Zhaosheng Yu

List of Publications by Year
in descending order

54 papers	1,772 citations	304743 22 h-index	265206 42 g-index
54 all docs	54 docs citations	54 times ranked	1067 citing authors

#	Article	IF	Citations
1	A direct-forcing fictitious domain method for particulate flows. Journal of Computational Physics, 2007, 227, 292-314.	3.8	188
2	A DLM/FD method for fluid/flexible-body interactions. Journal of Computational Physics, 2005, 207, 1-27.	3.8	151
3	A fictitious domain method for particulate flows with heat transfer. Journal of Computational Physics, 2006, 217, 424-452.	3.8	140
4	Fully resolved numerical simulation of particle-laden turbulent flow in a horizontal channel at a low Reynolds number. Journal of Fluid Mechanics, 2012, 693, 319-344.	3.4	118
5	Viscoelastic mobility problem of a system of particles. Journal of Non-Newtonian Fluid Mechanics, 2002, 104, 87-124.	2.4	91
6	Inertial migration of spherical particles in circular Poiseuille flow at moderately high Reynolds numbers. Physics of Fluids, 2008, 20, .	4.0	89
7	A fictitious domain method for dynamic simulation of particle sedimentation in Bingham fluids. Journal of Non-Newtonian Fluid Mechanics, 2007, 145, 78-91.	2.4	78
8	Numerical simulation of particle sedimentation in shear-thinning fluids with a fictitious domain method. Journal of Non-Newtonian Fluid Mechanics, 2006, 136, 126-139.	2.4	76
9	Discontinuous Galerkin spectral element lattice Boltzmann method on triangular element. International Journal for Numerical Methods in Fluids, 2003, 42, 1249-1261.	1.6	67
10	Dynamic simulation of sphere motion in a vertical tube. Journal of Fluid Mechanics, 2004, 518, 61-93.	3.4	67
11	Lattice Boltzmann simulation of particle-laden turbulent channel flow. Computers and Fluids, 2016, 124, 226-236.	2.5	65
12	Rotation of a spheroid in a Couette flow at moderate Reynolds numbers. Physical Review E, 2007, 76, 026310.	2.1	62
13	Hydrodynamic performance of a fishlike undulating foil in the wake of a cylinder. Physics of Fluids, 2010, 22, .	4.0	40
14	Equilibrium positions of the elasto-inertial particle migration in rectangular channel flow of Oldroyd-B viscoelastic fluids. Journal of Fluid Mechanics, 2019, 868, 316-340.	3.4	38
15	Numerical studies of the effects of large neutrally buoyant particles on the flow instability and transition to turbulence in pipe flow. Physics of Fluids, 2013, 25, 043305.	4.0	37
16	Flow Modulation by Finite-Size Neutrally Buoyant Particles in a Turbulent Channel Flow. Journal of Fluids Engineering, Transactions of the ASME, 2016, 138, .	1.5	35
17	Modulation of turbulence intensity by heavy finite-size particles in upward channel flow. Journal of Fluid Mechanics, 2021, 913, .	3.4	30
18	Effects of finite-size neutrally buoyant particles on the turbulent flows in a square duct. Physics of Fluids, 2017, 29, .	4.0	25

