## A Level Set Approach for Computing Solutions to Incom

Journal of Computational Physics 114, 146-159 DOI: 10.1006/jcph.1994.1155

Citation Report

#	Article	IF	CITATIONS
1	Free and Moving Boundary Problems Mathematics of Computation, 1986, 46, 765.	2.1	372
2	Chaotic Diffusion of Localized Turbulent Defect and Pattern Selection in Spatiotemporal Chaos. Europhysics Letters, 1988, 6, 193-199.	2.0	23
3	A Closed-Form Physical Drain Current Model Considering Energy Balance Equation and Source Resistance for Deep Submicron N-Channel Metal-Oxide-Semiconductor Devices. Japanese Journal of Applied Physics, 1994, 33, 6141-6147.	1.5	3
4	Accurate solution algorithms for incompressible multiphase flows. , 1995, , .		32
5	Drop formation in liquid–liquid systems before and after jetting. Physics of Fluids, 1995, 7, 2617-2630.	4.0	93
6	Stretching and tearing interface tracking methods. , 1995, , .		87
7	Liquid metal combustion modeling on a shared memory parallel computer - Simulation of jet-driven circulation. , 1995, , .		1
8	Shape modeling with front propagation: a level set approach. IEEE Transactions on Pattern Analysis and Machine Intelligence, 1995, 17, 158-175.	13.9	2,598
9	Theory, algorithms, and applications of level set methods for propagating interfaces. Acta Numerica, 1996, 5, 309-395.	10.7	169
10	Volume tracking of interfaces having surface tension in two and three dimensions. , 1996, , .		108
11	A Level Set Formulation of Eulerian Interface Capturing Methods for Incompressible Fluid Flows. Journal of Computational Physics, 1996, 124, 449-464.	3.8	696
12	Level Set Methods Applied to Modeling Detonation Shock Dynamics. Journal of Computational Physics, 1996, 126, 390-409.	3.8	75
13	An Eulerian Approach for Vortex Motion Using a Level Set Regularization Procedure. Journal of Computational Physics, 1996, 127, 15-26.	3.8	25
14	A Variational Level Set Approach to Multiphase Motion. Journal of Computational Physics, 1996, 127, 179-195.	3.8	898
15	The numerical simulation of the flow with contact lines. Communications in Nonlinear Science and Numerical Simulation, 1996, 1, 50-56.	3.3	0
16	Planar shape enhancement and exaggeration. , 1996, , .		4
17	Phase transitions, curve evolution, and the control of semiconductor manufacturing processes. , 0, , .		10
18	Numerical modeling of interactive burning droplets. , 1997, , .		0

TION RE

#	Article	IF	CITATIONS
19	Numerical modeling of interactions between evaporating droplets. , 1997, , .		1
20	The long-time motion of vortex sheets with surface tension. Physics of Fluids, 1997, 9, 1933-1954.	4.0	133
21	Thermocapillary motion of deformable drops at finite Reynolds and Marangoni numbers. Physics of Fluids, 1997, 9, 845-855.	4.0	81
22	Axisymmetric free boundary problems. Journal of Fluid Mechanics, 1997, 341, 269-294.	3.4	204
23	Direct Numerical Algorithm for Multiphase Flow with Free Surfaces and Interfaces 880-02 Nihon Kikai Gakkai Ronbunshū Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 1997, 63, 1576-1584.	0.2	34
24	A capturing - tracking hybrid scheme for deflagration discontinuities. Combustion Theory and Modelling, 1997, 1, 183-215.	1.9	92
25	An algorithm for simulating solid objects suspended in stratified flow. Computer Physics Communications, 1997, 102, 147-160.	7.5	56
26	Global Minimum for Active Contour Models: A Minimal Path Approach. International Journal of Computer Vision, 1997, 24, 57-78.	15.6	503
27	Numerical simulation of the flow with contact lines. Acta Mechanica Sinica/Lixue Xuebao, 1997, 13, 210-217.	3.4	0
28	A new approach to the level function. Communications in Nonlinear Science and Numerical Simulation, 1997, 2, 237-240.	3.3	Ο
29	An implicit centered scheme for steady and unsteady incompressible one and two-phase flows. Computers and Fluids, 1997, 26, 373-393.	2.5	8
30	VOLUME-TRACKING METHODS FOR INTERFACIAL FLOW CALCULATIONS. International Journal for Numerical Methods in Fluids, 1997, 24, 671-691.	1.6	639
31	A High-Order Projection Method for Tracking Fluid Interfaces in Variable Density Incompressible Flows. Journal of Computational Physics, 1997, 130, 269-282.	3.8	418
32	Temporal Evolution of Periodic Disturbances in Two-Layer Couette Flow. Journal of Computational Physics, 1997, 132, 346-361.	3.8	60
33	A Hybrid Method for Moving Interface Problems with Application to the Hele–Shaw Flow. Journal of Computational Physics, 1997, 134, 236-252.	3.8	210
34	A Simple Level Set Method for Solving Stefan Problems. Journal of Computational Physics, 1997, 135, 8-29.	3.8	421
35	Multiphase Dynamics in Arbitrary Geometries on Fixed Cartesian Grids. Journal of Computational Physics, 1997, 137, 366-405.	3.8	166
36	The Development of a Free Surface Capturing Approach for Multidimensional Free Surface Flows in Closed Containers. Journal of Computational Physics, 1997, 138, 939-980.	3.8	100

#	Article	IF	CITATIONS
37	Numerical Simulation of Premixed Combustion Processes in Closed Tubes. Combustion and Flame, 1998, 114, 397-419.	5.2	27
38	Essentially non-oscillatory and weighted essentially non-oscillatory schemes for hyperbolic conservation laws. Lecture Notes in Mathematics, 1998, , 325-432.	0.2	803
39	DIFFUSE-INTERFACE METHODS IN FLUID MECHANICS. Annual Review of Fluid Mechanics, 1998, 30, 139-165.	25.0	1,702
40	Capturing the Behavior of Bubbles and Drops Using the Variational Level Set Approach. Journal of Computational Physics, 1998, 143, 495-518.	3.8	61
41	Reconstructing Volume Tracking. Journal of Computational Physics, 1998, 141, 112-152.	3.8	1,290
42	An Efficient Shock-Capturing Algorithm for Compressible Multicomponent Problems. Journal of Computational Physics, 1998, 142, 208-242.	3.8	302
43	An Adaptive, Cartesian, Front-Tracking Method for the Motion, Deformation and Adhesion of Circulating Cells. Journal of Computational Physics, 1998, 143, 346-380.	3.8	83
44	A Front Tracking Method for the Motion of Premixed Flames. Journal of Computational Physics, 1998, 144, 52-69.	3.8	48
45	Progress in direct numerical simulation of turbulent transport and its control. International Journal of Heat and Fluid Flow, 1998, 19, 125-134.	2.4	25
46	An improved level set method for incompressible two-phase flows. Computers and Fluids, 1998, 27, 663-680.	2.5	648
47	Asymptotic flame shapes and speeds of hydrodynamically unstable laminar flames. Proceedings of the Combustion Institute, 1998, 27, 545-553.	0.3	7
48	An efficient numerical model for multi-phase fluid dynamics. Advances in Engineering Software, 1998, 29, 345-352.	3.8	2
49	3D finite element method for the simulation of the filling stage in injection molding. Polymer Engineering and Science, 1998, 38, 223-236.	3.1	85
50	Theoretical and numerical analysis on a thermo-elastic system with discontinuities. Journal of Computational and Applied Mathematics, 1998, 92, 37-58.	2.0	10
51	Regularization of Ill-Posed Problems Via the Level Set Approach. SIAM Journal on Applied Mathematics, 1998, 58, 1689-1706.	1.8	29
52	Quasi–incompressible Cahn–Hilliard fluids and topological transitions. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 1998, 454, 2617-2654.	2.1	716
53	STRUCTURED MOVING GRID AND GEOMETRIC CONSERVATIONLAWS FOR FLUID FLOW COMPUTATION. Numerical Heat Transfer; Part A: Applications, 1998, 34, 369-397.	2.1	16
54	A CURVILINEAR LEVEL SET FORMULATION FOR HIGHLY DEFORMABLE FREE SURFACE PROBLEMS WITH APPLICATION TO SOLIDIFICATION. Numerical Heat Transfer, Part B: Fundamentals, 1998, 34, 1-30.	0.9	31

