Yibao li

List of Publications by Year in Descending Order

168 papers	3,258 citations	30 h-index	51 g-index
179 ext. papers	4,105 ext. citations	3.1 avg, IF	6.28 L-index

#	Paper	IF	Citations
168	An unconditionally stable splitting method for the Allen–Cahn equation with logarithmic free energy. *Journal of Engineering Mathematics*, **2022**, 132, 1	1.2	0
167	Benchmark Problems for the Numerical Schemes of the Phase-Field Equations. *Discrete Dynamics in Nature and Society*, **2022**, 2022, 1-10	1.1	1
166	A simple and explicit numerical method for the phase-field model for diblock copolymer melts. *Computational Materials Science*, **2022**, 205, 111192	3.2	0
165	An explicit conservative Saul'ev scheme for the Cahn–Hilliard equation. *International Journal of Mechanical Sciences*, **2022**, 217, 106985	5.5	1
164	Linear and fully decoupled scheme for a hydrodynamics coupled phase-field surfactant system based on a multiple auxiliary variables approach. *Journal of Computational Physics*, **2022**, 452, 110909	4.1	0
163	A robust and efficient fingerprint image restoration method based on a phase-field model. *Pattern Recognition*, **2022**, 123, 108405	7.7	3
162	First- and second-order unconditionally stable direct discretization methods for multi-component Cahn–Hilliard system on surfaces. *Journal of Computational and Applied Mathematics*, **2022**, 401, 113778	2.4	2
161	Original variables based energy-stable time-dependent auxiliary variable method for the incompressible Navier–Stokes equation. *Computers and Fluids*, **2022**, 240, 105432	2.8	0
160	Three-dimensional volume reconstruction from multi-slice data using a shape transformation. *Computers and Mathematics With Applications*, **2022**, 113, 52-58	2.7	1
159	Unconditionally energy stable schemes for fluid-based topology optimization. *Communications in Nonlinear Science and Numerical Simulation*, **2022**, 111, 106433	3.7	1
158	Numerical simulation and analysis of the Swift–Hohenberg equation by the stabilized Lagrange multiplier approach. *Computational and Applied Mathematics*, **2022**, 41, 1	2.4	0
157	Fast and Efficient Numerical Finite Difference Method for Multiphase Image Segmentation. *Mathematical Problems in Engineering*, **2021**, 2021, 1-23	1.1	1
156	A conservative Allen–Cahn equation with a curvature-dependent Lagrange multiplier. *Applied Mathematics Letters*, **2021**, 107838	3.5	1
155	High-order time-accurate, efficient, and structure-preserving numerical methods for the conservative Swift–Hohenberg model. *Computers and Mathematics With Applications*, **2021**, 102, 160-174	2.7	0
154	A Simple Benchmark Problem for the Numerical Methods of the Cahn–Hilliard Equation. *Discrete Dynamics in Nature and Society*, **2021**, 2021, 1-8	1.1	1
153	A variant of stabilized-scalar auxiliary variable (S-SAV) approach for a modified phase-field surfactant model. *Computer Physics Communications*, **2021**, 261, 107825	4.2	9
152	A fast and practical adaptive finite difference method for the conservative Allen–Cahn model in two-phase flow system. *International Journal of Multiphase Flow*, **2021**, 137, 103561	3.6	6

151	Linear, Second-Order Accurate, and Energy Stable Scheme for a Ternary Cahn–Hilliard Model by Using Lagrange Multiplier Approach. *Acta Applicandae Mathematicae*, **2021**, 172, 1	1.1	3
150	Efficient second-order unconditionally stable numerical schemes for the modified phase field crystal model with long-range interaction. *Journal of Computational and Applied Mathematics*, **2021**, 389, 113335	2.4	5
149	Linear and energy stable schemes for the Swift–Hohenberg equation with quadratic-cubic nonlinearity based on a modified scalar auxiliary variable approach. *Journal of Engineering Mathematics*, **2021**, 128, 1	1.2	0
148	Simple and efficient volume merging method for triply periodic minimal structures. *Computer Physics Communications*, **2021**, 264, 107956	4.2	6
