

# Junseok Kim

## List of Publications by Year in descending order

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237  
papers

5,443  
citations

94381

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238  
all docs

238  
docs citations

238  
times ranked

2241  
citing authors

#	ARTICLE	IF	CITATIONS
1	Phase-Field Models for Multi-Component Fluid Flows. Communications in Computational Physics, 2012, 12, 613-661.	0.7	390
2	Conservative multigrid methods for Cahn-Hilliard fluids. Journal of Computational Physics, 2004, 193, 511-543.	1.9	248
3	A continuous surface tension force formulation for diffuse-interface models. Journal of Computational Physics, 2005, 204, 784-804.	1.9	221
4	Solving the regularized, strongly anisotropic Cahn-Hilliard equation by an adaptive nonlinear multigrid method. Journal of Computational Physics, 2007, 226, 414-446.	1.9	162
5	Phase field modeling and simulation of three-phase flows. Interfaces and Free Boundaries, 2005, 7, 435-466.	0.2	142
6	Physical, mathematical, and numerical derivations of the Cahn-Hilliard equation. Computational Materials Science, 2014, 81, 216-225.	1.4	113
7	Phase field computations for ternary fluid flows. Computer Methods in Applied Mechanics and Engineering, 2007, 196, 4779-4788.	3.4	112
8	An unconditionally gradient stable numerical method for solving the Allen-Cahn equation. Physica A: Statistical Mechanics and Its Applications, 2009, 388, 1791-1803.	1.2	108
9	Analysis of the impact of COVID-19 on the correlations between crude oil and agricultural futures. Chaos, Solitons and Fractals, 2020, 136, 109896.	2.5	107
10	An unconditionally stable hybrid numerical method for solving the Allen-Cahn equation. Computers and Mathematics With Applications, 2010, 60, 1591-1606.	1.4	106
11	A conservative Allen-Cahn equation with a space-time dependent Lagrange multiplier. International Journal of Engineering Science, 2014, 84, 11-17.	2.7	94
12	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.	3.4	80
13	Two-dimensional Kelvin-Helmholtz instabilities of multi-component fluids. European Journal of Mechanics, B/Fluids, 2015, 49, 77-88.	1.2	79
14	A numerical method for the Cahn-Hilliard equation with a variable mobility. Communications in Nonlinear Science and Numerical Simulation, 2007, 12, 1560-1571.	1.7	77
15	Multiphase image segmentation using a phase-field model. Computers and Mathematics With Applications, 2011, 62, 737-745.	1.4	75
16	Conservative multigrid methods for ternary Cahn-Hilliard systems. Communications in Mathematical Sciences, 2004, 2, 53-77.	0.5	70
17	Conservative Allen-Cahn-Navier-Stokes system for incompressible two-phase fluid flows. Computers and Fluids, 2017, 156, 239-246.	1.3	66
18	Accurate contact angle boundary conditions for the Cahn-Hilliard equations. Computers and Fluids, 2011, 44, 178-186.	1.3	58

