

Xiao-Dong Wang

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179
papers

4,688
citations

42
h-index

61
g-index

184
ext. papers

6,042
ext. citations

5.7
avg, IF

6.3
L-index

#	Paper	IF	Citations
179	Heat transfer enhancement in microchannel heat sink by wavy channel with changing wavelength/amplitude. <i>International Journal of Thermal Sciences</i> , 2017 , 118, 423-434	4.1	134
178	Heat transfer enhancement in microchannel heat sinks using nanofluids. <i>International Journal of Heat and Mass Transfer</i> , 2012 , 55, 2559-2570	4.9	131
177	A three-dimensional numerical modeling of thermoelectric device with consideration of coupling of temperature field and electric potential field. <i>Energy</i> , 2012 , 47, 488-497	7.9	126
176	Optimal geometric structure for nanofluid-cooled microchannel heat sink under various constraint conditions. <i>Energy Conversion and Management</i> , 2013 , 65, 528-538	10.6	116
175	An improved design of double-layered microchannel heat sink with truncated top channels. <i>Applied Thermal Engineering</i> , 2015 , 79, 54-62	5.8	111
174	A Critical Review of Dynamic Wetting by Complex Fluids: From Newtonian Fluids to Non-Newtonian Fluids and Nanofluids. <i>Advances in Colloid and Interface Science</i> , 2016 , 236, 43-62	14.3	108
173	Transient modeling and dynamic characteristics of thermoelectric cooler. <i>Applied Energy</i> , 2013 , 108, 340-348	10.7	101
172	Local transport phenomena and cell performance of PEM fuel cells with various serpentine flow field designs. <i>Journal of Power Sources</i> , 2008 , 175, 397-407	8.9	100
171	Performance investigation and design optimization of a thermoelectric generator applied in automobile exhaust waste heat recovery. <i>Energy Conversion and Management</i> , 2016 , 120, 71-80	10.6	99
170	Optimization of geometry and flow rate distribution for double-layer microchannel heat sink. <i>International Journal of Thermal Sciences</i> , 2014 , 78, 158-168	4.1	95
169	Novel serpentine-baffle flow field design for proton exchange membrane fuel cells. <i>Journal of Power Sources</i> , 2007 , 173, 210-221	8.9	95
168	Fluid flow and heat transfer in microchannel heat sink based on porous fin design concept. <i>International Communications in Heat and Mass Transfer</i> , 2015 , 65, 52-57	5.8	94
167	Internal flow in evaporating droplet on heated solid surface. <i>International Journal of Heat and Mass Transfer</i> , 2011 , 54, 4437-4447	4.9	85
166	Numerical study on channel size effect for proton exchange membrane fuel cell with serpentine flow field. <i>Energy Conversion and Management</i> , 2010 , 51, 959-968	10.6	85
165	Multi-parameter optimization of flow and heat transfer for a novel double-layered microchannel heat sink. <i>International Journal of Heat and Mass Transfer</i> , 2015 , 84, 359-369	4.9	84
164	Multi-parameters optimization for microchannel heat sink using inverse problem method. <i>International Journal of Heat and Mass Transfer</i> , 2011 , 54, 2811-2819	4.9	83
163	Optimization of thermal resistance and bottom wall temperature uniformity for double-layered microchannel heat sink. <i>Energy Conversion and Management</i> , 2015 , 93, 141-150	10.6	82