147	Side wall boundary effect on the Rayleigh–Taylor instability. *European Journal of Mechanics, B/Fluids*, **2021**, 85, 361-374	2.4	5
146	Modeling and simulation of droplet evaporation using a modified Cahn–Hilliard equation. *Applied Mathematics and Computation*, **2021**, 390, 125591	2.7	3
145	An improved scalar auxiliary variable (SAV) approach for the phase-field surfactant model. *Applied Mathematical Modelling*, **2021**, 90, 11-29	4.5	9
144	Automatic Binary Data Classification Using a Modified Allen–Cahn Equation. *International Journal of Pattern Recognition and Artificial Intelligence*, **2021**, 35, 2150013	1.1	0
143	An unconditionally stable scheme for the Allen–Cahn equation with high-order polynomial free energy. *Communications in Nonlinear Science and Numerical Simulation*, **2021**, 95, 105658	3.7	4
142	A stable second-order BDF scheme for the three-dimensional Cahn–Hilliard–Hele–Shaw system. *Advances in Computational Mathematics*, **2021**, 47, 1	1.6	2
141	A practical adaptive grid method for the Allen–Cahn equation. *Physica A: Statistical Mechanics and Its Applications*, **2021**, 573, 125975	3.3	1
140	The stabilized-trigonometric scalar auxiliary variable approach for gradient flows and its efficient schemes. *Journal of Engineering Mathematics*, **2021**, 129, 1	1.2	3
139	Numerical simulations of the dynamics of axisymmetric compound liquid threads with a phase-field model. *European Journal of Mechanics, B/Fluids*, **2021**, 89, 203-216	2.4	1
138	First and second order unconditionally energy stable schemes for topology optimization based on phase field method. *Applied Mathematics and Computation*, **2021**, 405, 126267	2.7	1
137	Unconditionally energy stable second-order numerical scheme for the Allen–Cahn equation with a high-order polynomial free energy. *Advances in Difference Equations*, **2021**, 2021,	3.6	1
136	Reduction in vacuum phenomenon for the triple junction in the ternary Cahn–Hilliard model. *Acta Mechanica*, **2021**, 232, 4485	2.1	0
135	Numerical study of incompressible binary fluids on 3D curved surfaces based on the conservative Allen–Cahn–Navier–Stokes model. *Computers and Fluids*, **2021**, 228, 105094	2.8	1
134	A second-order accurate, unconditionally energy stable numerical scheme for binary fluid flows on arbitrarily curved surfaces. *Computer Methods in Applied Mechanics and Engineering*, **2021**, 384, 113987	5.7	3

133	Numerical study of the ternary Cahn–Hilliard fluids by using an efficient modified scalar auxiliary variable approach. *Communications in Nonlinear Science and Numerical Simulation*, **2021**, 102, 105923	3.7	3
132	An unconditionally energy-stable second-order time-accurate numerical scheme for the coupled Cahn–Hilliard system in copolymer/homopolymer mixtures. *Computational Materials Science*, **2021**, 200, 110809	3.2	2
131	Benchmark Problems for the Numerical Discretization of the Cahn–Hilliard Equation with a Source Term. *Discrete Dynamics in Nature and Society*, **2021**, 2021, 1-11	1.1	
130	Periodic travelling wave solutions for a reaction-diffusion system on landscape fitted domains. *Chaos, Solitons and Fractals*, **2020**, 139, 110300	9.3	0
129	Pattern formation in reaction–diffusion systems on evolving surfaces. *Computers and Mathematics With Applications*, **2020**, 80, 2019-2028	2.7	3
128	Shape transformation using the modified Allen–Cahn equation. *Applied Mathematics Letters*, **2020**, 107, 106487	3.5	2
127	An efficient volume repairing method by using a modified Allen-Cahn equation. *Pattern Recognition* , **2020**, 107, 107478	7.7	6
126	The Navier–Stokes–Cahn–Hilliard model with a high-order polynomial free energy. *Acta Mechanica*, **2020**, 231, 2425-2437	2.1	2
125	Porous Three-Dimensional Scaffold Generation for 3D Printing. *Mathematics*, **2020**, 8, 946	2.3	2
124	A practical finite difference scheme for the Navier–Stokes equation on curved surfaces in$\mathbb{R}3$. *Journal of Computational Physics*, **2020**, 411, 109403	4.1	3
