaces between transparent, immiscible fluids <b>2012</b> ,		1
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226	Dissipative Forces in the Electrowetted Cassie-Wenzel Transition on Hydrophobic Rough Surfaces. <i>Nanoscale and Microscale Thermophysical Engineering</i> , <b>2012</b> , 16, 154-164	3.7	3
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218	Topological design of channels for squeeze flow optimization of thermal interface materials. <i>International Journal of Heat and Mass Transfer</i> , <b>2012</b> , 55, 3560-3575	4.9	7
217	Visualization of vapor formation regimes during capillary-fed boiling in sintered-powder heat pipe wicks. <i>International Journal of Heat and Mass Transfer</i> , <b>2012</b> , 55, 3498-3510	4.9	64
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214	<b>2012</b> ,		4

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211	Direct Simulation of Thermal Transport Through Sintered Wick Microstructures. <i>Journal of Heat Transfer</i> , <b>2012</b> , 134,	1.8	24
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208	Droplet Shapes on Superhydrophobic Surfaces Under Electrowetting Actuation <b>2011</b> ,		1
207	A Study of Critical Heat Flux During Flow Boiling in Microchannel Heat Sinks <b>2011</b> ,		1
206	An Experimentally Validated Model for Transport in Thin, High Thermal Conductivity, Low CTE Heat Spreaders <b>2011</b> ,		2
205	Dependence of Flow Boiling Heat Transfer Coefficient on Location and Vapor Quality in a Microchannel Heat Sink <b>2011</b> ,		1
204	A numerical model for transport in flat heat pipes considering wick microstructure effects. <i>International Journal of Heat and Mass Transfer</i> , <b>2011</b> , 54, 153-168	4.9	76
203	Local heat transfer distribution and effect of instabilities during flow boiling in a silicon microchannel heat sink. <i>International Journal of Heat and Mass Transfer</i> , <b>2011</b> , 54, 3179-3190	4.9	44
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199	Temperature measurements near the contact line of an evaporating meniscus V-groove. <i>International Journal of Heat and Mass Transfer</i> , <b>2011</b> , 54, 1520-1526	4.9	29
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190	Note: Thermal analog to atomic force microscopy force-displacement measurements for nanoscale interfacial contact resistance. <i>Review of Scientific Instruments</i> , <b>2010</b> , 81, 036111	1.7	6
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182	XMT-based direct simulation of flow and heat transfer through open-cell aluminum foams <b>2010</b> ,		1
181	A two-phase heat spreader for cooling high heat flux sources <b>2010</b> ,		3
180	Nano-Structured Two-Phase Heat Spreader for Cooling Ultra-High Heat Flux Sources <b>2010</b> ,		8
179	Analysis of evaporating mist flow for enhanced convective heat transfer. <i>International Journal of Heat and Mass Transfer</i> , <b>2010</b> , 53, 3346-3356	4.9	48
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162	Numerical Study of Evaporation Heat Transfer From the Liquid-Vapor Interface in Wick Microstructures <b>2009</b> ,	4
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152	Measurement and prediction of the cooling characteristics of a generalized vibrating piezoelectric fan. <i>International Journal of Heat and Mass Transfer</i> , <b>2009</b> , 52, 4470-4478	4.9	103
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147	Surface Roughness Effects on Flow Boiling in Microchannels <b>2009</b> ,		4
146	An Experimental Investigation of Microchannel Size Effects on Flow Boiling With De-Ionized Water <b>2009</b> ,		2
145	Numerical Analysis of Mist-Cooled High Power Components in Cabinets <b>2009</b> ,		3
144	Microscale Thermal Transport and Electromechanical Microfluidic Actuation. <i>Journal of Enhanced Heat Transfer</i> , <b>2009</b> , 16, 237-266	1.7	3
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142	Simulation of Thermal Transport in Open-Cell Metal Foams: Effect of Periodic Unit-Cell Structure. <i>Journal of Heat Transfer</i> , <b>2008</b> , 130,	1.8	68

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138	Flow Boiling in Silicon Microchannel Heat Sinks <b>2008</b> ,		1
137	Quantification of piezoelectric fan flow rate performance and experimental identification of installation effects. <i>Intersociety Conference on Thermal and Thermomechanical Phenomena in Electronic Systems</i> , <b>2008</b> ,		8
136	Enhanced cooling in a sealed cabinet using an evaporating-condensing dielectric mist. <i>Intersociety Conference on Thermal and Thermomechanical Phenomena in Electronic Systems</i> , <b>2008</b> ,		2
135	Ionic Winds for Enhanced Cooling in Portable Platforms <b>2008</b> ,		3
134	Metal Foams as Passive Thermal Control Systems <b>2008</b> , 261-282		2
133	Electrowetting-based control of droplet transition and morphology on artificially microstructured surfaces. <i>Langmuir</i> , <b>2008</b> , 24, 8338-45	4	60
132	Analysis and Suppression of Base Separation in the Casting of a Cylindrical Ingot. <i>Heat Transfer Engineering</i> , <b>2008</b> , 29, 385-394	1.7	1
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117	Microchannel size effects on local flow boiling heat transfer to a dielectric fluid. <i>International Journal of Heat and Mass Transfer</i> , <b>2008</b> , 51, 3724-3735	4.9	142
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114	Heat and Mass Transport in Heat Pipe Wick Structures. <i>Journal of Thermophysics and Heat Transfer</i> , <b>2007</b> , 21, 392-404	1.3	52
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111	Induction electrohydrodynamics micropump for high heat flux cooling. <i>Sensors and Actuators A: Physical</i> , <b>2007</b> , 134, 650-659	3.9	51
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109	Flow Boiling Heat Transfer to a Dielectric Coolant in a Microchannel Heat Sink. <i>IEEE Transactions on Components and Packaging Technologies</i> , <b>2007</b> , 30, 24-31		24
108	Experimental investigation of steady buoyant-thermocapillary convection near an evaporating meniscus. <i>Physics of Fluids</i> , <b>2007</b> , 19, 082103	4.4	50
107	Analysis and Performance Comparison of Competing Desktop Cooling Technologies <b>2007</b> , 1019		
106	Microscale Temperature Measurements at the Triple Line of an Evaporating Thin Film <b>2007</b> , 1575		

105	Effects of Surface Roughness on the Pool Boiling of Water <b>2007</b> , 219		7
104	Microchannel Size Effects on Two-Phase Local Heat Transfer and Pressure Drop in Silicon Microchannel Heat Sinks With a Dielectric Fluid <b>2007</b> , 437		3
103	Flow Boiling Heat Transfer in Microchannels. <i>Journal of Heat Transfer</i> , <b>2007</b> , 129, 1321-1332	1.8	100
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89	Hydrodynamic loading of microcantilevers vibrating in viscous fluids. <i>Journal of Applied Physics</i> , <b>2006</b> , 99, 114906	2.5	166
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86	Transport From a Volatile Meniscus in a Microtube <b>2006</b> , 585		1
85	Simulation of Thermal Transport in Open-Cell Metal Foams: Effect of Periodic Unit Cell Structure <b>2006</b> , 409		3
84	Prediction of Effective Thermo-Mechanical Properties of Particulate Composites <b>2006</b> , 593		3
83	Experimental and numerical study of melting in a cylinder. <i>International Journal of Heat and Mass Transfer</i> , <b>2006</b> , 49, 2724-2738	4.9	152
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