

Junseok Kim

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

224
papers

3,577
citations

31
h-index

52
g-index

238
ext. papers

4,533
ext. citations

3
avg, IF

6.39
L-index

#	Paper	IF	Citations
224	An unconditionally stable splitting method for the Allen-Cahn equation with logarithmic free energy. <i>Journal of Engineering Mathematics</i> , 2022 , 132, 1	1.2	0
223	Benchmark Problems for the Numerical Schemes of the Phase-Field Equations. <i>Discrete Dynamics in Nature and Society</i> , 2022 , 2022, 1-10	1.1	1
222	Unconditionally stable second-order accurate scheme for a parabolic sine-Gordon equation. <i>AIP Advances</i> , 2022 , 12, 025203	1.5	1
221	A simple and explicit numerical method for the phase-field model for diblock copolymer melts. <i>Computational Materials Science</i> , 2022 , 205, 111192	3.2	0
220	An explicit conservative Saul'yev scheme for the Cahn-Hilliard equation. <i>International Journal of Mechanical Sciences</i> , 2022 , 217, 106985	5.5	1
219	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	4.1	0
218	A robust and efficient fingerprint image restoration method based on a phase-field model. <i>Pattern Recognition</i> , 2022 , 123, 108405	7.7	3
217	Original variables based energy-stable time-dependent auxiliary variable method for the incompressible Navier-Stokes equation. <i>Computers and Fluids</i> , 2022 , 240, 105432	2.8	0
216	Three-dimensional volume reconstruction from multi-slice data using a shape transformation. <i>Computers and Mathematics With Applications</i> , 2022 , 113, 52-58	2.7	1
215	Unconditionally energy stable schemes for fluid-based topology optimization. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2022 , 111, 106433	3.7	1
214	Numerical simulation and analysis of the Swift-Hohenberg equation by the stabilized Lagrange multiplier approach. <i>Computational and Applied Mathematics</i> , 2022 , 41, 1	2.4	0
213	Robust optimal parameter estimation for the susceptible-unidentified infected-confirmed model. <i>Chaos, Solitons and Fractals</i> , 2021 , 153, 111556	9.3	0
212	An Unconditionally Stable Positivity-Preserving Scheme for the One-Dimensional Fisher-Kolmogorov-Petrovsky-Piskunov Equation. <i>Discrete Dynamics in Nature and Society</i> , 2021 , 2021, 1-11	1.1	0
211	A conservative and stable explicit finite difference scheme for the diffusion equation. <i>Journal of Computational Science</i> , 2021 , 56, 101491	3.4	3
210	Fast and Efficient Numerical Finite Difference Method for Multiphase Image Segmentation. <i>Mathematical Problems in Engineering</i> , 2021 , 2021, 1-23	1.1	1
209	A conservative Allen-Cahn equation with a curvature-dependent Lagrange multiplier. <i>Applied Mathematics Letters</i> , 2021 , 107838	3.5	1
208	Long-Time Analysis of a Time-Dependent SUC Epidemic Model for the COVID-19 Pandemic. <i>Journal of Healthcare Engineering</i> , 2021 , 2021, 5877217	3.7	0