123	A second order unconditionally stable scheme for the modified phase field crystal model with elastic interaction and stochastic noise effect. *Computer Methods in Applied Mechanics and Engineering*, **2020**, 363, 112795	5.7	13
122	An unconditionally stable second-order accurate method for systems of Cahn–Hilliard equations. *Communications in Nonlinear Science and Numerical Simulation*, **2020**, 87, 105276	3.7	15
121	Nonlinear Multigrid Implementation for the Two-Dimensional Cahn–Hilliard Equation. *Mathematics*, **2020**, 8, 97	2.3	2
120	A Conservative Numerical Method for the Cahn–Hilliard Equation with Generalized Mobilities on Curved Surfaces in Three-Dimensional Space. *Communications in Computational Physics*, **2020**, 27, 412-430	2.4	4
119	Fast and Accurate Smoothing Method Using A Modified Allen–Cahn Equation. *CAD Computer Aided Design*, **2020**, 120, 102804	2.9	3
118	Pinning boundary conditions for phase-field models. *Communications in Nonlinear Science and Numerical Simulation*, **2020**, 82, 105060	3.7	3
117	Conservative Allen–Cahn equation with a nonstandard variable mobility. *Acta Mechanica*, **2020**, 231, 561-576	2.1	3
116	A phase-field model and its efficient numerical method for two-phase flows on arbitrarily curved surfaces in 3D space. *Computer Methods in Applied Mechanics and Engineering*, **2020**, 372, 113382	5.7	7

115	An efficient nonlinear polynomial color characterization method based on interrelations of color spaces. *Color Research and Application*, **2020**, 45, 1023-1039	1.3	1
114	A novel Cahn–Hilliard–Navier–Stokes model with a nonstandard variable mobility for two-phase incompressible fluid flow. *Computers and Fluids*, **2020**, 213, 104755	2.8	3
113	Second-Order Unconditionally Stable Direct Methods for Allen–Cahn and Conservative Allen–Cahn Equations on Surfaces. *Mathematics*, **2020**, 8, 1486	2.3	1
112	Phase-field modeling and computer simulation of the coffee-ring effect. *Theoretical and Computational Fluid Dynamics*, **2020**, 34, 679-692	2.3	4
111	The susceptible-unidentified infected-confirmed (SUC) epidemic model for estimating unidentified infected population for COVID-19. *Chaos, Solitons and Fractals*, **2020**, 139, 110090	9.3	15
110	An Accurate and Practical Explicit Hybrid Method for the Chan–Vese Image Segmentation Model. *Mathematics*, **2020**, 8, 1173	2.3	2
109	Numerical Simulation of Dendritic Pattern Formation in an Isotropic Crystal Growth Model on Curved Surfaces. *Symmetry*, **2020**, 12, 1155	2.7	1
108	An Explicit Hybrid Method for the Nonlocal Allen–Cahn Equation. *Symmetry*, **2020**, 12, 1218	2.7	1
107	A phase-field method for two-phase fluid flow in arbitrary domains. *Computers and Mathematics With Applications*, **2020**, 79, 1857-1874	2.7	3
106	Enhanced neuronal activity in mouse motor cortex with microbubbles' oscillations by transcranial focused ultrasound stimulation. *Ultrasonics Sonochemistry*, **2019**, 59, 104745	8.9	14
105	Multicomponent volume reconstruction from slice data using a modified multicomponent Cahn–Hilliard system. *Pattern Recognition*, **2019**, 93, 124-133	7.7	10
104	A fractional step lattice Boltzmann model for two-phase flow with large density differences. *International Journal of Heat and Mass Transfer*, **2019**, 138, 1128-1141	4.9	13
103	Numerical simulation of Swift–Hohenberg equation by the fourth-order compact scheme. *Computational and Applied Mathematics*, **2019**, 38, 1	2.4	7
102	Verification of Convergence Rates of Numerical Solutions for Parabolic Equations. *Mathematical Problems in Engineering*, **2019**, 2019, 1-10	1.1	1
101	Mathematical Model and Numerical Simulation for Tissue Growth on Bioscaffolds. *Applied Sciences (Switzerland)*, **2019**, 9, 4058	2.6	8
100	A conservative finite difference scheme for the N-component Cahn–Hilliard system on curved surfaces in 3D. *Journal of Engineering Mathematics*, **2019**, 119, 149-166	1.2	4
