Hyoung-kyu Cho

List of Publications by Year
in descending order

		759233	839539
56 papers	433 citations	12 h-index	18 g-index
56 all docs	56 docs citations	56 times ranked	218 citing authors

#	Article	IF	Citations
1	RECENT IMPROVEMENTS IN THE CUPID CODE FOR A MULTI-DIMENSIONAL TWO-PHASE FLOW ANALYSIS OF NUCLEAR REACTOR COMPONENTS. Nuclear Engineering and Technology, 2014, 46, 655-666.	2.3	33
2	DEVELOPMENT AND PRELIMINARY ASSESSMENT OF A THREE-DIMENSIONAL THERMAL HYDRAULICS CODE, CUPID. Nuclear Engineering and Technology, 2010, 42, 279-296.	2.3	33
3	MULTI-SCALE THERMAL-HYDRAULIC ANALYSIS OF PWRS USING THE CUPID CODE. Nuclear Engineering and Technology, 2012, 44, 831-846.	2.3	31
4	Experimental observation of the droplet size change across a wet grid spacer in a 6 Ã— 6 rod bundle. Nuclear Engineering and Design, 2011, 241, 4649-4656.	1.7	25
5	Experimental analysis on mixed convection in reactor cavity cooling system of HTGR for hydrogen production. International Journal of Hydrogen Energy, 2017, 42, 22046-22053.	7.1	20
6	Experimental study on two-dimensional film flow with local measurement methods. Nuclear Engineering and Design, 2015, 294, 137-151.	1.7	16
7	Feasibility Test of a Liquid Film Thickness Sensor on a Flexible Printed Circuit Board Using a Three-Electrode Conductance Method. Sensors, 2017, 17, 42.	3.8	16
8	Prediction of nucleate boiling heat transfer on horizontal U-shaped heat exchanger submerged in a pool of water using MARS code. Nuclear Engineering and Design, 2015, 295, 317-337.	1.7	14
9	Improvement of CUPID code for simulating filmwise steam condensation in the presence of noncondensable gases. Nuclear Engineering and Technology, 2015, 47, 567-578.	2.3	14
10	Application of CUPID for subchannel-scale thermalâ€"hydraulic analysis of pressurized water reactor core under single-phase conditions. Nuclear Engineering and Technology, 2018, 50, 54-67.	2.3	14
11	Investigation on emergency core coolant bypass with local measurement of liquid film thickness using electrical conductance sensor fabricated on flexible printed circuit board. International Journal of Heat and Mass Transfer, 2019, 139, 130-143.	4.8	13
12	Heat structure coupling of CUPID and MARS for the multi-scale simulation of the passive auxiliary feedwater system. Nuclear Engineering and Design, 2014, 273, 459-468.	1.7	12
13	Measurement of sliding bubble behavior on a horizontal heated tube using a stereoscopic image processing technique. International Journal of Multiphase Flow, 2017, 94, 156-172.	3.4	12
14	Simulation of single- and two-phase natural circulation in the passive condensate cooling tank using the CUPID code. Journal of Nuclear Science and Technology, 2013, 50, 709-722.	1.3	11
15	Verification and improvement of dynamic motion model in MARS for marine reactor thermal-hydraulic analysis under ocean condition. Nuclear Engineering and Technology, 2019, 51, 1231-1240.	2.3	11
16	Experimental Study for Multidimensional ECC Behaviors in Downcomer Ann with Direct Vessel Injection Mode during the LBLOCA Reflood Phase. Journal of Nuclear Science and Technology, 2005, 42, 549-558.	1.3	10
17	Experimental study of pressure drops through LOCA-generated debris deposited on a fuel assembly. Nuclear Engineering and Design, 2015, 289, 49-59.	1.7	10
18	Flow visualization experiment in a two-side wall heated rectangular duct for turbulence model assessment in natural convection heat transfer. Nuclear Engineering and Design, 2019, 341, 284-296.	1.7	10

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19	Thermal-hydraulic analysis of water cooled breeding blanket of K-DEMO using MARS-KS code. Fusion Engineering and Design, 2015, 98-99, 1741-1746.	1.9	9
20	Development of thermal-hydraulic analysis methodology for multiple modules of water-cooled breeder blanket in fusion DEMO reactor. Fusion Engineering and Design, 2016, 103, 98-109.	1.9	9
21	Assessment of the two-phase flow models in the CUPID code using the downcomer boiling experiment. Journal of Nuclear Science and Technology, 2012, 49, 78-89.	1.3	7
22	A multi-scale analysis of the transient behavior of an advanced safety injection tank. Annals of Nuclear Energy, 2013, 62, 17-25.	1.8	7
23	Development of CUPID-SG for the analysis of two-phase flows in PWR steam generators. Progress in Nuclear Energy, 2014, 77, 132-140.	2.9	7
24	Predicting the sliding bubble velocity on the lower part of a horizontal tube heater under natural convection based on force balance analysis. International Journal of Heat and Mass Transfer, 2020, 151, 119453.	4.8	7
25	Assessment of wall friction model in multi-dimensional component of MARS with air–water cross flow experiment. Nuclear Engineering and Design, 2017, 312, 106-120.	1.7	6
26	Development of wall and interfacial friction models for two-dimensional film flow with local measurement methods. Nuclear Engineering and Design, 2018, 336, 141-153.	1.7	6
27	Multi-scale simulation of wall film condensation in the presence of non-condensable gases using heat structure-coupled CFD and system analysis codes. Nuclear Engineering and Technology, 2021, 53, 2488-2488.	2.3	6
28	Analytical Study on the Effective Thermal Conductivity of VHTR Fuel Block Geometry with Multiple Cylindrical Holes. Nuclear Technology, 2015, 191, 213-222.	1.2	5
29	Experimental investigation and CFD analysis on cross flow in the core of PMR200. Annals of Nuclear Energy, 2015, 83, 422-435.	1.8	5
30	Simulation of wall film condensation with non-condensable gases using wall function approach in component thermal hydraulic analysis code CUPID. Journal of Mechanical Science and Technology, 2018, 32, 1015-1023.	1.5	5
31	Simulations of air–water flow and subcooled boiling flow using the CUPID code. Journal of Nuclear Science and Technology, 2013, 50, 813-827.	1.3	4
32	Development of the loss coefficient correlation for cross flow between graphite fuel blocks in the core of prismatic very high temperature reactor-PMR200. Nuclear Engineering and Design, 2016, 307, 106-118.	1.7	4
33	Development of effective thermal conductivity models for Reserve Shutdown Control fuel block of prismatic HTGR for hydrogen production. International Journal of Hydrogen Energy, 2017, 42, 18614-18625.	7.1	4
34	An improved numerical scheme to evaluate the pressure gradient on unstructured meshes for two-phase flow analysis. International Communications in Heat and Mass Transfer, 2010, 37, 1273-1279.	5.6	3
35	Development of a heat transfer coefficient correlation for buoyancy-aided turbulent mixed convection of air inside a vertical channel. Applied Thermal Engineering, 2019, 159, 113884.	6.0	3
36	Local flow structure and turbulence quantities inside a heated rectangular riser in turbulent forced and mixed convection heat transfers. Experimental Thermal and Fluid Science, 2021, 122, 110297.	2.7	3

