Jung-il Choi

List of Publications by Year
in descending order

92	2,353	236925	233421
papers	citations	25 h-index	45 g-index

93	93	93	1581
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Impedance-based capacity estimation for lithium-ion batteries using generative adversarial network. Applied Energy, 2022, 308, 118317.	10.1	25
2	Parameter identification and identifiability analysis of lithiumâ€ion batteries. Energy Science and Engineering, 2022, 10, 488-506.	4.0	6
3	Monolithic projection-based method with staggered time discretization for solving non-Oberbeckâ€“Boussinesq natural convection flows. Journal of Computational Physics, 2022, 463, 111238.	3.8	11
4	Drag, lift, and torque coefficients for various geometrical configurations of elliptic cylinder under Stokes to laminar flow regimes. AIP Advances, 2022, 12, .	1.3	1
5	Binary genetic algorithm for optimal joinpoint detection: Application to cancer trend analysis. Statistics in Medicine, 2021, 40, 799-822.	1.6	9
6	PaScaL_TDMA: A library of parallel and scalable solvers for massive tridiagonal systems. Computer Physics Communications, 2021, 260, 107722.	7.5	16
7	Efficient monolithic projection-based method for chemotaxis-driven bioconvection problems. Computers and Mathematics With Applications, 2021, 84, 166-184.	2.7	13
8	Non-intrusive reduced-order modeling for uncertainty quantification of spaceâ€“time-dependent parameterized problems. Computers and Mathematics With Applications, 2021, 87, 50-64.	2.7	8
9	Mean thermal energy balance analysis in differentially heated vertical channel flows. Physics of Fluids, 2021, 33, .	4.0	8
10	Non-intrusive framework of reduced-order modeling based on proper orthogonal decomposition and polynomial chaos expansion. Journal of Computational and Applied Mathematics, 2021, 390, 113372.	2.0	10
11	Dynamic Pore Modulation of Stretchable Electrospun Nanofiber Filter for Adaptive Machine Learned Respiratory Protection. ACS Nano, 2021, 15, 15730-15740.	14.6	25
12	Forecasting state-of-health of lithium-ion batteries using variational long short-term memory with transfer learning. Journal of Energy Storage, 2021, 41, 102893.	8.1	54
13	Contribution of Reynolds shear stress to near-wall turbulence in Rayleighâ€“BÃ©nard convection. International Journal of Heat and Mass Transfer, 2021, 181, 121873.	4.8	3
14	MPI Parallel Implementation for Pseudo-Spectral Simulations for Turbulent Channel Flow. International Journal of Computational Fluid Dynamics, 2020, 34, 569-582.	1.2	8
15	Quantification of measurement error effects on conductivity reconstruction in electrical impedance tomography. Inverse Problems in Science and Engineering, 2020, 28, 1669-1693.	1.2	2
16	Global sensitivity analysis for multivariate outputs using polynomial chaos-based surrogate models. Applied Mathematical Modelling, 2020, 82, 867-887.	4.2	20
17	Multiple parameter identification using genetic algorithm in vanadium redox flow batteries. Journal of Power Sources, 2020, 450, 227684.	7.8	33
18	An immersed boundary formulation incorporating a two-layer wall model approach for RANS simulations with complex geometry. Computers and Fluids, 2020, 205, 104551.	2.5	4

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19	Immersed-Boundary Methods for Simulating Human Motion Events. Computational Methods in Engineering & the Sciences, 2020, , 395-419.	0.3	3
20	Analysis of localized damping effects in channel flows with arbitrary rough boundary. Applicable Analysis, 2019, 98, 2359-2377.	1.3	1
21	Numerical Simulation of Underwater Burst Events Using Sharp Interface Capturing Methods. , 2019, , .		1
22	Efficient exact solution procedure for quasi-one-dimensional nozzle flows with stiffened-gas equation of state. International Journal of Heat and Mass Transfer, 2019, 137, 523-533.	4.8	5
23	Extended synthetic eddy method to generate inflow data for turbulent thermal boundary layer. International Journal of Heat and Mass Transfer, 2019, 134, 1261-1267.	4.8	11
24	Efficient monolithic projection method with staggered time discretization for natural convection problems. International Journal of Heat and Mass Transfer, 2019, 144, 118677.	4.8	18
25	Lock-in regions of laminar flows over a streamwise oscillating circular cylinder. Journal of Fluid Mechanics, 2019, 858, 315-351.	3.4	19
26	Analysis of convective heat transfer in channel flow with arbitrary rough surface. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2019, 99, e201700363.	1.6	1
27	Pre-design model for redox flow battery design. Journal of Mechanical Science and Technology, 2018, 32, 1025-1032.	1.5	3
28	Analysis of localized damping effects in channel flows with a periodic rough boundary. Applicable Analysis, 2018, 97, 902-918.	1.3	2
29	Activity gradient carbon felt electrodes for vanadium redox flow batteries. Journal of Power Sources, 2018, 408, 128-135.	7.8	30
30	Efficient monolithic projection method for time-dependent conjugate heat transfer problems. Journal of Computational Physics, 2018, 369, 191-208.	3.8	17
31	Short note on conditional collapse of self-gravitating system with positive total energy. Physica A: Statistical Mechanics and Its Applications, 2018, 507, 205-209.	2.6	0
32	Fully decoupled monolithic projection method for natural convection problems. Journal of Computational Physics, 2017, 334, 582-606.	3.8	25
33	Physically Based Probabilistic Analysis of Sediment Deposition in Open Channel Flow. Journal of Hydraulic Engineering, 2017, 143, .	1.5	4
34	A simple and efficient outflow boundary condition for the incompressible Navierâ€“Stokes equations. Engineering Applications of Computational Fluid Mechanics, 2017, 11, 69-85.	3.1	10
35	Uncertainty quantification of upstream wind effects on single-sided ventilation in a building using generalized polynomial chaos method. Building and Environment, 2017, 125, 153-167.	6.9	8
36	Effect of wind and buoyancy interaction on single-sided ventilation in a building. Journal of Wind Engineering and Industrial Aerodynamics, 2017, 171, 380-389.	3.9	21

