

Xiaojun Li

List of Publications by Year in descending order

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52
papers

1,265
citations

304602

22
h-index

377752

34
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52
all docs

52
docs citations

52
times ranked

420
citing authors

#	ARTICLE	IF	CITATIONS
1	Effects of flow pattern on hydraulic performance and energy conversion characterisation in a centrifugal pump. <i>Renewable Energy</i> , 2020, 151, 475-487.	4.3	88
2	Entropy generation analysis for the cavitating head-drop characteristic of a centrifugal pump. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2018, 232, 4637-4646.	1.1	85
3	Numerical and Experimental Analysis of Flow Phenomena in a Centrifugal Pump Operating Under Low Flow Rates. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2015, 137, .	0.8	84
4	Theoretical, experimental, and numerical methods to predict the best efficiency point of centrifugal pump as turbine. <i>Renewable Energy</i> , 2021, 168, 31-44.	4.3	64
5	Experimental and numerical investigations of head-flow curve instability of a single-stage centrifugal pump with volute casing. <i>Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy</i> , 2016, 230, 633-647.	0.8	55
6	Effect of the blade loading distribution on hydrodynamic performance of a centrifugal pump with cylindrical blades. <i>Journal of Mechanical Science and Technology</i> , 2018, 32, 1161-1170.	0.7	55
7	Extended compressible thermal cavitation model for the numerical simulation of cryogenic cavitating flow. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 10104-10118.	3.8	51
8	Calculation of cavitation evolution and associated turbulent kinetic energy transport around a NACA66 hydrofoil. <i>Journal of Mechanical Science and Technology</i> , 2019, 33, 1231-1241.	0.7	49
9	Numerical simulation of cryogenic cavitating flow by an extended transport-based cavitation model with thermal effects. <i>Cryogenics</i> , 2018, 92, 98-104.	0.9	44
10	Application of enstrophy dissipation to analyze energy loss in a centrifugal pump as turbine. <i>Renewable Energy</i> , 2021, 163, 41-55.	4.3	43
11	Numerical simulation of leading edge cavitation within the whole flow passage of a centrifugal pump. <i>Science China Technological Sciences</i> , 2013, 56, 2156-2162.	2.0	41
12	An experimental study on the cavitation vibration characteristics of a centrifugal pump at normal flow rate. <i>Journal of Mechanical Science and Technology</i> , 2018, 32, 4711-4720.	0.7	40
13	Numerical investigation of attached cavitating flow in thermo-sensitive fluid with special emphasis on thermal effect and shedding dynamics. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 3170-3184.	3.8	40
14	Multiscale modeling of tip-leakage cavitating flows by a combined volume of fluid and discrete bubble model. <i>Physics of Fluids</i> , 2021, 33, .	1.6	36
15	An energy consumption improvement method for centrifugal pump based on bionic optimization of blade trailing edge. <i>Energy</i> , 2022, 246, 123323.	4.5	34
16	Numerical modeling of multiphase flow in gas stirred ladles: From a multiscale point of view. <i>Powder Technology</i> , 2020, 373, 14-25.	2.1	29
17	Statistical characteristics of suction pressure signals for a centrifugal pump under cavitating conditions. <i>Journal of Thermal Science</i> , 2017, 26, 47-53.	0.9	28
18	Influence of Impeller Sinusoidal Tubercle Trailing-Edge on Pressure Pulsation in a Centrifugal Pump at Nominal Flow Rate. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2021, 143, .	0.8	26

