Ho Seon Ahn

List of Publications by Year in Descending Order

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	Numerical study and optimisation of the boiling of refrigerant in a vertical corrugated tube using vapour phase tracking. *International Journal of Heat and Mass Transfer*, **2022**, 183, 122116	4.9	2
97	Air-side performance of embedded and welded spiral fin and tube heat exchangers. *Case Studies in Thermal Engineering*, **2022**, 30, 101721	5.6	2
96	Effects of confined space on the critical heat flux under the pool-boiling condition. *AEJ - Alexandria Engineering Journal*, **2022**, 61, 329-338	6.1	0
95	A high-temperature adhesive for stainless steel 304: Effect of Cr growth at the interface of alkali silicate adhesive. *International Journal of Adhesion and Adhesives*, **2022**, 116, 103152	3.4	
94	An experimental study of the air-side performance of a novel louver spiral fin-and-tube heat exchanger. *AEJ - Alexandria Engineering Journal*, **2022**, 61, 9811-9818	6.1	2
93	Nanostructured micro/mesoporous graphene: removal performance of volatile organic compounds. *RSC Advances*, **2022**, 12, 14570-14577	3.7	
92	Effect of the segmented fin height on the air-side performance of serrated welded spiral fin-and-tube heat exchangers. *Case Studies in Thermal Engineering*, **2022**, 35, 102128	5.6	2
91	Transition phenomena of natural convection of the air in an asymmetrically heated vertical channel with a damper. *International Journal of Heat and Mass Transfer*, **2021**, 183, 122196	4.9	0
90	Experimental study on breakup mechanism of microbubble in 2D channel. *Case Studies in Thermal Engineering*, **2021**, 28, 101523	5.6	1
89	Explosive lift-off triggering mechanism on a surface with micropillar arrays: Liquid-vapor interface behavior between micropillars during drop impingement. *Applied Thermal Engineering*, **2021**, 117739	5.8	1
88	Geometrical parametric study of drop impingement onto heated surface with micro-pillar arrays. *International Journal of Heat and Mass Transfer*, **2021**, 168, 120891	4.9	2
87	Effect of geometrical parameters on the evaporative heat transfer and pressure drop of R-134a flowing in dimpled tubes. *Heat and Mass Transfer*, **2021**, 57, 465-479	2.2	1
86	Building with graphene oxide: effect of graphite nature and oxidation methods on the graphene assembly.. *RSC Advances*, **2021**, 11, 3645-3654	3.7	3
85	Advanced Boiling-A Scalable Strategy for Self-Assembled Three-Dimensional Graphene. *ACS Nano*, **2021**, 15, 2839-2848	16.7	6
84	Improvement of thermal-hydraulic performance of plate heat exchanger by electroless nickel, copper and silver plating. *Case Studies in Thermal Engineering*, **2021**, 23, 100797	5.6	3
83	Thermally annealed self-assembled three-dimensional graphene for direct construction of porous flow distributor in polymer electrolyte membrane fuel cell. *International Journal of Hydrogen Energy*, **2021**, 46, 36930-36930	6.7	0
82	Effect of pin fin configuration on thermal performance of plate pin fin heat sinks. *Case Studies in Thermal Engineering*, **2021**, 27, 101269	5.6	2