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19	Dynamics of a compound droplet in shear flow. International Journal of Heat and Fluid Flow, 2014, 50, 63-71.	1.1	54
20	A phase-field approach for minimizing the area of triply periodic surfaces with volume constraint. Computer Physics Communications, 2010, 181, 1037-1046.	3.0	53
21	A fast, robust, and accurate operator splitting method for phase-field simulations of crystal growth. Journal of Crystal Growth, 2011, 321, 176-182.	0.7	52
22	Numerical investigation of falling bacterial plumes caused by bioconvection in a three-dimensional chamber. European Journal of Mechanics, B/Fluids, 2015, 52, 120-130.	1.2	52
23	Fast local image inpainting based on the Allen-Cahn model. , 2015, 37, 65-74.		51
24	On the long time simulation of the Rayleigh-Taylor instability. International Journal for Numerical Methods in Engineering, 2011, 85, 1633-1647.	1.5	50
25	A phase-field fluid modeling and computation with interfacial profile correction term. Communications in Nonlinear Science and Numerical Simulation, 2016, 30, 84-100.	1.7	50
26	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.	3.4	50
27	Numerical simulation of the three-dimensional Rayleigh-Taylor instability. Computers and Mathematics With Applications, 2013, 66, 1466-1474.	1.4	49
28	A practically unconditionally gradient stable scheme for the $N$ -component Cahn-Hilliard system. Physica A: Statistical Mechanics and Its Applications, 2012, 391, 1009-1019.	1.2	47
29	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.	1.4	46
30	Basic Principles and Practical Applications of the Cahn-Hilliard Equation. Mathematical Problems in Engineering, 2016, 2016, 1-11.	0.6	45
31	Multi-component Cahn-Hilliard system with different boundary conditions in complex domains. Journal of Computational Physics, 2016, 323, 1-16.	1.9	45
32	Comparison study of the conservative Allen-Cahn and the Cahn-Hilliard equations. Mathematics and Computers in Simulation, 2016, 119, 35-56.	2.4	45
33	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.	1.7	45
34	A compact fourth-order finite difference scheme for the three-dimensional Cahn-Hilliard equation. Computer Physics Communications, 2016, 200, 108-116.	3.0	44
35	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.	1.2	43
36	A comparison study of the Boussinesq and the variable density models on buoyancy-driven flows. Journal of Engineering Mathematics, 2012, 75, 15-27.	0.6	42

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37	A diffuse-interface model for axisymmetric immiscible two-phase flow. <i>Applied Mathematics and Computation</i> , 2005, 160, 589-606.	1.4	41
38	Finite Element Analysis of Schwarz P Surface Pore Geometries for Tissue-Engineered Scaffolds. <i>Mathematical Problems in Engineering</i> , 2012, 2012, 1-13.	0.6	40
39	Regularized Dirac delta functions for phase field models. <i>International Journal for Numerical Methods in Engineering</i> , 2012, 91, 269-288.	1.5	40
40	An efficient numerical method for simulating multiphase flows using a diffuse interface model. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2015, 423, 33-50.	1.2	39
41	An explicit hybrid finite difference scheme for the Allen-Cahn equation. <i>Journal of Computational and Applied Mathematics</i> , 2018, 340, 247-255.	1.1	36
42	Phase-field simulations of crystal growth with adaptive mesh refinement. <i>International Journal of Heat and Mass Transfer</i> , 2012, 55, 7926-7932.	2.5	35
43	Computationally efficient adaptive time step method for the Cahn-Hilliard equation. <i>Computers and Mathematics With Applications</i> , 2017, 73, 1855-1864.	1.4	35
44	Three-dimensional volume reconstruction from slice data using phase-field models. <i>Computer Vision and Image Understanding</i> , 2015, 137, 115-124.	3.0	34
45	A simple and efficient finite difference method for the phase-field crystal equation on curved surfaces. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2016, 307, 32-43.	3.4	31
46	An unconditionally stable second-order accurate method for systems of Cahn-Hilliard equations. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2020, 87, 105276.	1.7	31
47	Simple and efficient volume merging method for triply periodic minimal structures. <i>Computer Physics Communications</i> , 2021, 264, 107956.	3.0	31
48	A conservative numerical method for the Cahn-Hilliard equation in complex domains. <i>Journal of Computational Physics</i> , 2011, 230, 7441-7455.	1.9	30
49	A new phase-field model for a water-oil-surfactant system. <i>Applied Mathematics and Computation</i> , 2014, 229, 422-432.	1.4	28
50	An efficient linear second order unconditionally stable direct discretization method for the phase-field crystal equation on surfaces. <i>Applied Mathematical Modelling</i> , 2019, 67, 477-490.	2.2	28
51	Chondroitinase ABC I-Mediated Enhancement of Oncolytic Virus Spread and Anti Tumor Efficacy: A Mathematical Model. <i>PLoS ONE</i> , 2014, 9, e102499.	1.1	28
52	A fourth-order spatial accurate and practically stable compact scheme for the Cahn-Hilliard equation. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2014, 409, 17-28.	1.2	27
53	A finite difference method for a conservative Allen-Cahn equation on non-flat surfaces. <i>Journal of Computational Physics</i> , 2017, 334, 170-181.	1.9	27
54	An unconditionally stable hybrid method for image segmentation. <i>Applied Numerical Mathematics</i> , 2014, 82, 32-43.	1.2	26