#	ARTICLE	IF	CITATIONS
55	A Level-Set Capturing Scheme for Compressible Interfaces. Fluid Mechanics and Its Applications, 1998, , 253-273.	0.2	1
56	Numerical Simulation of Film Boiling Near Critical Pressures With a Level Set Method. Journal of Heat Transfer, 1998, 120, 183-192.	2.1	281
57	Direct numerical simulations of bubbly flows. Part 1. Low Reynolds number arrays. Journal of Fluid Mechanics, 1998, 377, 313-345.	3.4	235
58	Level-set methods for the simulation of epitaxial phenomena. Physical Review E, 1998, 58, R6927-R6930.	2.1	78
59	The Least-Squares Finite Element Method. Scientific Computation, 1998, , .	0.2	224
60	Perspective on Eulerian Finite Volume Methods for Incompressible Interfacial Flows. , 1998, , 267-331.		28
61	Numerical Solution of Moving Interface Behaviour in Incompressible Gas-Liquid Two-Phase Flow Using a Level Set Approach 880-02 Nihon Kikai Gakkai Ronbunshū Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 1998, 64, 42-49.	0.2	2
62	Compressible bubbles with surface tension. , 1998, , 506-511.		2
63	Island-Size Distributions for Submonolayer Epitaxy: Rate Equations and Beyond. Materials Research Society Symposia Proceedings, 1998, 528, 261.	0.1	3
64	Motion by intrinsic Laplacian of curvature. Interfaces and Free Boundaries, 1999, 1, 107-123.	0.8	61
65	Numerical Analysis on the Motion of Gas Bubbles Using Level Set Method. Journal of the Physical Society of Japan, 1999, 68, 823-832.	1.6	16
66	The development of a bubble rising in a viscous liquid. Journal of Fluid Mechanics, 1999, 387, 61-96.	3.4	144
67	The turbulent burning velocity for large-scale and small-scale turbulence. Journal of Fluid Mechanics, 1999, 384, 107-132.	3.4	627
68	Direct numerical simulations of bubbly flows Part 2. Moderate Reynolds number arrays. Journal of Fluid Mechanics, 1999, 385, 325-358.	3.4	165
69	Dynamics and Heat Transfer Associated With a Single Bubble During Nucleate Boiling on a Horizontal Surface. Journal of Heat Transfer, 1999, 121, 623-631.	2.1	412
70	High-Order Methods for Computational Physics. Lecture Notes in Computational Science and Engineering, 1999, , .	0.3	68
71	Discontinuous Galerkin Methods for Convection-Dominated Problems. Lecture Notes in Computational Science and Engineering, 1999, , 69-224.	0.3	178
72	A Level Set Model for Image Classification. Lecture Notes in Computer Science, 1999, , 306-317.	1.3	48

#	Article	IF	CITATIONS
73	Modelling and Calculation of a Partially Premixed Turbulent Flame. Combustion Science and Technology, 1999, 149, 249-266.	2.3	0
74	High Order ENO and WENO Schemes for Computational Fluid Dynamics. Lecture Notes in Computational Science and Engineering, 1999, , 439-582.	0.3	126
75	A Computational Method for Two-Phase Flow with a Moving Boundary Based on a Gal Model. Coastal Engineering Journal, 1999, 41, 327-340.	1.9	4
76	Numerical Simulation of Partially Premixed Combustion using the Flamelet Approach. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 1999, 79, 41-43.	1.6	1
77	Experimental and analytical studies of melt jet-coolant interactions: a synthesis. Nuclear Engineering and Design, 1999, 189, 299-327.	1.7	80
78	A method for simulating sharp fluid interfaces in groundwater flow. Advances in Water Resources, 1999, 23, 83-95.	3.8	16
79	A fed back level-set method for moving material-void interfaces. Journal of Computational and Applied Mathematics, 1999, 101, 131-152.	2.0	3
80	Island dynamics and the level set method for epitaxial growth. Applied Mathematics Letters, 1999, 12, 13-22.	2.7	66
81	The unified simulation for incompressible and compressible flow by the predictor-corrector scheme based on the CIP method. Computer Physics Communications, 1999, 119, 149-158.	7.5	37
82	Vapor–liquid interfacial dynamics and related liquid nitrogen boiling on perforated plates. Cryogenics, 1999, 39, 389-397.	1.7	4
83	Simulation of Large Bubble/Molten Steel Interaction for Gas-Injected Ladle. Journal of Materials Engineering and Performance, 1999, 8, 236-244.	2.5	8
84	Object-Oriented Symbolic Derivation and Automatic Programming of Finite Elements in Mechanics. Engineering With Computers, 1999, 15, 12-36.	6.1	15
85	An examination of the flow induced by the motion of many buoyant bubbles. Journal of Visualization, 1999, 2, 153-158.	1.8	11
86	Numerical simulation of deformed single bubbles rising in magnetic fluid. Journal of Magnetism and Magnetic Materials, 1999, 201, 281-284.	2.3	18
87	The Fast Construction of Extension Velocities in Level Set Methods. Journal of Computational Physics, 1999, 148, 2-22.	3.8	603
88	An Adaptive Level Set Approach for Incompressible Two-Phase Flows. Journal of Computational Physics, 1999, 148, 81-124.	3.8	560
89	A Numerical Method for Solving Incompressible Flow Problems with a Surface of Discontinuity. Journal of Computational Physics, 1999, 148, 366-396.	3.8	44
90	Volume-of-Fluid Interface Tracking with Smoothed Surface Stress Methods for Three-Dimensional Flows. Journal of Computational Physics, 1999, 152, 423-456.	3.8	793