81	An experimental investigation of the air-side performance of crimped spiral fin-and-tube heat exchangers with a small tube diameter. *International Journal of Heat and Mass Transfer*, **2021**, 178, 121571	4.9	6
80	A comprehensive review on micro/nanoscale surface modification techniques for heat transfer enhancement in heat exchanger. *International Journal of Heat and Mass Transfer*, **2021**, 178, 121601	4.9	8
79	Experimental investigation of the microbubble generation using a venturi-type bubble generator. *Case Studies in Thermal Engineering*, **2021**, 27, 101238	5.6	4
78	Improving the water resistance and adhesion strength of a mixed alkali silicate adhesive by optimizing the molar ratio and curing conditions. *Journal of Adhesion Science and Technology*, **2020**, 34, 1269-1282	2	1
77	Two/three-dimensional reduced graphene oxide coating for porous flow distributor in polymer electrolyte membrane fuel cell. *International Journal of Hydrogen Energy*, **2020**, 45, 12972-12981	6.7	7
76	Experimental study on the thermal-hydraulic performance of modified chevron plate heat exchanger by electrochemical etching method. *International Journal of Heat and Mass Transfer*, **2020**, 155, 119857	4.9	2
75	Experimental investigation of the heat transfer and pressure drop characteristics of SiO2/water nanofluids flowing through a circular tube equipped with free rotating swirl generators. *Heat and Mass Transfer*, **2020**, 56, 1613-1626	2.2	5
74	Design of A scale-down experimental model for SFR reactor vault cooling system performance analyses. *Nuclear Engineering and Technology*, **2020**, 52, 1611-1625	2.6	1
73	Experimental study of turbulent air natural convection in open-ended vertical parallel plates under asymmetric heating conditions. *International Journal of Heat and Mass Transfer*, **2020**, 159, 120135	4.9	8
72	Heat transfer and fluid flow characteristics in a plate heat exchanger filled with copper foam. *Heat and Mass Transfer*, **2020**, 56, 3261-3271	2.2	2
71	Experimental investigation on two-phase heat transfer of R-134a during vaporization in a plate heat exchanger with rough surface. *International Journal of Heat and Mass Transfer*, **2020**, 160, 120221	4.9	2
70	Two-phase flow boiling in a microfluidic channel at high mass flux. *Physics of Fluids*, **2020**, 32, 093309	4.4	14
69	Anti-fouling performance of chevron plate heat exchanger by the surface modification. *International Journal of Heat and Mass Transfer*, **2019**, 144, 118634	4.9	13
68	Application of the heat pipe to enhance the performance of the vapor compression refrigeration system. *Case Studies in Thermal Engineering*, **2019**, 15, 100531	5.6	13
67	Virtual Loudspeaker Effect of Graphene-Based Hybrid Material To Improve Low-Frequency Acoustic Performance. *ACS Applied Materials & Interfaces*, **2019**, 11, 35941-35948	9.5	3
66	Fluid flow and heat transfer characteristics of heat sinks with laterally perforated plate fins. *International Journal of Heat and Mass Transfer*, **2019**, 138, 293-303	4.9	19
65	Experimental investigation of microbubble generation in the venturi nozzle. *International Journal of Heat and Mass Transfer*, **2019**, 136, 1127-1138	4.9	23
64	Heat transfer and flow characteristics of sinusoidal wavy plate fin heat sink with and without crosscut flow control. *International Journal of Heat and Mass Transfer*, **2019**, 137, 565-572	4.9	19

63	Mesoporous graphene adsorbents for the removal of toluene and xylene at various concentrations and its reusability. *Scientific Reports*, **2019**, 9, 10922	4.9	18
62	Effect of sonication characteristics on stability, thermophysical properties, and heat transfer of nanofluids: A comprehensive review. *Ultrasonics Sonochemistry*, **2019**, 58, 104701	8.9	120
61	Experimental study on evaporative heat transfer and pressure drop of R-134a in a horizontal dimpled tube. *International Journal of Heat and Mass Transfer*, **2019**, 144, 118688	4.9	11
60	Effect of porous graphene networks and micropillar arrays on boiling heat transfer performance. *Experimental Thermal and Fluid Science*, **2018**, 93, 153-164	3	21
59	Effect of chevron angle and surface roughness on thermal performance of single-phase water flow inside a plate heat exchanger. *International Communications in Heat and Mass Transfer*, **2018**, 91, 201-209	5.8	41
58	Hydrodynamics of nucleate boiling on downward surface with various orientation. Part I: Departure diameter, frequency, and escape speed of the slug. *International Journal of Heat and Mass Transfer*, **2018**, 116, 1341-1351	4.9	6
57	Toluene and acetaldehyde removal from air on to graphene-based adsorbents with microsized pores. *Journal of Hazardous Materials*, **2018**, 344, 458-465	12.8	51
56	Effect of aluminum oxide and reduced graphene oxide mixtures on critical heat flux enhancement. *International Journal of Heat and Mass Transfer*, **2018**, 116, 858-870	4.9	13
55	Effect of h-BN coating on nucleate boiling heat transfer performance in pool boiling. *Experimental Thermal and Fluid Science*, **2018**, 98, 12-19	3	14
54	Orientation effects on bubble dynamics and nucleate pool boiling heat transfer of graphene-modified surface. *International Journal of Heat and Mass Transfer*, **2017**, 108, 1393-1405	4.9	16
53	Distribution of oxygen functional groups of graphene oxide obtained from low-temperature atomic layer deposition of titanium oxide. *RSC Advances*, **2017**, 7, 13979-13984	3.7	32
52	Nanocapillarity in Graphene Oxide Laminate and Its Effect on Critical Heat Flux. *Journal of Heat Transfer*, **2017**, 139,	1.8	5
51	Experimental investigation of filmwise and dropwise condensation inside transparent circular tubes. *Applied Thermal Engineering*, **2017**, 110, 412-423	5.8	25
50	Nucleate boiling in graphene oxide colloids: Morphological change and critical heat flux enhancement. *International Journal of Multiphase Flow*, **2016**, 85, 209-222	3.6	22
49	Boiling characteristics on a serpentine-like geometry thin-film platinum heater under pool boiling. *International Journal of Heat and Mass Transfer*, **2016**, 95, 214-223	4.9	10
48	Film boiling heat transfer on a completely wettable surface with atmospheric saturated distilled water quenching. *International Journal of Heat and Mass Transfer*, **2016**, 93, 67-74	4.9	42
47	Pool Boiling Characteristics on the Microstructured surfaces with Both Rectangular Cavities and Channels. *Transactions of the Korean Society of Mechanical Engineers, B*, **2016**, 40, 383-389	0.5	0
46	Boiling crisis controlled by capillary pumping and viscous friction: Liquid penetration length and dry spot diameter. *Applied Physics Letters*, **2016**, 109, 243901	3.4	19