#	Article	IF	Citations
19	A parallel fictitious domain method for the interface-resolved simulation of particle-laden flows and its application to the turbulent channel flow. Engineering Applications of Computational Fluid Mechanics, 2016, 10, 160-170.	3.1	24
20	Numerical simulations of particle migration in rectangular channel flow of Giesekus viscoelastic fluids. Journal of Non-Newtonian Fluid Mechanics, 2018, 262, 142-148.	2.4	24
21	Effects of particle-fluid density ratio on the interactions between the turbulent channel flow and finite-size particles. Physical Review E, 2017, 96, 033102.	2.1	22
22	Interface-resolved direct numerical simulations of the interactions between spheroidal particles and upward vertical turbulent channel flows. Journal of Fluid Mechanics, 2020, 891, .	3.4	22
23	Direct numerical simulation of particulate flows with a fictitious domain method. International Journal of Multiphase Flow, 2010, 36, 127-134.	3.4	21
24	Interface-resolved direct numerical simulations of the interactions between neutrally buoyant spheroidal particles and turbulent channel flows. Physics of Fluids, 2018, 30, .	4.0	21
25	Effects of the collision model in interface-resolved simulations of particle-laden turbulent channel flows. Physics of Fluids, 2020, 32, .	4.0	19
26	Effects of the particle deformability on the critical separation diameter in the deterministic lateral displacement device. Journal of Fluid Mechanics, 2014, 743, 60-74.	3.4	18
27	On the polydisperse particle migration and formation of chains in a square channel flow of non-Newtonian fluids. Journal of Fluid Mechanics, 2022, 936, .	3.4	17
28	Discrete element methodâ€"computational fluid dynamics analyses of flexible fibre fluidization. Journal of Fluid Mechanics, 2021, 910, .	3.4	16
29	Interface-resolved numerical simulations of particle-laden turbulent flows in a vertical channel filled with Bingham fluids. Journal of Fluid Mechanics, 2020, 883, .	3.4	15
30	CXCR4-dependent macrophage-to-fibroblast signaling contributes to cardiac diastolic dysfunction in heart failure with preserved ejection fraction. International Journal of Biological Sciences, 2022, 18, 1271-1287.	6.4	14
31	Numerical simulations of the motion of ellipsoids in planar Couette flow of Giesekus viscoelastic fluids. Microfluidics and Nanofluidics, 2019, 23, 1.	2.2	13
32	Interface-resolved numerical simulations of particle-laden turbulent channel flows with spanwise rotation. Physics of Fluids, 2020, 32, 013303.	4.0	11
33	Turbulence modulation by finite-size heavy particles in a downward turbulent channel flow. Physics of Fluids, 2021, 33, .	4.0	11
34	Transport of finite-size particles in a turbulent Couette flow: The effect of particle shape and inertia. International Journal of Multiphase Flow, 2018, 107, 168-181.	3.4	10
35	Discrete Element Method Investigation of Binary Granular Flows with Different Particle Shapes. Energies, 2020, 13, 1841.	3.1	9
36	Frictional granular flows of rod and disk mixtures with particle shape distributions. Physics of Fluids, 2021, 33, 093303.	4.0	9

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37	Hydrodynamics of an inertial squirmer and squirmer dumbbell in a tube. Journal of Fluid Mechanics, 2022, 939, .	3.4	9
38	Particle migration in bounded shear flow of Giesekus fluids. Journal of Non-Newtonian Fluid Mechanics, 2020, 276, 104233.	2.4	8
39	Three-dimensional roll-up of a viscoelastic mixing layer. Journal of Fluid Mechanics, 2004, 500, 29-53.	3.4	7
40	Effects of finite-size neutrally buoyant particles on the turbulent channel flow at a Reynolds number of 395. Applied Mathematics and Mechanics (English Edition), 2019, 40, 293-304.	3.6	7
41	Elasto-inertial particle migration in a confined simple shear-flow of Giesekus viscoelastic fluids. Particulate Science and Technology, 2021, 39, 726-737.	2.1	6
42	Dynamic Simulation of Shear-induced Particle Migration in a Two-dimensional Circular Couette Device. Chinese Journal of Chemical Engineering, 2007, 15, 333-338.	3.5	5
43	Migration of spherical particles in a confined shear flow of Giesekus fluid. Rheologica Acta, 2019, 58, 639-646.	2.4	5
44	A fictitious domain method for particulate flows of arbitrary density ratio. Computers and Fluids, 2019, 193, 104293.	2.5	5
45	Drag model from interface-resolved simulations of particle sedimentation in a periodic domain and vertical turbulent channel flows. Journal of Fluid Mechanics, 2022, 944, .	3.4	5
46	Numerical studies on the dynamics of an open triangle in a vertically oscillatory flow. Journal of Fluid Mechanics, 2016, 788, 381-406.	3.4	4
47	Investigation of the interactions between two contact fibers in the fiber suspensions. Journal of Materials Science, 2003, 38, 1499-1505.	3.7	3
48	A fictitious domain method for particulate flows. Journal of Hydrodynamics, 2006, 18, 482-486.	3.2	3
49	Turbulent channel flow of a binary mixture of neutrally buoyant ellipsoidal particles. Physics of Fluids, 2022, 34, .	4.0	3
50	Model of interfacial term in turbulent kinetic energy equation and computation of dissipation rate for particle-laden flows. Physics of Fluids, 2022, 34, .	4.0	3
51	The stress-microstructure relationship in an evolving mixing layer of fiber suspensions. Acta Mechanica Sinica/Lixue Xuebao, 2005, 21, 16-23.	3.4	2
52	Particle trajectory and orientation evolution of ellipsoidal particles in bounded shear flow of Giesekus fluids. Korea Australia Rheology Journal, 2021, 33, 343-355.	1.7	2
53	Lubrication Force Saturation Matters for the Critical Separation Size of the Non-Colloidal Spherical Particle in the Deterministic Lateral Displacement Device. Applied Sciences (Switzerland), 2022, 12, 2733.	2.5	2
54	A fictitious domain method for particulate flows. Journal of Hydrodynamics, 2006, 18, 471-475.	3.2	0