

Ho Seon Ahn

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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.

98
papers

2,927
citations

30
h-index

52
g-index

105
ext. papers

3,441
ext. citations

4.5
avg, IF

5.45
L-index

#	Paper	IF	Citations
98	A study of nucleate boiling heat transfer on hydrophilic, hydrophobic and heterogeneous wetting surfaces. <i>International Journal of Heat and Mass Transfer</i> , 2011 , 54, 5643-5652	4.9	278
97	Review of boiling heat transfer enhancement on micro/nanostructured surfaces. <i>Experimental Thermal and Fluid Science</i> , 2015 , 66, 173-196	3	219
96	Effect of liquid spreading due to nano/microstructures on the critical heat flux during pool boiling. <i>Applied Physics Letters</i> , 2011 , 98, 071908	3.4	163
95	Pool boiling CHF enhancement by micro/nanoscale modification of zircaloy-4 surface. <i>Nuclear Engineering and Design</i> , 2010 , 240, 3350-3360	1.8	141
94	Effects of nano-fluid and surfaces with nano structure on the increase of CHF. <i>Experimental Thermal and Fluid Science</i> , 2010 , 34, 487-495	3	135
93	Effect of sonication characteristics on stability, thermophysical properties, and heat transfer of nanofluids: A comprehensive review. <i>Ultrasonics Sonochemistry</i> , 2019 , 58, 104701	8.9	120
92	Experimental study of critical heat flux enhancement during forced convective flow boiling of nanofluid on a short heated surface. <i>International Journal of Multiphase Flow</i> , 2010 , 36, 375-384	3.6	116
91	The effect of capillary wicking action of micro/nano structures on pool boiling critical heat flux. <i>International Journal of Heat and Mass Transfer</i> , 2012 , 55, 89-92	4.9	85
90	The effect of water absorption on critical heat flux enhancement during pool boiling. <i>Experimental Thermal and Fluid Science</i> , 2012 , 42, 187-195	3	76
89	On the Mechanism of Pool Boiling Critical Heat Flux Enhancement in Nanofluids. <i>Journal of Heat Transfer</i> , 2010 , 132,	1.8	76
88	A novel role of three dimensional graphene foam to prevent heater failure during boiling. <i>Scientific Reports</i> , 2013 , 3, 1960	4.9	68
87	A Review on Critical Heat Flux Enhancement With Nanofluids and Surface Modification. <i>Journal of Heat Transfer</i> , 2012 , 134,	1.8	66
86	Self-assembled foam-like graphene networks formed through nucleate boiling. <i>Scientific Reports</i> , 2013 , 3, 1396	4.9	65
85	Critical heat flux triggering mechanism on micro-structured surfaces: Coalesced bubble departure frequency and liquid furnishing capability. <i>International Journal of Heat and Mass Transfer</i> , 2015 , 91, 1237-1247 ⁵²	4.9	52
84	Toluene and acetaldehyde removal from air on to graphene-based adsorbents with microsized pores. <i>Journal of Hazardous Materials</i> , 2018 , 344, 458-465	12.8	51
83	Pool boiling experiments in reduced graphene oxide colloids. Part I Boiling characteristics. <i>International Journal of Heat and Mass Transfer</i> , 2014 , 74, 501-512	4.9	43
82	Film boiling heat transfer on a completely wettable surface with atmospheric saturated distilled water quenching. <i>International Journal of Heat and Mass Transfer</i> , 2016 , 93, 67-74	4.9	42

