Shigeo Hosokawa

List of Publications by Citations

91 papers	1,908 citations	19 h-index	42 g-index
98 ext. papers	2,157 ext. citations	1.7 avg, IF	4.72 L-index

#	Paper	IF	Citations
91	Transverse migration of single bubbles in simple shear flows. *Chemical Engineering Science*, **2002**, 57, 1849-1858	4.4	659
90	Effects of cavitation in a nozzle on liquid jet atomization. *International Journal of Heat and Mass Transfer*, **2007**, 50, 3575-3582	4.9	206
89	Multi-fluid simulation of turbulent bubbly pipe flows. *Chemical Engineering Science*, **2009**, 64, 5308-5318	4.4	72
88	Simulation of Bubble Motion under Gravity by Lattice Boltzmann Method. *Journal of Nuclear Science and Technology*, **2001**, 38, 330-341	1	68
87	Turbulence modification in gas□quid and solid□quid dispersed two-phase pipe flows. *International Journal of Heat and Fluid Flow*, **2004**, 25, 489-498	2.4	48
86	Bubble-induced pseudo turbulence in laminar pipe flows. *International Journal of Heat and Fluid Flow*, **2013**, 40, 97-105	2.4	44
85	Mass transfer from a bubble in a vertical pipe. *International Journal of Heat and Mass Transfer*, **2014**, 69, 215-222	4.9	43
84	Two-Phase Swirling Flow in a Gas-Liquid Separator. *Journal of Power and Energy Systems*, **2008**, 2, 1120-1131		42
83	Cavitation in a Two-Dimensional Nozzle and Liquid Jet Atomization (LDV Measurement of Liquid Velocity in a Nozzle). *JSME International Journal Series B*, **2006**, 49, 1253-1259		33
82	Two-phase Flow Patterns in a Four by Four Rod Bundle. *Journal of Nuclear Science and Technology*, **2007**, 44, 894-901	1	31
81	Effects of Nozzle Geometry on Cavitation in Nozzles of Pressure Atomizers. *Journal of Fluid Science and Technology*, **2008**, 3, 622-632	0.4	28
80	Measurements of turbulent flows in a 2□ rod bundle. *Nuclear Engineering and Design*, **2012**, 249, 2-13	1.8	27
79	Void distribution and bubble motion in bubbly flows in a 4□ rod bundle. Part I: Experiments. *Journal of Nuclear Science and Technology*, **2014**, 51, 220-230	1	27
78	Shapes and Rising Velocities of Single Bubbles rising through an Inner Subchannel. *Journal of Nuclear Science and Technology*, **2003**, 40, 136-142	1	27
77	Generation mechanism of micro-bubbles in a pressurized dissolution method. *Experimental Thermal and Fluid Science*, **2015**, 60, 201-207	3	26
76	Shapes of single bubbles in infinite stagnant liquids contaminated with surfactant. *Experimental Thermal and Fluid Science*, **2018**, 96, 460-469	3	25
75	MODELING AND HYBRID SIMULATION OF BUBBLY FLOW. *Multiphase Science and Technology*, **2006**, 18, 73-110	1	22