207	High-order time-accurate, efficient, and structure-preserving numerical methods for the conservative Swift-Hohenberg model. <i>Computers and Mathematics With Applications</i> , 2021 , 102, 160-174	2.7	0
206	A Simple Benchmark Problem for the Numerical Methods of the Cahn-Hilliard Equation. <i>Discrete Dynamics in Nature and Society</i> , 2021 , 2021, 1-8	1.1	1
205	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	4.2	9
204	Reconstruction of the local volatility function using the Black-Scholes model. <i>Journal of Computational Science</i> , 2021 , 51, 101341	3.4	2
203	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	3.6	6
202	Linear, Second-Order Accurate, and Energy Stable Scheme for a Ternary Cahn-Hilliard Model by Using Lagrange Multiplier Approach. <i>Acta Applicandae Mathematicae</i> , 2021 , 172, 1	1.1	3
201	A Simple Visualization Method for Three-Dimensional (3D) Network. <i>Discrete Dynamics in Nature and Society</i> , 2021 , 2021, 1-10	1.1	0
200	Linear and energy stable schemes for the Swift-Hohenberg equation with quadratic-cubic nonlinearity based on a modified scalar auxiliary variable approach. <i>Journal of Engineering Mathematics</i> , 2021 , 128, 1	1.2	0
199	An efficient stabilized multiple auxiliary variables method for the Cahn-Hilliard-Darcy two-phase flow system. <i>Computers and Fluids</i> , 2021 , 223, 104948	2.8	4
198	Effect of oxytocin injection on fetal heart rate based on multifractal analysis. <i>Chaos, Solitons and Fractals</i> , 2021 , 148, 111045	9.3	1
197	Simple and efficient volume merging method for triply periodic minimal structures. <i>Computer Physics Communications</i> , 2021 , 264, 107956	4.2	6
196	Co-movements between Shanghai Composite Index and some fund sectors in China. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2021 , 573, 125981	3.3	0
195	Side wall boundary effect on the Rayleigh-Taylor instability. <i>European Journal of Mechanics, B/Fluids</i> , 2021 , 85, 361-374	2.4	5
194	Modeling and simulation of droplet evaporation using a modified Cahn-Hilliard equation. <i>Applied Mathematics and Computation</i> , 2021 , 390, 125591	2.7	3
193	An improved scalar auxiliary variable (SAV) approach for the phase-field surfactant model. <i>Applied Mathematical Modelling</i> , 2021 , 90, 11-29	4.5	9
192	Automatic Binary Data Classification Using a Modified Allen-Cahn Equation. <i>International Journal of Pattern Recognition and Artificial Intelligence</i> , 2021 , 35, 2150013	1.1	0
191	ECG CLASSIFICATION COMPARISON BETWEEN MF-DFA AND MF-DXA. <i>Fractals</i> , 2021 , 29, 2150029	3.2	1
190	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	3.7	4

189	Optimal non-uniform finite difference grids for the Black-Scholes equations. <i>Mathematics and Computers in Simulation</i> , 2021 , 182, 690-704	3.3	2
188	Controlling COVID-19 Outbreaks with Financial Incentives. <i>International Journal of Environmental Research and Public Health</i> , 2021 , 18,	4.6	4
187	A stable second-order BDF scheme for the three-dimensional Cahn-Hilliard-Hele-Shaw system. <i>Advances in Computational Mathematics</i> , 2021 , 47, 1	1.6	2
186	A practical adaptive grid method for the Allen-Cahn equation. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2021 , 573, 125975	3.3	1
185	The stabilized-trigonometric scalar auxiliary variable approach for gradient flows and its efficient schemes. <i>Journal of Engineering Mathematics</i> , 2021 , 129, 1	1.2	3
184	Robust and accurate construction of the local volatility surface using the Black-Scholes equation. <i>Chaos, Solitons and Fractals</i> , 2021 , 150, 111116	9.3	3
183	Numerical simulations of the dynamics of axisymmetric compound liquid threads with a phase-field model. <i>European Journal of Mechanics, B/Fluids</i> , 2021 , 89, 203-216	2.4	1
182	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,	3.6	1
181	Reduction in vacuum phenomenon for the triple junction in the ternary Cahn-Hilliard model. <i>Acta Mechanica</i> , 2021 , 232, 4485	2.1	0
180	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	2.8	1
179	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	3.7	3
178	An unconditionally energy-stable second-order time-accurate numerical scheme for the coupled Cahn-Hilliard system in copolymer/homopolymer mixtures. <i>Computational Materials Science</i> , 2021 , 200, 110809	3.2	2
177	Benchmark Problems for the Numerical Discretization of the Cahn-Hilliard Equation with a Source Term. <i>Discrete Dynamics in Nature and Society</i> , 2021 , 2021, 1-11	1.1	
176	Nonuniform Finite Difference Scheme for the Three-Dimensional Time-Fractional Black-Scholes Equation. <i>Journal of Function Spaces</i> , 2021 , 2021, 1-11	0.8	
175	Periodic travelling wave solutions for a reaction-diffusion system on landscape fitted domains. <i>Chaos, Solitons and Fractals</i> , 2020 , 139, 110300	9.3	0
174	Pattern formation in reaction-diffusion systems on evolving surfaces. <i>Computers and Mathematics With Applications</i> , 2020 , 80, 2019-2028	2.7	3
173	Analysis of the impact of COVID-19 on the correlations between crude oil and agricultural futures. <i>Chaos, Solitons and Fractals</i> , 2020 , 136, 109896	9.3	50
172	CROSS-CORRELATIONS BETWEEN BACTERIAL FOODBORNE DISEASES AND METEOROLOGICAL FACTORS BASED ON MF-DCCA: A CASE IN SOUTH KOREA. <i>Fractals</i> , 2020 , 28, 2050046	3.2	7