162	Inverse geometric optimization for geometry of nanofluid-cooled microchannel heat sink. <i>Applied Thermal Engineering</i> , 2013 , 55, 87-94	5.8	81
161	An inverse geometry design problem for optimization of single serpentine flow field of PEM fuel cell. <i>International Journal of Hydrogen Energy</i> , 2010 , 35, 4247-4257	6.7	81
160	Multi-objective and multi-parameter optimization of a thermoelectric generator module. <i>Energy</i> , 2014 , 71, 367-376	7.9	79
159	Geometry optimization of thermoelectric coolers using simplified conjugate-gradient method. <i>Energy</i> , 2013 , 59, 689-697	7.9	75
158	A new scheme for reducing pressure drop and thermal resistance simultaneously in microchannel heat sinks with wavy porous fins. <i>International Journal of Heat and Mass Transfer</i> , 2017 , 111, 1071-1078	4.9	74
157	Dynamic response characteristics of thermoelectric generator predicted by a three-dimensional heat-electricity coupled model. <i>Journal of Power Sources</i> , 2014 , 245, 262-269	8.9	66
156	Effects of solid-gas coupling and pore and particle microstructures on the effective gaseous thermal conductivity in aerogels. <i>Journal of Nanoparticle Research</i> , 2012 , 14, 1	2.3	65
155	Characteristics analysis and parametric study of a thermoelectric generator by considering variable material properties and heat losses. <i>International Journal of Heat and Mass Transfer</i> , 2015 , 80, 227-235	4.9	62
154	Energy- and exergy-based working fluid selection and performance analysis of a high-temperature PEMFC-based micro combined cooling heating and power system. <i>Applied Energy</i> , 2017 , 204, 446-458	10.7	62
153	Determination of the optimal active area for proton exchange membrane fuel cells with parallel, interdigitated or serpentine designs. <i>International Journal of Hydrogen Energy</i> , 2009 , 34, 3823-3832	6.7	62
152	Flow and heat transfer characteristics in double-layered microchannel heat sinks with porous fins. <i>International Communications in Heat and Mass Transfer</i> , 2018 , 93, 41-47	5.8	55
151	Molecular Dynamics Simulations on Coalescence and Non-coalescence of Conducting Droplets. <i>Langmuir</i> , 2015 , 31, 7457-62	4	54
150	Molecular dynamics simulation on evaporation of water and aqueous droplets in the presence of electric field. <i>International Journal of Heat and Mass Transfer</i> , 2014 , 73, 533-541	4.9	54
149	Surface tension, viscosity, and rheology of water-based nanofluids: a microscopic interpretation on the molecular level. <i>Journal of Nanoparticle Research</i> , 2014 , 16, 1	2.3	52
148	Impacts of potential models on calculating the thermal conductivity of graphene using non-equilibrium molecular dynamics simulations. <i>International Journal of Heat and Mass Transfer</i> , 2017 , 107, 450-460	4.9	49
147	Enhancement of maximum temperature drop across thermoelectric cooler through two-stage design and transient supercooling effect. <i>Applied Energy</i> , 2016 , 175, 285-292	10.7	48
146	Coalescence-Induced Jumping of Two Unequal-Sized Nanodroplets. <i>Langmuir</i> , 2018 , 34, 2734-2740	4	46
145	Power output and efficiency of a thermoelectric generator under temperature control. <i>Energy Conversion and Management</i> , 2016 , 127, 404-415	10.6	45

144	Parameter analysis and optimal design for two-stage thermoelectric cooler. <i>Applied Energy</i> , 2015 , 154, 1-12	10.7	45
143	Effect of nanofluids on thin film evaporation in microchannels. <i>Journal of Nanoparticle Research</i> , 2011 , 13, 5033-5047	2.3	45
142	A new design of solar thermoelectric generator with combination of segmented materials and asymmetrical legs. <i>Energy Conversion and Management</i> , 2018 , 175, 11-20	10.6	44
141	Performance analysis of two-stage TECs (thermoelectric coolers) using a three-dimensional heat-electricity coupled model. <i>Energy</i> , 2014 , 65, 419-429	7.9	43
140	Effect of longitudinal electrode arrangement on EHD-induced heat transfer enhancement in a rectangular channel. <i>International Journal of Heat and Mass Transfer</i> , 2016 , 93, 1072-1081	4.9	42
139	Thermodynamic approach and comparison of two-step and single step DME (dimethyl ether) syntheses with carbon dioxide utilization. <i>Energy</i> , 2016 , 109, 326-340	7.9	42
138	Selected porous-ribs design for performance improvement in double-layered microchannel heat sinks. <i>International Journal of Thermal Sciences</i> , 2019 , 137, 616-626	4.1	42
137	Channel aspect ratio effect for serpentine proton exchange membrane fuel cell: Role of sub-rib convection. <i>Journal of Power Sources</i> , 2009 , 193, 684-690	8.9	41
136	Flow field optimization for proton exchange membrane fuel cells with varying channel heights and widths. <i>Electrochimica Acta</i> , 2009 , 54, 5522-5530	6.7	38
135	Explosive boiling of nano-liquid argon films on high temperature platinum walls: Effects of surface wettability and film thickness. <i>International Journal of Thermal Sciences</i> , 2018 , 132, 610-617	4.1	36
134	Enhanced Peltier cooling of two-stage thermoelectric cooler via pulse currents. <i>International Journal of Heat and Mass Transfer</i> , 2017 , 114, 656-663	4.9	35
133	Investigation of heat transfer enhancement by electrohydrodynamics in a double-wall-heated channel. <i>International Journal of Heat and Mass Transfer</i> , 2017 , 113, 373-383	4.9	34
132	Performance of a thermoelectric generator intensified by temperature oscillation. <i>Energy</i> , 2017 , 133, 257-269	7.9	33
131	Enhancement of Coalescence-Induced Nanodroplet Jumping on Superhydrophobic Surfaces. <i>Langmuir</i> , 2018 , 34, 11195-11203	4	33
130	Enhancement of boiling heat transfer of thin water film on an electrified solid surface. <i>International Journal of Heat and Mass Transfer</i> , 2017 , 109, 410-416	4.9	32
129	Adsorption removal of natural organic matters in waters using biochar. <i>Bioresource Technology</i> , 2018 , 260, 413-416	11	32
128	Contact Time of a Bouncing Nanodroplet. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 2818-2823	6.4	30
127	Improvement of transient supercooling of thermoelectric coolers through variable semiconductor cross-section. <i>Applied Energy</i> , 2016 , 164, 501-508	10.7	30