74	Swirling Annular Flow in a Steam Separator. *Journal of Engineering for Gas Turbines and Power*, **2009**, 131,	1.7	21
73	Distributions of void fraction and liquid velocity in air–water bubble column. *International Journal of Multiphase Flow*, **2014**, 67, 111-121	3.6	19
72	Shapes of Single Drops Rising Through Stagnant Liquids. *Journal of Fluid Science and Technology*, **2007**, 2, 184-195	0.4	19
71	BUBBLE TRACKING SIMULATION OF BUBBLE-INDUCED PSEUDOTURBULENCE. *Multiphase Science and Technology*, **2012**, 24, 197-222	1	19
70	Application of photobleaching molecular tagging velocimetry to turbulent bubbly flow in a square duct. *Experiments in Fluids*, **2009**, 47, 745-754	2.5	18
69	Effects of Surfactants on Mass Transfer from Single Carbon Dioxide Bubbles in Vertical Pipes. *Chemical Engineering and Technology*, **2015**, 38, 1955-1964	2	16
68	Void Fraction in a Four by Four Rod Bundle under a Stagnant Condition. *Journal of Power and Energy Systems*, **2010**, 4, 315-326		16
67	Lateral Force Acting on a Deformed Single Bubble due to the Presence of Wall. *880-02 Nihon Kikai Gakkai Ronbunsh□Transactions of the Japan Society of Mechanical Engineers Series B B-hen*, **2003**, 69, 2214-2220		15
66	Effects of fluid properties on CCFL characteristics at a vertical pipe lower end. *Journal of Nuclear Science and Technology*, **2015**, 52, 887-896	1	14
65	Spatial filter velocimetry based on time-series particle images. *Experiments in Fluids*, **2012**, 52, 1361-1372	2.5	14
64	CAVITATION IN NOZZLES OF PLAIN ORIFICE ATOMIZERSWITH VARIOUS LENGTH-TO-DIAMETER RATIOS. *Atomization and Sprays*, **2010**, 20, 513-524	1.2	14
63	Countercurrent Flow Limitation at the Junction between the Surge Line and the Pressurizer of a PWR. *Science and Technology of Nuclear Installations*, **2012**, 2012, 1-10	0.6	14
62	Terminal Velocity of Single Drops in Stagnant Liquids. *Journal of Fluid Science and Technology*, **2006**, 1, 72-81	0.4	14
61	PWR?????????????????????(1) (?????CCFL??). *Japanese Journal of Multiphase Flow*, **2008**, 22, 403-412	0.3	14
60	Experimental evaluation of Marangoni stress and surfactant concentration at interface of contaminated single spherical drop using spatiotemporal filter velocimetry. *International Journal of Multiphase Flow*, **2017**, 97, 157-167	3.6	13
59	Condensation experiments for counter-current flow limitation in an inverted U-tube. *Journal of Nuclear Science and Technology*, **2016**, 53, 486-495	1	13
58	Turbulence kinetic energy budget in bubbly flows in a vertical duct. *Experiments in Fluids*, **2012**, 52, 719-728	2.5	12
57	Development of a submersible small fiber LDV probe and its application to flows in a 4□ rod bundle. *Nuclear Engineering and Design*, **2013**, 263, 342-349	1.8	12

56	Motion of Small Bubbles near a Grid Spacer in a Two by Three Rod Bundle. *Journal of Fluid Science and Technology*, **2008**, 3, 172-182	0.4	12
55	Shapes and Rising Velocities of Single Bubbles rising through an Inner Subchannel		12
54	Mass transfer from single carbon-dioxide bubbles in electrolyte aqueous solutions in vertical pipes. *International Journal of Heat and Mass Transfer*, **2017**, 115, 663-671	4.9	11
53	Mass transfer from single carbon dioxide bubbles in alcohol aqueous solutions in vertical pipes. *International Journal of Heat and Mass Transfer*, **2017**, 108, 1991-2001	4.9	10
52	Ligament Formation Induced by Cavitation in a Cylindrical Nozzle. *Journal of Fluid Science and Technology*, **2008**, 3, 633-644	0.4	10
51	Evaluation of adsorption of surfactant at a moving interface of a single spherical drop. *Experimental Thermal and Fluid Science*, **2018**, 96, 397-405	3	8
50	Experimental study on interfacial and wall friction factors under counter-current flow limitation in vertical pipes with sharp-edged lower ends. *Nuclear Engineering and Design*, **2019**, 353, 110223	1.8	8
49	Countercurrent Air-Water Flow in a Scale-Down Model of a Pressurizer Surge Line. *Science and Technology of Nuclear Installations*, **2012**, 2012, 1-7	0.6	8
48	Measurement of bubble velocity using spatial filter velocimetry. *Experiments in Fluids*, **2013**, 54, 1	2.5	7
47	Dissolution of Single Carbon Dioxide Bubbles in a Vertical Pipe. *Journal of Chemical Engineering of Japan*, **2015**, 48, 418-426	0.8	7
46	EFFECTS OF BUBBLES ON TURBULENCE PROPERTIES IN A DUCT FLOW. *Multiphase Science and Technology*, **2010**, 22, 211-232	1	7
45	Void distribution and bubble motion in bubbly flows in a 4⁄4 rod bundle. Part II: numerical simulation. *Journal of Nuclear Science and Technology*, **2014**, 51, 580-589	1	6
44	Influence of inlet conditions on the flowfield in a model gas turbine combustor. *Experimental Thermal and Fluid Science*, **1992**, 5, 390-400	3	6
43	MOLECULAR TAGGING VELOCIMETRY BASED ON PHOTOBLEACHING REACTION AND ITS APPLICATION TO FLOWS AROUND SINGLE FLUID PARTICLES. *Multiphase Science and Technology*, **2004**, 16, 335-353	1	6
42	Mass transfer from single carbon-dioxide bubbles in surfactant-electrolyte mixed aqueous solutions in vertical pipes. *International Journal of Multiphase Flow*, **2020**, 124, 103207	3.6	6
41	Temperature fluctuation phenomena in a normally stagnant pipe connected downward to a high velocity and high temperature main pipe. *Nuclear Engineering and Design*, **2014**, 269, 360-373	1.8	5
40	Tomographic spatial filter velocimetry for three-dimensional measurement of fluid velocity. *Experiments in Fluids*, **2013**, 54, 1	2.5	5
39	Dissolution of a Carbon Dioxide Bubble in a Vertical Pipe. *Journal of Fluid Science and Technology*, **2008**, 3, 667-677	0.4	5