#	Article	IF	CITATIONS
91	A Level-Set Approach to the Computation of Twinning and Phase-Transition Dynamics. Journal of Computational Physics, 1999, 150, 302-331.	3.8	48
92	Semi-Lagrangian Methods for Level Set Equations. Journal of Computational Physics, 1999, 151, 498-533.	3.8	108
93	Tree Methods for Moving Interfaces. Journal of Computational Physics, 1999, 151, 616-648.	3.8	130
94	A Non-oscillatory Eulerian Approach to Interfaces in Multimaterial Flows (the Ghost Fluid Method). Journal of Computational Physics, 1999, 152, 457-492.	3.8	1,587
95	Fast Tree-Based Redistancing for Level Set Computations. Journal of Computational Physics, 1999, 152, 664-686.	3.8	79
96	A Method for Capturing Sharp Fluid Interfaces on Arbitrary Meshes. Journal of Computational Physics, 1999, 153, 26-50.	3.8	612
97	The Ghost Fluid Method for Deflagration and Detonation Discontinuities. Journal of Computational Physics, 1999, 154, 393-427.	3.8	149
98	Calculation of Two-Phase Navier–Stokes Flows Using Phase-Field Modeling. Journal of Computational Physics, 1999, 155, 96-127.	3.8	1,215
99	A Computational Model for Suspended Large Rigid Bodies in 3D Unsteady Viscous Flows. Journal of Computational Physics, 1999, 155, 348-379.	3.8	52
100	A PDE-Based Fast Local Level Set Method. Journal of Computational Physics, 1999, 155, 410-438.	3.8	999
101	A Fluid-Mixture Type Algorithm for Compressible Multicomponent Flow with van der Waals Equation of State. Journal of Computational Physics, 1999, 156, 43-88.	3.8	110
102	A frontâ€ŧracking algorithm for accurate representation of surface tension. International Journal for Numerical Methods in Fluids, 1999, 30, 775-793.	1.6	377
103	A FINITE ELEMENT METHOD FOR CASTING SIMULATIONS. Numerical Heat Transfer; Part A: Applications, 1999, 36, 657-679.	2.1	12
104	A study of drop dynamics using an adaptive finite element method. , 1999, , .		1
105	Numerical modeling of collision between two droplets. , 1999, , .		0
106	A front tracking scheme for high density-ratio multi-fluid flows. , 1999, , .		1
107	An Efficient, Interface-Preserving Level Set Redistancing Algorithm and Its Application to Interfacial Incompressible Fluid Flow. SIAM Journal of Scientific Computing, 1999, 20, 1165-1191.	2.8	493
108	A Discontinuous Galerkin Finite Element Method for Hamilton-Jacobi Equations. SIAM Journal of Scientific Computing, 1999, 21, 666-690.	2.8	157

#	Article	IF	CITATIONS
109	DIRECT NUMERICAL SIMULATION OF FREE-SURFACE AND INTERFACIAL FLOW. Annual Review of Fluid Mechanics, 1999, 31, 567-603.	25.0	1,615
110	INTERIM DEVELOPMENT OF A NUMERICAL WAVE FLUME FOR MARITIME STRUCTURE DESIGN. Proceedings of Civil Engineering in the Ocean, 1999, 15, 321-326.	0.0	19
111	A Mesh-Free Numerical Method for Direct Simulation of Gas-Liquid Phase Interface. Nuclear Science and Engineering, 1999, 133, 192-200.	1.1	28
112	Marangoni Convection in Half-Zone Liquid Bridge. Materials Transactions, JIM, 1999, 40, 1331-1336.	0.9	7
113	Numerical Analysis of Two-Phase Flow under Microgravity Condition 880-02 Nihon Kikai Gakkai Ronbunshū Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 1999, 65, 2333-2340.	0.2	8
114	Numerical Analysis of Waves (Viscous Waves) Generated on Thin Liquid Film Acompanied by Gas Flow 880-02 Nihon Kikai Gakkai Ronbunshū Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 1999, 65, 3252-3259.	0.2	0
115	Two-Phase Flow Behavior in a Liquid Propellant Tank 880-02 Nihon Kikai Gakkai Ronbunshū Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2000, 66, 67-73.	0.2	0
117	DEVELOPMENT OF A COMPUTATIONAL METHOD FOR MOVING BOUNDARY FLOWS WITH GAL MODEL AND ITS APPLICATIONS. Doboku Gakkai Ronbunshu, 2000, 2000, 19-30.	0.2	3
118	Numerical Analysis of a Drop Oscillation using a Level Set Method Nippon Genshiryoku Gakkaishi/Journal of the Atomic Energy Society of Japan, 2000, 42, 43-55.	0.0	0
119	Simulating surface tension with smoothed particle hydrodynamics. International Journal for Numerical Methods in Fluids, 2000, 33, 333-353.	1.6	383
120	Motion of deformable drops in pipes and channels using Navier-Stokes equations. International Journal for Numerical Methods in Fluids, 2000, 34, 609-626.	1.6	9
121	Finite element solution of three-dimensional turbulent flows applied to mold-filling problems. International Journal for Numerical Methods in Fluids, 2000, 34, 729-750.	1.6	32
122	Implicit and Nonparametric Shape Reconstruction from Unorganized Data Using a Variational Level Set Method. Computer Vision and Image Understanding, 2000, 80, 295-314.	4.7	248
123	Numerical Simulation of Axisymmetric Free Surface Flows. Journal of Computational Physics, 2000, 157, 441-472.	3.8	52
124	Level-Set-Based Deformation Methods for Adaptive Grids. Journal of Computational Physics, 2000, 159, 103-122.	3.8	32
125	A Boundary Condition Capturing Method for Poisson's Equation on Irregular Domains. Journal of Computational Physics, 2000, 160, 151-178.	3.8	503
126	A Coupled Level Set and Volume-of-Fluid Method for Computing 3D and Axisymmetric Incompressible Two-Phase Flows. Journal of Computational Physics, 2000, 162, 301-337.	3.8	1,317
127	A Remark on Computing Distance Functions. Journal of Computational Physics, 2000, 163, 51-67.	3.8	306

C		101	DEDC	
	IAI	ION	<b>KEPC</b>	ואנ

#	Article	IF	CITATIONS
128	The Point-Set Method: Front-Tracking without Connectivity. Journal of Computational Physics, 2000, 165, 620-644.	3.8	137
129	Finite elements and object-oriented implementation techniques in computational fluid dynamics. Computer Methods in Applied Mechanics and Engineering, 2000, 190, 865-888.	6.6	9
130	Flamelet modeling of lifted turbulent methane/air and propane/air jet diffusion flames. Proceedings of the Combustion Institute, 2000, 28, 167-174.	3.9	80
131	Une méthode de simulation d'écoulements diphasiques sans reconstruction d'interfaces. Comptes Rendus De L'Academie De Sciences - Serie IIb: Mecanique, Physique, Chimie, Astronomie, 2000, 328, 25-32.	0.1	7
132	Numerical approaches for motion of dispersed particles, droplets and bubbles. Progress in Energy and Combustion Science, 2000, 26, 161-223.	31.2	326
133	Level-set flamelet library approach for premixed turbulent combustion. Experimental Thermal and Fluid Science, 2000, 21, 87-98.	2.7	30
134	Spiral crystal growth. Physica D: Nonlinear Phenomena, 2000, 138, 282-301.	2.8	71
135	A Level Set Model for Image Classification. International Journal of Computer Vision, 2000, 40, 187-197.	15.6	205
136	A Boundary Condition Capturing Method for Multiphase Incompressible Flow. Journal of Scientific Computing, 2000, 15, 323-360.	2.3	509
137	Interaction of a solitary wave and a front step simulated by level set method. Applied Mathematics and Mechanics (English Edition), 2000, 21, 761-766.	3.6	2
138	A finite element based level-set method for multiphase flow applications. Computing and Visualization in Science, 2000, 3, 93-101.	1.2	88
139	Predicting the movement of voids in solder bumps and subsequent reliability [flip chip assembly]. , 0, , .		2
140	A self-consistent three dimensional laser keyhole welding model. , 2000, , .		2
141	Computation of dendritic microstructures using a level set method. Physical Review E, 2000, 62, 2471-2474.	2.1	146
142	Relationships between a roller and a dynamic pressure distribution in circular hydraulic jumps. Physical Review E, 2000, 61, R1016-R1019.	2.1	16
143	Contact-line dynamics of a diffuse fluid interface. Journal of Fluid Mechanics, 2000, 402, 57-88.	3.4	619
144	Weighted ENO Schemes for Hamilton-Jacobi Equations. SIAM Journal of Scientific Computing, 2000, 21, 2126-2143.	2.8	866
145	Numerical Simulation on the Interaction of Buoyant Drops with a Fluid-Fluid Interface. Journal of the Physical Society of Japan, 2000, 69, 392-400.	1.6	1