126	Reduction in the contact time of impacting droplets by decorating a rectangular ridge on superhydrophobic surfaces. <i>International Journal of Heat and Mass Transfer</i> , 2019 , 132, 1105-1115	4.9	30
125	Optimal pulse current shape for transient supercooling of thermoelectric cooler. <i>Energy</i> , 2015 , 83, 788-796		29
124	Effects of wettability on explosive boiling of nanoscale liquid films: Whether the classical nucleation theory fails or not?. <i>International Journal of Heat and Mass Transfer</i> , 2019 , 132, 1277-1283	4.9	27
123	The Maximum Spreading Factor for Polymer Nanodroplets Impacting a Hydrophobic Solid Surface. <i>Journal of Physical Chemistry C</i> , 2019 ,	3.8	26
122	Electro-coalescence of two charged droplets under constant and pulsed DC electric fields. <i>International Journal of Heat and Mass Transfer</i> , 2016 , 98, 10-16	4.9	26
121	Proteomic researches for lignocellulose-degrading enzymes: A mini-review. <i>Bioresource Technology</i> , 2018 , 265, 532-541	11	26
120	Effects of slot-jet length on the cooling performance of hybrid microchannel/slot-jet module. <i>International Journal of Heat and Mass Transfer</i> , 2015 , 89, 838-845	4.9	24
119	Microscopic mechanism for the effect of adding salt on electrospinning by molecular dynamics simulations. <i>Applied Physics Letters</i> , 2014 , 105, 121906	3.4	24
118	Energy-based model for capillary spreading of power-law liquids on a horizontal plane. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2012 , 403, 155-163	5.1	24
117	Heat transfer enhancement of microchannel heat sink using transcritical carbon dioxide as the coolant. <i>Energy Conversion and Management</i> , 2016 , 110, 154-164	10.6	23
116	Performance comparison of wavy microchannel heat sinks with wavy bottom rib and side rib designs. <i>International Journal of Thermal Sciences</i> , 2019 , 146, 106068	4.1	22
115	A comprehensive analysis of the performance of thermoelectric generators with constant and variable properties. <i>Applied Energy</i> , 2019 , 241, 11-24	10.7	22
114	Electrocoalescence behavior of two identical droplets with various droplet radii. <i>Applied Thermal Engineering</i> , 2017 , 111, 1464-1469	5.8	22
113	Universal Model for the Maximum Spreading Factor of Impacting Nanodroplets: From Hydrophilic to Hydrophobic Surfaces. <i>Langmuir</i> , 2020 , 36, 9306-9316	4	22
112	A new configuration design of thermoelectric cooler driven by thermoelectric generator. <i>Applied Thermal Engineering</i> , 2019 , 160, 114087	5.8	21
111	Molecular Dynamics Simulations on Evaporation of Droplets with Dissolved Salts. <i>Entropy</i> , 2013 , 15, 1232-1246		21
110	Non-isothermal effects of single or double serpentine proton exchange membrane fuel cells. <i>Electrochimica Acta</i> , 2010 , 55, 4926-4934	6.7	21
109	A computational fluid dynamics (CFD) approach of thermoelectric generator (TEG) for power generation. <i>Applied Thermal Engineering</i> , 2020 , 173, 115203	5.8	20

