

# Xianmin Xu

## List of Publications by Year in descending order

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37  
papers

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citations

623734

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642732

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38  
docs citations

38  
times ranked

376  
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	Sharp-interface limits of a phase-field model with a generalized Navier slip boundary condition for moving contact lines. Journal of Fluid Mechanics, 2018, 849, 805-833.	3.4	45
3	Analysis of Wetting and Contact Angle Hysteresis on Chemically Patterned Surfaces. SIAM Journal on Applied Mathematics, 2011, 71, 1753-1779.	1.8	39
4	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
5	The modified Cassie's equation and contact angle hysteresis. Colloid and Polymer Science, 2013, 291, 299-306.	2.1	35
6	Variational method for liquids moving on a substrate. Physics of Fluids, 2016, 28, .	4.0	34
7	AN EFFICIENT NUMERICAL METHOD FOR CAVITATION IN NONLINEAR ELASTICITY. Mathematical Models and Methods in Applied Sciences, 2011, 21, 1733-1760.	3.3	33
8	A Stabilized Trace Finite Element Method for Partial Differential Equations on Evolving Surfaces. SIAM Journal on Numerical Analysis, 2018, 56, 1643-1672.	2.3	27
9	An efficient threshold dynamics method for wetting on rough surfaces. Journal of Computational Physics, 2017, 330, 510-528.	3.8	24
10	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
11	A Trace Finite Element Method for PDEs on Evolving Surfaces. SIAM Journal of Scientific Computing, 2017, 39, A1301-A1319.	2.8	18
12	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
13	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
14	Application of the Onsager-Machlup integral in solving dynamic equations in nonequilibrium systems. Physical Review E, 2019, 99, 063303.	2.1	15
15	An improved threshold dynamics method for wetting dynamics. Journal of Computational Physics, 2019, 392, 291-310.	3.8	15
16	Effective contact angle for rough boundary. Physica D: Nonlinear Phenomena, 2013, 242, 54-64.	2.8	13
17	$\hat{\Gamma}$ -convergence Approximation of Fracture and Cavitation in Nonlinear Elasticity. Archive for Rational Mechanics and Analysis, 2015, 216, 813-879.	2.4	11
18	Modified Wenzel and Cassie Equations for Wetting on Rough Surfaces. SIAM Journal on Applied Mathematics, 2016, 76, 2353-2374.	1.8	11

#	ARTICLE	IF	CITATIONS
19	Theoretical analysis for dynamic contact angle hysteresis on chemically patterned surfaces. <i>Physics of Fluids</i> , 2020, 32, .	4.0	11
20	Thin film dynamics in coating problems using Onsager principle. <i>Chinese Physics B</i> , 2018, 27, 024501.	1.4	10
21	Onset of thin film meniscus along a fibre. <i>Journal of Fluid Mechanics</i> , 2019, 865, 650-680.	3.4	10
22	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
23	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
24	On surface meshes induced by level set functions. <i>Computing and Visualization in Science</i> , 2012, 15, 53-60.	1.2	8
25	Non-Darcy behavior of two-phase channel flow. <i>Physical Review E</i> , 2014, 90, 023010.	2.1	7
26	A Multiscale Finite Element Method for Oscillating Neumann Problem on Rough Domain. <i>Multiscale Modeling and Simulation</i> , 2016, 14, 1276-1300.	1.6	6
27	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
28	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
29	Effective boundary conditions for dynamic contact angle hysteresis on chemically inhomogeneous surfaces. <i>Journal of Fluid Mechanics</i> , 2022, 935, .	3.4	5
30	Self-propulsion dynamics of small droplets on general surfaces with curvature gradient. <i>Physics of Fluids</i> , 2021, 33, 082107.	4.0	4
31	Analysis for wetting on rough surfaces by a three-dimensional phase field model. <i>Discrete and Continuous Dynamical Systems - Series B</i> , 2016, 21, 2839-2850.	0.9	4
32	Theoretical analysis for flattening of a rising bubble in a Hele-Shaw cell. <i>Physics of Fluids</i> , 2020, 32, 092102.	4.0	3
33	Non-conforming finite element and artificial boundary in multi-atomic Young measure approximation for micromagnetics. <i>Applied Numerical Mathematics</i> , 2009, 59, 920-937.	2.1	2
34	An efficient diffusion generated motion method for wetting dynamics. <i>Journal of Computational Physics</i> , 2021, 441, 110476.	3.8	2
35	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
36	A Posteriori Error Estimates of a Non-Conforming Finite Element Method for Problems with Artificial Boundary Conditions. <i>Journal of Computational Mathematics</i> , 2009, 27, 677-696.	0.4	0

#	ARTICLE	IF	CITATIONS
37	Convergence and stability of a numerical method for micromagnetics. Numerische Mathematik, 2009, 112, 245-265.	1.9	0