

Zhang Xiaobin

List of Publications by Year in descending order

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papers

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567281

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41
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docs citations

41
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404
citing authors

#	ARTICLE	IF	CITATIONS
1	Extension of the Schnerr-Sauer model for cryogenic cavitation. <i>European Journal of Mechanics, B/Fluids</i> , 2015, 52, 1-10.	2.5	75
2	Unsteady cavitation characteristics of liquid nitrogen flows through venturi tube. <i>International Journal of Heat and Mass Transfer</i> , 2017, 112, 544-552.	4.8	69
3	Interactions of vortices, thermal effects and cavitation in liquid hydrogen cavitating flows. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 614-631.	7.1	58
4	Research and development of large-scale cryogenic air separation in China. <i>Journal of Zhejiang University: Science A</i> , 2014, 15, 309-322.	2.4	53
5	Modeling cavitation flow of cryogenic fluids with thermodynamic phase-change theory. <i>Science Bulletin</i> , 2013, 58, 567-574.	1.7	40
6	Numerical analysis of energy separation in Ranque-Hilsch vortex tube with gaseous hydrogen using real gas model. <i>Applied Thermal Engineering</i> , 2018, 140, 287-294.	6.0	31
7	Simulations on effects of rated ullage pressure on the evaporation rate of liquid hydrogen tank. <i>International Journal of Heat and Mass Transfer</i> , 2019, 134, 842-851.	4.8	30
8	Influences of thermal effects on cavitation dynamics in liquid nitrogen through venturi tube. <i>Physics of Fluids</i> , 2020, 32, .	4.0	28
9	Calculation and verification of dynamical cavitation model for quasi-steady cavitating flow. <i>International Journal of Heat and Mass Transfer</i> , 2015, 86, 294-301.	4.8	26
10	Computational fluid dynamics study on liquefied natural gas dispersion with phase change of water. <i>International Journal of Heat and Mass Transfer</i> , 2015, 91, 347-354.	4.8	25
11	Validation of dynamic cavitation model for unsteady cavitating flow on NACA66. <i>Science China Technological Sciences</i> , 2014, 57, 819-827.	4.0	22
12	Studies on thermal effects of cavitation in LN2 flow over a twisted hydrofoil based on large eddy simulation. <i>Cryogenics</i> , 2019, 97, 40-49.	1.7	21
13	Validation of full cavitation model in cryogenic fluids. <i>Science Bulletin</i> , 2009, 54, 1633-1640.	9.0	20
14	Frequency characteristics of liquid hydrogen cavitating flow over a NACA0015 hydrofoil. <i>Cryogenics</i> , 2018, 90, 7-19.	1.7	18
15	Investigation of unsteady cryogenic cavitating flow and induced noise around a three-dimensional hydrofoil. <i>Physics of Fluids</i> , 2022, 34, .	4.0	16
16	Three-dimensional Computational Fluid Dynamics Modeling of Two-phase Flow in a Structured Packing Column. <i>Chinese Journal of Chemical Engineering</i> , 2013, 21, 959-966.	3.5	15
17	Computational fluid dynamic simulations on liquid film behaviors at flooding in an inclined pipe. <i>Chinese Journal of Chemical Engineering</i> , 2015, 23, 1460-1468.	3.5	15
18	CFD study on Taconis thermoacoustic oscillation with cryogenic hydrogen as working gas. <i>Cryogenics</i> , 2016, 75, 38-46.	1.7	15