99	Efficient numerical schemes with unconditional energy stabilities for the modified phase field crystal equation. *Advances in Computational Mathematics*, **2019**, 45, 1551-1580	1.6	22
98	A practical and efficient numerical method for the Cahn–Hilliard equation in complex domains. *Communications in Nonlinear Science and Numerical Simulation*, **2019**, 73, 217-228	3.7	10

97	Mathematical modeling and computer simulation of the three-dimensional pattern formation of honeycombs. *Scientific Reports*, **2019**, 9, 20364	4.9	2
96	An unconditional stable compact fourth-order finite difference scheme for three dimensional Allen□Cahn equation. *Computers and Mathematics With Applications*, **2019**, 77, 1042-1054	2.7	8
95	Comparison study on the different dynamics between the Allen□Cahn and the Cahn□Hilliard equations. *Computers and Mathematics With Applications*, **2019**, 77, 311-322	2.7	6
94	Fast and accurate adaptive finite difference method for dendritic growth. *Computer Physics Communications*, **2019**, 236, 95-103	4.2	5
93	An efficient linear second order unconditionally stable direct discretization method for the phase-field crystal equation on surfaces. *Applied Mathematical Modelling*, **2019**, 67, 477-490	4.5	15
92	Surface reconstruction from unorganized points with l0 gradient minimization. *Computer Vision and Image Understanding*, **2018**, 169, 108-118	4.3	6
91	A benchmark problem for the two- and three-dimensional Cahn□Hilliard equations. *Communications in Nonlinear Science and Numerical Simulation*, **2018**, 61, 149-159	3.7	10
90	An explicit hybrid finite difference scheme for the Allen□Cahn equation. *Journal of Computational and Applied Mathematics*, **2018**, 340, 247-255	2.4	21
89	A Projection Method for the Conservative Discretizations of Parabolic Partial Differential Equations. *Journal of Scientific Computing*, **2018**, 75, 332-349	2.3	
88	Direct Discretization Method for the Cahn□Hilliard Equation on an Evolving Surface. *Journal of Scientific Computing*, **2018**, 77, 1147-1163	2.3	10
87	Efficient 3D Volume Reconstruction from a Point Cloud Using a Phase-Field Method. *Mathematical Problems in Engineering*, **2018**, 2018, 1-9	1.1	3
86	A finite difference method for a conservative Allen□Cahn equation on non-flat surfaces. *Journal of Computational Physics*, **2017**, 334, 170-181	4.1	16
85	Numerical simulation of the zebra pattern formation on a three-dimensional model. *Physica A: Statistical Mechanics and Its Applications*, **2017**, 475, 106-116	3.3	11
84	Phase-field model and its splitting numerical scheme for tissue growth. *Applied Numerical Mathematics*, **2017**, 117, 22-35	2.5	5
83	Computationally efficient adaptive time step method for the Cahn□Hilliard equation. *Computers and Mathematics With Applications*, **2017**, 73, 1855-1864	2.7	23
82	An efficient and stable compact fourth-order finite difference scheme for the phase field crystal equation. *Computer Methods in Applied Mechanics and Engineering*, **2017**, 319, 194-216	5.7	29
81	Phase-field simulations of crystal growth in a two-dimensional cavity flow. *Computer Physics Communications*, **2017**, 216, 84-94	4.2	11
80	A simple and efficient outflow boundary condition for the incompressible Navier□Stokes equations. *Engineering Applications of Computational Fluid Mechanics*, **2017**, 11, 69-85	4.5	5

79	A new conservative vector-valued Allen–Cahn equation and its fast numerical method. *Computer Physics Communications*, **2017**, 221, 102-108	4.2	12
78	Curve and Surface Smoothing Using a Modified Cahn-Hilliard Equation. *Mathematical Problems in Engineering*, **2017**, 2017, 1-9	1.1	6
77	Conservative Allen–Cahn–Navier–Stokes system for incompressible two-phase fluid flows. *Computers and Fluids*, **2017**, 156, 239-246	2.8	41
76	An unconditionally energy-stable second-order time-accurate scheme for the Cahn–Hilliard equation on surfaces. *Communications in Nonlinear Science and Numerical Simulation*, **2017**, 53, 213-227	3.7	32