108	Asymmetric heat transfer characteristics of a double droplet impact on a moving liquid film. <i>International Journal of Heat and Mass Transfer</i> , 2018 , 126, 649-659	4.9	20
107	Wetting Transition from the Cassie-Baxter State to the Wenzel State on Regularly Nanostructured Surfaces Induced by an Electric Field. <i>Langmuir</i> , 2019 , 35, 662-670	4	20
106	Study on initial stage of capillary rise dynamics. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2013 , 433, 95-103	5.1	19
105	Proton exchange membrane fuel cell modeling with diffusion layer-based and sands-based capillary pressure correlations: Comparative study. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2014 , 45, 1532-1541	5.3	19
104	A new design of double-layered microchannel heat sinks with wavy microchannels and porous-ribs. <i>Journal of Thermal Analysis and Calorimetry</i> , 2020 , 141, 547-558	4.1	18
103	Dynamic wetting of non-newtonian fluids: multicomponent molecular-kinetic approach. <i>Langmuir</i> , 2010 , 26, 14594-9	4	18
102	Does macroscopic flow geometry influence wetting dynamic?. <i>Journal of Colloid and Interface Science</i> , 2011 , 362, 221-7	9.3	18
101	Experimental performance investigation on the arrangement of metal foam as flow distributors in proton exchange membrane fuel cell. <i>Energy Conversion and Management</i> , 2021 , 231, 113846	10.6	18
100	Experimental study on the dynamic wetting of dilute nanofluids. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2015 , 486, 6-13	5.1	17
99	Spreading dynamics of power-law fluid droplets. <i>Journal of Physics Condensed Matter</i> , 2009 , 21, 464117	1.8	17
98	Bio-inspired design of an auxiliary fishbone-shaped cathode flow field pattern for polymer electrolyte membrane fuel cells. <i>Energy Conversion and Management</i> , 2021 , 227, 113588	10.6	17
97	Acceleration of aqueous nano-film evaporation by applying parallel electric field: A molecular dynamics simulation. <i>International Journal of Heat and Mass Transfer</i> , 2019 , 138, 68-74	4.9	16
96	Effects of Free Surface Evaporation on Water Nanodroplet Wetting Kinetics: A Molecular Dynamics Study. <i>Journal of Heat Transfer</i> , 2015 , 137,	1.8	16
95	Active disturbance rejection control strategy applied to cathode humidity control in PEMFC system. <i>Energy Conversion and Management</i> , 2020 , 224, 113389	10.6	16
94	Thermodynamic study of a hybrid PEMFC-solar energy multi-generation system combined with SOEC and dual Rankine cycle. <i>Energy Conversion and Management</i> , 2020 , 226, 113512	10.6	16
93	Optimization of a serpentine flow field with variable channel heights and widths for PEM fuel cells. <i>Science China Technological Sciences</i> , 2010 , 53, 453-460	3.5	15
92	Spreading of completely wetting, non-Newtonian fluids with non-power-law rheology. <i>Journal of Colloid and Interface Science</i> , 2010 , 348, 250-4	9.3	15
91	Geometry optimization of a novel M-like flow field in a proton exchange membrane fuel cell. <i>Energy Conversion and Management</i> , 2021 , 228, 113651	10.6	15