81	Effect of chevron angle and surface roughness on thermal performance of single-phase water flow inside a plate heat exchanger. <i>International Communications in Heat and Mass Transfer</i> , 2018 , 91, 201-209 ^{5.8}	41
80	Dynamics of water droplet on a heated nanotubes surface. <i>Applied Physics Letters</i> , 2013 , 102, 233901	3.4 38
79	Loss of superhydrophobicity of hydrophobic micro/nano structures during condensation. <i>Scientific Reports</i> , 2015 , 5, 9901	4.9 37
78	The boiling phenomenon of alumina nanofluid near critical heat flux. <i>International Journal of Heat and Mass Transfer</i> , 2013 , 62, 718-728	4.9 37
77	Wicking and spreading of water droplets on nanotubes. <i>Langmuir</i> , 2012 , 28, 2614-9	4 37
76	Experimental study of the effect of a reduced graphene oxide coating on critical heat flux enhancement. <i>International Journal of Heat and Mass Transfer</i> , 2013 , 60, 763-771	4.9 35
75	Enhanced critical heat flux by capillary driven liquid flow on the well-designed surface. <i>Applied Physics Letters</i> , 2015 , 107, 023903	3.4 35
74	Experimental study of water droplets on over-heated nano/microstructured zirconium surfaces. <i>Nuclear Engineering and Design</i> , 2014 , 278, 367-376	1.8 34
73	Effect of a graphene oxide coating layer on critical heat flux enhancement under pool boiling. <i>International Journal of Heat and Mass Transfer</i> , 2014 , 77, 919-927	4.9 34
72	Visualization study of the effects of nanoparticles surface deposition on convective flow boiling CHF from a short heated wall. <i>International Journal of Multiphase Flow</i> , 2011 , 37, 215-228	3.6 34
71	Distribution of oxygen functional groups of graphene oxide obtained from low-temperature atomic layer deposition of titanium oxide. <i>RSC Advances</i> , 2017 , 7, 13979-13984	3.7 32
70	Visualization study of critical heat flux mechanism on a small and horizontal copper heater. <i>International Journal of Multiphase Flow</i> , 2012 , 41, 1-12	3.6 32
69	Enhanced heat transfer is dependent on thickness of graphene films: the heat dissipation during boiling. <i>Scientific Reports</i> , 2014 , 4, 6276	4.9 31
68	Wetting and evaporation phenomena of water droplets on textured surfaces. <i>International Journal of Heat and Mass Transfer</i> , 2015 , 90, 191-200	4.9 29
67	The effect of liquid spreading due to micro-structures of flow boiling critical heat flux. <i>International Journal of Multiphase Flow</i> , 2012 , 43, 1-12	3.6 29
66	Controllable pore size of three dimensional self-assembled foam-like graphene and its wettability. <i>Carbon</i> , 2013 , 64, 27-34	10.4 25
65	Experimental investigation of filmwise and dropwise condensation inside transparent circular tubes. <i>Applied Thermal Engineering</i> , 2017 , 110, 412-423	5.8 25
64	Fluid flow and heat transfer in vascularized cooling plates. <i>International Journal of Heat and Mass Transfer</i> , 2010 , 53, 3607-3614	4.9 25

63	Wetting state on hydrophilic and hydrophobic micro-textured surfaces: Thermodynamic analysis and X-ray visualization. <i>Applied Physics Letters</i> , 2015 , 106, 171602	3-4	24
62	Dynamics of contact line depinning during droplet evaporation based on thermodynamics. <i>Langmuir</i> , 2015 , 31, 1950-7	4	24
61	Experimental investigation of microbubble generation in the venturi nozzle. <i>International Journal of Heat and Mass Transfer</i> , 2019 , 136, 1127-1138	4-9	23
60	Nucleate boiling in graphene oxide colloids: Morphological change and critical heat flux enhancement. <i>International Journal of Multiphase Flow</i> , 2016 , 85, 209-222	3-6	22
59	Pool boiling experiments in reduced graphene oxide colloids part II Behavior after the CHF, and boiling hysteresis. <i>International Journal of Heat and Mass Transfer</i> , 2014 , 78, 224-231	4-9	22
58	STUDY OF LEIDENFROST MECHANISM IN DROPLET IMPACTING ON HYDROPHILIC AND HYDROPHOBIC SURFACES 2013 , 21, 1350028		22
57	Effect of porous graphene networks and micropillar arrays on boiling heat transfer performance. <i>Experimental Thermal and Fluid Science</i> , 2018 , 93, 153-164	3	21
56	Micro/nanostructure evolution of zircaloy surface using anodization technique: Application to nuclear fuel cladding modification. <i>Applied Surface Science</i> , 2012 , 258, 8724-8731	6-7	21
55	Visualized effect of alumina nanoparticles surface deposition on water flow boiling heat transfer. <i>Experimental Thermal and Fluid Science</i> , 2012 , 37, 154-163	3	21
54	Fluid flow and heat transfer characteristics of heat sinks with laterally perforated plate fins. <i>International Journal of Heat and Mass Transfer</i> , 2019 , 138, 293-303	4-9	19
53	Heat transfer and flow characteristics of sinusoidal wavy plate fin heat sink with and without crosscut flow control. <i>International Journal of Heat and Mass Transfer</i> , 2019 , 137, 565-572	4-9	19
52	Boiling crisis controlled by capillary pumping and viscous friction: Liquid penetration length and dry spot diameter. <i>Applied Physics Letters</i> , 2016 , 109, 243901	3-4	19
51	Mesoporous graphene adsorbents for the removal of toluene and xylene at various concentrations and its reusability. <i>Scientific Reports</i> , 2019 , 9, 10922	4-9	18
50	Orientation effects on bubble dynamics and nucleate pool boiling heat transfer of graphene-modified surface. <i>International Journal of Heat and Mass Transfer</i> , 2017 , 108, 1393-1405	4-9	16
49	Boiling characteristics on the reduced graphene oxide films. <i>Experimental Thermal and Fluid Science</i> , 2015 , 60, 361-366	3	15
48	Two-phase flow boiling in a microfluidic channel at high mass flux. <i>Physics of Fluids</i> , 2020 , 32, 093309	4-4	14
47	Effect of h-BN coating on nucleate boiling heat transfer performance in pool boiling. <i>Experimental Thermal and Fluid Science</i> , 2018 , 98, 12-19	3	14
46	Anti-fouling performance of chevron plate heat exchanger by the surface modification. <i>International Journal of Heat and Mass Transfer</i> , 2019 , 144, 118634	4-9	13