#	Article	IF	CITATIONS
146	Freeflow: an integrated simulation system for three-dimensional free surface flows. Computing and Visualization in Science, 2000, 2, 199-210.	1.2	33
147	Non-parametric and non-rigid registration method applied to myocardial gated SPECT. , 0, , .		0
148	The Ghost Fluid Method for Numerical Treatment of Discontinuities and Interfaces. , 2001, , 309-317.		2
150	Numerical Simulation of 2-D Two-Phase Flows with Interface. , 2001, , 513-518.		1
151	On the incorporation of shape priors into geometric active contours. , 0, , .		72
152	Numerical analysis for propellant management in liquid rocket tank. , 2001, , .		7
153	Active contours without edges. IEEE Transactions on Image Processing, 2001, 10, 266-277.	9.8	8,453
154	Some Improvements of the Fast Marching Method. SIAM Journal of Scientific Computing, 2001, 23, 230-244.	2.8	174
155	A Numerical Method for Bubble Motion with Phase Change. Numerical Heat Transfer, Part B: Fundamentals, 2001, 39, 509-523.	0.9	59
156	Fast surface reconstruction using the level set method. , 0, , .		194
157	Level set modeling of transient electromigration grooving. Computational Materials Science, 2001, 20, 235-250.	3.0	16
158	Simulating a double casting technique using level set method. Computational Materials Science, 2001, 22, 200-212.	3.0	6
159	A level set algorithm for minimizing the Mumford-Shah functional in image processing. , 0, , .		145
160	A NUMERICAL METHOD FOR INCOMPRESSIBLE TWO-PHASE FLOWS WITH OPEN OR PERIODIC BOUNDARIES. Numerical Heat Transfer, Part B: Fundamentals, 2001, 39, 45-60.	0.9	14
161	A Taylor-Galerkin Method for Modeling Unsteady Fluid Flow Under its Own Weight. International Journal of Computational Fluid Dynamics, 2001, 15, 13-18.	1.2	0
163	Projection methods for incompressible unsteady flows. , 2001, , .		0
164	An Adaptive Mesh Algorithm for Free Surface Flows in General Geometries. , 2001, , .		9
165	Single Crystal Growing Problem in the FZ Method under Microgravity : Three-dimensional Numerical Simulation with the Hybrid FEM-BEM applying LSM on the Free Surface. 880-02 Nihon Kikai Gakkai Ronbunshū Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2001, 67, 1408-1415.	0.2	1

#	Article	IF	CITATIONS
166	Numerical Analysis Method of Interface Movement and Growth with Phase Change by Level Set Method 880-02 Nihon Kikai Gakkai Ronbunshū Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2001, 67, 2487-2494.	0.2	0
167	Numerical Study of the Flow around a Cylinder with Deformed Magnetic Fluid Coating at Low Reynolds Number 880-02 Nihon Kikai Gakkai Ronbunshū Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2001, 67, 861-867.	0.2	1
169	Numerical study on a sliding bubble during nucleate boiling. Journal of Mechanical Science and Technology, 2001, 15, 931-940.	0.4	19
170	Focusing of an elongated hole in porous medium flow. Physica D: Nonlinear Phenomena, 2001, 151, 228-252.	2.8	53
171	Surface tension effects on two-dimensional two-phase Kelvin–Helmholtz instabilities. Advances in Water Resources, 2001, 24, 461-478.	3.8	60
172	Two-way coupling of Eulerian–Lagrangian model for dispersed multiphase flows using filtering functions. International Journal of Multiphase Flow, 2001, 27, 2129-2153.	3.4	63
173	Multi-scale analysis of bubbly flows. Computer Methods in Applied Mechanics and Engineering, 2001, 191, 689-704.	6.6	32
174	The simulation of compressible multi-medium flow. Computers and Fluids, 2001, 30, 315-337.	2.5	56
175	The simulation of compressible multi-medium flow. I. A new methodology with test applications to 1D gas–gas and gas–water cases. Computers and Fluids, 2001, 30, 291-314.	2.5	54
176	Application of the level set method to the finite element solution of two-phase flows. International Journal for Numerical Methods in Engineering, 2001, 50, 645-663.	2.8	37
177	A level set technique applied to unsteady free surface flows. International Journal for Numerical Methods in Fluids, 2001, 35, 281-297.	1.6	47
178	A Numerical Method for Two-Phase Flow Consisting of Separate Compressible and Incompressible Regions. Journal of Computational Physics, 2001, 166, 1-27.	3.8	129
179	The Constrained Interpolation Profile Method for Multiphase Analysis. Journal of Computational Physics, 2001, 169, 556-593.	3.8	646
180	Level Set Methods: An Overview and Some Recent Results. Journal of Computational Physics, 2001, 169, 463-502.	3.8	1,471
181	Two-Phase Flows on Interface Refined Grids Modeled with VOF, Staggered Finite Volumes, and Spline Interpolants. Journal of Computational Physics, 2001, 166, 302-335.	3.8	83
182	Evolution, Implementation, and Application of Level Set and Fast Marching Methods for Advancing Fronts. Journal of Computational Physics, 2001, 169, 503-555.	3.8	411
183	A Kinetic Method for Hyperbolic–Elliptic Equations and Its Application in Two-Phase Flow. Journal of Computational Physics, 2001, 166, 383-399.	3.8	8
184	Computation for Electromigration in Interconnects of Microelectronic Devices. Journal of Computational Physics, 2001, 167, 316-371.	3.8	17