90	Contact time on inclined superhydrophobic surfaces decorated with parallel macro-ridges. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2020 , 599, 124924	5.1	14
89	Gas diffusion layer properties on the performance of proton exchange membrane fuel cell: pc-s relationship with K-function. <i>International Journal of Hydrogen Energy</i> , 2016 , 41, 21827-21837	6.7	14
88	Spreading and retraction kinetics for impact of nanodroplets on hydrophobic surfaces. <i>Physics of Fluids</i> , 2020 , 32, 092005	4.4	14
87	Electro-coalescence of two charged droplets under pulsed direct current electric fields with various waveforms: A molecular dynamics study. <i>Journal of Molecular Liquids</i> , 2020 , 312, 113429	6	13
86	Droplet dynamic characteristics on PEM fuel cell cathode gas diffusion layer with gradient pore size distribution. <i>Renewable Energy</i> , 2021 , 178, 864-874	8.1	13
85	Dynamics of droplets impacting hydrophilic surfaces decorated with a hydrophobic strip. <i>International Journal of Heat and Mass Transfer</i> , 2019 , 135, 235-246	4.9	12
84	Lattice kinetic scheme for the Navier-Stokes equations coupled with convection-diffusion equations. <i>Physical Review E</i> , 2018 , 98,	2.4	12
83	Numerical analysis for transient supercooling effect of pulse current shapes on a two-stage thermoelectric cooler. <i>Applied Thermal Engineering</i> , 2019 , 163, 114416	5.8	11
82	Transient supercooling behaviors of a novel two-stage Peltier cooler. <i>Applied Thermal Engineering</i> , 2018 , 143, 248-256	5.8	11
81	Optimal design of a novel M-like channel in bipolar plates of proton exchange membrane fuel cell based on minimum entropy generation. <i>Energy Conversion and Management</i> , 2020 , 205, 112386	10.6	11
80	Performance study on a stepped flow field design for bipolar plate in PEMFC. <i>Energy Reports</i> , 2021 , 7, 336-347	4.6	11
79	Theoretical analysis of performance of variable cross-section thermoelectric generators: Effects of shape factor and thermal boundary conditions. <i>Energy</i> , 2020 , 201, 117660	7.9	10
78	A comprehensive analysis about thermal conductivity of multi-layer graphene with N-doping, -CH ₃ group, and single vacancy. <i>Journal of Applied Physics</i> , 2018 , 123, 135101	2.5	10
77	Molecular dynamics investigation on enhancement of heat transfer between electrified solid surface and liquid water. <i>International Journal of Heat and Mass Transfer</i> , 2018 , 125, 756-760	4.9	10
76	Effects of torsion on the thermal conductivity of multi-layer graphene. <i>Journal of Applied Physics</i> , 2017 , 121, 205102	2.5	9
75	A Comprehensive Review on Measurement and Correlation Development of Capillary Pressure for Two-Phase Modeling of Proton Exchange Membrane Fuel Cells. <i>Journal of Chemistry</i> , 2015 , 2015, 1-17	2.3	9
74	Thermodynamic and economic study of PEMFC stack considering degradation characteristic. <i>Energy Conversion and Management</i> , 2021 , 235, 114016	10.6	9
73	Droplet spreading and permeating on the hybrid-wettability porous substrates: a lattice Boltzmann method study. <i>Open Physics</i> , 2016 , 14, 483-491	1.3	9

72	Molecular dynamics simulations on dissolutive wetting of AlNi alloy droplets on NiAl substrate. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2017 , 75, 51-58	5.3	8
71	Nucleate boiling inside small evaporating droplets: An experimental and numerical study. <i>International Journal of Heat and Mass Transfer</i> , 2017 , 108, 2253-2261	4.9	7
70	Nucleation and sliding growth of boiling bubbles on locally heated silicon surfaces. <i>Applied Thermal Engineering</i> , 2018 , 143, 1068-1078	5.8	7
69	Size Control Mechanism for Bio-Nanoparticle Fabricated by Electro spray Deposition. <i>Drying Technology</i> , 2015 , 33, 406-413	2.6	7
68	Numerical Investigation of Tapered Flow Field Configurations for Enhanced Polymer Electrolyte Membrane Fuel Cell Performance. <i>Applied Energy</i> , 2022 , 306, 118021	10.7	7
67	Dropwise condensation: From fundamentals of wetting, nucleation, and droplet mobility to performance improvement by advanced functional surfaces. <i>Advances in Colloid and Interface Science</i> , 2021 , 295, 102503	14.3	7
66	Bubble dynamics and heat transfer characteristics on a micropillar-structured surface with different nucleation site positions. <i>Journal of Thermal Analysis and Calorimetry</i> , 2020 , 141, 447-464	4.1	6
65	Numerical study of seed bubble-triggered evaporation heat transfer in a single microtube. <i>Microfluidics and Nanofluidics</i> , 2014 , 16, 347-360	2.8	6
64	Multi-sub-inlets at cathode flow-field plate for current density homogenization and enhancement of PEM fuel cells in low relative humidity. <i>Energy Conversion and Management</i> , 2021 , 252, 115069	10.6	6
63	Performance of Parallel, Interdigitated, and Serpentine Flow Field PEM Fuel Cells with Straight or Wavelike Channels. <i>Journal of Energy Engineering - ASCE</i> , 2020 , 146, 04020054	1.7	6
62	Electrowetting-based control of wetting transition of a nanodroplet on pillar-arrayed surfaces. <i>Journal of Molecular Liquids</i> , 2021 , 345, 117049	6	6
61	High-temperature reactive wetting systems: Role of lattice constant. <i>Chemical Engineering Science</i> , 2019 , 209, 115206	4.4	5
60	Rebound dynamics of two droplets simultaneously impacting a flat superhydrophobic surface. <i>AIChE Journal</i> , 2020 , 66, e16647	3.6	5
59	Highly heterogeneous interior structure of biofilm wastewater for enhanced pollutant removals. <i>Bioresour. Technol.</i> , 2019 , 291, 121919	11	5
58	Molecular dynamics study of high temperature wetting kinetics for Al/NiAl and Al/Ni ₃ Al systems: Effects of grain boundaries. <i>Chemical Engineering Science</i> , 2017 , 174, 127-135	4.4	5
57	Transient supercooling performance of thermoelectric coolers with a continuous double current pulse. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2021 , 120, 127-135	5.3	5
56	Spreading Time of Impacting Nanodroplets. <i>Journal of Physical Chemistry B</i> , 2021 , 125, 5630-5635	3.4	5
55	Dynamic spreading of a water nanodroplet on a nanostructured surface in the presence of an electric field. <i>Journal of Molecular Liquids</i> , 2021 , 333, 116039	6	5