171	Shape transformation using the modified Allen-Cahn equation. <i>Applied Mathematics Letters</i> , 2020 , 107, 106487	3.5	2
170	AUTOMATED CLASSIFICATION FOR BRAIN MRIS BASED ON 2D MF-DFA METHOD. <i>Fractals</i> , 2020 , 28, 2050109	3.2	3
169	The Navier-Stokes-Cahn-Hilliard model with a high-order polynomial free energy. <i>Acta Mechanica</i> , 2020 , 231, 2425-2437	2.1	2
168	Porous Three-Dimensional Scaffold Generation for 3D Printing. <i>Mathematics</i> , 2020 , 8, 946	2.3	2
167	A practical finite difference scheme for the Navier-Stokes equation on curved surfaces in R^3 . <i>Journal of Computational Physics</i> , 2020 , 411, 109403	4.1	3
166	Super-Fast Computation for the Three-Asset Equity-Linked Securities Using the Finite Difference Method. <i>Mathematics</i> , 2020 , 8, 307	2.3	1
165	A Simple Method for Network Visualization. <i>Mathematics</i> , 2020 , 8, 1020	2.3	2
164	Finite Difference Method for the Multi-Asset Black-Scholes Equations. <i>Mathematics</i> , 2020 , 8, 391	2.3	4
163	Multifractal detrended cross-correlation analysis between respiratory diseases and haze in South Korea. <i>Chaos, Solitons and Fractals</i> , 2020 , 135, 109781	9.3	8
162	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	3.7	15
161	Investigation of the Implications of Haze Special Law on Air Quality in South Korea. <i>Complexity</i> , 2020 , 2020, 1-18	1.6	0
160	Nonlinear Multigrid Implementation for the Two-Dimensional Cahn-Hilliard Equation. <i>Mathematics</i> , 2020 , 8, 97	2.3	2
159	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	2.4	4
158	Combining MF-DFA and LSSVM for retina images classification. <i>Biomedical Signal Processing and Control</i> , 2020 , 60, 101943	4.9	4
157	Fast Monte Carlo Simulation for Pricing Equity-Linked Securities. <i>Computational Economics</i> , 2020 , 56, 865-882	1.4	2
156	Fast and Accurate Smoothing Method Using A Modified Allen-Cahn Equation. <i>CAD Computer Aided Design</i> , 2020 , 120, 102804	2.9	3
155	Pinning boundary conditions for phase-field models. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2020 , 82, 105060	3.7	3
154	Conservative Allen-Cahn equation with a nonstandard variable mobility. <i>Acta Mechanica</i> , 2020 , 231, 561-576		3