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55	A variant of stabilized-scalar auxiliary variable (S-SAV) approach for a modified phase-field surfactant model. <i>Computer Physics Communications</i> , 2021, 261, 107825.	3.0	26
56	A robust and efficient fingerprint image restoration method based on a phase-field model. <i>Pattern Recognition</i> , 2022, 123, 108405.	5.1	26
57	A comparison study of ADI and operator splitting methods on option pricing models. <i>Journal of Computational and Applied Mathematics</i> , 2013, 247, 162-171.	1.1	25
58	Motion by mean curvature of curves on surfaces using the Allen-Cahn equation. <i>International Journal of Engineering Science</i> , 2015, 97, 126-132.	2.7	25
59	Multifractal detrended cross-correlation analysis between respiratory diseases and haze in South Korea. <i>Chaos, Solitons and Fractals</i> , 2020, 135, 109781.	2.5	25
60	An Unconditionally Gradient Stable Adaptive Mesh Refinement for the Cahn-Hilliard Equation. <i>Journal of the Korean Physical Society</i> , 2008, 53, 672-679.	0.3	25
61	Three-dimensional volume-conserving immersed boundary model for two-phase fluid flows. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2013, 257, 36-46.	3.4	24
62	Combining MF-DFA and LSSVM for retina images classification. <i>Biomedical Signal Processing and Control</i> , 2020, 60, 101943.	3.5	24
63	An efficient and accurate numerical algorithm for the vector-valued Allen-Cahn equations. <i>Computer Physics Communications</i> , 2012, 183, 2107-2115.	3.0	23
64	An unconditionally stable numerical method for bimodal image segmentation. <i>Applied Mathematics and Computation</i> , 2012, 219, 3083-3090.	1.4	23
65	Microphase separation patterns in diblock copolymers on curved surfaces using a nonlocal Cahn-Hilliard equation. <i>European Physical Journal E</i> , 2015, 38, 117.	0.7	23
66	A new conservative vector-valued Allen-Cahn equation and its fast numerical method. <i>Computer Physics Communications</i> , 2017, 221, 102-108.	3.0	23
67	Predicting Stock Price Trend Using MACD Optimized by Historical Volatility. <i>Mathematical Problems in Engineering</i> , 2018, 2018, 1-12.	0.6	23
68	Level Set, Phase-Field, and Immersed Boundary Methods for Two-Phase Fluid Flows. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2014, 136, .	0.8	22
69	Comparison study of numerical methods for solving the Allen-Cahn equation. <i>Computational Materials Science</i> , 2016, 111, 131-136.	1.4	22
70	Numerical analysis of energy-minimizing wavelengths of equilibrium states for diblock copolymers. <i>Current Applied Physics</i> , 2014, 14, 1263-1272.	1.1	21
71	Volume preserving immersed boundary methods for two-phase fluid flows. <i>International Journal for Numerical Methods in Fluids</i> , 2012, 69, 842-858.	0.9	20
72	Mean curvature flow by the Allen-Cahn equation. <i>European Journal of Applied Mathematics</i> , 2015, 26, 535-559.	1.4	20

