Yohei Sato

List of Publications by Year
in descending order

34 papers	897 citations	516561 16 h-index	477173 29 g-index
36 all docs	36 docs citations	36 times ranked	585 citing authors

#	ARTICLE	IF	CITATIONS
1	A sharp-interface phase change model for a mass-conservative interface tracking method. Journal of Computational Physics, 2013, 249, 127-161.	1.9	165
2	A depletable micro-layer model for nucleate pool boiling. Journal of Computational Physics, 2015, 300, 20-52.	1.9	113
3	Nucleate pool boiling simulations using the interface tracking method: Boiling regime from discrete bubble to vapor mushroom region. International Journal of Heat and Mass Transfer, 2017, 105, 505-524.	2.5	84
4	Data-driven modeling for boiling heat transfer: Using deep neural networks and high-fidelity simulation results. Applied Thermal Engineering, 2018, 144, 305-320.	3.0	79
5	Pool boiling simulation using an interface tracking method: From nucleate boiling to film boiling regime through critical heat flux. International Journal of Heat and Mass Transfer, 2018, 125, 876-890.	2.5	61
6	Direct numerical simulation of evaporation and condensation with the geometric VOF method and a sharp-interface phase-change model. International Journal of Heat and Mass Transfer, 2021, 173, 121233.	2.5	36
7	A conservative local interface sharpening scheme for the constrained interpolation profile method. International Journal for Numerical Methods in Fluids, 2012, 70, 441-467.	0.9	35
8	Numerical and experimental investigations of human swimming motions. Journal of Sports Sciences, 2016, 34, 1564-1580.	1.0	33
9	A new contact line treatment for a conservative level set method. Journal of Computational Physics, 2012, 231, 3887-3895.	1.9	29
10	Parallelization of an unstructured Navier–Stokes solver using a multi-color ordering method for OpenMP. Computers and Fluids, 2013, 88, 496-509.	1.3	24
11	Computational fluid dynamics simulation of Hyperloop pod predicting laminar–turbulent transition. Railway Engineering Science, 2020, 28, 97-111.	2.7	22
12	Direct numerical simulation of bubble dynamics in subcooled and near-saturated convective nucleate boiling. International Journal of Heat and Fluid Flow, 2015, 51, 16-28.	1.1	21
13	Computational Fluid Dynamic Simulation of Single Bubble Growth under High-Pressure Pool Boiling Conditions. Nuclear Engineering and Technology, 2016, 48, 859-869.	1.1	20
14	On the modelling of the transition between contact-line and microlayer evaporation regimes in nucleate boiling. Journal of Fluid Mechanics, 2021, 916, .	1.4	18
15	Aerodynamic study of a Hyperloop pod equipped with compressor to overcome the Kantrowitz limit. Journal of Wind Engineering and Industrial Aerodynamics, 2021, 218, 104784.	1.7	18
16	Oscillation resonances and anisotropic damping of the motion of acoustically levitated droplets in single-axis acoustic levitators. Applied Physics Letters, 2019, 115, .	1.5	17
17	Comprehensive simulations of boiling with a resolved microlayer: validation and sensitivity study. Journal of Fluid Mechanics, 2022, 933, .	1.4	17
18	Computational Fluid Dynamics Analysis of the Transient Cooling of the Boiling Surface at Bubble Departure. Journal of Heat Transfer, 2017, 139, .	1.2	15

#	Article	IF	Citations
19	A computational fluid dynamics analysis of hydrodynamic force acting on a swimmer's hand in a swimming competition. Journal of Sports Science and Medicine, 2013, 12, 679-89.	0.7	11
20	Influence of surface penetration on measured fluid force on a hand model. Journal of Biomechanics, 2008, 41, 3502-3505.	0.9	10
21	Large eddy simulation of upward co-current annular boiling flow using an interface tracking method. Nuclear Engineering and Design, 2017, 321, 69-81.	0.8	10
22	Influence of buoyancy in a mixed convection liquid metal flow for a horizontal channel configuration. International Journal of Heat and Fluid Flow, 2020, 85, 108630.	1.1	10
23	Acoustic levitation and rotation of thin films and their application for room temperature protein crystallography. Scientific Reports, 2022, 12, 5349.	1.6	9
24	CFD simulation of flows around a swimmer in a prone glide position. Suiei Suichu Undo Kagaku, 2010, 13, 1-9.	0.2	7
25	Piecewise linear interface-capturing volume-of-fluid method in axisymmetric cylindrical coordinates. Journal of Computational Physics, 2021, 436, 110291.	1.9	7
26	Direct numerical simulation of phase change in the presence of non-condensable gases. International Journal of Heat and Mass Transfer, 2020, 151, 119400.	2.5	7
27	COMPUTATIONAL FLUID DYNAMICS SIMULATION OF SINGLE BUBBLE DYNAMICS IN CONVECTIVE BOILING FLOWS. Multiphase Science and Technology, 2013, 25, 287-309.	0.2	7
28	Finite size Lagrangian particle tracking approach to simulate dispersed bubbly flows. Chemical Engineering Science, 2015, 122, 321-335.	1.9	5
29	Nonlinear ship waves and computational fluid dynamics. Proceedings of the Japan Academy Series B: Physical and Biological Sciences, 2014, 90, 278-300.	1.6	4
30	A Three-Dimensional, Immersed Boundary, Finite Volume Method for the Simulation of Incompressible Heat Transfer Flows around Complex Geometries. International Journal of Chemical Engineering, 2017, 2017, 1-14.	1.4	1
31	ANALYSIS OF DYNAMICS OF MICROLAYER FORMATION AND DESTRUCTION IN NUCLEATE BOILING. , 2021, , .		1
32	SHARP-INTERFACE PHASE-CHANGE MODEL WITH THE VOF METHOD. , 2020, , .		1
33	Development of Mass-Conservative Phase-Change Model for Convective Boiling Simulations. , 2013, , .		0
34	Examples of Pool-Boiling Simulations Using an Interface Tracking Method Applied to Nucleate Boiling, Departure from Nucleate Boiling and Film Boiling. , 2018, , 225-263.		0