Afshin J Ghajar

List of Publications by Year
in descending order

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64 papers	2,174 citations	257450 24 h-index	265206 42 g-index
79 all docs	79 docs citations	79 times ranked	873 citing authors

#	Article	IF	Citations
1	Comparison of void fraction correlations for different flow patterns in horizontal and upward inclined pipes. International Journal of Multiphase Flow, 2007, 33, 347-370.	3.4	398
2	A flow pattern independent drift flux model based void fraction correlation for a wide range of gasâ€“liquid two phase flow. International Journal of Multiphase Flow, 2014, 59, 186-205.	3.4	209
3	Heat transfer measurements and correlations in the transition region for a circular tube with three different inlet configurations. Experimental Thermal and Fluid Science, 1994, 8, 79-90.	2.7	151
4	Similarities and differences in the flow patterns and void fraction in vertical upward and downward two phase flow. Experimental Thermal and Fluid Science, 2012, 39, 213-227.	2.7	103
5	A general heat transfer correlation for non-boiling gasâ€“liquid flow with different flow patterns in horizontal pipes. International Journal of Multiphase Flow, 2006, 32, 447-465.	3.4	94
6	Comparison of Void Fraction Correlations for Different Flow Patterns in Upward Vertical Two-Phase Flow. Heat Transfer Engineering, 2011, 32, 843-860.	1.9	93
7	Transitional Heat Transfer in Plain Horizontal Tubes. Heat Transfer Engineering, 2006, 27, 23-38.	1.9	87
8	Effect of inlet geometry and heating on the fully developed friction factor in the transition region of a horizontal tube. Experimental Thermal and Fluid Science, 1997, 15, 52-64.	2.7	84
9	Heat Transfer Measurements, Flow Pattern Maps, and Flow Visualization for Non-Boiling Two-Phase Flow in Horizontal and Slightly Inclined Pipe. Heat Transfer Engineering, 2007, 28, 525-540.	1.9	66
10	Flow regime map for a horizontal pipe with uniform wall heat flux and three inlet configurations. Experimental Thermal and Fluid Science, 1995, 10, 287-297.	2.7	64
11	Pressure drop measurements in the transition region for a circular tube with three different inlet configurations. Experimental Thermal and Fluid Science, 1992, 5, 129-135.	2.7	55
12	Robust Heat Transfer Correlation for Turbulent Gas-Liquid Flow in Vertical Pipes. Journal of Thermophysics and Heat Transfer, 2000, 14, 574-578.	1.6	49
13	Heat transfer measurements and correlations for airâ€“water flow of different flow patterns in a horizontal pipe. Experimental Thermal and Fluid Science, 2002, 25, 659-676.	2.7	49
14	Comparison of near-wall treatment methods for high Reynolds number backward-facing step flow. International Journal of Computational Fluid Dynamics, 2005, 19, 493-500.	1.2	48
15	Effect of inlet geometries and heating on the entrance and fully-developed friction factors in the laminar and transition regions of a horizontal tube. Experimental Thermal and Fluid Science, 2013, 44, 680-696.	2.7	48
16	Experimental Investigation of Friction Factor in the Transition Region for Water Flow in Minitubes and Microtubes. Heat Transfer Engineering, 2010, 31, 646-657.	1.9	46
17	Experimental investigation of non-boiling gas-liquid two phase flow in downward inclined pipes. Experimental Thermal and Fluid Science, 2017, 89, 219-237.	2.7	39
18	Experimental study of the ultrasonic effect on heat transfer inside a horizontal mini-tube in the laminar region. Applied Thermal Engineering, 2017, 114, 1300-1308.	6.0	37