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37	Two dimensional radial gas flows in atmospheric pressure plasma-enhanced chemical vapor deposition. AIP Advances, 2017, 7, 125310.	1.3	1
38	Inverse Problem for Color Doppler Ultrasound-Assisted Intracardiac Blood Flow Imaging. Computational and Mathematical Methods in Medicine, 2016, 2016, 1-10.	1.3	2
39	Enhanced Single-Sided Ventilation with Overhang in Buildings. Energies, 2016, 9, 122.	3.1	9
40	A decoupled monolithic projection method for natural convection problems. Journal of Computational Physics, 2016, 314, 160-166.	3.8	19
41	Effect of surface conditions on blast wave propagation. Journal of Mechanical Science and Technology, 2016, 30, 3907-3915.	1.5	5
42	Multi-component Cahnâ€“Hilliard system with different boundary conditions in complex domains. Journal of Computational Physics, 2016, 323, 1-16.	3.8	45
43	Interparticle collision mechanism in turbulence. Physical Review E, 2016, 93, 013112.	2.1	6
44	Analysis of velocity-components decoupled projection method for the incompressible Navierâ€“Stokes equations. Computers and Mathematics With Applications, 2016, 71, 1722-1743.	2.7	17
45	Size-Resolved Source Emission Rates of Indoor Ultrafine Particles Considering Coagulation. Environmental Science & Technology, 2016, 50, 10031-10038.	10.0	30
46	A pre-conditioned implicit direct forcing based immersed boundary method for incompressible viscous flows. Journal of Computational Physics, 2016, 314, 774-799.	3.8	19
47	A phase-field fluid modeling and computation with interfacial profile correction term. Communications in Nonlinear Science and Numerical Simulation, 2016, 30, 84-100.	3.3	50
48	Numerical Analysis on Water Transport in Alkaline Anion Exchange Membrane Fuel Cells. Electrochemistry, 2015, 83, 80-83.	1.4	15
49	An electrical impedance monitoring method of water-lubricated oil transportation. Flow Measurement and Instrumentation, 2015, 46, 327-333.	2.0	2
50	A Reconstruction Method of Blood Flow Velocity in Left Ventricle Using Color Flow Ultrasound. Computational and Mathematical Methods in Medicine, 2015, 2015, 1-15.	1.3	8
51	A reconstruction method of intra-ventricular blood flow using color flow ultrasound: a simulation study. Proceedings of SPIE, 2015, , .	0.8	2
52	Fast local image inpainting based on the Allenâ€“Cahn model. , 2015, 37, 65-74.		51
53	Spatial organization of large-Âand very-large-scale motions in a turbulent channel flow. Journal of Fluid Mechanics, 2014, 749, 818-840.	3.4	90
54	Large-eddy simulation of turbulent flow and dispersion over a complex urban street canyon. Environmental Fluid Mechanics, 2014, 14, 1381-1403.	1.6	28