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73	Fast and efficient narrow volume reconstruction from scattered data. <i>Pattern Recognition</i> , 2015, 48, 4057-4069.	5.1	20
74	A phase-field model and its efficient numerical method for two-phase flows on arbitrarily curved surfaces in 3D space. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2020, 372, 113382.	3.4	20
75	The susceptible-unidentified infected-confirmed (SUC) epidemic model for estimating unidentified infected population for COVID-19. <i>Chaos, Solitons and Fractals</i> , 2020, 139, 110090.	2.5	20
76	Fourier-Spectral Method for the Phase-Field Equations. <i>Mathematics</i> , 2020, 8, 1385.	1.1	20
77	Linear and fully decoupled scheme for a hydrodynamics coupled phase-field surfactant system based on a multiple auxiliary variables approach. <i>Journal of Computational Physics</i> , 2022, 452, 110909.	1.9	20
78	A numerical method for the ternary Cahn-Hilliard system with a degenerate mobility. <i>Applied Numerical Mathematics</i> , 2009, 59, 1029-1042.	1.2	19
79	Surface embedding narrow volume reconstruction from unorganized points. <i>Computer Vision and Image Understanding</i> , 2014, 121, 100-107.	3.0	19
80	A practical and efficient numerical method for the Cahn-Hilliard equation in complex domains. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2019, 73, 217-228.	1.7	19
81	A parallel multigrid method of the Cahn-Hilliard equation. <i>Computational Materials Science</i> , 2013, 71, 89-96.	1.4	18
82	Numerical simulation of the zebra pattern formation on a three-dimensional model. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2017, 475, 106-116.	1.2	18
83	Direct Discretization Method for the Cahn-Hilliard Equation on an Evolving Surface. <i>Journal of Scientific Computing</i> , 2018, 77, 1147-1163.	1.1	18
84	Numerical study of the ternary Cahn-Hilliard fluids by using an efficient modified scalar auxiliary variable approach. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2021, 102, 105923.	1.7	18
85	Mathematical model and its fast numerical method for the tumor growth. <i>Mathematical Biosciences and Engineering</i> , 2015, 12, 1173-1187.	1.0	18
86	AN ACCURATE AND EFFICIENT NUMERICAL METHOD FOR BLACK-SCHOLES EQUATIONS. <i>Communications of the Korean Mathematical Society</i> , 2009, 24, 617-628.	0.2	18
87	Phase-field simulations of crystal growth in a two-dimensional cavity flow. <i>Computer Physics Communications</i> , 2017, 216, 84-94.	3.0	17
88	AUTOMATED CLASSIFICATION FOR BRAIN MRIS BASED ON 2D MF-DFA METHOD. <i>Fractals</i> , 2020, 28, 2050109.	1.8	17
89	Buoyancy-driven mixing of multi-component fluids in two-dimensional tilted channels. <i>European Journal of Mechanics, B/Fluids</i> , 2013, 42, 37-46.	1.2	16
90	A hybrid FEM for solving the Allen-Cahn equation. <i>Applied Mathematics and Computation</i> , 2014, 244, 606-612.	1.4	16