#	Article	IF	Citations
185	A Level Set Method for Thin Film Epitaxial Growth. Journal of Computational Physics, 2001, 167, 475-500.	3.8	75
186	A Front-Tracking Method for the Computations of Multiphase Flow. Journal of Computational Physics, 2001, 169, 708-759.	3.8	1,744
187	Motion of Curves in Three Spatial Dimensions Using a Level Set Approach. Journal of Computational Physics, 2001, 170, 720-741.	3.8	79
188	Numerical Simulation of Grain-Boundary Grooving by Level Set Method. Journal of Computational Physics, 2001, 170, 764-784.	3.8	38
189	Level Set Methods for Optimization Problems Involving Geometry and Constraints. Journal of Computational Physics, 2001, 171, 272-288.	3.8	458
190	Coupling of the Interface Tracking and the Two-Fluid Models for the Simulation of Incompressible Two-Phase Flow. Journal of Computational Physics, 2001, 171, 776-804.	3.8	130
191	A Boundary Condition Capturing Method for Incompressible Flame Discontinuities. Journal of Computational Physics, 2001, 172, 71-98.	3.8	146
192	A Sharp Interface Cartesian Grid Method for Simulating Flows with Complex Moving Boundaries. Journal of Computational Physics, 2001, 174, 345-380.	3.8	432
193	A Level-Set Method for Computing Solutions to Viscoelastic Two-Phase Flow. Journal of Computational Physics, 2001, 174, 552-578.	3.8	132
194	A Fixed-Grid, Sharp-Interface Method for Bubble Dynamics and Phase Change. Journal of Computational Physics, 2001, 174, 781-815.	3.8	72
195	GENSMAC3D: a numerical method for solving unsteady three-dimensional free surface flows. International Journal for Numerical Methods in Fluids, 2001, 37, 747-796.	1.6	56
196	Numerical simulations of pool-boiling heat transfer. AICHE Journal, 2001, 47, 813-834.	3.6	120
197	Surface wetting effects on the spreading of liquid droplets impacting a solid surface at low Weber numbers. International Journal of Heat and Mass Transfer, 2001, 44, 235-240.	4.8	35
198	On the validity of the adiabatic spreading assumption in droplet impact cooling. International Journal of Heat and Mass Transfer, 2001, 44, 3869-3881.	4.8	38
199	The Ghost Fluid Method for Viscous Flows. , 2001, , 111-143.		8
200	MODELING SEGMENTATION VIA GEOMETRIC DEFORMABLE REGULARIZERS, PDE AND LEVEL SETS IN STILL AND MOTION IMAGERY: A REVISIT. International Journal of Image and Graphics, 2001, 01, 681-734.	1.5	9
201	Extension velocities for level set based surface profile evolution. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2001, 19, 1630-1635.	2.1	19
202	Numerical method for complex moving boundary problems in a Cartesian fixed grid. Physical Review E, 2002, 65, 055701.	2.1	17

	CHARTON REL		
#	Article	IF	CITATIONS
204	Shape Priors for Level Set Representations. Lecture Notes in Computer Science, 2002, , 78-92.	1.3	291
205	Unified Modeling of Fluid or Granular Flows on Dam-Break Case. Journal of Hydraulic Engineering, 2002, 128, 299-305.	1.5	11
206	Numerical Simulation of Bubble Merger Process on a Single Nucleation Site During Pool Nucleate Boiling. Journal of Heat Transfer, 2002, 124, 51-62.	2.1	119
207	Image Segmentation Via PDEs. , 2002, , 153-223.		1
208	Analysis of a micro-scale, multi-phase device for enhanced thermal management. Progress in Computational Fluid Dynamics, 2002, 2, 59.	0.2	2
209	Numerical Analysis of Liquid Film Formation in a Horizontal Annular Flow 880-02 Nihon Kikai Gakkai Ronbunshū Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2002, 68, 1-8.	0.2	0
210	A Numerical Study of the Effect of Contact Angle on the Dynamics of a Single Bubble During Pool Boiling. , 2002, , 467.		14
211	A projection method for motion of triple junctions by level sets. Interfaces and Free Boundaries, 2002, 4, 263-276.	0.8	94
212	Modeling pinchoff and reconnection in a Hele-Shaw cell. II. Analysis and simulation in the nonlinear regime. Physics of Fluids, 2002, 14, 514-545.	4.0	85
213	NUMERICAL SIMULATION OF WAVE-DAMPING PERFORMANCE OF SLITTYPE OFFSHORE WAVE BREAKER BY SOLVING N.S. EQUATION. Proceedings of Civil Engineering in the Ocean, 2002, 18, 323-328.	0.0	0
214	DEVELOPMENT AND PROSPECTS OF NUMERICAL WAVE FLUME. Doboku Gakkai Ronbunshu, 2002, 2002, 1-17.	0.2	1
215	æµä¼2"ã®å⁻†åº¦ã,'考慮ã⊷ã¥́éžç·šå¼2¢æ³¢å⊶æ−¹ç∵å¼4• Proceedings of Coastal Engineering Jsce, 2002, 49, 2	l-ð.1	0
216	Image-Based Multiresolution Implicit Object Modeling. Eurasip Journal on Advances in Signal Processing, 2002, 2002, 1.	1.7	4
217	Three-dimensional smoothed particle hydrodynamics simulation of high pressure die casting of light metal components. Journal of Light Metals, 2002, 2, 169-183.	0.8	20
218	Nonlinear dynamics of an interface in an inclined channel. Physics of Fluids, 2002, 14, 1877-1885.	4.0	17
219	A COUPLED LEVEL SET AND VOLUME-OF-FLUID METHOD FOR THE BUOYANCY-DRIVEN MOTION OF FLUID PARTICLES. Numerical Heat Transfer, Part B: Fundamentals, 2002, 42, 523-542.	0.9	134
220	Modeling pinchoff and reconnection in a Hele-Shaw cell. I. The models and their calibration. Physics of Fluids, 2002, 14, 492-513.	4.0	121
221	Computational Methods for Fluid Dynamics. , 2002, , .		2,051

#	ARTICLE	IF	CITATIONS
222	Analysis of Stefan Problem with Level Set Method. , 2002, , .		2
223	Deformation and drag properties of round drops subjected to shock wave disturbances. , 2002, , .		Ο
224	Numerical Investigation of Liquid Behavior in the Propellant Tank of H-IIA. , 2002, , .		5
225	New finite element technique for simulation of wave-object interaction. , 2002, , .		3
226	Nonparametric and nonrigid registration method applied to myocardial-gated SPECT. IEEE Transactions on Nuclear Science, 2002, 49, 782-788.	2.0	5
227	Using Prior Shapes in Geometric Active Contours in a Variational Framework. International Journal of Computer Vision, 2002, 50, 315-328.	15.6	345
228	Role of recoil pressure, multiple reflections, and free surface evolution during laser keyhole welding. , 2002, , .		3
229	Numerical Modeling of Breaking Waves in Nearshore Environment. , 2002, , 1.		0
230	Shape recovery algorithms using level sets in 2-D/3-D medical imagery: a state-of-the-art review. IEEE Transactions on Information Technology in Biomedicine, 2002, 6, 8-28.	3.2	266
231	Experimental validation of 3-D lagrangian VOF model: Bubble shape and rise velocity. AICHE Journal, 2002, 48, 2744-2753.	3.6	52
232	Motion of Curves Constrained on Surfaces Using a Level-Set Approach. Journal of Computational Physics, 2002, 175, 604-644.	3.8	78
233	A Second-Order-Accurate Symmetric Discretization of the Poisson Equation on Irregular Domains. Journal of Computational Physics, 2002, 176, 205-227.	3.8	396
234	Rapid and Accurate Computation of the Distance Function Using Grids. Journal of Computational Physics, 2002, 178, 175-195.	3.8	88
235	Geometric Optics in a Phase-Space-Based Level Set and Eulerian Framework. Journal of Computational Physics, 2002, 179, 622-648.	3.8	107
236	Modeling Three-Dimensional Multiphase Flow Using a Level Contour Reconstruction Method for Front Tracking without Connectivity. Journal of Computational Physics, 2002, 180, 427-470.	3.8	292
237	A Five-Equation Model for the Simulation of Interfaces between Compressible Fluids. Journal of Computational Physics, 2002, 181, 577-616.	3.8	409
238	Riemann-Problem and Level-Set Approaches for Homentropic Two-Fluid Flow Computations. Journal of Computational Physics, 2002, 181, 654-674.	3.8	29
239	A Hybrid Particle Level Set Method for Improved Interface Capturing. Journal of Computational Physics, 2002, 183, 83-116.	3.8	863