38	Effects of Pick-Off-Ring Configuration on Separation Performance of a Gas-Liquid Separator. *Progress in Multiphase Flow Research*, **2008**, 3, 67-74		5
37	Effects of Inlet Bubble Diameter on Bubbly Flow in a Bubble Column under High Gas Volume Flux Condition. *880-02 Nihon Kikai Gakkai Ronbunsh□Transactions of the Japan Society of Mechanical Engineers Series B B-hen*, **2008**, 74, 1368-1375		4
36	Effects of Bubble Wake on Coalescence Between Planar Bubbles. *Journal of Fluid Science and Technology*, **2006**, 1, 94-104	0.4	4
35	Effects of Fluid Properties on Countercurrent Flow Limitation in Vertical Pipes. *Japanese Journal of Multiphase Flow*, **2017**, 31, 152-161	0.3	4
34	Combined effects of alcohol and electrolyte on mass transfer from single carbon-dioxide bubbles in vertical pipes. *International Journal of Heat and Mass Transfer*, **2019**, 136, 521-530	4.9	3
33	Numerical simulation of slugging of stagnant liquid at a V-shaped elbow in a pipeline. *Applied Mathematical Modelling*, **2014**, 38, 4238-4248	4.5	3
32	Interfacial Friction Factor for Counter-Current Gas-Liquid Flows in Vertical Pipes. *Japanese Journal of Multiphase Flow*, **2017**, 31, 37-46	0.3	3
31	Flow and Temperature Fluctuation Mechanism in a Downward Branch Pipe with a Closed End : 1st Report, Flow Structure in a Vertical Branch Pipe(Fluids Engineering). *880-02 Nihon Kikai Gakkai Ronbunsh□Transactions of the Japan Society of Mechanical Engineers Series B B-hen*, **2009**, 75, 68-76		3
30	Characteristics of Liquid Slug Generated at a V-Shaped Elbow between Inclined Pipes. *880-02 Nihon Kikai Gakkai Ronbunsh□Transactions of the Japan Society of Mechanical Engineers Series B B-hen*, **2003**, 69, 2208-2213		3
29	Two-phase Flow Patterns in a Four by Four Rod Bundle		3
28	Measurements of Temperature Distributions and Condensation Heat Fluxes for Downward Flows of Steam-Air Mixture in a Circular Pipe. *Japanese Journal of Multiphase Flow*, **2019**, 33, 405-416	0.3	3
27	DRAG CORRELATIONS OF ELLIPSOIDAL BUBBLES IN CLEAN AND FULLY CONTAMINATED SYSTEMS. *Multiphase Science and Technology*, **2019**, 31, 215-234	1	3
26	Pressure and shear stress analysis in a normal triangular tube bundle based on experimental flow velocity field. *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, **2020**, 42, 1	2	2
25	Gaslift pump making use of phase change of working fluid. *Applied Thermal Engineering*, **2016**, 103, 1119-1125	5.8	2
24	Motion of Small Bubbles in High-Speed Flows in a Vertical Duct Containing an Obstacle. *880-02 Nihon Kikai Gakkai Ronbunsh□Transactions of the Japan Society of Mechanical Engineers Series B B-hen*, **2007**, 73, 162-168		2
23	Cavitation in a Two-Dimensional Nozzle and Liquid Jet Atomization (1st Report, Ultra-High Speed Visualization). *880-02 Nihon Kikai Gakkai Ronbunsh□Transactions of the Japan Society of Mechanical Engineers Series B B-hen*, **2006**, 72, 513-520		2
22	Condensation Heat Transfer for Downward Flows of Steam-Air Mixture in a Circular Pipe. *Japanese Journal of Multiphase Flow*, **2020**, 34, 510-519	0.3	2
21	??????????????????????. *Japanese Journal of Multiphase Flow*, **2010**, 24, 462-469	0.3	2