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91	A practical finite difference method for the three-dimensional Black-Scholes equation. <i>European Journal of Operational Research</i> , 2016, 252, 183-190.	3.5	16
92	CROSS-CORRELATIONS BETWEEN BACTERIAL FOODBORNE DISEASES AND METEOROLOGICAL FACTORS BASED ON MF-DCCA: A CASE IN SOUTH KOREA. <i>Fractals</i> , 2020, 28, 2050046.	1.8	16
93	An improved scalar auxiliary variable (SAV) approach for the phase-field surfactant model. <i>Applied Mathematical Modelling</i> , 2021, 90, 11-29.	2.2	16
94	Numerical simulations of phase separation dynamics in a water-oil-surfactant system. <i>Journal of Colloid and Interface Science</i> , 2006, 303, 272-279.	5.0	15
95	Adaptive mesh refinement for simulation of thin film flows. <i>Meccanica</i> , 2014, 49, 239-252.	1.2	15
96	An immersed boundary method for simulating a single axisymmetric cell growth and division. <i>Journal of Mathematical Biology</i> , 2012, 65, 653-675.	0.8	14
97	Multicomponent volume reconstruction from slice data using a modified multicomponent Cahn-Hilliard system. <i>Pattern Recognition</i> , 2019, 93, 124-133.	5.1	14
98	Comparison study on the different dynamics between the Allen-Cahn and the Cahn-Hilliard equations. <i>Computers and Mathematics With Applications</i> , 2019, 77, 311-322.	1.4	14
99	Pattern formation in reaction-diffusion systems on evolving surfaces. <i>Computers and Mathematics With Applications</i> , 2020, 80, 2019-2028.	1.4	14
100	Modeling and simulation of the hexagonal pattern formation of honeycombs by the immersed boundary method. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2018, 62, 61-77.	1.7	13
101	A benchmark problem for the two- and three-dimensional Cahn-Hilliard equations. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2018, 61, 149-159.	1.7	13
102	Finite Difference Method for the Black-Scholes Equation Without Boundary Conditions. <i>Computational Economics</i> , 2018, 51, 961-972.	1.5	13
103	Efficient 3D Volume Reconstruction from a Point Cloud Using a Phase-Field Method. <i>Mathematical Problems in Engineering</i> , 2018, 2018, 1-9.	0.6	13
104	An unconditionally stable scheme for the Allen-Cahn equation with high-order polynomial free energy. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2021, 95, 105658.	1.7	13
105	A fast and practical adaptive finite difference method for the conservative Allen-Cahn model in two-phase flow system. <i>International Journal of Multiphase Flow</i> , 2021, 137, 103561.	1.6	13
106	An efficient stabilized multiple auxiliary variables method for the Cahn-Hilliard-Darcy two-phase flow system. <i>Computers and Fluids</i> , 2021, 223, 104948.	1.3	13
107	A Conservative Numerical Method for the Cahn-Hilliard Equation with Generalized Mobilities on Curved Surfaces in Three-Dimensional Space. <i>Communications in Computational Physics</i> , 2020, 27, 412-430.	0.7	13
108	Unconditionally energy stable schemes for fluid-based topology optimization. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2022, 111, 106433.	1.7	13

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109	Surface reconstruction from unorganized points with l0 gradient minimization. Computer Vision and Image Understanding, 2018, 169, 108-118.	3.0	12
110	Reconstruction of the Time-Dependent Volatility Function Using the Black-Scholes Model. Discrete Dynamics in Nature and Society, 2018, 2018, 1-9.	0.5	12
111	A Hybrid Monte Carlo and Finite Difference Method for Option Pricing. Computational Economics, 2019, 53, 111-124.	1.5	12
112	Fast and Accurate Smoothing Method Using A Modified Allen-Cahn Equation. CAD Computer Aided Design, 2020, 120, 102804.	1.4	12
113	Shape transformation using the modified Allen-Cahn equation. Applied Mathematics Letters, 2020, 107, 106487.	1.5	12
114	ECG CLASSIFICATION COMPARISON BETWEEN MF-DFA AND MF-DXA. Fractals, 2021, 29, 2150029.	1.8	12
115	Mathematical model and numerical simulation of the cell growth in scaffolds. Biomechanics and Modeling in Mechanobiology, 2012, 11, 677-688.	1.4	11
116	Effect of confinement on droplet deformation in shear flow. International Journal of Computational Fluid Dynamics, 2013, 27, 317-331.	0.5	11
117	Energy-minimizing wavelengths of equilibrium states for diblock copolymers in the hex-cylinder phase. Current Applied Physics, 2015, 15, 799-804.	1.1	11
118	Phase-field simulation of Rayleigh instability on a fibre. International Journal of Multiphase Flow, 2018, 105, 84-90.	1.6	11
119	Fast and accurate adaptive finite difference method for dendritic growth. Computer Physics Communications, 2019, 236, 95-103.	3.0	11
120	A conservative Allen-Cahn equation with a curvature-dependent Lagrange multiplier. Applied Mathematics Letters, 2022, 126, 107838.	1.5	11
121	AN AUGMENTED PROJECTION METHOD FOR THE INCOMPRESSIBLE NAVIER-STOKES EQUATIONS IN ARBITRARY DOMAINS. International Journal of Computational Methods, 2005, 02, 201-212.	0.8	10
122	A simple and efficient outflow boundary condition for the incompressible Navier-Stokes equations. Engineering Applications of Computational Fluid Mechanics, 2017, 11, 69-85.	1.5	10
123	Mathematical Model and Numerical Simulation for Tissue Growth on Bioscaffolds. Applied Sciences (Switzerland), 2019, 9, 4058.	1.3	10
124	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.	0.5	10
125	Energy dissipation-preserving time-dependent auxiliary variable method for the phase-field crystal and the Swift-Hohenberg models. Numerical Algorithms, 2022, 89, 1865-1894.	1.1	10
126	The stabilized-trigonometric scalar auxiliary variable approach for gradient flows and its efficient schemes. Journal of Engineering Mathematics, 2021, 129, 1.	0.6	10