54	Dynamic behaviors of two droplets impacting an inclined superhydrophobic substrate. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021 , 623, 126725	5.1	5
53	Splash of impacting nanodroplets on solid surfaces. <i>Physical Review Fluids</i> , 2021 , 6,	2.8	5
52	Heat transfer enhancement of symmetric and parallel wavy microchannel heat sinks with secondary branch design. <i>International Journal of Thermal Sciences</i> , 2022 , 171, 107229	4.1	5
51	Scaling laws of the maximum spreading factor for impact of nanodroplets on solid surfaces. <i>Journal of Fluid Mechanics</i> , 2022 , 937,	3.7	5
50	Electrical Double Layer of Linear Tricationic Ionic Liquids at Graphite Electrode. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 15723-15729	3.8	4
49	Dewetting kinetics of metallic liquid films: Competition between unbalanced Young's force and dissolutive reaction. <i>Chemical Physics Letters</i> , 2017 , 687, 91-95	2.5	4
48	Three-dimensional numerical study of a cathode gas diffusion layer with a through/in plane synergetic gradient porosity distribution for PEM fuel cells. <i>International Journal of Heat and Mass Transfer</i> , 2022 , 188, 122661	4.9	4
47	Temperature and voltage dynamic control of PEMFC Stack using MPC method. <i>Energy Reports</i> , 2022 , 8, 798-808	4.6	4
46	Numerical study on transient supercooling performance of annular thermoelectric cooler. <i>Applied Thermal Engineering</i> , 2021 , 182, 116090	5.8	4
45	Spreading of a nanodroplet over isothermally heated smooth and nanostructured surfaces: A molecular dynamics study. <i>International Journal of Thermal Sciences</i> , 2021 , 159, 106649	4.1	4
44	Influence of Wave Parallel Flow Field Design on the Performance of PEMFC. <i>Journal of Energy Engineering - ASCE</i> , 2021 , 147, 04020080	1.7	4
43	Maximum spreading factor for nanodroplets impacting a hydrophobic surface under a perpendicular electric field. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021 , 623, 126769	5.1	4
42	Numerical study of a MIMO-shaped cooling plate in PEMFC stack for heat transfer enhancement. <i>Energy Reports</i> , 2021 , 7, 5804-5814	4.6	4
41	Rebound Dynamics of Two Droplets Successively Impacting an Inclined Surface. <i>Coatings</i> , 2020 , 10, 592	2.9	3
40	Equivalent Stiffness Model of a Proton Exchange Membrane Fuel Cell Stack Including Hygrothermal Effects and Dimensional Tolerances. <i>Journal of Electrochemical Energy Conversion and Storage</i> , 2018 , 15,	2	3
39	Relaxation Dynamics of Non-Power-Law Fluids. <i>International Journal of Thermophysics</i> , 2013 , 34, 2276-2285		3
38	Forced Wetting Dynamics of Sodium Dodecyl Sulfate Glycerol Solution on Solid Substrates. <i>International Journal of Thermophysics</i> , 2013 , 34, 2286-2296	2.1	3
37	Temperature and humidity management of PEM fuel cell power system using multi-input and multi-output fuzzy method. <i>Applied Thermal Engineering</i> , 2022 , 203, 117865	5.8	3

