Warn-Gyu Park

List of Publications by Year
in descending order

67	1,132	361296 20	454834 30
papers	citations	h-index	g-index

83	83	83	533
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Navierâ€“Stokes solver for water entry bodies with moving Chimera grid method in 6DOF motions. Computers and Fluids, 2016, 140, 19-38.	1.3	74
2	Numerical flow and performance analysis of waterjet propulsion system. Ocean Engineering, 2005, 32, 1740-1761.	1.9	63
3	Numerical study of impact force and ricochet behavior of high speed water-entry bodies. Computers and Fluids, 2003, 32, 939-951.	1.3	48
4	A volume-of-fluid (VOF) interface-sharpening method for two-phase incompressible flows. Computers and Fluids, 2017, 152, 104-119.	1.3	47
5	A free surface flow solver for complex threeâ€dimensional water impact problems based on the VOF method. International Journal for Numerical Methods in Fluids, 2016, 82, 3-34.	0.9	43
6	Numerical study on strong nonlinear interactions between spark-generated underwater explosion bubbles and a free surface. International Journal of Heat and Mass Transfer, 2020, 163, 120506.	2.5	43
7	Numerical study of flow characteristics of the high speed train entering into a tunnel. Mechanics Research Communications, 2003, 30, 287-296.	1.0	42
8	Numerical flow simulation of flush type intake duct of waterjet. Ocean Engineering, 2005, 32, 2107-2120.	1.9	35
9	Evaluation of a new scaling term in preconditioning schemes for computations of compressible cavitating and ventilated flows. Ocean Engineering, 2016, 126, 432-466.	1.9	32
10	Numerical study on dynamics of an underwater explosion bubble based on compressible homogeneous mixture model. Computers and Fluids, 2019, 191, 104262.	1.3	32
11	Thermodynamic effects on single cavitation bubble dynamics under various ambient temperature conditions. Physics of Fluids, 2022, 34, .	1.6	30
12	Numerical analysis of water impact forces using a dual-time pseudo-compressibility method and volume-of-fluid interface tracking algorithm. Computers and Fluids, 2014, 103, 18-33.	1.3	29
13	Numerical modeling for compressible two-phase flows and application to near-field underwater explosions. Computers and Fluids, 2021, 215, 104805.	1.3	27
14	Dynamics of a single cavitation bubble near a cylindrical rod. Physics of Fluids, 2021, 33, .	1.6	27
15	Numerical study on heat transfer effects of cavitating and flashing flows based on homogeneous mixture model. International Journal of Heat and Mass Transfer, 2017, 109, 1068-1083.	2.5	25
16	A compressive interface-capturing scheme for computation of compressible multi-fluid flows. Computers and Fluids, 2017, 152, 164-181.	1.3	24
17	Modeling and numerical simulation of ricochet and penetration of water entry bodies using an efficient free surface model. International Journal of Mechanical Sciences, 2020, 182, 105726.	3.6	24
18	Numerical flow analysis of single-stage ducted marine propulsor. Ocean Engineering, 2005, 32, 1260-1277.	1.9	23

#	Article	IF	Citations
19	Numerical simulations of compressible flows using multi-fluid models. International Journal of Multiphase Flow, 2015, 74, 5-18.	1.6	23
20	Numerical simulation of airâ€“steam mixture condensation flows in a vertical tube. International Journal of Heat and Mass Transfer, 2018, 127, 568-578.	2.5	23
21	Numerical Viscous Flow Analysis Around a High-Speed Train with Crosswind Effects. AIAA Journal, 1998, 36, 477-479.	1.5	21
22	Numerical study on simultaneous thermodynamic and hydrodynamic mechanisms of underwater explosion. International Journal of Heat and Mass Transfer, 2021, 178, 121581.	2.5	21
23	Numerical investigation on cavitation flow of hydrofoil and its flow noise with emphasis on turbulence models. AIP Advances, 2017, 7, .	0.6	20
24	Numerical investigation of single and multiple bubble condensing behaviors in subcooled flow boiling based on homogeneous mixture model. International Journal of Mechanical Sciences, 2018, 136, 220-233.	3.6	18
25	Numerical simulation of bubble collapse between two parallel walls and saturated film boiling on a sphere. International Journal of Heat and Mass Transfer, 2018, 127, 116-125.	2.5	18
26	Numerical analysis of an unsteady natural cavitating flow around an axisymmetric projectile under various free-stream temperature conditions. International Journal of Heat and Mass Transfer, 2021, 164, 120484.	2.5	18
27	Influence of phase-change on the collapse and rebound stages of a single spark-generated cavitation bubble. International Journal of Heat and Mass Transfer, 2022, 184, 122270.	2.5	18
28	Modeling of the bubble collapse with water jets and pressure loads using a geometrical volume of fluid based simulation method. International Journal of Multiphase Flow, 2022, 152, 104103.	1.6	18
29	Numerical study of ventilated cavitating flows with free surface effects. Journal of Mechanical Science and Technology, 2013, 27, 3683-3691.	0.7	16
30	A novel sharp interface capturing method for two- and three-phase incompressible flows. Computers and Fluids, 2018, 172, 147-161.	1.3	16
31	Numerical simulation of cavitating flow past axisymmetric body. International Journal of Naval Architecture and Ocean Engineering, 2012, 4, 256-266.	1.0	15
32	Experimental study of R134a/R410A cascade cycle for variable refrigerant flow heat pump systems. Journal of Mechanical Science and Technology, 2015, 29, 5447-5458.	0.7	14
33	Enhancement of Navierâ€“Stokes solver based on an improved volume-of-fluid method for complex interfacial-flow simulations. Applied Ocean Research, 2018, 72, 92-109.	1.8	14
34	Numerical Investigation into Effects of Viscous Flux Vectors on Hydrofoil Cavitation Flow and Its Radiated Flow Noise. Applied Sciences (Switzerland), 2018, 8, 289.	1.3	14
35	Numerical investigation of laser-induced cavitation bubble dynamics near a rigid surface based on three-dimensional fully compressible model. International Journal of Heat and Mass Transfer, 2022, 191, 122853.	2.5	14
36	3D simulation of water entry of an oblique cylinder with six-degree-of-freedom motions using an efficient free surface flow model. Ocean Engineering, 2021, 220, 108409.	1.9	13