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127	COMPARISON OF DIFFERENT NUMERICAL SCHEMES FOR THE CAHN-HILLIARD EQUATION. Journal of the Korean Society for Industrial and Applied Mathematics, 2013, 17, 197-207.	0.0	10
128	A Phase-Field Model for the Pinchoff of Liquid-Liquid Jets. Journal of the Korean Physical Society, 2009, 55, 1451-1460.	0.3	10
129	A conservative and stable explicit finite difference scheme for the diffusion equation. Journal of Computational Science, 2021, 56, 101491.	1.5	10
130	Modeling and simulation of multi-component immiscible flows based on a modified Cahn-Hilliard equation. European Journal of Mechanics, B/Fluids, 2022, 95, 194-204.	1.2	10
131	Totally decoupled implicit-explicit linear scheme with corrected energy dissipation law for the phase-field fluid vesicle model. Computer Methods in Applied Mechanics and Engineering, 2022, 399, 115330.	3.4	10
132	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.	1.2	9
133	A phase-field method for two-phase fluid flow in arbitrary domains. Computers and Mathematics With Applications, 2020, 79, 1857-1874.	1.4	9
134	A novel Cahn-Hilliard-Navier-Stokes model with a nonstandard variable mobility for two-phase incompressible fluid flow. Computers and Fluids, 2020, 213, 104755.	1.3	9
135	Controlling COVID-19 Outbreaks with Financial Incentives. International Journal of Environmental Research and Public Health, 2021, 18, 724.	1.2	9
136	A stable second-order BDF scheme for the three-dimensional Cahn-Hilliard-Hele-Shaw system. Advances in Computational Mathematics, 2021, 47, 1.	0.8	9
137	Nonlinear Multigrid Implementation for the Two-Dimensional Cahn-Hilliard Equation. Mathematics, 2020, 8, 97.	1.1	9
138	Effective Time Step Analysis of a Nonlinear Convex Splitting Scheme for the Cahn-Hilliard Equation. Communications in Computational Physics, 2019, 25, .	0.7	9
139	An explicit conservative Saul'yev scheme for the Cahn-Hilliard equation. International Journal of Mechanical Sciences, 2022, 217, 106985.	3.6	9
140	Energy-stable method for the Cahn-Hilliard equation in arbitrary domains. International Journal of Mechanical Sciences, 2022, 228, 107489.	3.6	9
141	An efficient numerical method for evolving microstructures with strong elastic inhomogeneity. Modelling and Simulation in Materials Science and Engineering, 2015, 23, 045007.	0.8	8
142	Three-dimensional simulations of the cell growth and cytokinesis using the immersed boundary method. Mathematical Biosciences, 2016, 271, 118-127.	0.9	8
143	A multigrid solution for the Cahn-Hilliard equation on nonuniform grids. Applied Mathematics and Computation, 2017, 293, 320-333.	1.4	8
144	A practical finite difference scheme for the Navier-Stokes equation on curved surfaces in $\mathbb{R}^3$ . Journal of Computational Physics, 2020, 411, 109403.	1.9	8