#	ARTICLE	IF	CITATIONS
19	Preliminary evaluation of cryogenic two-phase flow imaging using electrical capacitance tomography. <i>Cryogenics</i> , 2017, 86, 97-105.	1.7	14
20	Evaluation of mass transfer correlations applying to cryogenic distillation process with non-equilibrium model. <i>Cryogenics</i> , 2019, 97, 22-30.	1.7	12
21	Unsteady cloud cavitation mechanisms of liquid nitrogen in convergent–divergent nozzle. <i>Physics of Fluids</i> , 2021, 33, .	4.0	12
22	Experimental results of flooding experiments in an inclined tube with liquid nitrogen and its vapor. <i>Cryogenics</i> , 2014, 62, 1-6.	1.7	10
23	Capacitance-based liquid holdup measurement of cryogenic two-phase flow in a nearly-horizontal tube. <i>Cryogenics</i> , 2017, 84, 69-75.	1.7	10
24	CFD analysis on flow and heat transfer mechanism of a microchannel I-shaped heat pipe under zero gravity condition. <i>International Journal of Heat and Mass Transfer</i> , 2020, 163, 120448.	4.8	10
25	A Novel Passive Method for Regulating Both Air Temperature and Relative Humidity of the Microenvironment in Museum Display Cases. <i>Energies</i> , 2019, 12, 3768.	3.1	9
26	Preliminary study on three-dimensional imaging of cryogenic two-phase flow based on electrical capacitance volume tomography. <i>Cryogenics</i> , 2020, 110, 103127.	1.7	8
27	Effects of surface tension on bubble growth in an extensive uniformly superheated liquid. <i>Science Bulletin</i> , 2011, 56, 3191.	1.7	7
28	A least squares support vector regression coupled linear reconstruction algorithm for ECT. <i>Flow Measurement and Instrumentation</i> , 2021, 77, 101874.	2.0	7
29	Computational fluid dynamics analysis on flow-induced vibration of a cryogenic poppet valve in consideration of cavitation effect. <i>Journal of Zhejiang University: Science A</i> , 2022, 23, 83-100.	2.4	7
30	Computational fluid dynamic simulation of an inter-phasing pulse tube cooler. <i>Journal of Zhejiang University: Science A</i> , 2008, 9, 93-98.	2.4	6
31	Modeling droplet vaporization and combustion with the volume of fluid method at a small Reynolds number. <i>Journal of Zhejiang University: Science A</i> , 2012, 13, 361-374.	2.4	6
32	Flow-induced vibration characteristics of the U-type Coriolis mass flowmeter with liquid hydrogen. <i>Journal of Zhejiang University: Science A</i> , 2022, 23, 495-504.	2.4	5
33	A parametric sensitivity study by numerical simulations on plume dispersion of the exhaust from a cryogenic wind tunnel. <i>Journal of Zhejiang University: Science A</i> , 2018, 19, 746-757.	2.4	4
34	Visual Experimental Study on Liquid-Nitrogen Cavitating Flow on NACA 66 Hydrofoil. <i>Journal of Propulsion and Power</i> , 2020, 36, 88-94.	2.2	4
35	Research on gas bubble merging through the lattice Boltzmann method. <i>Journal of Computational Methods in Sciences and Engineering</i> , 2016, 16, 99-109.	0.2	3
36	Experimental analysis on the decoupling of temperature and humidity by using a double circuit cooling coil. <i>Science and Technology for the Built Environment</i> , 2019, 25, 914-924.	1.7	3

#	ARTICLE	IF	CITATIONS
37	Lattice Boltzmann Simulation of Multiple Bubbles Motion under Gravity. Abstract and Applied Analysis, 2015, 2015, 1-12.	0.7	2
38	Experimental Study on a 500 W Traveling-wave Thermoacoustic Electric Generator. Energy Procedia, 2014, 61, 2271-2274.	1.8	1
39	Evaluation of the approach based on the concept of hyperbolicity breaking for prediction of flooding velocity of both room temperature and cryogenic fluids. Cryogenics, 2018, 93, 41-47.	1.7	1
40	Cavitation evolution and damage by liquid nitrogen in a globe valve. Journal of Zhejiang University: Science A, 2022, 23, 101-117.	2.4	1
41	Numerical investigation of a burning fuel droplet pair with different spacings and sizes. Combustion Theory and Modelling, 2020, 24, 41-71.	1.9	0