75	Triply periodic minimal surface using a modified Allen–Cahn equation. *Applied Mathematics and Computation*, **2017**, 295, 84-94	2.7	11
74	A multigrid solution for the Cahn–Hilliard equation on nonuniform grids. *Applied Mathematics and Computation*, **2017**, 293, 320-333	2.7	4
73	Comparison study of the conservative Allen–Cahn and the Cahn–Hilliard equations. *Mathematics and Computers in Simulation*, **2016**, 119, 35-56	3.3	26
72	A phase-field fluid modeling and computation with interfacial profile correction term. *Communications in Nonlinear Science and Numerical Simulation*, **2016**, 30, 84-100	3.7	35
71	A compact fourth-order finite difference scheme for the three-dimensional Cahn–Hilliard equation. *Computer Physics Communications*, **2016**, 200, 108-116	4.2	38
70	Three-dimensional simulations of the cell growth and cytokinesis using the immersed boundary method. *Mathematical Biosciences*, **2016**, 271, 118-27	3.9	6
69	Time-fractional Schamel–KdV equation for dust-ion-acoustic waves in pair-ion plasma with trapped electrons and opposite polarity dust grains. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2016**, 380, 1031-1036	2.3	11
68	A practical numerical scheme for the ternary Cahn–Hilliard system with a logarithmic free energy. *Physica A: Statistical Mechanics and Its Applications*, **2016**, 442, 510-522	3.3	6
67	An Immersed Boundary Method for a Contractile Elastic Ring in a Three-Dimensional Newtonian Fluid. *Journal of Scientific Computing*, **2016**, 67, 909-925	2.3	4
66	Comparison study of numerical methods for solving the Allen–Cahn equation. *Computational Materials Science*, **2016**, 111, 131-136	3.2	17
65	Basic Principles and Practical Applications of the Cahn–Hilliard Equation. *Mathematical Problems in Engineering*, **2016**, 2016, 1-11	1.1	30
64	A simple and efficient finite difference method for the phase-field crystal equation on curved surfaces. *Computer Methods in Applied Mechanics and Engineering*, **2016**, 307, 32-43	5.7	20
63	Effect of surface conditions on blast wave propagation. *Journal of Mechanical Science and Technology*, **2016**, 30, 3907-3915	1.6	2
62	Multi-component Cahn–Hilliard system with different boundary conditions in complex domains. *Journal of Computational Physics*, **2016**, 323, 1-16	4.1	24

61	Three-dimensional volume reconstruction from slice data using phase-field models. *Computer Vision and Image Understanding*, **2015**, 137, 115-124	4.3	26
60	Numerical investigation of falling bacterial plumes caused by bioconvection in a three-dimensional chamber. *European Journal of Mechanics, B/Fluids*, **2015**, 52, 120-130	2.4	26
59	Motion by mean curvature of curves on surfaces using the Allen□Cahn equation. *International Journal of Engineering Science*, **2015**, 97, 126-132	5.7	16
58	Fast and efficient narrow volume reconstruction from scattered data. *Pattern Recognition*, **2015**, 48, 4057-4069	7.7	14
57	Two-dimensional Kelvin□Helmholtz instabilities of multi-component fluids. *European Journal of Mechanics, B/Fluids*, **2015**, 49, 77-88	2.4	56
56	Microphase separation patterns in diblock copolymers on curved surfaces using a nonlocal Cahn-Hilliard equation. *European Physical Journal E*, **2015**, 38, 117	1.5	20
55	Energy-minimizing wavelengths of equilibrium states for diblock copolymers in the hex-cylinder phase. *Current Applied Physics*, **2015**, 15, 799-804	2.6	8
54	Numerical Study of Periodic Traveling Wave Solutions for the Predator□Prey Model with Landscape Features. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2015**, 25, 1550117	2	2
53	A hybrid numerical method for the phase-field model of fluid vesicles in three-dimensional space. *International Journal for Numerical Methods in Fluids*, **2015**, 78, 63-75	1.9	1
52	Fast local image inpainting based on the Allen□Cahn model **2015**, 37, 65-74		35
