Shintaro

List of Publications by Year
in descending order

63 papers	855 citations	623734 14 h-index	477307 29 g-index
63 all docs	63 docs citations	63 times ranked	531 citing authors

#	Article	IF	Citations
1	Flow Rate Prediction for a Semi-permeable Membrane at Low Reynolds Number in a Circular Pipe. Transport in Porous Media, 2022, 141, 185.	2.6	0
2	Effect of lubrication in the non-Reynolds regime due to the non-negligible gap on the fluid permeation through a membrane. Fluid Dynamics Research, 2021, 53, 035501.	1.3	3
3	Transport of solute and solvent driven by lubrication pressure through non-deformable permeable membranes. Microfluidics and Nanofluidics, 2021, 25, 1.	2.2	3
4	Lubrication pressure model in a non-negligible gap for fluid permeation through a membrane with finite permeability. Physical Review Fluids, 2021, 6, .	2.5	1
5	Fluid Permeation Through A Membrane With Infinitesimal Permeability Under Reynolds Lubrication. Journal of Mechanics, 2020, 36, 637-648.	1.4	3
6	Volume conservation method for the three-dimensional front-tracking method. Mechanical Engineering Letters, 2020, 6, 20-00216-20-00216.	0.6	1
7	Anisotropic Reaction Force Model in Two-way Coupling Simulation for a Smaller Particle Than Grid Spacing Based on Volume Averaging. Flow, Turbulence and Combustion, 2020, 105, 1017-1034.	2.6	1
8	Estimation of fluid forces on a spherical particle for two-way coupling simulation based on the volume averaging. International Journal of Multiphase Flow, 2019, 113, 165-178.	3.4	7
9	A relation between membrane permeability and flow rate at low Reynolds number in circular pipe. Journal of Membrane Science, 2019, 582, 91-102.	8.2	14
10	Vortical flow patterns by the cooperative effect of convective and conductive heat transfers in particle-dispersed natural convection. International Journal of Heat and Mass Transfer, 2019, 130, 946-959.	4.8	2
11	Flow reversals in particle-dispersed natural convection in a two-dimensional enclosed square domain. Physical Review Fluids, 2019, 4, .	2.5	1
12	Extended Reynolds lubrication model for incompressible Newtonian fluid. Physical Review Fluids, 2019, 4, .	2.5	6
13	A numerical approach for particle-vortex interactions based on volume-averaged equations. International Journal of Multiphase Flow, 2018, 104, 188-205.	3.4	14
14	An immersed lubrication model for the fluid flow in a narrow gap region. Powder Technology, 2018, 329, 445-454.	4.2	9
15	Influence of Rayleigh number and solid volume fraction in particle-dispersed natural convection. International Journal of Heat and Mass Transfer, 2018, 120, 250-258.	4.8	6
16	Direct numerical simulation of turbulent flow above zigzag riblets. AIP Advances, 2018, 8, 105227.	1.3	5
17	Interaction problem between fluid and membrane by a consistent direct discretisation approach. Journal of Computational Physics, 2018, 371, 1018-1042.	3.8	15
18	A numerical method for interaction problems between fluid and membranes with arbitrary permeability for fluid. Journal of Computational Physics, 2017, 345, 33-57.	3.8	16

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19	Interaction force and residual stress models for volume-averaged momentum equation for flow laden with particles of comparable diameter to computational grid width. International Journal of Multiphase Flow, 2016, 85, 298-313.	3.4	10
20	Wake Structures of a Particle in Straight and Curved Flows. Springer Proceedings in Physics, 2016, , 189-194.	0.2	1
21	A consistent direct discretization scheme on Cartesian grids for convective and conjugate heat transfer. Journal of Computational Physics, 2016, 321, 76-104.	3.8	28
22	Interaction between fluid and flexible membrane structures by a new fixed-grid direct forcing method. AIP Conference Proceedings, 2015, , .	0.4	1
23	Numerical study of heat transfer problems in two-phase flows involving temperature distribution within dispersed solid particles. AIP Conference Proceedings, 2015, , .	0.4	0
24	A numerical method for mass transfer by a thin moving membrane with selective permeabilities. Journal of Computational Physics, 2015, 284, 490-504.	3.8	12
25	HEAT TRANSFER IN NATURAL CONVECTION WITH FINITE-SIZED PARTICLES CONSIDERING THERMAL CONDUCTANCE DUE TO INTER-PARTICLE CONTACTS. Computational Thermal Sciences, 2015, 7, 385-404.	0.9	11
26	ROLE OF VORTICAL STRUCTURES ON THE FORCED CONVECTIVE HEAT TRANSFER IN OSCILLATION-CONTROLLED COAXIAL-PIPE HEAT EXCHANGER. Journal of Enhanced Heat Transfer, 2015, 22, 365-389.	1.1	1
27	Numerical Simulation of Heat Transfer in Shear Flow of Liquid-Solid Two-Phase Media by Immersed Solid Approach. , 2015, , .		1
28	Heat Transfer and Particle Behaviours in Dispersed Two-Phase Flow with Different Heat Conductivities for Liquid and Solid. Flow, Turbulence and Combustion, 2014, 92, 103-119.	2.6	13
29	Effects of curvature and vorticity in rotating flows on hydrodynamic forces acting on a sphere. International Journal of Multiphase Flow, 2014, 58, 292-300.	3.4	12
30	1G34 Numerical Simulation for Concentration Diffusion using Finite Element Analysis Considering Jump condition across Thin Membrane with Permeability. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2014, 2014.26, 237-238.	0.0	0
31	Effect of temperature gradient within a solid particle on the rotation and oscillation modes in solid-dispersed two-phase flows. International Journal of Heat and Fluid Flow, 2013, 43, 15-25.	2.4	14
32	A Direct Discretization Approach near Wall Boundaries for Flow with Heat Transfer Using a Cartesian Grid Method. 880-02 Nihon Kikai Gakkai RonbunshÅ« Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2013, 79, 1219-1231.	0.2	1
33	A Direct Discretization Approach near Wall Boundaries for a Cartesian Grid Method (Consideration) Tj ETQq1 1 0.784314 rgBT /Overl Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2013, 79, 605-621.	0.2	4
34	2B20 Numerical study of the interaction between fluid and flexible filaments clamped on elastic walls. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2013, 2013.25, 309-310.	0.0	0
35	An interface capturing method with a continuous function: The THINC method with multi-dimensional reconstruction. Journal of Computational Physics, 2012, 231, 2328-2358.	3.8	124
36	Direct numerical simulation of heat transfer in fluid-particle two-phase flow by coupled immersed-boundary and discrete-element methods. , 2012, , .		0

