

# Yong Hoon Jeong

## List of Publications by Year in descending order

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Version: 2024-02-01

62  
papers

1,354  
citations

331670

21  
h-index

361022

35  
g-index

64  
all docs

64  
docs citations

64  
times ranked

781  
citing authors

#	ARTICLE	IF	CITATIONS
1	Wettability of heated surfaces under pool boiling using surfactant solutions and nano-fluids. International Journal of Heat and Mass Transfer, 2008, 51, 3025-3031.	4.8	124
2	Subcooled flow boiling CHF enhancement with porous surface coatings. International Journal of Heat and Mass Transfer, 2007, 50, 3649-3657.	4.8	95
3	An experimental study on CHF enhancement in flow boiling using Al <sub>2</sub> O <sub>3</sub> nano-fluid. International Journal of Heat and Mass Transfer, 2010, 53, 1015-1022.	4.8	95
4	Potential improvements of supercritical recompression CO <sub>2</sub> Brayton cycle by mixing other gases for power conversion system of a SFR. Nuclear Engineering and Design, 2011, 241, 2128-2137.	1.7	91
5	Performance of supercritical Brayton cycle using CO <sub>2</sub> -based binary mixture at varying critical points for SFR applications. Nuclear Engineering and Design, 2013, 262, 12-20.	1.7	54
6	Critical Heat Flux Experiments on the Reactor Vessel Wall Using 2-D Slice Test Section. Nuclear Technology, 2005, 152, 162-169.	1.2	51
7	Experimental study on the pool boiling CHF enhancement using magnetite-water nanofluids. International Journal of Heat and Mass Transfer, 2012, 55, 2656-2663.	4.8	51
8	The effect of pressure on the critical heat flux in water-based nanofluids containing Al <sub>2</sub> O <sub>3</sub> and Fe <sub>3</sub> O <sub>4</sub> nanoparticles. International Journal of Heat and Mass Transfer, 2013, 61, 432-438.	4.8	51
9	Flow boiling critical heat flux characteristics of magnetic nanofluid at atmospheric pressure and low mass flux conditions. International Journal of Heat and Mass Transfer, 2013, 56, 101-106.	4.8	50
10	Critical heat flux for SiC- and Cr-coated plates under atmospheric condition. Annals of Nuclear Energy, 2015, 76, 335-342.	1.8	48
11	Flow boiling CHF enhancement with surfactant solutions under atmospheric pressure. International Journal of Heat and Mass Transfer, 2008, 51, 1913-1919.	4.8	38
12	Effect of heater material and coolant additives on CHF for a downward facing curved surface. Nuclear Engineering and Design, 2014, 278, 344-351.	1.7	38
13	Development of analytical model for solar chimney power plant with and without water storage system. Energy, 2016, 112, 200-207.	8.8	35
14	Safety evaluation of supercritical CO <sub>2</sub> cooled micro modular reactor. Annals of Nuclear Energy, 2017, 110, 1202-1216.	1.8	35
15	CHF enhancement in flow boiling system with TSP and boric acid solutions under atmospheric pressure. Nuclear Engineering and Design, 2010, 240, 3594-3600.	1.7	32
16	A concept design of supercritical CO <sub>2</sub> cooled SMR operating at isolated microgrid region. International Journal of Energy Research, 2017, 41, 512-525.	4.5	30
17	The effect of the geometric scale on the critical heat flux for the top of the reactor vessel lower head. Nuclear Engineering and Design, 2013, 258, 176-183.	1.7	28
18	Size effect of nanometer vacuum gap thermionic power conversion device with CsI coated graphite electrodes. Applied Physics Letters, 2009, 95, .	3.3	25

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19	Effects of two-phase flow conditions on flow boiling CHF enhancement of magnetite-water nanofluids. International Journal of Heat and Mass Transfer, 2014, 74, 278-284.	4.8	25
20	Innovative concept for an ultra-small nuclear thermal rocket utilizing a new moderated reactor. Nuclear Engineering and Technology, 2015, 47, 678-699.	2.3	24
21	Critical heat flux on downward-facing carbon steel flat plates under atmospheric condition. Experimental Thermal and Fluid Science, 2018, 90, 22-27.	2.7	23
22	Analysis of CHF enhancement by magnetite nanoparticle deposition in the subcooled flow boiling region. International Journal of Heat and Mass Transfer, 2017, 109, 1191-1199.	4.8	22
23	The effect of nanofluid stability on critical heat flux using magnetite-water nanofluids. Nuclear Engineering and Design, 2015, 292, 187-192.	1.7	21
24	Onset of Nucleate Boiling in narrow, rectangular channel for downward flow under low pressure. Annals of Nuclear Energy, 2017, 109, 498-506.	1.8	20
25	An investigation of pressure build-up effects due to check valve's closing characteristics using dynamic mesh techniques of CFD. Annals of Nuclear Energy, 2021, 152, 107996.	1.8	20
26	Investigation of the pressure vessel lower head potential failure under IVR-ERVC condition during a severe accident scenario in APR1400 reactors. Nuclear Engineering and Design, 2021, 376, 111107.	1.7	17
27	Conceptual design of reactor system for hybrid micro modular reactor (H-MMR) using potassium heat pipe. Nuclear Engineering and Design, 2020, 370, 110886.	1.7	16
28	Critical heat flux model on a downward facing surface for application to the IVR conditions. Nuclear Engineering and Design, 2018, 330, 317-324.	1.7	13
29	Effects of silica nanoparticles and low concentration on the deterioration of critical heat flux in a pool boiling experiment with a flat-type heater. International Journal of Heat and Mass Transfer, 2019, 144, 118420.	4.8	13
30	Feasibility study of solar-nuclear hybrid system for distributed power source. Energy Conversion and Management, 2021, 230, 113808.	9.2	13
31	Effect of dimensions and downward-facing angle on CHF under atmospheric condition. Experimental Thermal and Fluid Science, 2019, 102, 603-610.	2.7	11
32	Preliminary conceptual design of a new moderated reactor utilizing an LEU fuel for space nuclear thermal propulsion. Progress in Nuclear Energy, 2016, 91, 183-207.	2.9	10
33	Flow boiling CHF enhancement by wettability and flow conditions in a slug flow in the rectangular curved channel. Experimental Thermal and Fluid Science, 2018, 91, 388-398.	2.7	10
34	CHF experiment with downward-facing carbon and stainless steel plates under pressurized conditions. International Journal of Heat and Mass Transfer, 2018, 125, 670-680.	4.8	10
35	Simulation of the market penetration of hydrogen fuel cell vehicles in Korea. International Journal of Energy Research, 2008, 32, 318-327.	4.5	9
36	A heat transfer model development for CHF prediction with consideration of dry patch characteristics. International Journal of Heat and Mass Transfer, 2020, 148, 118812.	4.8	9