153	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	5.7	7
152	A novel Cahn-Hilliard-Navier-Stokes model with a nonstandard variable mobility for two-phase incompressible fluid flow. <i>Computers and Fluids</i> , 2020 , 213, 104755	2.8	3
151	Phase-field modeling and computer simulation of the coffee-ring effect. <i>Theoretical and Computational Fluid Dynamics</i> , 2020 , 34, 679-692	2.3	4
150	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	9.3	15
149	An Accurate and Practical Explicit Hybrid Method for the Chan-Vese Image Segmentation Model. <i>Mathematics</i> , 2020 , 8, 1173	2.3	2
148	Numerical Simulation of Dendritic Pattern Formation in an Isotropic Crystal Growth Model on Curved Surfaces. <i>Symmetry</i> , 2020 , 12, 1155	2.7	1
147	An Explicit Hybrid Method for the Nonlocal Allen-Cahn Equation. <i>Symmetry</i> , 2020 , 12, 1218	2.7	1
146	Fourier-Spectral Method for the Phase-Field Equations. <i>Mathematics</i> , 2020 , 8, 1385	2.3	9
145	A phase-field method for two-phase fluid flow in arbitrary domains. <i>Computers and Mathematics With Applications</i> , 2020 , 79, 1857-1874	2.7	3
144	Multicomponent volume reconstruction from slice data using a modified multicomponent Cahn-Hilliard system. <i>Pattern Recognition</i> , 2019 , 93, 124-133	7.7	10
143	Verification of Convergence Rates of Numerical Solutions for Parabolic Equations. <i>Mathematical Problems in Engineering</i> , 2019 , 2019, 1-10	1.1	1
142	Applying Least Squares Support Vector Machines to Mean-Variance Portfolio Analysis. <i>Mathematical Problems in Engineering</i> , 2019 , 2019, 1-10	1.1	1
141	Mathematical Model and Numerical Simulation for Tissue Growth on Bioscaffolds. <i>Applied Sciences (Switzerland)</i> , 2019 , 9, 4058	2.6	8
140	A conservative finite difference scheme for the N-component Cahn-Hilliard system on curved surfaces in 3D. <i>Journal of Engineering Mathematics</i> , 2019 , 119, 149-166	1.2	4
139	Equity-linked security pricing and Greeks at arbitrary intermediate times using Brownian bridge. <i>Monte Carlo Methods and Applications</i> , 2019 , 25, 291-305	0.4	1
138	Effective Time Step Analysis of a Nonlinear Convex Splitting Scheme for the Cahn-Hilliard Equation. <i>Communications in Computational Physics</i> , 2019 , 25,	2.4	3
137	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	3.7	10
136	The Cahn-Hilliard Equation with Generalized Mobilities in Complex Geometries. <i>Mathematical Problems in Engineering</i> , 2019 , 2019, 1-10	1.1	2

135	Mathematical modeling and computer simulation of the three-dimensional pattern formation of honeycombs. <i>Scientific Reports</i> , 2019 , 9, 20364	4.9	2
134	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	2.7	6
133	Fast and accurate adaptive finite difference method for dendritic growth. <i>Computer Physics Communications</i> , 2019 , 236, 95-103	4.2	5
132	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	4.5	15
131	A Hybrid Monte Carlo and Finite Difference Method for Option Pricing. <i>Computational Economics</i> , 2019 , 53, 111-124	1.4	8
130	Surface reconstruction from unorganized points with l0 gradient minimization. <i>Computer Vision and Image Understanding</i> , 2018 , 169, 108-118	4.3	6
129	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	3.7	8
128	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	3.7	10
127	An explicit hybrid finite difference scheme for the Allen-Cahn equation. <i>Journal of Computational and Applied Mathematics</i> , 2018 , 340, 247-255	2.4	21
126	Finite Difference Method for the Black-Scholes Equation Without Boundary Conditions. <i>Computational Economics</i> , 2018 , 51, 961-972	1.4	9
125	A Projection Method for the Conservative Discretizations of Parabolic Partial Differential Equations. <i>Journal of Scientific Computing</i> , 2018 , 75, 332-349	2.3	
124	Direct Discretization Method for the Cahn-Hilliard Equation on an Evolving Surface. <i>Journal of Scientific Computing</i> , 2018 , 77, 1147-1163	2.3	10
123	Phase-field simulation of Rayleigh instability on a fibre. <i>International Journal of Multiphase Flow</i> , 2018 , 105, 84-90	3.6	8
122	Predicting Stock Price Trend Using MACD Optimized by Historical Volatility. <i>Mathematical Problems in Engineering</i> , 2018 , 2018, 1-12	1.1	9
121	Efficient 3D Volume Reconstruction from a Point Cloud Using a Phase-Field Method. <i>Mathematical Problems in Engineering</i> , 2018 , 2018, 1-9	1.1	3
120	Reconstruction of the Time-Dependent Volatility Function Using the Black-Scholes Model. <i>Discrete Dynamics in Nature and Society</i> , 2018 , 2018, 1-9	1.1	6
119	A finite difference method for a conservative Allen-Cahn equation on non-flat surfaces. <i>Journal of Computational Physics</i> , 2017 , 334, 170-181	4.1	16
118	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	3.3	11