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37	Scaling analysis for single-phase natural circulation under dynamic motion and its verification using MARS-KS code. Annals of Nuclear Energy, 2021, 159, 108308.	1.8	3
38	Turbulence model assessment and heat transfer phenomena inside a rectangular channel under forced and mixed convection. International Journal of Heat and Mass Transfer, 2022, 185, 122388.	4.8	3
39	Experiments on a Water Pool-Type Reactor Cavity Cooling System in a High-Temperature Gas-Cooled Reactor. Nuclear Technology, 2007, 159, 39-58.	1.2	2
40	Assessment of MARS-GCR Code for a New Reactor Cavity Cooling System Design. Nuclear Technology, 2008, 162, 92-106.	1.2	2
41	Computational Analysis of Downcomer Boiling Phenomena Using a Component Thermal Hydraulic Analysis Code, CUPID. Journal of Engineering for Gas Turbines and Power, 2011, 133, .	1.1	2
42	Development of Heat Transfer Model Package for Horizontal U-Shaped Heat Exchanger Submerged in Pool of Passive Safety System. Nuclear Technology, 2016, 196, 303-318.	1.2	2
43	Study on the Turbulent Mixed Convection Phenomena Inside the Air-Cooled RCCS Riser. , 2018, , .		2
44	Effect of wall friction model on predicting emergency core coolant behavior in upper downcomer with direct vessel safety injection using MARS-KS. Annals of Nuclear Energy, 2018, 116, 395-406.	1.8	2
45	Advanced boiling heat transfer model for a horizontal tube with numerical analysis of bubble behaviours. International Journal of Heat and Mass Transfer, 2021, 175, 121168.	4.8	2
46	Development of Three-ring Conductance Sensor based on Flexible Printed Circuit Board for Measuring Liquid Film thickness in Two-phase Flow with High Resolution. Journal of Sensor Science and Technology, 2016, 25, 57-64.	0.2	2
47	Melting and evaporation analysis of the first wall in a water-cooled breeding blanket module under vertical displacement event by using the MARS code. Fusion Engineering and Design, 2017, 118, 52-63.	1.9	1
48	Application of three-dimensional looped network analysis method to the core of prismatic very high temperature gas-cooled reactor. Annals of Nuclear Energy, 2018, 117, 12-24.	1.8	1
49	Three-dimensional looped network analysis code including core thermal analysis model for prismatic very high temperature gas-cooled reactor. International Journal of Thermal Sciences, 2019, 143, 76-91.	4.9	1
50	Effect of asymmetric airflow on liquid film behavior and emergency core coolant bypass in the downcomer geometry of a nuclear reactor pressure vessel. International Communications in Heat and Mass Transfer, 2020, 117, 104765.	5.6	1
51	Computational fluid dynamics analysis of buoyancy-aided turbulent mixed convection inside a heated vertical rectangular duct. Progress in Nuclear Energy, 2021, 137, 103766.	2.9	1
52	Numerical Investigations of Liquid Film Offtake by Transverse Gas Flow in a Downcomer Annulus Geometry. Frontiers in Energy Research, 2022, 10, .	2.3	1
53	Application of the mesh adaptation technique to effective heat capacity method for melting simulation of the first wall in breeding blanket under high heat flux condition. Fusion Engineering and Design, 2018, 136, 891-896.	1.9	0
54	Jet impingement model for system analysis code to enhance mixing behavior prediction in downcomer during DVI line break accident. Nuclear Engineering and Design, 2018, 334, 121-137.	1.7	0

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#	ARTICLE	IF	CITATIONS
55	Visual Observation of Nucleate Boiling and Sliding Phenomena of Boiling Bubbles on a Horizontal Tube Heater. , 0, , .		0
56	Visualization Experiment for Nucleate Boiling Bubble Motion on a Horizontal Tube Heater Fabricated with Flexible Circuit Board. Journal of the Korean Society of Visualization, 2016, 14, 52-60.	0.1	0