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37	A study on prediction methods of the critical heat flux for upward flow in a vertical narrow rectangular channel. Nuclear Engineering and Design, 2015, 294, 103-116.	1.7	8
38	Prediction of the critical heat flux for saturated upward flow boiling water in vertical narrow rectangular channels. Nuclear Engineering and Design, 2016, 303, 1-16.	1.7	8
39	CHF correlation development under ERVC conditions by using the local liquid velocity from PIV measurements. International Journal of Heat and Mass Transfer, 2019, 128, 171-184.	4.8	8
40	Flow boiling experiments for CHF evaluation under downward-facing heating including flow visualization: Effects of pressure, orientation, mass flux, and local quality. Annals of Nuclear Energy, 2022, 171, 108994.	1.8	8
41	Boric acid and boiling time effects on critical heat flux for corrosive and non-corrosive materials. Annals of Nuclear Energy, 2020, 136, 106999.	1.8	7
42	Fluid-to-fluid scaling criteria development for modeling high pressure steam condensation in horizontal tubes. International Journal of Heat and Mass Transfer, 2018, 116, 1266-1281.	4.8	5
43	The importance of representative aerosol diameter and bubble size distribution in pool scrubbing. Annals of Nuclear Energy, 2020, 147, 107712.	1.8	5
44	A novel approach for critical heat flux enhancement during severe accident mitigation with removal of radioactive materials from the coolant. Nuclear Engineering and Design, 2020, 365, 110715.	1.7	5
45	Mechanistic CHF model development for subcooled flow boiling in a vertical rectangular channel under low pressure. International Journal of Heat and Mass Transfer, 2021, 174, 121328.	4.8	5
46	Conceptual design of small modular reactor driven by natural circulation and study of design characteristics using CFD & RELAP5 code. Nuclear Engineering and Technology, 2020, 52, 2743-2759.	2.3	5
47	Experimental study of the nozzle size effect on aerosol removal by pool scrubbing. Nuclear Engineering and Design, 2021, 385, 111544.	1.7	5
48	CHF on Anodized Zirconium-based Alloy Surfaces with Protective Oxide Layers for ATF cladding. International Journal of Heat and Mass Transfer, 2021, 170, 120936.	4.8	4
49	Sodium-cooled fast reactor (SFR) fuel assembly design with graphite-moderating rods to reduce the sodium void reactivity coefficient. Nuclear Engineering and Design, 2014, 280, 223-232.	1.7	3
50	Heat transfer performance of downward-facing carbon and stainless steel surfaces. International Communications in Heat and Mass Transfer, 2020, 113, 104503.	5.6	3
51	Indirect validation of fluid-to-fluid scaling criteria for modeling steam condensation based on empirical correlations and CFD simulations. Nuclear Engineering and Design, 2021, 378, 111235.	1.7	3
52	Observation of the jet transition at a single vertical nozzle under pool scrubbing conditions. Annals of Nuclear Energy, 2022, 171, 109041.	1.8	3
53	Experimental evaluations of the critical heat flux in terms of the heater dimensions, orientation, and surface morphology. International Communications in Heat and Mass Transfer, 2022, 136, 106211.	5.6	3
54	Assessment of advanced RANS models ability to predict a turbulent swept liquid metal flow over a wire in a channel. Nuclear Engineering and Design, 2019, 353, 110206.	1.7	2

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55	An experimental observation of the effects of submicron- and micron-sized mesoporous silica particles on the critical heat flux. International Journal of Heat and Mass Transfer, 2020, 160, 120182.	4.8	2
56	Correction factor development for the 2006 Groeneveld CHF look-up table for rectangular channels under low pressure. Nuclear Engineering and Design, 2020, 370, 110869.	1.7	2
57	Analysis of CHF enhancement by magnetite nanoparticle deposition in the subcooled flow boiling region. , 2017, 109, 1191-1191.		1
58	Safety Enhancements for PHWRs Based on Macroscopic Losses of the Fukushima Accident. Science and Technology of Nuclear Installations, 2015, 2015, 1-12.	0.8	0
59	Experiment of CHF Enhancement by Magnetite Nanoparticle Deposition in the Subcooled Flow Boiling Region. , 2017, , .		0
60	Investigation of various reactor vessel auxiliary cooling system geometries for a hybrid micro modular reactor. Nuclear Engineering and Design, 2021, 379, 111239.	1.7	0
61	Depressurization of nuclear power plants through a silica gel-based system. Nuclear Engineering and Design, 2021, 381, 111333.	1.7	0
62	Magnetic withdrawal of particles for multiple purposes in nuclear power plants. Nuclear Engineering and Technology, 2021, 53, 3979-3989.	2.3	0