117	Phase-field model and its splitting numerical scheme for tissue growth. <i>Applied Numerical Mathematics</i> , 2017 , 117, 22-35	2.5	5
116	Computationally efficient adaptive time step method for the Cahn-Hilliard equation. <i>Computers and Mathematics With Applications</i> , 2017 , 73, 1855-1864	2.7	23
115	An efficient and stable compact fourth-order finite difference scheme for the phase field crystal equation. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2017 , 319, 194-216	5.7	29
114	Phase-field simulations of crystal growth in a two-dimensional cavity flow. <i>Computer Physics Communications</i> , 2017 , 216, 84-94	4.2	11
113	A simple and efficient outflow boundary condition for the incompressible Navier-Stokes equations. <i>Engineering Applications of Computational Fluid Mechanics</i> , 2017 , 11, 69-85	4.5	5
112	A new conservative vector-valued Allen-Cahn equation and its fast numerical method. <i>Computer Physics Communications</i> , 2017 , 221, 102-108	4.2	12
111	Curve and Surface Smoothing Using a Modified Cahn-Hilliard Equation. <i>Mathematical Problems in Engineering</i> , 2017 , 2017, 1-9	1.1	6
110	Conservative Allen-Cahn-Navier-Stokes system for incompressible two-phase fluid flows. <i>Computers and Fluids</i> , 2017 , 156, 239-246	2.8	41
109	Practical estimation of a splitting parameter for a spectral method for the ternary Cahn-Hilliard system with a logarithmic free energy. <i>Mathematical Methods in the Applied Sciences</i> , 2017 , 40, 1734-1745	2.3	0
108	An unconditionally energy-stable second-order time-accurate scheme for the Cahn-Hilliard equation on surfaces. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2017 , 53, 213-227	3.7	32
107	A multigrid solution for the Cahn-Hilliard equation on nonuniform grids. <i>Applied Mathematics and Computation</i> , 2017 , 293, 320-333	2.7	4
106	AN UNCONDITIONALLY GRADIENT STABLE NUMERICAL METHOD FOR THE OHTA-KAWASAKI MODEL. <i>Bulletin of the Korean Mathematical Society</i> , 2017 , 54, 145-158		3
105	Comparison study of the conservative Allen-Cahn and the Cahn-Hilliard equations. <i>Mathematics and Computers in Simulation</i> , 2016 , 119, 35-56	3.3	26
104	A phase-field fluid modeling and computation with interfacial profile correction term. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2016 , 30, 84-100	3.7	35
103	The daily computed weighted averaging basic reproduction number for MERS-CoV in South Korea. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2016 , 451, 190-197	3.3	5
102	A compact fourth-order finite difference scheme for the three-dimensional Cahn-Hilliard equation. <i>Computer Physics Communications</i> , 2016 , 200, 108-116	4.2	38
101	A practical finite difference method for the three-dimensional Black-Scholes equation. <i>European Journal of Operational Research</i> , 2016 , 252, 183-190	5.6	11
100	Three-dimensional simulations of the cell growth and cytokinesis using the immersed boundary method. <i>Mathematical Biosciences</i> , 2016 , 271, 118-27	3.9	6