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37	Synergistic effect of a coating and nano-oil lubricant on the tribological properties of friction surfaces. International Journal of Precision Engineering and Manufacturing, 2012, 13, 97-102.	1.1	12
38	Efficient three-equation two-phase model for free surface and water impact flows on a general curvilinear body-fitted grid. Computers and Fluids, 2020, 196, 104324.	1.3	11
39	Modeling the cooling performance of vortex tube using a genetic algorithm-based artificial neural network. Thermal Science, 2016, 20, 53-65.	0.5	10
40	Numerical investigation on cooling performance of Ranque-Hilsch vortex tube. Thermal Science, 2014, 18, 1173-1189.	0.5	9
41	Numerical simulation of cavitating flow past axisymmetric body. International Journal of Naval Architecture and Ocean Engineering, 2012, 4, 256-266.	1.0	9
42	Numerical investigation of active control for an S809 wind turbine airfoil. International Journal of Precision Engineering and Manufacturing, 2013, 14, 1037-1041.	1.1	8
43	Numerical analysis of cavitating flow past an axisymmetric cylinder with comparison to experiments. Journal of Mechanical Science and Technology, 2013, 27, 3673-3681.	0.7	8
44	An efficient shock-capturing scheme for simulating compressible homogeneous mixture flow. Journal of Mechanical Science and Technology, 2016, 30, 3969-3983.	0.7	8
45	Numerical modeling of multiphase compressible flows with the presence of shock waves using an interface-sharpening five-equation model. International Journal of Multiphase Flow, 2021, 135, 103542.	1.6	8
46	An enhancement of coupling method for interface computations in incompressible two-phase flows. Computers and Fluids, 2021, 214, 104763.	1.3	8
47	Fully compressible multiphase model for computation of compressible fluid flows with large density ratio and the presence of shock waves. Computers and Fluids, 2022, 237, 105325.	1.3	8
48	Numerical study of the thermodynamics and supercavitating flow around an underwater high-speed projectile using a fully compressible multiphase flow model. Ocean Engineering, 2022, 257, 111686.	1.9	8
49	Multiphase Flow Simulation of Water-Entry and -Exit of Axisymmetric Bodies. , 2013, , .		6
50	Axisymmetric simulation of bubble condensation of pure steam and steamâ€“air mixture. Nuclear Engineering and Design, 2018, 337, 193-204.	0.8	5
51	Numerical Analysis of Multi-Phase Flow around Supercavitating Body at Various Cavitator Angle of Attack and Ventilation Mass Flux. Applied Sciences (Switzerland), 2020, 10, 4228.	1.3	5
52	Comparative study on the performance of Pod type waterjet by experiment and computation. International Journal of Naval Architecture and Ocean Engineering, 2010, 2, 1-13.	1.0	4
53	Numerical simulation of vapor volume fraction in a vertical channel under low-pressure conditions. Journal of Mechanical Science and Technology, 2018, 32, 4657-4664.	0.7	4
54	Numerical simulation of incompressible viscous flow around a propeller. , 1993, , .		3

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55	Comparison of different two equation turbulence models for studying the effect of cold outlet diameter on cooling performance of vortex tube. , 2010, , .		3
56	CFD Analysis of Subcooled Flow Boiling in 4 Ã— 4 Rod Bundle. Applied Sciences (Switzerland), 2020, 10, 4559.	1.3	3
57	Automatic demisting control of automobile windscreen glass. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2007, 221, 33-40.	1.1	2
58	Numerical Study of Bubble Behavior under Gradient Flows during Subcooled Flow Boiling in Vertical Flow Channel. Symmetry, 2020, 12, 611.	1.1	2
59	Numerical analysis of bubble condensation behavior under high-pressure flow conditions. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2020, 234, 3725-3741.	1.1	2
60	Numerical investigation on influences of injection flow rate on bubbling flow at submerged orifices. European Journal of Mechanics, B/Fluids, 2022, 95, 23-37.	1.2	2
61	Numerical analysis of flow and pollutant dispersion over 2-d bell shaped hills. Journal of Mechanical Science and Technology, 2003, 17, 1054-1062.	0.4	1
62	Numerical Analysis of Partial Cavitaing Flow Past Axisymmetric Cylinders. Transactions of the Korean Society of Mechanical Engineers, B, 2009, 33, 69-78.	0.0	1
63	Developing an automated system for predicting the shape and volume of an air pocket on the draw die. International Journal of Advanced Manufacturing Technology, 2009, 40, 697-708.	1.5	0
64	Numerical estimation of energy efficiency in cryogenic chamber with various methods of ventilation and location of test object. Advances in Mechanical Engineering, 2017, 9, 168781401771995.	0.8	0
65	10.1063/5.0070847.3. , 2021, , .		0
66	10.1063/5.0076913.3. , 2022, , .		0
67	10.1063/5.0076913.5. , 2022, , .		0