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19	Investigation of flow pattern and hydraulic performance of a centrifugal pump impeller through the PIV method. <i>Renewable Energy</i> , 2020, 162, 561-574.	4.3	25
20	Numerical and experimental studies on hydrodynamic characteristics of sleeve regulating valves. <i>Flow Measurement and Instrumentation</i> , 2017, 53, 279-285.	1.0	24
21	Investigation of flow instability characteristics in a low specific speed centrifugal pump using a modified partially averaged Navier–Stokes model. <i>Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy</i> , 2019, 233, 834-848.	0.8	24
22	Instability analysis under part-load conditions in centrifugal pump. <i>Journal of Mechanical Science and Technology</i> , 2019, 33, 269-278.	0.7	24
23	Numerical investigation on the evolution of forces and energy features in thermo-sensitive cavitating flow. <i>European Journal of Mechanics, B/Fluids</i> , 2020, 84, 233-249.	1.2	24
24	Quantification of wake unsteadiness for low-Re flow across two staggered cylinders. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2019, 233, 6892-6909.	1.1	20
25	Investigations of energy distribution and loss characterization in a centrifugal impeller through PIV experiment. <i>Ocean Engineering</i> , 2022, 247, 110773.	1.9	19
26	Thermal performance comparison of oscillating heat pipes with and without helical micro-grooves. <i>Heat and Mass Transfer</i> , 2017, 53, 3383-3390.	1.2	16
27	Numerical investigation of transient liquid nitrogen cavitating flows with special emphasis on force evolution and entropy features. <i>Cryogenics</i> , 2021, 113, 103225.	0.9	16
28	Large eddy simulation of tip-leakage cavitating flow using a multiscale cavitation model and investigation on model parameters. <i>Physics of Fluids</i> , 2021, 33, .	1.6	16
29	Condensation flow patterns and heat transfer correction for zeotropic hydrocarbon mixtures in a helically coiled tube. <i>International Journal of Heat and Mass Transfer</i> , 2019, 143, 118500.	2.5	15
30	The Role of Blade Sinusoidal Tubercle Trailing Edge in a Centrifugal Pump with Low Specific Speed. <i>Processes</i> , 2019, 7, 625.	1.3	15
31	Numerical analysis of thermo-sensitive cavitating flows with special emphasises on flow separation and entrophy conversion. <i>International Communications in Heat and Mass Transfer</i> , 2021, 125, 105336.	2.9	14
32	Axial thrust instability analysis and estimation theory of high speed centrifugal pump. <i>Physics of Fluids</i> , 2022, 34, .	1.6	13
33	Dynamic Characteristics of Rotating Stall in Mixed Flow Pump. <i>Journal of Applied Mathematics</i> , 2013, 2013, 1-12.	0.4	12
34	Evaluation of vorticity forces in thermo-sensitive cavitating flow considering the local compressibility. <i>International Communications in Heat and Mass Transfer</i> , 2021, 120, 105008.	2.9	11
35	Investigation of Flow Separation Characteristics in a Pump as Turbines Impeller Under the Best Efficiency Point Condition. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2021, 143, .	0.8	11
36	Time-Resolved Particle Image Velocimetry Measurements and Proper Orthogonal Decomposition Analysis of Unsteady Flow in a Centrifugal Impeller Passage. <i>Frontiers in Energy Research</i> , 2022, 9, .	1.2	11

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37	Prediction of particle distribution and particle impact erosion in inclined cavities. Powder Technology, 2017, 305, 562-571.	2.1	10
38	Hydraulic Performance Optimization of Pump Impeller Based on a Joint of Particle Swarm Algorithm and Least-Squares Support Vector Regression. IEEE Access, 2020, 8, 203645-203654.	2.6	8
39	Boundary Vorticity Analysis and Shedding Dynamics of Transient Cavitation Flow Around a Twisted Hydrofoil. Journal of Fluids Engineering, Transactions of the ASME, 2021, 143, .	0.8	8
40	Investigation of unsteady flow in a centrifugal pump at low flow rate. Advances in Mechanical Engineering, 2016, 8, 168781401668215.	0.8	7
41	Investigation of flow separation in a centrifugal pump impeller based on improved delayed detached eddy simulation method. Advances in Mechanical Engineering, 2019, 11, 168781401989783.	0.8	6
42	Numerical Simulation of Fine Particle Solid-Liquid Two-Phase Flow in a Centrifugal Pump. Shock and Vibration, 2021, 2021, 1-10.	0.3	6
43	An improved turbulence model for separation flow in a centrifugal pump. Advances in Mechanical Engineering, 2016, 8, 168781401665331.	0.8	5
44	The Tip Clearance Cavitation Mechanism of a High-Speed Centrifugal Pump with a Splitter-Bladed Inducer. Processes, 2021, 9, 1576.	1.3	5
45	Instability analysis for a centrifugal pump with straight inlet pipe using partially averaged Navier–Stokes model. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2021, 235, 211-226.	0.8	4
46	Study on calculation method of condensation heat transfer for non-azeotropic hydrocarbon mixtures in helically coiled tubes. Journal of Thermal Analysis and Calorimetry, 2020, 141, 177-186.	2.0	1
47	Numerical simulation of rotating channel flow based on a modified DES model. Modern Physics Letters B, 2021, 35, 2150193.	1.0	1
48	Wear Characteristics of Dense Fine Particles Solid-Liquid Two-Phase Fluid Centrifugal Pump with Open Impellers. Shock and Vibration, 2021, 2021, 1-13.	0.3	1
49	Correlation between the Internal Flow Pattern and the Blade Load Distribution of the Centrifugal Impeller. Machines, 2022, 10, 40.	1.2	1
50	Numerical Investigation on Periodic Flow Unsteadiness in a Centrifugal Pump With Volute. , 2013, , .		0
51	Effect of Rotation Speed and Flow Rate on Slip Factor in a Centrifugal Pump. Shock and Vibration, 2021, 2021, 1-14.	0.3	0
52	Numerical simulation of cavitating flow around a twist hydrofoil focusing on the erosion behaviour. Journal of Physics: Conference Series, 2022, 2217, 012011.	0.3	0