99	A practical numerical scheme for the ternary Cahn-Hilliard system with a logarithmic free energy. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2016 , 442, 510-522	3-3	6
98	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	2-3	4
97	Comparison study of numerical methods for solving the Allen-Cahn equation. <i>Computational Materials Science</i> , 2016 , 111, 131-136	3-2	17
96	Accurate and Efficient Computations of the Greeks for Options Near Expiry Using the Black-Scholes Equations. <i>Discrete Dynamics in Nature and Society</i> , 2016 , 2016, 1-12	1-1	2
95	Basic Principles and Practical Applications of the Cahn-Hilliard Equation. <i>Mathematical Problems in Engineering</i> , 2016 , 2016, 1-11	1-1	30
94	Comparison of optimization algorithms for modeling of Haldane-type growth kinetics during phenol and benzene degradation. <i>Biochemical Engineering Journal</i> , 2016 , 106, 118-124	4-2	5
93	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	5-7	20
92	Multi-component Cahn-Hilliard system with different boundary conditions in complex domains. <i>Journal of Computational Physics</i> , 2016 , 323, 1-16	4-1	24
91	Three-dimensional volume reconstruction from slice data using phase-field models. <i>Computer Vision and Image Understanding</i> , 2015 , 137, 115-124	4-3	26
90	An efficient numerical method for evolving microstructures with strong elastic inhomogeneity. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2015 , 23, 045007	2	6
89	Numerical investigation of falling bacterial plumes caused by bioconvection in a three-dimensional chamber. <i>European Journal of Mechanics, B/Fluids</i> , 2015 , 52, 120-130	2-4	26
88	Motion by mean curvature of curves on surfaces using the Allen-Cahn equation. <i>International Journal of Engineering Science</i> , 2015 , 97, 126-132	5-7	16
87	Fast and efficient narrow volume reconstruction from scattered data. <i>Pattern Recognition</i> , 2015 , 48, 4057-4069	7-7	14
86	Two-dimensional Kelvin-Helmholtz instabilities of multi-component fluids. <i>European Journal of Mechanics, B/Fluids</i> , 2015 , 49, 77-88	2-4	56
85	Mean curvature flow by the Allen-Cahn equation. <i>European Journal of Applied Mathematics</i> , 2015 , 26, 535-559	1	8
84	Microphase separation patterns in diblock copolymers on curved surfaces using a nonlocal Cahn-Hilliard equation. <i>European Physical Journal E</i> , 2015 , 38, 117	1-5	20
83	Accuracy, Robustness, and Efficiency of the Linear Boundary Condition for the Black-Scholes Equations. <i>Discrete Dynamics in Nature and Society</i> , 2015 , 2015, 1-10	1-1	5
82	Energy-minimizing wavelengths of equilibrium states for diblock copolymers in the hex-cylinder phase. <i>Current Applied Physics</i> , 2015 , 15, 799-804	2-6	8

81	Numerical Study of Periodic Traveling Wave Solutions for the Predator-Prey Model with Landscape Features. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2015 , 25, 1550117	2	2
80	A hybrid numerical method for the phase-field model of fluid vesicles in three-dimensional space. <i>International Journal for Numerical Methods in Fluids</i> , 2015 , 78, 63-75	1.9	1
79	Fast local image inpainting based on the Allen-Cahn model 2015 , 37, 65-74		35
78	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	3.3	24
77	Mathematical model and its fast numerical method for the tumor growth. <i>Mathematical Biosciences and Engineering</i> , 2015 , 12, 1173-87	2.1	10
76	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		6
75	A COMPARISON STUDY OF EXPLICIT AND IMPLICIT NUMERICAL METHODS FOR THE EQUITY-LINKED SECURITIES. <i>Honam Mathematical Journal</i> , 2015 , 37, 441-455		1
74	A new phase-field model for a water-oil-surfactant system. <i>Applied Mathematics and Computation</i> , 2014 , 229, 422-432	2.7	19
73	A conservative Allen-Cahn equation with a space-time dependent Lagrange multiplier. <i>International Journal of Engineering Science</i> , 2014 , 84, 11-17	5.7	58
72	Numerical analysis of energy-minimizing wavelengths of equilibrium states for diblock copolymers. <i>Current Applied Physics</i> , 2014 , 14, 1263-1272	2.6	16
71	A hybrid FEM for solving the Allen-Cahn equation. <i>Applied Mathematics and Computation</i> , 2014 , 244, 606-612	2.7	11
70	Dynamics of a compound droplet in shear flow. <i>International Journal of Heat and Fluid Flow</i> , 2014 , 50, 63-71	2.4	42
69	An unconditionally stable hybrid method for image segmentation. <i>Applied Numerical Mathematics</i> , 2014 , 82, 32-43	2.5	21
68	Surface embedding narrow volume reconstruction from unorganized points. <i>Computer Vision and Image Understanding</i> , 2014 , 121, 100-107	4.3	13
67	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	3.3	14
66	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,	2.1	16
65	Physical, mathematical, and numerical derivations of the Cahn-Hilliard equation. <i>Computational Materials Science</i> , 2014 , 81, 216-225	3.2	75
64	An accurate and robust numerical method for micromagnetics simulations. <i>Current Applied Physics</i> , 2014 , 14, 476-483	2.6	3

63	A simple and robust boundary treatment for the forced Korteweg–de Vries equation. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2014 , 19, 2262-2271	3.7	2
62	Adaptive mesh refinement for simulation of thin film flows. <i>Meccanica</i> , 2014 , 49, 239-252	2.1	12
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