45	Wetting and evaporation phenomena of water droplets on textured surfaces. *International Journal of Heat and Mass Transfer*, **2015**, 90, 191-200	4.9	29
44	Review of boiling heat transfer enhancement on micro/nanostructured surfaces. *Experimental Thermal and Fluid Science*, **2015**, 66, 173-196	3	219
43	Loss of superhydrophobicity of hydrophobic micro/nano structures during condensation. *Scientific Reports*, **2015**, 5, 9901	4.9	37
42	Critical heat flux triggering mechanism on micro-structured surfaces: Coalesced bubble departure frequency and liquid furnishing capability. *International Journal of Heat and Mass Transfer*, **2015**, 91, 1237-1247	4.9	52
41	Wetting state on hydrophilic and hydrophobic micro-textured surfaces: Thermodynamic analysis and X-ray visualization. *Applied Physics Letters*, **2015**, 106, 171602	3.4	24
40	Boiling characteristics on the reduced graphene oxide films. *Experimental Thermal and Fluid Science*, **2015**, 60, 361-366	3	15
39	Tunable, self-assembled 3D reduced graphene oxide structures fabricated via boiling. *Carbon*, **2015**, 81, 357-366	10.4	13
38	Enhanced critical heat flux by capillary driven liquid flow on the well-designed surface. *Applied Physics Letters*, **2015**, 107, 023903	3.4	35
37	Dynamics of contact line depinning during droplet evaporation based on thermodynamics. *Langmuir*, **2015**, 31, 1950-7	4	24
36	Enhanced heat transfer is dependent on thickness of graphene films: the heat dissipation during boiling. *Scientific Reports*, **2014**, 4, 6276	4.9	31
35	Pool boiling experiments in reduced graphene oxide colloids. Part I Boiling characteristics. *International Journal of Heat and Mass Transfer*, **2014**, 74, 501-512	4.9	43
34	Experimental study of water droplets on over-heated nano/microstructured zirconium surfaces. *Nuclear Engineering and Design*, **2014**, 278, 367-376	1.8	34
33	Pool boiling experiments in reduced graphene oxide colloids part II Behavior after the CHF, and boiling hysteresis. *International Journal of Heat and Mass Transfer*, **2014**, 78, 224-231	4.9	22
32	Effect of a graphene oxide coating layer on critical heat flux enhancement under pool boiling. *International Journal of Heat and Mass Transfer*, **2014**, 77, 919-927	4.9	34
31	Experimental study of transient boiling characteristics on three-dimensional reduced graphene oxide networks. *Experimental Thermal and Fluid Science*, **2014**, 59, 51-55	3	10
30	Self-assembled foam-like graphene networks formed through nucleate boiling. *Scientific Reports*, **2013**, 3, 1396	4.9	65
29	Controllable pore size of three dimensional self-assembled foam-like graphene and its wettability. *Carbon*, **2013**, 64, 27-34	10.4	25
28	Experimental study of the effect of a reduced graphene oxide coating on critical heat flux enhancement. *International Journal of Heat and Mass Transfer*, **2013**, 60, 763-771	4.9	35