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19	The unusual behavior of local heat transfer coefficient in a circular tube with a bell-mouth inlet. Experimental Thermal and Fluid Science, 1998, 16, 187-194.	2.7	36
20	Improved Heat Transfer Correlation in the Transition Region for a Circular Tube with Three Inlet Configurations Using Artificial Neural Networks. Heat Transfer Engineering, 2004, 25, 30-40.	1.9	36
21	Improved forced convective heat-transfer correlations for liquids inthe near-critical region. AIAA Journal, 1986, 24, 2030-2037.	2.6	33
22	Effect of Void Fraction and Two-Phase Dynamic Viscosity Models on Prediction of Hydrostatic and Frictional Pressure Drop in Vertical Upward Gasâ€“Liquid Two-Phase Flow. Heat Transfer Engineering, 2013, 34, 1044-1059.	1.9	32
23	Importance of Non-Boiling Two-Phase Flow Heat Transfer in Pipes for Industrial Applications. Heat Transfer Engineering, 2010, 31, 711-732.	1.9	31
24	Experimental investigation of non-boiling gas-liquid two phase flow in upward inclined pipes. Experimental Thermal and Fluid Science, 2016, 79, 301-318.	2.7	30
25	Contribution Analysis of Dimensionless Variables for Laminar and Turbulent Flow Convection Heat Transfer in a Horizontal Tube Using Artificial Neural Network. Heat Transfer Engineering, 2008, 29, 793-804.	1.9	21
26	EXPERIMENTAL INVESTIGATION OF HEAT TRANSFER, FRICTION FACTOR, AND OPTIMAL FIN GEOMETRIES FOR THE INTERNALLY MICROFIN TUBES IN THE TRANSITION AND TURBULENT REGIONS. Journal of Enhanced Heat Transfer, 2012, 19, 457-476.	1.1	21
27	Heat transfer in the thermal entrance region for viscoelastic fluids in turbulent pipe flows. International Journal of Heat and Mass Transfer, 1988, 31, 1261-1267.	4.8	17
28	Pipe insulation thermal conductivity under dry and wet condensing conditions with moisture ingress: A critical review. HVAC and R Research, 2014, 20, 458-479.	0.6	14
29	Void Fraction and Flow Patterns of Two-Phase Flow in Upward and Downward Vertical and Horizontal Pipes. , 2012, , 175-201.		13
30	Flow Patterns, Void Fraction and Pressure Drop in Gas-Liquid Two Phase Flow at Different Pipe Orientations. , 2014, , 157-212.		12
31	Heat transfer and pressure drop in the transition region of smooth horizontal circular tubes with different inlet configurations. Advances in Heat Transfer, 2019, 51, 1-53.	0.9	12
32	Single-Phase Heat Transfer in Micro-Tubes: A Critical Review. , 2007, , .		11
33	Experimental and analytical studies of different methods for producing stratified flows. Energy, 1993, 18, 323-334.	8.8	9
34	Effect of Void Fraction on Pressure Drop in Upward Vertical Two-Phase Gas-Liquid Pipe Flow. Journal of Engineering for Gas Turbines and Power, 2013, 135, .	1.1	9
35	Improved free convective heat-transfer correlations in the near-critical region. AIAA Journal, 1985, 23, 1647-1649.	2.6	8
36	A HEAT TRANSFER CORRELATION FOR VISCOELASTIC TURBULENT PIPE FLOWS. Chemical Engineering Communications, 1989, 78, 167-177.	2.6	8