51	An efficient numerical method for simulating multiphase flows using a diffuse interface model. *Physica A: Statistical Mechanics and Its Applications*, **2015**, 423, 33-50	3.3	24
50	A new phase-field model for a water□oil-surfactant system. *Applied Mathematics and Computation*, **2014**, 229, 422-432	2.7	19
49	A conservative Allen□Cahn equation with a space□time dependent Lagrange multiplier. *International Journal of Engineering Science*, **2014**, 84, 11-17	5.7	58
48	Numerical analysis of energy-minimizing wavelengths of equilibrium states for diblock copolymers. *Current Applied Physics*, **2014**, 14, 1263-1272	2.6	16
47	A hybrid FEM for solving the Allen□Cahn equation. *Applied Mathematics and Computation*, **2014**, 244, 606-612	2.7	11
46	Dynamics of a compound droplet in shear flow. *International Journal of Heat and Fluid Flow*, **2014**, 50, 63-71	2.4	42
45	An unconditionally stable hybrid method for image segmentation. *Applied Numerical Mathematics*, **2014**, 82, 32-43	2.5	21
44	Surface embedding narrow volume reconstruction from unorganized points. *Computer Vision and Image Understanding*, **2014**, 121, 100-107	4.3	13

43	A fourth-order spatial accurate and practically stable compact scheme for the Cahn–Hilliard equation. *Physica A: Statistical Mechanics and Its Applications*, **2014**, 409, 17-28	3.3	14
42	Level Set, Phase-Field, and Immersed Boundary Methods for Two-Phase Fluid Flows. *Journal of Fluids Engineering, Transactions of the ASME*, **2014**, 136,	2.1	16
41	Physical, mathematical, and numerical derivations of the Cahn–Hilliard equation. *Computational Materials Science*, **2014**, 81, 216-225	3.2	75
40	Adaptive mesh refinement for simulation of thin film flows. *Meccanica*, **2014**, 49, 239-252	2.1	12
39	Three-dimensional volume-conserving immersed boundary model for two-phase fluid flows. *Computer Methods in Applied Mechanics and Engineering*, **2013**, 257, 36-46	5.7	20
38	Effect of confinement on droplet deformation in shear flow. *International Journal of Computational Fluid Dynamics*, **2013**, 27, 317-331	1.2	9
37	A phase-field model for articular cartilage regeneration in degradable scaffolds. *Bulletin of Mathematical Biology*, **2013**, 75, 2389-409	2.1	3
36	Numerical investigations on self-similar solutions of the nonlinear diffusion equation. *European Journal of Mechanics, B/Fluids*, **2013**, 42, 30-36	2.4	1
35	A parallel multigrid method of the Cahn–Hilliard equation. *Computational Materials Science*, **2013**, 71, 89-96	3.2	13
34	Buoyancy-driven mixing of multi-component fluids in two-dimensional tilted channels. *European Journal of Mechanics, B/Fluids*, **2013**, 42, 37-46	2.4	11
33	A conservative numerical method for the Cahn–Hilliard equation with Dirichlet boundary conditions in complex domains. *Computers and Mathematics With Applications*, **2013**, 65, 102-115	2.7	32
32	A practically unconditionally gradient stable scheme for the N-component Cahn–Hilliard system. *Physica A: Statistical Mechanics and Its Applications*, **2012**, 391, 1009-1019	3.3	39
31	Phase-field simulations of crystal growth with adaptive mesh refinement. *International Journal of Heat and Mass Transfer*, **2012**, 55, 7926-7932	4.9	28
30	An efficient and accurate numerical algorithm for the vector-valued Allen–Cahn equations. *Computer Physics Communications*, **2012**, 183, 2107-2115	4.2	17
29	A comparison study of phase-field models for an immiscible binary mixture with surfactant. *European Physical Journal B*, **2012**, 85, 1	1.2	12
28	An unconditionally stable numerical method for bimodal image segmentation. *Applied Mathematics and Computation*, **2012**, 219, 3083-3090	2.7	21
27	An immersed boundary method for simulating a single axisymmetric cell growth and division. *Journal of Mathematical Biology*, **2012**, 65, 653-75	2	14
26	Regularized Dirac delta functions for phase field models. *International Journal for Numerical Methods in Engineering*, **2012**, 91, 269-288	2.4	34