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55	Exponentially Stagnation Point Flow of Non-Newtonian Nanofluid over an Exponentially Stretching Surface. International Journal of Nonlinear Sciences and Numerical Simulation, 2014, 15, .	1.0	3
56	NUMERICAL SIMULATION OF INITIAL FIREBALL AFTER NUCLEAR EXPLOSION. Journal of Computational Fluids Engineering, 2014, 19, 45-51.	0.0	3
57	Multizone modeling of strategies to reduce the spread of airborne infectious agents in healthcare facilities. Building and Environment, 2013, 60, 105-115.	6.9	38
58	AN IMMERSED BOUNDARY METHOD FOR LOW REYNOLDS NUMBER FLOWS. Journal of Computational Fluids Engineering, 2013, 18, 34-41.	0.0	0
59	Large Eddy Simulation of Particle Re-suspension During a Footstep. Aerosol Science and Technology, 2012, 46, 767-780.	3.1	13
60	Evolution of Ultrafine Particle Size Distributions Following Indoor Episodic Releases: Relative Importance of Coagulation, Deposition and Ventilation. Aerosol Science and Technology, 2012, 46, 494-503.	3.1	70
61	Numerical Simulation of the Effects of Mesoflaps in Controlling Shock/Boundary-Layer Interactions. Journal of Propulsion and Power, 2012, 28, 955-970.	2.2	23
62	Large-eddy simulation of human-induced contaminant transport in room compartments. Indoor Air, 2012, 22, 77-87.	4.3	89
63	Simulation of a Mach 3 24-Degree Compression-Ramp Interaction using LES/RANS Models. , 2011, , .		3
64	Inter-particle collision in particle-laden isotropic turbulence. Journal of Physics: Conference Series, 2011, 318, 052012.	0.4	2
65	Compressible-Flow Simulations Using a New Large-Eddy Simulation/Reynolds-Averaged Navier-Stokes Model. AIAA Journal, 2011, 49, 2194-2209.	2.6	53
66	An Immersed Boundary Method for General Flow Applications. , 2010, , .		3
67	Simulation of Shock/Boundary-Layer Interactions with Bleed Using Immersed-Boundary Methods. Journal of Propulsion and Power, 2010, 26, 203-214.	2.2	47
68	Human-Induced Particle Re-Suspension in a Room. Aerosol Science and Technology, 2010, 44, 216-229.	3.1	35
69	Numerical Simulations of Effects of Micro Vortex Generators Using Immersed-Boundary Methods. AIAA Journal, 2010, 48, 92-103.	2.6	97
70	Multi-Wall Recycling / Rescaling Method for Inflow Turbulence Generation. , 2010, , .		16
71	Simulation of Shock / Boundary Layer Interactions Using Improved LES/RANS Models. , 2010, , .		11
72	Numerical Simulation of the Effects of Mesoflaps in Controlling Shock / Boundary Layer Interactions. , 2010, , .		1

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73	Compressible Boundary-Layer Predictions at High Reynolds Number Using Hybrid LES/RANS Methods. AIAA Journal, 2009, 47, 2179-2193.	2.6	62
74	Simulations of High-Speed Internal Flows Using LES/RANS Models. , 2009, , .		24
75	Simulations of Shock / Boundary Layer Interactions with Bleed using Immersed Boundary Methods. , 2009, , .		4
76	Large eddy simulation and zonal modeling of human-induced contaminant transport. Indoor Air, 2008, 18, 233-249.	4.3	71
77	Large Eddy/Reynolds-Averaged Navier-Stokes Simulation of a Mach 5 Compression-Corner Interaction. AIAA Journal, 2008, 46, 977-991.	2.6	81
78	RANS and Hybrid LES/RANS Simulation of the Effects of Micro Vortex Generators Using Immersed Boundary Methods. , 2008, , .		23
79	Compressible Boundary Layer Predictions at High Reynolds Number using Hybrid LES/RANS Methods. , 2008, , .		7
80	Hybrid LES/RANS Simulation of a Mach 5 Compression-Corner Interaction. , 2008, , .		8
81	Direct Numerical Simulation of Turbulent Flow in a Square Duct: Analysis of Secondary Flows. Journal of Engineering Mechanics - ASCE, 2007, 133, 213-221.	2.9	37
82	Mathematical Analysis of Particle Deposition in Human Lungs: An Improved Single Path Transport Model. Inhalation Toxicology, 2007, 19, 925-939.	1.6	76
83	An immersed boundary method for complex incompressible flows. Journal of Computational Physics, 2007, 224, 757-784.	3.8	281
84	Intermittent Nature of Acceleration in Near Wall Turbulence. Physical Review Letters, 2004, 92, 144502.	7.8	44
85	Lagrangian statistics in turbulent channel flow. Physics of Fluids, 2004, 16, 779-793.	4.0	85
86	Identification and Control of Taylor-Go-yen;rtler Vortices in Turbulent Curved Channel Flow. AIAA Journal, 2003, 41, 2387-2393.	2.6	2
87	Assessment of suboptimal control for drag reduction in turbulent channel flow. Journal of Turbulence, 2002, 3, N29.	1.4	8
88	Relationship between wall pressure fluctuations and streamwise vortices in a turbulent boundary layer. Physics of Fluids, 2002, 14, 898-901.	4.0	38
89	Drag Reduction by Spanwise Wall Oscillation in Wall-Bounded Turbulent Flows. AIAA Journal, 2002, 40, 842-850.	2.6	125
90	Suboptimal control for drag reduction in turbulent pipe flow. Fluid Dynamics Research, 2002, 30, 217-231.	1.3	13

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91	Transition flow modes in Czochralski convection. Journal of Crystal Growth, 1997, 180, 305-314.	1.5	13
92	Suppression of temperature oscillation in Czochralski convection by superimposing rotating flows. International Journal of Heat and Mass Transfer, 1997, 40, 1667-1675.	4.8	10