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37	Single-Phase Friction Factor in Micro-Tubes: A Critical Review of Measurement, Instrumentation and Data Reduction Techniques From 1991-2006. , 2007, , 813.		8
38	Validation of a General Heat Transfer Correlation for Non-Boiling Two-Phase Flow With Different Flow Patterns and Pipe Inclination Angles. , 2007, , .		7
39	An Empirical Model to Predict the Transition Between Stratified and Nonstratified Gasâ€“Liquid Two-Phase Flow in Horizontal and Downward Inclined Pipes. Heat Transfer Engineering, 2015, 36, 1485-1494.	1.9	7
40	Parametric Effects on the Substrate Temperature Profile in Oxy-Acetylene Flames. Heat Transfer Engineering, 1993, 14, 48-59.	1.9	6
41	The Effect of Inner Surface Roughness and Heating on Friction Factor in Horizontal Micro-Tubes. , 2011, , .		6
42	A Mechanistic Heat Transfer Correlation for Non-Boiling Two-Phase Flow in Horizontal, Inclined and Vertical Pipes. , 2011, , .		6
43	Experimental Investigaton of the Single-Phase Friction Factor and Heat Transfer Inside the Horizontal Internally Micro-Fin Tubes in the Transition Region. , 2011, , .		6
44	Experimental Investigation of Single-Phase Heat Transfer in a Horizontal Internally Micro-Fin Tube With Three Different Inlet Configurations. , 2012, , .		6
45	Heat Transfer Correlation for Two-Phase Flow in Vertical Pipes Using Support Vector Machines. Heat Transfer Engineering, 2011, 32, 1047-1052.	1.9	5
46	Heat Transfer Measurements and Correlations for Air-Water Two-Phase Slug Flow in a Horizontal Pipe. , 2004, , 745.		4
47	Flow Pattern and Pipe Orientation Independent Semi-Empirical Void Fraction Correlation for a Gas-Liquid Two Phase Flow Based on the Concept of Drift Flux Model. , 2012, , .		4
48	New optimization method, the algorithms of changes, for heat exchanger design. Chinese Journal of Mechanical Engineering (English Edition), 2012, 25, 55-62.	3.7	4
49	Frontiers and Progress in Multiphase Flow and Heat Transfer. Heat Transfer Engineering, 2019, 40, 1299-1300.	1.9	4
50	Methods for producing linear density gradients in laboratory tanks. Energy, 1990, 15, 23-34.	8.8	3
51	A Systematic Method to Predict Cloud Point Temperature and Solid Precipitation. Petroleum Science and Technology, 2003, 21, 409-424.	1.5	3
52	Experimental Investigation and Performance Evaluation of Isothermal Frictional Two Phase Pressure Drop Correlations in Vertical Downward Gas-Liquid Two Phase Flow. , 2012, , .		3
53	Experimental Investigation and Empirical Analysis of Non-Boiling Gas-Liquid Two Phase Heat Transfer in Vertical Downward Pipe Orientation. , 2012, , .		3
54	Effect of Vertical Vibration on the Mixing Time of a Passive Scalar in a Sparged Bubble Column Reactor. Fluids, 2020, 5, 6.	1.7	3

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55	Effect of Void Fraction on Pressure Drop in Upward Vertical Two-Phase Gas-Liquid Pipe Flow. , 2012, , .		1
56	Selected Papers from the 1st International Symposium on Thermal-Fluid Dynamics (ISTFD2019). Heat Transfer Engineering, 0, , 1-4.	1.9	1
57	Recent Developments in Non-Boiling Two-Phase Flow Heat Transfer and Void Fraction in Various Pipe Inclinations. , 2010, , .		0
58	In Celebration of Professor John Richard Thome on His 60th Birthday. Heat Transfer Engineering, 2013, 34, 1013-1015.	1.9	0
59	Correlating Isothermal Friction Factor Data for Micro-Fin Tubes Using Logistic Dose-Response Curve Fitting Method. Heat Transfer Engineering, 2014, 35, 996-1006.	1.9	0
60	Editorial to special issue on advances in heat transfer enhancement. Advances in Mechanical Engineering, 2015, 7, 168781401560237.	1.6	0
61	Flow Patterns, Flow Pattern Maps, and Flow Pattern Transition Models. SpringerBriefs in Applied Sciences and Technology, 2020, , 13-35.	0.4	0
62	Non-Boiling Two-Phase Heat Transfer. SpringerBriefs in Applied Sciences and Technology, 2020, , 103-116.	0.4	0
63	Pressure Drop. SpringerBriefs in Applied Sciences and Technology, 2020, , 65-93.	0.4	0
64	Void Fraction. SpringerBriefs in Applied Sciences and Technology, 2020, , 37-64.	0.4	0