27	The boiling phenomenon of alumina nanofluid near critical heat flux. *International Journal of Heat and Mass Transfer*, **2013**, 62, 718-728	4.9	37
26	Experimental study of siphon breaking phenomenon in the real-scaled research reactor pool. *Nuclear Engineering and Design*, **2013**, 255, 28-37	1.8	10
25	Dynamics of water droplet on a heated nanotubes surface. *Applied Physics Letters*, **2013**, 102, 233901	3.4	38
24	A novel role of three dimensional graphene foam to prevent heater failure during boiling. *Scientific Reports*, **2013**, 3, 1960	4.9	68
23	STUDY OF LEIDENFROST MECHANISM IN DROPLET IMPACTING ON HYDROPHILIC AND HYDROPHOBIC SURFACES **2013**, 21, 1350028		22
22	Visualization study of critical heat flux mechanism on a small and horizontal copper heater. *International Journal of Multiphase Flow*, **2012**, 41, 1-12	3.6	32
21	The effect of liquid spreading due to micro-structures of flow boiling critical heat flux. *International Journal of Multiphase Flow*, **2012**, 43, 1-12	3.6	29
20	Wicking and spreading of water droplets on nanotubes. *Langmuir*, **2012**, 28, 2614-9	4	37
19	Micro/nanostructure evolution of zircaloy surface using anodization technique: Application to nuclear fuel cladding modification. *Applied Surface Science*, **2012**, 258, 8724-8731	6.7	21
18	The effect of water absorption on critical heat flux enhancement during pool boiling. *Experimental Thermal and Fluid Science*, **2012**, 42, 187-195	3	76
17	A Review on Critical Heat Flux Enhancement With Nanofluids and Surface Modification. *Journal of Heat Transfer*, **2012**, 134,	1.8	66
16	Visualized effect of alumina nanoparticles surface deposition on water flow boiling heat transfer. *Experimental Thermal and Fluid Science*, **2012**, 37, 154-163	3	21
15	The effect of capillary wicking action of micro/nano structures on pool boiling critical heat flux. *International Journal of Heat and Mass Transfer*, **2012**, 55, 89-92	4.9	85
14	Investigation of Pool Boiling Critical Heat Flux Enhancement on a Modified Surface Through the Dynamic Wetting of Water Droplets. *Journal of Heat Transfer*, **2012**, 134,	1.8	12
13	A study of nucleate boiling heat transfer on hydrophilic, hydrophobic and heterogeneous wetting surfaces. *International Journal of Heat and Mass Transfer*, **2011**, 54, 5643-5652	4.9	278
12	Visualization study of the effects of nanoparticles surface deposition on convective flow boiling CHF from a short heated wall. *International Journal of Multiphase Flow*, **2011**, 37, 215-228	3.6	34
11	Effect of liquid spreading due to nano/microstructures on the critical heat flux during pool boiling. *Applied Physics Letters*, **2011**, 98, 071908	3.4	163
10	THE EFFECT OF MICRO/NANOSCALE STRUCTURES ON CHF ENHANCEMENT. *Nuclear Engineering and Technology*, **2011**, 43, 205-216	2.6	8

9	Optimizing the Configurations of Cooling Channels with Low Flow Resistance and Thermal Resistance. *Transactions of the Korean Society of Mechanical Engineers, B*, **2011**, 35, 9-15	0.5	2
8	On the Mechanism of Pool Boiling Critical Heat Flux Enhancement in Nanofluids. *Journal of Heat Transfer*, **2010**, 132,	1.8	76
7	Effects of nano-fluid and surfaces with nano structure on the increase of CHF. *Experimental Thermal and Fluid Science*, **2010**, 34, 487-495	3	135
6	Pool boiling CHF enhancement by micro/nanoscale modification of zircaloy-4 surface. *Nuclear Engineering and Design*, **2010**, 240, 3350-3360	1.8	141
5	Fluid flow and heat transfer in vascularized cooling plates. *International Journal of Heat and Mass Transfer*, **2010**, 53, 3607-3614	4.9	25
4	Experimental study of critical heat flux enhancement during forced convective flow boiling of nanofluid on a short heated surface. *International Journal of Multiphase Flow*, **2010**, 36, 375-384	3.6	116
3	Experimental Study of Pool Boiling for Enhancing the Boiling Heat Transfer by Hydrophobic Dots on Silicon Surface. *Transactions of the Korean Society of Mechanical Engineers, B*, **2010**, 34, 655-663	0.5	3
2	Experimental Investigation of Critical Heat Flux Enhancement by Micro/Nanoscale Surface Modification in Pool Boiling **2008**,		2
1	PROFESSOR SOMCHAI WONGWISES ON HIS 60TH BIRTHDAY. *Journal of Thermal Engineering*,438-439	1.1	