		CITATION R	EPORT	
#	Article		IF	CITATIONS
240	Reactive Autophobic Spreading of Drops. Journal of Computational Physics, 2002, 183, 3	35-366.	3.8	37
241	A High-Resolution Characteristics-Based Implicit Dual Time-Stepping VOF Method for Fre Flow Simulation on Unstructured Grids. Journal of Computational Physics, 2002, 183, 23	e Surface 3-273.	3.8	76
242	The extended finite element method (XFEM) for solidification problems. International Jou Numerical Methods in Engineering, 2002, 53, 1959-1977.	rnal for	2.8	252
243	Adaptive ICT procedure for non-linear seepage flows with free surface in porous media. Communications in Numerical Methods in Engineering, 2002, 18, 161-176.		1.3	6
244	PC cluster parallel finite element analysis of sloshing problem by earthquake using differe environments. Communications in Numerical Methods in Engineering, 2002, 18, 681-69	nt network ).	1.3	13
245	A reappraisal of Taylor-Galerkin algorithm for drying-wetting areas in shallow water comp International Journal for Numerical Methods in Fluids, 2002, 38, 515-531.	utations.	1.6	37
246	Numerical errors of the volume-of-fluid interface tracking algorithm. International Journa Numerical Methods in Fluids, 2002, 38, 329-350.	for	1.6	31
247	State-of-the-Art on numerical simulation of fiber-reinforced thermoplastic forming proces Archives of Computational Methods in Engineering, 2002, 9, 141-198.	ses.	10.2	28
248	Modeling of laser keyhole welding: Part I. mathematical modeling, numerical methodolog recoil pressure, multiple reflections, and free surface evolution. Metallurgical and Materia Transactions A: Physical Metallurgy and Materials Science, 2002, 33, 1817-1830.	;y, role of ils	2.2	234
249	Large-eddy simulation of premixed turbulent combustion using a level-set approach. Pro the Combustion Institute, 2002, 29, 2001-2008.	ceedings of	3.9	243
250	Computational modeling techniques for reliability of electronic components on printed o boards. Applied Numerical Mathematics, 2002, 40, 101-117.	ircuit	2.1	12
251	Mechanism of structure formation in circular hydraulic jumps: numerical studies of stron deformed free-surface shallow flows. Physica D: Nonlinear Phenomena, 2002, 161, 202-2	gly 19.	2.8	34
252	Micro-scale drop dynamics for heat transfer enhancement. Progress in Aerospace Science 275-304.	es, 2002, 38,	12.1	29
253	Finite element simulation of single crystal growth process using GSMAC method. Journal Computational and Applied Mathematics, 2002, 149, 359-371.	of	2.0	9
254	Two-phase heat transfer on an isothermal vertical surface: a numerical simulation. Intern Journal of Heat and Fluid Flow, 2002, 23, 308-316.	ational	2.4	14
255	Effects of flame stretch and wrinkling on co formation in turbulent premixed combustion Proceedings of the Combustion Institute, 2002, 29, 1873-1879.		3.9	23
256	Three-dimensional GSMAC-FEM simulations of the deformation process and the flow stru floating zone method. Journal of Crystal Growth, 2002, 237-239, 1870-1875.	icture in the	1.5	3
257	Rapid plunging of a body partly submerged in water. Journal of Engineering Mathematics 303-319.	, 2002, 42,	1.2	3

		CITATION REP	ORT	
#	Article		IF	CITATIONS
258	Hamilton-Jacobi Skeletons. International Journal of Computer Vision, 2002, 48, 215-231.		15.6	231
259	A Multiphase Level Set Framework for Image Segmentation Using the Mumford and Shah I International Journal of Computer Vision, 2002, 50, 271-293.	Model.	15.6	2,060
260	Multi-Dimensional Quadrature of Singular and Discontinuous Functions. BIT Numerical Ma 2002, 42, 644-669.	thematics,	2.0	43
261	Semi-Implicit Level Set Methods for Curvature and Surface Diffusion Motion. Journal of Sci Computing, 2003, 19, 439-456.	entific	2.3	149
262	A Discontinuous Spectral Element Method for the Level Set Equation. Journal of Scientific Computing, 2003, 19, 479-500.		2.3	33
263	Regularization Techniques for Numerical Approximation of PDEs with Singularities. Journal Scientific Computing, 2003, 19, 527-552.	of	2.3	84
264	An Eulerian Formulation for Solving Partial Differential Equations Along a Moving Interface of Scientific Computing, 2003, 19, 573-594.	. Journal	2.3	172
265	Construction of Shapes Arising from the Minkowski Problem Using a Level Set Approach. J Scientific Computing, 2003, 19, 123-138.	ournal of	2.3	9
266	A Level Set Approach for the Numerical Simulation of Dendritic Growth. Journal of Scientifi Computing, 2003, 19, 183-199.	c	2.3	144
267	Marangoni migration of a methanol drop in cyclohexane matrix in a closed cavity. Microgra Science and Technology, 2003, 14, 20-33.	avity	1.4	7
268	Numerical schemes for Hamilton-Jacobi equations on unstructured meshes. Numerische M 2003, 94, 315-331.	athematik,	1.9	16
269	New Cartesian grid methods for interface problems using the finite element formulation. N Mathematik, 2003, 96, 61-98.	lumerische	1.9	321
270	Modeling elastic effects in epitaxial growth. Continuum Mechanics and Thermodynamics, 2 197-215.	2003, 15,	2.2	31
271	A domain decomposition approach to compute wave breaking (wave-breaking flows). Inter Journal for Numerical Methods in Fluids, 2003, 41, 419-445.	rnational	1.6	48
272	Parallel finite element simulation of mooring forces on floating objects. International Journ Numerical Methods in Fluids, 2003, 41, 809-822.	al for	1.6	20
273	PDF of distance function for level-set flamelet library modelling. International Journal for No Methods in Fluids, 2003, 41, 653-673.	umerical	1.6	4
274	Numerical simulation of thermo-solutal-capillary migration of a dissolving drop in a cavity. International Journal for Numerical Methods in Fluids, 2003, 41, 765-788.		1.6	22
275	An efficient method for capturing free boundaries in multi-fluid simulations. International J for Numerical Methods in Fluids, 2003, 42, 187-210.	ournal	1.6	48