20	Measurement of bubbly flow using spatiotemporal filter velocimetry coupled with molecular tagging **2014**,		1
19	Effect of Entrained Air Bubbles on Micro Bubbles Generated by a Pressurized Dissolution Method(The Forefront of Multi-Physics CFD/EFD). *880-02 Nihon Kikai Gakkai Ronbunsh Transactions of the Japan Society of Mechanical Engineers Series B B-hen*, **2010**, 76, 763-770		1
18	Evaluation of Turbulence Kinetic Energy Budget in Turbulent Flows by Using Photobleaching Molecular Tagging Velocimetry. *Journal of Fluid Science and Technology*, **2012**, 7, 168-180	0.4	1
17	Numerical Simulation of Bubble Motion about a Grid Spacer in a Rod Bundle. *Journal of Power and Energy Systems*, **2009**, 3, 393-404		1
16	Cavitation in a Two-Dimensional Nozzle and Liquid Jet Atomization (2nd Report, LDV Measurement of Liquid Velocity in a Nozzle). *880-02 Nihon Kikai Gakkai RonbunshTransactions of the Japan Society of Mechanical Engineers Series B B-hen*, **2006**, 72, 521-527		1
15	LATTICE BOLTZMANN SIMULATION OF INTERFACIAL DEFORMATION. *International Journal of Modern Physics B*, **2003**, 17, 179-182	1.1	1
14	Single Contaminated Drops Falling through Stagnant Liquid at Low Reynolds Numbers. *Fluids*, **2022**, 7, 55	1.6	1
13	Condensation heat transfer for downward flows of superheated steam-air mixture in a circular pipe. *Nuclear Engineering and Design*, **2021**, 371, 110948	1.8	1
12	Characterization of the Velocity Field External to a Tube Bundle Using Spatial Filter Velocimetry Based on Variable Meshing Scheme. *Flow, Turbulence and Combustion*, **2020**, 105, 1277-1301	2.5	
11	Measurements of velocity distribution and flow rate by using spatiotemporal filter velocimetry. *Transactions of the JSME (in Japanese)*, **2015**, 81, 14-00597-14-00597	0.2	
10	Evaluation of Turbulence Kinetic Energy Budget in Turbulent Flows by Using a Photobleaching Molecular Tagging Velocimetry. *880-02 Nihon Kikai Gakkai RonbunshTransactions of the Japan Society of Mechanical Engineers Series B B-hen*, **2011**, 77, 2263-2272		
9	Motion of Single Drops in Linear Shear Flows **2007**, 303		
8	A Compact Fiber LDV with a Perforated Beam Expander. *Transactions of the Society of Instrument and Control Engineers*, **1990**, 26, 605-611	0.1	
7	F233 Velocity distribution of gas-liquid two-phase bubble flow in a 2 rod bundle. *The Proceedings of the National Symposium on Power and Energy Systems*, **2015**, 2015.20, 389-390	0	
6	Turbulence Characteristics of Gas-Liquid Two-Phase Bubbly Flow in a 2x2 Rod Bundle. *The Proceedings of the National Symposium on Power and Energy Systems*, **2016**, 2016.21, A215	0	
5	B223 Turbulent liquid flow in a rod bundle. *The Proceedings of the National Symposium on Power and Energy Systems*, **2012**, 2012.17, 287-288	0	
4	B112 Study on Two-Phase Swirling Flow in a Gas-Liquid Separator. *The Proceedings of the National Symposium on Power and Energy Systems*, **2012**, 2012.17, 53-54	0	
3	Numerical Simulation of Slug Generation at a V-Shaped Elbow between Inclined Pipes. *Kagaku Kogaku Ronbunshu*, **2014**, 40, 275-281	0.4	

2	F221 Measurement of liquid velocity in gas-liquid two-phase flow in a 2x2 rod bundle. *The Proceedings of the National Symposium on Power and Energy Systems*, **2014**, 2014.19, 369-370	0
1	Distribution characteristics of two-phase refrigerant in a return junction connecting parallel narrow channels. *Transactions of the JSME (in Japanese)*, **2016**, 82, 15-00685-15-00685	0.2