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37	Numerical Simulation of Unsteady Flow Through a Two-Dimensional Channel With a Vocal Cord Model. , 2011, , .		1
38	Direct Numerical Simulation of Flow Past a Solid Particle: Influence of Streamline Curvature and Particle Non-Sphericity. , 2011, , .		0
39	Direct numerical simulation of multiphase flows involving dispersed components with deformable interfaces. Heat Transfer - Asian Research, 2011, 40, 387-403.	2.8	1
40	A full Eulerian finite difference approach for solving fluidâ€“structure coupling problems. Journal of Computational Physics, 2011, 230, 596-627.	3.8	139
41	A Full Eulerian Finite Difference Method for Hyperelasic Particles in Fluid Flows. , 2011, , .		0
42	Full-Eulerian Finite-Difference Simulation of Fluid Flow in Hyperelastic Wavy Channel. Journal of Fluid Science and Technology, 2010, 5, 475-490.	0.6	16
43	Direct Numerical Simulation of Multiphase Flows(<Special Issue>The Forefront of Multi-Physics) Tj ETQq1 1 0.784314 rgBT /Overlo Engineers Series B B-hen, 2010, 76, 712-719.	0.2	0
44	Full Eulerian simulations of biconcave neo-Hookean particles in a Poiseuille flow. Computational Mechanics, 2010, 46, 147-157.	4.0	52
45	A conservative momentumâ€exchange algorithm for interaction problem between fluid and deformable particles. International Journal for Numerical Methods in Fluids, 2010, 64, 1084-1101.	1.6	29
46	Drag Model for Two-Dimensional String-Type Agglomerate of Micro Particles(Fluids Engineering). 880-02 Nihon Kikai Gakkai RonbunshÅ« Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2010, 76, 203-210.	0.2	0
47	Large Scale Analysis of Multiphase Flow Involving Dispersed Components with Deformable Boundaries by a New Immersed Boundary Technique Coupled with VOF and FEM. , 2010, , .		0
48	Interaction Between Multiple Solid Objects and Bubbles. , 2010, , .		0
49	An Eulerian Approach to Fluid-Structure Coupling Problems Suitable for Voxel-Based Geometry. , 2010, , .		2
50	LARGE-SCALE ANALYSIS OF INTERACTIVE BEHAVIORS OF BUBBLES AND PARTICLES IN A LIQUID BY A COUPLED IMMERSED BOUNDARY AND VOF TECHNIQUE. Multiphase Science and Technology, 2010, 22, 233-246.	0.5	5
51	Immersed-boundary and volume-of-fluid ã‚«ãƒƒãƒ—ãƒªãƒ³ã‚°æ³•ã«ã‚ˆã‚‹ ç²’åã¨æ°—æ³¡ã®è§£æž Japanese	0.8	4
52	Discrete element method simulation of three-dimensional conical-base spouted beds. Powder Technology, 2008, 184, 141-150.	4.2	41
53	Motion of particle agglomerate involving interparticle force in dilute suspension. Powder Technology, 2008, 184, 232-240.	4.2	10
54	Efficient Immersed Boundary Method for Strong Interaction Problem of Arbitrary Shape Object with the Self-Induced Flow. Journal of Fluid Science and Technology, 2007, 2, 1-11.	0.6	69

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55	Immersed Boundary and Finite Element Methods Approach for Interaction of an Elastic Body and Fluid by Two-Stage Correction of Velocity and Pressure. , 2007, , 75.		0
56	Genetic Algorithm Optimisation of Fish Shape and Swim Mode in Fully-Resolved Flow Field. , 2007, , 301-308.		1
57	Study of Solid-Fluid Interaction in Body-Fixed Non-Inertial Frame of Reference. Journal of Fluid Science and Technology, 2006, 1, 1-11.	0.6	8
58	Discrete element study of particle circulation in a 3-D spouted bed. Chemical Engineering Science, 2005, 60, 1267-1276.	3.8	39
59	W02-3-(2) A Simple Immersed-Boundary Method to Deal with Fluid-Solid Interaction(International) Tj ETQq1 1 0.784314 rgBT /Overlock	0.0	0
60	Discrete element simulation of a flat-bottomed spouted bed in the 3-D cylindrical coordinate system. Chemical Engineering Science, 2004, 59, 3495-3504.	3.8	71
61	The role of interstitial gas in the Brazil Nut effect. Granular Matter, 2003, 5, 107-114.	2.2	21
62	Secondary Instability of Round Jets by the Global Instability Analysis.. 880-02 Nihon Kikai Gakkai RonbunshÅ« Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2002, 68, 30-37.	0.2	3
63	Direct Numerical Simulation of Turbulent Round Jet.. 880-02 Nihon Kikai Gakkai RonbunshÅ« Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 1999, 65, 3918-3925.	0.2	3