#	Article	IF	Citations
276	Numerical simulation of unsteady multidimensional free surface motions by level set method. International Journal for Numerical Methods in Fluids, 2003, 42, 853-884.	1.6	111
277	Computation of turbulent free-surface flows around modern ships. International Journal for Numerical Methods in Fluids, 2003, 43, 407-430.	1.6	9
278	Simulation technique for wave generation. Communications in Numerical Methods in Engineering, 2003, 19, 349-359.	1.3	7
279	The segment projection method for interface tracking. Communications on Pure and Applied Mathematics, 2003, 56, 47-79.	3.1	29
280	A numerical study of the motion of a spherical drop rising in shear-thinning fluid systems. Journal of Non-Newtonian Fluid Mechanics, 2003, 116, 95-111.	2.4	43
281	Methods for multiphase computational fluid dynamics. Chemical Engineering Journal, 2003, 96, 81-98.	12.7	248
282	Shock capturing, level sets, and PDE based methods in computer vision and image processing: a review of Osher's contributions. Journal of Computational Physics, 2003, 185, 309-341.	3.8	55
283	A level set approach to Eulerian–Lagrangian coupling. Journal of Computational Physics, 2003, 185, 213-251.	3.8	113
284	A second order coupled level set and volume-of-fluid method for computing growth and collapse of vapor bubbles. Journal of Computational Physics, 2003, 187, 110-136.	3.8	451
285	Finite element modelling of free surface flows on inclined and curved beds. Journal of Computational Physics, 2003, 189, 45-62.	3.8	12
286	Back and forth error compensation and correction methods for removing errors induced by uneven gradients of the level set function. Journal of Computational Physics, 2003, 190, 311-324.	3.8	64
287	Computation of multiphase systems with phase field models. Journal of Computational Physics, 2003, 190, 371-397.	3.8	511
288	Ghost fluid method for strong shock impacting on material interface. Journal of Computational Physics, 2003, 190, 651-681.	3.8	244
289	An "attachment kinetics-based―volume of fraction method for organic crystallization: a fluid-dynamic approach to macromolecular-crystal engineering. Journal of Computational Physics, 2003, 191, 97-129.	3.8	6
290	Numerical simulation of interfacial flows by smoothed particle hydrodynamics. Journal of Computational Physics, 2003, 191, 448-475.	3.8	1,192
291	Fully nonlinear numerical wave tank (NWT) simulations and wave run-up prediction around 3-D structures. Ocean Engineering, 2003, 30, 1969-1996.	4.3	27
292	Elastic mesh technique for 3D BIM simulation with an application to underwater explosion bubble dynamics. Computers and Fluids, 2003, 32, 1195-1212.	2.5	92
293	A FEM/VOF hybrid formulation for underfill encapsulation modeling. Computers and Structures, 2003, 81, 879-885.	4.4	16

#	Article	IF	CITATIONS
294	Analysis of liquid film formation in a horizontal annular flow by DNS. International Journal of Multiphase Flow, 2003, 29, 1413-1430.	3.4	16
295	Initiation of rapidly expanding supercritical fluids. Physica A: Statistical Mechanics and Its Applications, 2003, 322, 55-72.	2.6	4
296	Non-rigid registration using distance functions. Computer Vision and Image Understanding, 2003, 89, 142-165.	4.7	119
297	A level set method for dislocation dynamics. Acta Materialia, 2003, 51, 5499-5518.	7.9	91
298	A front tracking method on unstructured grids. Computers and Fluids, 2003, 32, 547-570.	2.5	19
299	Appendix 3: Report of study group on computational physics. International Journal of Multiphase Flow, 2003, 29, 1089-1099.	3.4	10
300	Level set-based integration of segmentation and computational fluid dynamics for flow correction in phase contrast angiography. Academic Radiology, 2003, 10, 1416-1423.	2.5	9
301	LEVELSETMETHODS FORFLUIDINTERFACES. Annual Review of Fluid Mechanics, 2003, 35, 341-372.	25.0	775
302	Air bubble entrapment under an impacting droplet. Physics of Fluids, 2003, 15, 173-183.	4.0	155
303	An inverse scattering method based on contour deformations by means of a level set method using frequency hopping technique. IEEE Transactions on Antennas and Propagation, 2003, 51, 1100-1113.	5.1	75
304	COMPUTATIONS OF DROP DYNAMICS WITH THE IMMERSED BOUNDARY METHOD, PART 1: NUMERICAL ALGORITHM AND BUOYANCY-INDUCED EFFECT. Numerical Heat Transfer, Part B: Fundamentals, 2003, 44, 101-118.	0.9	60
305	Wavelet-based level set evolution for classification of textured images. IEEE Transactions on Image Processing, 2003, 12, 1634-1641.	9.8	99
306	A computational framework for modelling grain-structure evolution in three dimensions. Philosophical Magazine, 2003, 83, 3549-3568.	1.6	28
307	EFFICIENT IMPLEMENTATION OF A COUPLED LEVEL-SET AND VOLUME-OF-FLUID METHOD FOR THREE-DIMENSIONAL INCOMPRESSIBLE TWO-PHASE FLOWS. Numerical Heat Transfer, Part B: Fundamentals, 2003, 43, 549-565.	0.9	115
308	Segmentation of RT3D ultrasound with implicit deformable models without gradients. , 0, , .		5
309	High-Order WENO Schemes for Hamilton-Jacobi Equations on Triangular Meshes. SIAM Journal of Scientific Computing, 2003, 24, 1005-1030.	2.8	147
310	Cerebrovascular segmentation for MRA data using level sets. International Congress Series, 2003, 1256, 246-252.	0.2	8
311	Large-Eddy Simulation of Combustion Dynamics of Lean-Premixed Swirl-Stabilized Combustor. Journal of Propulsion and Power, 2003, 19, 782-794.	2.2	179

#	Article	IF	CITATIONS
312	A Level-Set Based Sharp Interface Method for Three Dimensional Incompressible Flows with Complex Immersed Boundaries. , 2003, , .		0
313	Prediction of Sloshing in the Propellant Tank of Reusable Rocket Vehicle. , 2003, , .		5
314	An Extended Finite Element Method for Two-Phase Fluids. Journal of Applied Mechanics, Transactions ASME, 2003, 70, 10-17.	2.2	234
315	Computations of Multiphase Flows. Advances in Applied Mechanics, 2003, 39, 81-120.	2.3	16
316	PROJECTION METHODS FOR THE CALCULATION OF INCOMPRESSIBLE UNSTEADY FLOWS. Numerical Heat Transfer, Part B: Fundamentals, 2003, 44, 533-551.	0.9	37
318	Towards Recognition-Based Variational Segmentation Using Shape Priors and Dynamic Labeling. Lecture Notes in Computer Science, 2003, , 388-400.	1.3	94
319	RECONSTRUCTION OF COMPLEX AND MULTIPLE SHAPE OBJECT CONTOURS USING A LEVEL SET METHOD. Journal of Electromagnetic Waves and Applications, 2003, 17, 153-181.	1.6	15
320	Numerical method for a moving solid object in flows. Physical Review E, 2003, 67, 045701.	2.1	15
321	Tumbling of vesicles under shear flow within an advected-field approach. Physical Review E, 2003, 67, 031908.	2.1	157
322	A VARIABLE-DENSITY PROJECTION METHOD FOR INTERFACIAL FLOWS. Numerical Heat Transfer, Part B: Fundamentals, 2003, 44, 553-574.	0.9	30
323	Numerical bubble dynamics. Computer Aided Chemical Engineering, 2003, , 941-946.	0.5	8
324	Deformation and Drag Properties of Round Drops Subjected to Shock-Wave Disturbances. AIAA Journal, 2003, 41, 2371-2378.	2.6	43
325	A Levelset Based Method for Segmenting the Heart in 3D+T Gated SPECT Images. Lecture Notes in Computer Science, 2003, , 52-61.	1.3	7
327	Modeling Superconformal Electrodeposition Using The Level Set Method. Journal of the Electrochemical Society, 2003, 150, C302.	2.9	128
328	MRA data segmentation using level sets. , 0, , .		4
329	A second-order PDE technique to construct distance functions with more accurate derivatives. , 0, , .		1
330	Capturing the Pinch-Off of Liquid Jets by the Level Set Method. Journal of Fluids Engineering, Transactions of the ASME, 2003, 125, 922-927.	1.5	19
331	Interfaceâ€capturing finite element technique for transient twoâ€phase flow. Engineering Computations, 2003, 20, 725-740.	1.4	1