25	Volume preserving immersed boundary methods for two-phase fluid flows. *International Journal for Numerical Methods in Fluids*, **2012**, 69, 842-858	1.9	18
24	A comparison study of the Boussinesq and the variable density models on buoyancy-driven flows. *Journal of Engineering Mathematics*, **2012**, 75, 15-27	1.2	26
23	Phase-Field Models for Multi-Component Fluid Flows. *Communications in Computational Physics*, **2012**, 12, 613-661	2.4	300
22	A conservative numerical method for the Cahn–Hilliard equation in complex domains. *Journal of Computational Physics*, **2011**, 230, 7441-7455	4.1	19
21	On the long time simulation of the Rayleigh–Taylor instability. *International Journal for Numerical Methods in Engineering*, **2011**, 85, 1633-1647	2.4	41
20	Numerical studies of the fingering phenomena for the thin film equation. *International Journal for Numerical Methods in Fluids*, **2011**, 67, 1358-1372	1.9	4
19	Multiphase image segmentation using a phase-field model. *Computers and Mathematics With Applications*, **2011**, 62, 737-745	2.7	60
18	Accurate contact angle boundary conditions for the Cahn–Hilliard equations. *Computers and Fluids*, **2011**, 44, 178-186	2.8	46
17	A fast, robust, and accurate operator splitting method for phase-field simulations of crystal growth. *Journal of Crystal Growth*, **2011**, 321, 176-182	1.6	37
16	A phase-field approach for minimizing the area of triply periodic surfaces with volume constraint. *Computer Physics Communications*, **2010**, 181, 1037-1046	4.2	38
15	An unconditionally stable hybrid numerical method for solving the Allen–Cahn equation. *Computers and Mathematics With Applications*, **2010**, 60, 1591-1606	2.7	75
14	A generalized continuous surface tension force formulation for phase-field models for multi-component immiscible fluid flows. *Computer Methods in Applied Mechanics and Engineering*, **2009**, 198, 3105-3112	5.7	59
13	An unconditionally gradient stable numerical method for solving the Allen–Cahn equation. *Physica A: Statistical Mechanics and Its Applications*, **2009**, 388, 1791-1803	3.3	68
12	A second-order accurate non-linear difference scheme for the N -component Cahn–Hilliard system. *Physica A: Statistical Mechanics and Its Applications*, **2008**, 387, 4787-4799	3.3	36
11	An Unconditionally Gradient Stable Adaptive Mesh Refinement for the Cahn-Hilliard Equation. *Journal of the Korean Physical Society*, **2008**, 53, 672-679	0.6	22
10	Phase field computations for ternary fluid flows. *Computer Methods in Applied Mechanics and Engineering*, **2007**, 196, 4779-4788	5.7	79
9	Solving the regularized, strongly anisotropic Cahn–Hilliard equation by an adaptive nonlinear multigrid method. *Journal of Computational Physics*, **2007**, 226, 414-446	4.1	138
8	A numerical method for the Cahn–Hilliard equation with a variable mobility. *Communications in Nonlinear Science and Numerical Simulation*, **2007**, 12, 1560-1571	3.7	62

7	A continuous surface tension force formulation for diffuse-interface models. *Journal of Computational Physics*, **2005**, 204, 784-804	4.1	175
6	Phase field modeling and simulation of three-phase flows. *Interfaces and Free Boundaries*, **2005**, 435-466	0.7	120
5	AN AUGMENTED PROJECTION METHOD FOR THE INCOMPRESSIBLE NAVIER-STOKES EQUATIONS IN ARBITRARY DOMAINS. *International Journal of Computational Methods*, **2005**, 02, 201-212	1.1	6
4	A HYBRID METHOD FOR HIGHER-ORDER NONLINEAR DIFFUSION EQUATIONS. *Communications of the Korean Mathematical Society*, **2005**, 20, 179-193		2
3	Conservative multigrid methods for Cahn–Hilliard fluids. *Journal of Computational Physics*, **2004**, 193, 511-543	4.1	210
2	Conservative multigrid methods for ternary Cahn-Hilliard systems. *Communications in Mathematical Sciences*, **2004**, 2, 53-77	1	57
1	Energy dissipation–preserving time-dependent auxiliary variable method for the phase-field crystal and the Swift–Hohenberg models. *Numerical Algorithms*,1	2.1	0