

Xianmin Xu

List of Publications by Year in descending order

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37
papers

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623734

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38
times ranked

376
citing authors

#	ARTICLE	IF	CITATIONS
1	Effective boundary conditions for dynamic contact angle hysteresis on chemically inhomogeneous surfaces. <i>Journal of Fluid Mechanics</i> , 2022, 935, .	3.4	5
2	A finite element method for Allen-Cahn equation on deforming surface. <i>Computers and Mathematics With Applications</i> , 2021, 90, 148-158.	2.7	9
3	Self-propulsion dynamics of small droplets on general surfaces with curvature gradient. <i>Physics of Fluids</i> , 2021, 33, 082107.	4.0	4
4	An efficient diffusion generated motion method for wetting dynamics. <i>Journal of Computational Physics</i> , 2021, 441, 110476.	3.8	2
5	Theoretical analysis for dynamic contact angle hysteresis on chemically patterned surfaces. <i>Physics of Fluids</i> , 2020, 32, .	4.0	11
6	Debonding waves in gel thin films. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2020, 476, 20200001.	2.1	1
7	Theoretical analysis for flattening of a rising bubble in a Hele-Shaw cell. <i>Physics of Fluids</i> , 2020, 32, 092102.	4.0	3
8	Application of the Onsager-Machlup integral in solving dynamic equations in nonequilibrium systems. <i>Physical Review E</i> , 2019, 99, 063303.	2.1	15
9	An improved threshold dynamics method for wetting dynamics. <i>Journal of Computational Physics</i> , 2019, 392, 291-310.	3.8	15
10	Onset of thin film meniscus along a fibre. <i>Journal of Fluid Mechanics</i> , 2019, 865, 650-680.	3.4	10
11	Analysis for Contact Angle Hysteresis on Rough Surfaces by a Phase-Field Model with a Relaxed Boundary Condition. <i>SIAM Journal on Applied Mathematics</i> , 2019, 79, 2551-2568.	1.8	5
12	Thin film dynamics in coating problems using Onsager principle. <i>Chinese Physics B</i> , 2018, 27, 024501.	1.4	10
13	Sharp-interface limits of a phase-field model with a generalized Navier slip boundary condition for moving contact lines. <i>Journal of Fluid Mechanics</i> , 2018, 849, 805-833.	3.4	45
14	A Stabilized Trace Finite Element Method for Partial Differential Equations on Evolving Surfaces. <i>SIAM Journal on Numerical Analysis</i> , 2018, 56, 1643-1672.	2.3	27
15	An efficient threshold dynamics method for wetting on rough surfaces. <i>Journal of Computational Physics</i> , 2017, 330, 510-528.	3.8	24
16	A Trace Finite Element Method for PDEs on Evolving Surfaces. <i>SIAM Journal of Scientific Computing</i> , 2017, 39, A1301-A1319.	2.8	18
17	Finite element methods for a class of continuum models for immiscible flows with moving contact lines. <i>International Journal for Numerical Methods in Fluids</i> , 2017, 84, 268-291.	1.6	9
18	A dynamic theory for contact angle hysteresis on chemically rough boundary. <i>Discrete and Continuous Dynamical Systems</i> , 2017, 37, 1061-1073.	0.9	5

#	ARTICLE	IF	CITATIONS
19	Theoretical analysis for meniscus rise of a liquid contained between a flexible film and a solid wall. Europhysics Letters, 2016, 113, 36001.	2.0	15
20	Modified Wenzel and Cassie Equations for Wetting on Rough Surfaces. SIAM Journal on Applied Mathematics, 2016, 76, 2353-2374.	1.8	11
21	Variational method for liquids moving on a substrate. Physics of Fluids, 2016, 28, .	4.0	34
22	A numerical study of void coalescence and fracture in nonlinear elasticity. Computer Methods in Applied Mechanics and Engineering, 2016, 303, 163-184.	6.6	17
23	A Multiscale Finite Element Method for Oscillating Neumann Problem on Rough Domain. Multiscale Modeling and Simulation, 2016, 14, 1276-1300.	1.6	6
24	Analysis for wetting on rough surfaces by a three-dimensional phase field model. Discrete and Continuous Dynamical Systems - Series B, 2016, 21, 2839-2850.	0.9	4
25	$\tilde{\Gamma}$ -convergence Approximation of Fracture and Cavitation in Nonlinear Elasticity. Archive for Rational Mechanics and Analysis, 2015, 216, 813-879.	2.4	11
26	Non-Darcy behavior of two-phase channel flow. Physical Review E, 2014, 90, 023010.	2.1	7
27	An Eulerian Space-Time Finite Element Method for Diffusion Problems on Evolving Surfaces. SIAM Journal on Numerical Analysis, 2014, 52, 1354-1377.	2.3	53
28	Analysis of the Cahn-Hilliard Equation with a Relaxation Boundary Condition Modeling the Contact Angle Dynamics. Archive for Rational Mechanics and Analysis, 2014, 213, 1-24.	2.4	21
29	The modified Cassie's equation and contact angle hysteresis. Colloid and Polymer Science, 2013, 291, 299-306.	2.1	35
30	Effective contact angle for rough boundary. Physica D: Nonlinear Phenomena, 2013, 242, 54-64.	2.8	13
31	On surface meshes induced by level set functions. Computing and Visualization in Science, 2012, 15, 53-60.	1.2	8
32	Analysis of Wetting and Contact Angle Hysteresis on Chemically Patterned Surfaces. SIAM Journal on Applied Mathematics, 2011, 71, 1753-1779.	1.8	39
33	AN EFFICIENT NUMERICAL METHOD FOR CAVITATION IN NONLINEAR ELASTICITY. Mathematical Models and Methods in Applied Sciences, 2011, 21, 1733-1760.	3.3	33
34	Derivation of the Wenzel and Cassie Equations from a Phase Field Model for Two Phase Flow on Rough Surface. SIAM Journal on Applied Mathematics, 2010, 70, 2929-2941.	1.8	37
35	A Posteriori Error Estimates of a Non-Conforming Finite Element Method for Problems with Artificial Boundary Conditions. Journal of Computational Mathematics, 2009, 27, 677-696.	0.4	0
36	Convergence and stability of a numerical method for micromagnetics. Numerische Mathematik, 2009, 112, 245-265.	1.9	0

#	ARTICLE	IF	CITATIONS
37	Non-conforming finite element and artificial boundary in multi-atomic Young measure approximation for micromagnetics. Applied Numerical Mathematics, 2009, 59, 920-937.	2.1	2