36	Contact Time of Double-Droplet Impacting Superhydrophobic Surfaces with Different Macrottextures. <i>Processes</i> , 2020 , 8, 896	2.9	3
35	Harnessing Reversible Wetting Transition to Sweep Contaminated Superhydrophobic Surfaces. <i>Langmuir</i> , 2021 , 37, 3929-3938	4	3
34	Coalescence-induced jumping of nanodroplets on mixed-wettability superhydrophobic surfaces. <i>Canadian Journal of Physics</i> , 2021 , 99, 297-301	1.1	3
33	Performance investigation of proton exchange membrane fuel cells with curved membrane electrode assemblies caused by pressure differences between cathode and anode. <i>International Journal of Hydrogen Energy</i> , 2021 ,	6.7	3
32	Coalescence-induced jumping and condensation of argon nanodroplets in the Cassie or the Wenzel state on nanopillar-arrayed surfaces. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021 , 628, 127269	5.1	3
31	Retraction dynamics of low-viscosity nanodroplets: From hydrophobic to hydrophilic surfaces. <i>Journal of Molecular Liquids</i> , 2022 , 355, 118963	6	3
30	An experimental investigation on spreading of droplets with evaporation and nucleation. <i>Heat Transfer - Asian Research</i> , 2009 , 38, 40-50	2.8	2
29	Molecular Dynamics Investigation on Thermal Conductivity and Phonon Transmission of Folded Graphene. <i>ECS Journal of Solid State Science and Technology</i> , 2020 , 9, 093005	2	2
28	Water vapor condensation on binary mixed substrates: A molecular dynamics study. <i>International Journal of Heat and Mass Transfer</i> , 2021 , 184, 122281	4.9	2
27	Phase diagram for nanodroplet impact on solid surfaces. <i>Physics of Fluids</i> , 2021 , 33, 102007	4.4	2
26	Power generation of thermoelectric generator with plate fins for recovering low-temperature waste heat. <i>Applied Energy</i> , 2022 , 306, 118012	10.7	2
25	Experimental investigation on boiling heat transfer enhanced by gradient aperture porous copper. <i>Applied Thermal Engineering</i> , 2021 , 191, 116877	5.8	2
24	Re-touch rebound patterns and contact time for a droplet impacting a superhydrophobic cylinder. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2021 , 126, 359-370	5.3	2
23	Rebound Behaviors of Multiple Droplets Simultaneously Impacting a Superhydrophobic Surface. <i>Langmuir</i> , 2021 , 37, 11233-11241	4	2
22	Impacting-bouncing nanodroplets on superhydrophobic surfaces under electric fields. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021 , 629, 127513	5.1	2
21	Electrocoalescence of two charged nanodroplets under different types of external electric fields. <i>Journal of Molecular Liquids</i> , 2021 , 341, 117417	6	2
20	Inner Phase Change Behavior of Small Liquid Droplet on Heated Solid Surface 2011 ,		1
19	Spreading of Droplets with Evaporation and Nucleation on Solid Surfaces 2006 ,		1

18	The Cassie-to-Wenzel wetting transition of water films on textured surfaces with different topologies. <i>Physics of Fluids</i> , 2021 , 33, 112006	4.4	1
17	Water management and structure optimization study of nickel metal foam as flow distributors in proton exchange membrane fuel cell. <i>Applied Energy</i> , 2022 , 309, 118448	10.7	1
16	Bubble dynamics and heat transfer performance on micro-pillars structured surfaces with various pillars heights. <i>International Journal of Heat and Mass Transfer</i> , 2020 , 163, 120502	4.9	1
15	Energy analysis on rebound dynamics of two droplets impacting a superhydrophobic surface simultaneously. <i>AIP Advances</i> , 2021 , 11, 055007	1.5	1
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