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145	Modeling and simulation of droplet evaporation using a modified Cahn-Hilliard equation. Applied Mathematics and Computation, 2021, 390, 125591.	1.4	8
146	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.	1.4	8
147	Phase-field model and its splitting numerical scheme for tissue growth. Applied Numerical Mathematics, 2017, 117, 22-35.	1.2	7
148	Curve and Surface Smoothing Using a Modified Cahn-Hilliard Equation. Mathematical Problems in Engineering, 2017, 2017, 1-9.	0.6	7
149	The Cahn-Hilliard Equation with Generalized Mobilities in Complex Geometries. Mathematical Problems in Engineering, 2019, 2019, 1-10.	0.6	7
150	Numerical Simulation of Dendritic Pattern Formation in an Isotropic Crystal Growth Model on Curved Surfaces. Symmetry, 2020, 12, 1155.	1.1	7
151	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.	1.4	7
152	A Crank-Nicolson scheme for the Landau-Lifshitz equation without damping. Journal of Computational and Applied Mathematics, 2010, 234, 613-623.	1.1	6
153	Accuracy, Robustness, and Efficiency of the Linear Boundary Condition for the Black-Scholes Equations. Discrete Dynamics in Nature and Society, 2015, 2015, 1-10.	0.5	6
154	Comparison of optimization algorithms for modeling of Haldane-type growth kinetics during phenol and benzene degradation. Biochemical Engineering Journal, 2016, 106, 118-124.	1.8	6
155	The daily computed weighted averaging basic reproduction number $R_0$ for MERS-CoV in South Korea. Physica A: Statistical Mechanics and Its Applications, 2016, 451, 190-197.	1.2	6
156	Phase-field modeling and computer simulation of the coffee-ring effect. Theoretical and Computational Fluid Dynamics, 2020, 34, 679-692.	0.9	6
157	The Navier-Stokes-Cahn-Hilliard model with a high-order polynomial free energy. Acta Mechanica, 2020, 231, 2425-2437.	1.1	6
158	Finite Difference Method for the Multi-Asset Black-Scholes Equations. Mathematics, 2020, 8, 391.	1.1	6
159	Side wall boundary effect on the Rayleigh-Taylor instability. European Journal of Mechanics, B/Fluids, 2021, 85, 361-374.	1.2	6
160	Co-movements between Shanghai Composite Index and some fund sectors in China. Physica A: Statistical Mechanics and Its Applications, 2021, 573, 125981.	1.2	6
161	A practical adaptive grid method for the Allen-Cahn equation. Physica A: Statistical Mechanics and Its Applications, 2021, 573, 125975.	1.2	6
162	Robust and accurate construction of the local volatility surface using the Black-Scholes equation. Chaos, Solitons and Fractals, 2021, 150, 111116.	2.5	6

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163	Unconditionally energy stable second-order numerical scheme for the Allen–Cahn equation with a high-order polynomial free energy. <i>Advances in Difference Equations</i> , 2021, 2021, .	3.5	6
164	Numerical study of incompressible binary fluids on 3D curved surfaces based on the conservative Allen–Cahn–Navier–Stokes model. <i>Computers and Fluids</i> , 2021, 228, 105094.	1.3	6
165	ROBUST AND ACCURATE METHOD FOR THE BLACK-SCHOLES EQUATIONS WITH PAYOFF-CONSISTENT EXTRAPOLATION. <i>Communications of the Korean Mathematical Society</i> , 2015, 30, 297-311.	0.2	6
166	Efficient and structure-preserving time-dependent auxiliary variable method for a conservative Allen–Cahn type surfactant system. <i>Engineering With Computers</i> , 2022, 38, 5231-5250.	3.5	6
167	Numerical studies of the fingering phenomena for the thin film equation. <i>International Journal for Numerical Methods in Fluids</i> , 2011, 67, 1358-1372.	0.9	5
168	A Phase-Field Model for Articular Cartilage Regeneration in Degradable Scaffolds. <i>Bulletin of Mathematical Biology</i> , 2013, 75, 2389-2409.	0.9	5
169	An Immersed Boundary Method for a Contractile Elastic Ring in a Three-Dimensional Newtonian Fluid. <i>Journal of Scientific Computing</i> , 2016, 67, 909-925.	1.1	5
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