Takeshi Omori

List of Publications by Year
in descending order

21 papers	205 citations	1040056 9 h-index	996975 15 g-index
23 all docs	23 docs citations	23 times ranked	173 citing authors

#	Article	IF	Citations
1	Interpretation of Youngâ€™s equation for a liquid droplet on a flat and smooth solid surface: Mechanical and thermodynamic routes with a simple Lennard-Jones liquid. Journal of Chemical Physics, 2019, 150, 044701.	3.0	35
2	Shear force measurement of the hydrodynamic wall position in molecular dynamics. Journal of Chemical Physics, 2019, 151, 041103.	3.0	24
3	Green-Kubo measurement of liquid-solid friction in finite-size systems. Journal of Chemical Physics, 2019, 151, .	3.0	21
4	Apparent and microscopic dynamic contact angles in confined flows. Physics of Fluids, 2017, 29, 112107.	4.0	18
5	Wilhelmy equation revisited: A lightweight method to measure liquidâ€“vapor, solidâ€“liquid, and solidâ€“vapor interfacial tensions from a single molecular dynamics simulation. Journal of Chemical Physics, 2020, 153, 034701.	3.0	16
6	Extraction of the equilibrium pinning force on a contact line exerted from a wettability boundary of a solid surface through the connection between mechanical and thermodynamic routes. Journal of Chemical Physics, 2019, 151, 154501.	3.0	15
7	Molecular dynamics analysis of the velocity slip of a water and methanol liquid mixture. Physical Review E, 2015, 92, 022402.	2.1	11
8	Molecular dynamics analysis of the friction between a water-methanol liquid mixture and a non-polar solid crystal surface. Journal of Chemical Physics, 2017, 146, 174702.	3.0	10
9	Slip length measurement in rectangular graphene nanochannels with a 3D flow analysis. Carbon, 2022, 189, 162-172.	10.3	10
10	Large effect of lateral box size in molecular dynamics simulations of liquid-solid friction. Physical Review E, 2019, 100, 023101.	2.1	9
11	Full characterization of the hydrodynamic boundary condition at the atomic scale using an oscillating channel: Identification of the viscoelastic interfacial friction and the hydrodynamic boundary position. Physical Review Fluids, 2019, 4, .	2.5	9
12	Extraction of the solid-liquid friction coefficient between a water-methanol liquid mixture and a non-polar solid crystal surface by Green-Kubo equations. Mechanical Engineering Letters, 2017, 3, 17-00422-17-00422.	0.6	8
13	Understanding the asymmetry between advancing and receding microscopic contact angles. Soft Matter, 2019, 15, 3923-3928.	2.7	7
14	Local stress tensor calculation by the method-of-plane in microscopic systems with macroscopic flow: A formulation based on the velocity distribution function. Journal of Chemical Physics, 2021, 155, 184103.	3.0	5
15	Study on the Navier boundary condition for flows with a moving contact line by means of molecular dynamics simulation. Transactions of the JSME (in Japanese), 2015, 81, 15-00409-15-00409.	0.2	3
16	Theoretical framework for the atomistic modeling of frequency-dependent liquid-solid friction. Physical Review Research, 2021, 3, .	3.6	2
17	Numerical study on the aerodynamics of an airfoil moving close to an air-water interface. Transactions of the JSME (in Japanese), 2016, 82, 16-00112-16-00112.	0.2	1
18	Coupled Simulation of Flow and Chemical Reaction with Finite Reaction Rate for Decarburization of Molten Iron using Gas Jet of Carbon Dioxide. ISIJ International, 2022, 62, 38-47.	1.4	1

#	Article	IF	Citations
19	Development of numerical method for two-phase flow on polyhedral meshes (Part 1, Development of) Tj ETQq1 1 0.784314 rgBT /Ov 15-00256-15-00256.	0.2	0
20	Development of numerical method for mass transfer from a buoyant bubble under a high Schmidt number condition. Transactions of the JSME (in Japanese), 2016, 82, 16-00079-16-00079.	0.2	0
21	Quantifying the solidâ€“fluid interfacial tensions depending on the substrate curvature: Youngâ€™s equation holds for wetting around nanoscale cylinder. Journal of Chemical Physics, 2022, 156, 054701.	3.0	0