45	Application of the heat pipe to enhance the performance of the vapor compression refrigeration system. <i>Case Studies in Thermal Engineering</i> , 2019 , 15, 100531	5.6	13
44	Tunable, self-assembled 3D reduced graphene oxide structures fabricated via boiling. <i>Carbon</i> , 2015 , 81, 357-366	10.4	13
43	Effect of aluminum oxide and reduced graphene oxide mixtures on critical heat flux enhancement. <i>International Journal of Heat and Mass Transfer</i> , 2018 , 116, 858-870	4.9	13
42	Investigation of Pool Boiling Critical Heat Flux Enhancement on a Modified Surface Through the Dynamic Wetting of Water Droplets. <i>Journal of Heat Transfer</i> , 2012 , 134,	1.8	12
41	Experimental study on evaporative heat transfer and pressure drop of R-134a in a horizontal dimpled tube. <i>International Journal of Heat and Mass Transfer</i> , 2019 , 144, 118688	4.9	11
40	Boiling characteristics on a serpentine-like geometry thin-film platinum heater under pool boiling. <i>International Journal of Heat and Mass Transfer</i> , 2016 , 95, 214-223	4.9	10
39	Experimental study of transient boiling characteristics on three-dimensional reduced graphene oxide networks. <i>Experimental Thermal and Fluid Science</i> , 2014 , 59, 51-55	3	10
38	Experimental study of siphon breaking phenomenon in the real-scaled research reactor pool. <i>Nuclear Engineering and Design</i> , 2013 , 255, 28-37	1.8	10
37	THE EFFECT OF MICRO/NANOSCALE STRUCTURES ON CHF ENHANCEMENT. <i>Nuclear Engineering and Technology</i> , 2011 , 43, 205-216	2.6	8
36	Experimental study of turbulent air natural convection in open-ended vertical parallel plates under asymmetric heating conditions. <i>International Journal of Heat and Mass Transfer</i> , 2020 , 159, 120135	4.9	8
35	A comprehensive review on micro/nanoscale surface modification techniques for heat transfer enhancement in heat exchanger. <i>International Journal of Heat and Mass Transfer</i> , 2021 , 178, 121601	4.9	8
34	Two/three-dimensional reduced graphene oxide coating for porous flow distributor in polymer electrolyte membrane fuel cell. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 12972-12981	6.7	7
33	Hydrodynamics of nucleate boiling on downward surface with various orientation. Part I: Departure diameter, frequency, and escape speed of the slug. <i>International Journal of Heat and Mass Transfer</i> , 2018 , 116, 1341-1351	4.9	6
32	Advanced Boiling-A Scalable Strategy for Self-Assembled Three-Dimensional Graphene. <i>ACS Nano</i> , 2021 , 15, 2839-2848	16.7	6
31	An experimental investigation of the air-side performance of crimped spiral fin-and-tube heat exchangers with a small tube diameter. <i>International Journal of Heat and Mass Transfer</i> , 2021 , 178, 121571	4.9	6
30	Nanocapillarity in Graphene Oxide Laminate and Its Effect on Critical Heat Flux. <i>Journal of Heat Transfer</i> , 2017 , 139,	1.8	5
29	Experimental investigation of the heat transfer and pressure drop characteristics of SiO ₂ /water nanofluids flowing through a circular tube equipped with free rotating swirl generators. <i>Heat and Mass Transfer</i> , 2020 , 56, 1613-1626	2.2	5
28	Experimental investigation of the microbubble generation using a venturi-type bubble generator. <i>Case Studies in Thermal Engineering</i> , 2021 , 27, 101238	5.6	4

27	Virtual Loudspeaker Effect of Graphene-Based Hybrid Material To Improve Low-Frequency Acoustic Performance. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 35941-35948	9.5	3
26	Experimental Study of Pool Boiling for Enhancing the Boiling Heat Transfer by Hydrophobic Dots on Silicon Surface. <i>Transactions of the Korean Society of Mechanical Engineers, B</i> , 2010 , 34, 655-663	0.5	3
25	Building with graphene oxide: effect of graphite nature and oxidation methods on the graphene assembly.. <i>RSC Advances</i> , 2021 , 11, 3645-3654	3.7	3
24	Improvement of thermal-hydraulic performance of plate heat exchanger by electroless nickel, copper and silver plating. <i>Case Studies in Thermal Engineering</i> , 2021 , 23, 100797	5.6	3
23	Experimental Investigation of Critical Heat Flux Enhancement by Micro/Nanoscale Surface Modification in Pool Boiling 2008 ,		2
22	Numerical study and optimisation of the boiling of refrigerant in a vertical corrugated tube using vapour phase tracking. <i>International Journal of Heat and Mass Transfer</i> , 2022 , 183, 122116	4.9	2
21	Air-side performance of embedded and welded spiral fin and tube heat exchangers. <i>Case Studies in Thermal Engineering</i> , 2022 , 30, 101721	5.6	2
20	Experimental study on the thermal-hydraulic performance of modified chevron plate heat exchanger by electrochemical etching method. <i>International Journal of Heat and Mass Transfer</i> , 2020 , 155, 119857	4.9	2
19	Optimizing the Configurations of Cooling Channels with Low Flow Resistance and Thermal Resistance. <i>Transactions of the Korean Society of Mechanical Engineers, B</i> , 2011 , 35, 9-15	0.5	2
18	Heat transfer and fluid flow characteristics in a plate heat exchanger filled with copper foam. <i>Heat and Mass Transfer</i> , 2020 , 56, 3261-3271	2.2	2
17	Experimental investigation on two-phase heat transfer of R-134a during vaporization in a plate heat exchanger with rough surface. <i>International Journal of Heat and Mass Transfer</i> , 2020 , 160, 120221	4.9	2
16	Geometrical parametric study of drop impingement onto heated surface with micro-pillar arrays. <i>International Journal of Heat and Mass Transfer</i> , 2021 , 168, 120891	4.9	2
15	Effect of pin fin configuration on thermal performance of plate pin fin heat sinks. <i>Case Studies in Thermal Engineering</i> , 2021 , 27, 101269	5.6	2
14	An experimental study of the air-side performance of a novel louver spiral fin-and-tube heat exchanger. <i>AEJ - Alexandria Engineering Journal</i> , 2022 , 61, 9811-9818	6.1	2
13	Effect of the segmented fin height on the air-side performance of serrated welded spiral fin-and-tube heat exchangers. <i>Case Studies in Thermal Engineering</i> , 2022 , 35, 102128	5.6	2
12	Improving the water resistance and adhesion strength of a mixed alkali silicate adhesive by optimizing the molar ratio and curing conditions. <i>Journal of Adhesion Science and Technology</i> , 2020 , 34, 1269-1282	2	1
11	Experimental study on breakup mechanism of microbubble in 2D channel. <i>Case Studies in Thermal Engineering</i> , 2021 , 28, 101523	5.6	1
10	Explosive lift-off triggering mechanism on a surface with micropillar arrays: Liquid-vapor interface behavior between micropillars during drop impingement. <i>Applied Thermal Engineering</i> , 2021 , 117739	5.8	1

9	Design of A scale-down experimental model for SFR reactor vault cooling system performance analyses. <i>Nuclear Engineering and Technology</i> , 2020 , 52, 1611-1625	2.6	1
8	Effect of geometrical parameters on the evaporative heat transfer and pressure drop of R-134a flowing in dimpled tubes. <i>Heat and Mass Transfer</i> , 2021 , 57, 465-479	2.2	1
7	Transition phenomena of natural convection of the air in an asymmetrically heated vertical channel with a damper. <i>International Journal of Heat and Mass Transfer</i> , 2021 , 183, 122196	4.9	0
6	Pool Boiling Characteristics on the Microstructured surfaces with Both Rectangular Cavities and Channels. <i>Transactions of the Korean Society of Mechanical Engineers, B</i> , 2016 , 40, 383-389	0.5	0
5	Thermally annealed self-assembled three-dimensional graphene for direct construction of porous flow distributor in polymer electrolyte membrane fuel cell. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 36930-36930	6.7	0
4	Effects of confined space on the critical heat flux under the pool-boiling condition. <i>AEJ - Alexandria Engineering Journal</i> , 2022 , 61, 329-338	6.1	0
3	PROFESSOR SOMCHAI WONGWISES ON HIS 60TH BIRTHDAY. <i>Journal of Thermal Engineering</i> , 438-439	1.1	
2	A high-temperature adhesive for stainless steel 304: Effect of Cr growth at the interface of alkali silicate adhesive. <i>International Journal of Adhesion and Adhesives</i> , 2022 , 116, 103152	3.4	
1	Nanostructured micro/mesoporous graphene: removal performance of volatile organic compounds. <i>RSC Advances</i> , 2022 , 12, 14570-14577	3.7	