#	Article	IF	CITATIONS
332	Wavelet-based level set evolution for classification of textured images. , 0, , .		9
333	Using the Particle Level Set Method and a Second Order Accurate Pressure Boundary Condition for Free Surface Flows. , 2003, , 337.		49
334	Negative Wake and Velocity of a Bubble Rising in a Viscoelastic Fluid. , 2003, , 709.		1
335	A new general purpose event horizon finder for 3D numerical spacetimes. Classical and Quantum Gravity, 2003, 20, 4901-4917.	4.0	47
336	Pre-clinical evaluation of implicit deformable models for three-dimensional segmentation of brain aneurysms from CTA images. , 2003, 5032, 1264.		5
337	The effects of surfactants on the formation and evolution of capillary waves. Physics of Fluids, 2003, 15, 245-256.	4.0	50
338	Blood Flow Field Simulation and Vessel Segmentation in Level Set Frame Work for MR Angiography (Vessel Wall Description and Velocity Boundary Condition). 880-02 Nihon Kikai Gakkai Ronbunshū Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2003, 69, 2408-2415.	0.2	0
339	A coupled level set projection method applied to ink jet simulation. Interfaces and Free Boundaries, 2003, 5, 459-482.	0.8	28
340	AN OVERVIEW OF THE IMMERSED INTERFACE METHOD AND ITS APPLICATIONS. Taiwanese Journal of Mathematics, 2003, 7, 1.	0.4	93
341	Title is missing!. Journal of Applied Mechanics, 2003, 6, 215-222.	0.1	6
342	Study on Numerical Calculation for Rupture of Bubble at Water Surface by Level Set Method. Journal of Applied Mechanics, 2003, 6, 201-208.	0.1	2
343	Title is missing!. Journal of Applied Mechanics, 2003, 6, 223-230.	0.1	1
344	FIFTH-ORDER CONSERVATIVE SCHEME WITH FLUX CONTROL APPLICABLE TO CONVECTION EQUATIONS. Doboku Gakkai Ronbunshu, 2003, 2003, 85-94.	0.2	2
345	Parallel FEM Based on Level set Method for Free-Surface Flow using PC Cluster. , 2003, , 337-344.		0
346	Modeling Ignition and Combustion in Spark-ignition Engines Using a Level Set Method. , 0, , .		66
347	Numerical Simulation and Experimental Validation of the Dynamics of a Single Bubble During Pool Boiling Under Constant and Time-Varying Reduced Gravity Conditions. , 2003, , 279.		0
348	Effective motion of a curvature-sensitive interface through a heterogeneous medium. Interfaces and Free Boundaries, 2004, 6, 151-173.	0.8	14
349	The cellular burning regime in type Ia supernova explosions. Astronomy and Astrophysics, 2004, 421, 783-795.	5.1	27

#	Article	IF	CITATIONS
350	A new mathematical model for chemotactic bacterial colony growth. Water Science and Technology, 2004, 49, 187-192.	2.5	9
352	Investigation of Turbulent Combustion in Humid Air Using a Level-Set Flamelet Library Approach. , 2004, , 215.		0
353	Dynamics of a drop at a fluid interface under shear. Physical Review E, 2004, 69, 046302.	2.1	10
354	Combining Shape Prior and Statistical Features for Active Contour Segmentation. IEEE Transactions on Circuits and Systems for Video Technology, 2004, 14, 726-734.	8.3	62
355	Encapsulated Drop Breakup in Shear Flow. Physical Review Letters, 2004, 93, 204501.	7.8	63
356	An Improved Three-Dimensional Level Set Method for Gas-Liquid Two-Phase Flows. Journal of Fluids Engineering, Transactions of the ASME, 2004, 126, 578-585.	1.5	18
357	Study of Lateral Merger of Vapor Bubbles During Nucleate Pool Boiling. Journal of Heat Transfer, 2004, 126, 1023-1039.	2.1	150
358	Prediction and Analysis of the Bubble Formation in Film Boiling. , 2004, , 169.		0
359	Simulation of Pendant Droplets and Falling Films in Horizontal Tube Absorbers. , 2004, , 357.		4
360	Numerical Simulation of Two-Phase Fluid Flow and Heat Transfer With or Without Phase Change Using a Volume-of-Fluid Model. , 2004, , 455.		1
361	Direct Computational Simulations for Internal Condensing Flows and Results on Attainability/Stability of Steady Solutions, Their Intrinsic Waviness, and Their Noise Sensitivity. Journal of Applied Mechanics, Transactions ASME, 2004, 71, 69-88.	2.2	34
362	Planar Simulation of Bubble Growth in Film Boiling in Near-Critical Water Using a Variant of the VOF Method. Journal of Heat Transfer, 2004, 126, 329-338.	2.1	76
363	Investigation of Turbulence Models Applied to Premixed Combustion Using a Level-Set Flamelet Library Approach. Journal of Engineering for Gas Turbines and Power, 2004, 126, 701-707.	1.1	4
364	Effects of Gravity, Shear and Surface Tension in Internal Condensing Flows: Results From Direct Computational Simulations. Journal of Heat Transfer, 2004, 126, 676-686.	2.1	28
365	Simulation of Pendant Droplets and Falling Films in Horizontal Tube Absorbers. Journal of Heat Transfer, 2004, 126, 1003-1013.	2.1	58
366	Direct Numerical Simulations of Micro-Bubble Expansion in Gas Embolotherapy. Journal of Biomechanical Engineering, 2004, 126, 745-759.	1.3	61
367	Numerical modeling of two-fluid Taylor–Couette flow with deformable capillary liquid–liquid interface. Physics of Fluids, 2004, 16, 4066-4074.	4.0	12
368	A numerical study of breaking waves. Physics of Fluids, 2004, 16, 2649-2667.	4.0	38

#	Article	IF	CITATIONS
369	An "Attachment Kinetics-based―Level-set Method for Macromolecular Crystallization under Buoyancy-driven Convective Effects. International Journal of Computational Fluid Dynamics, 2004, 18, 615-621.	1.2	3
370	Molecular Modeling of Viscoelastic Flow with Free Surface. AIP Conference Proceedings, 2004, , .	0.4	0
371	Numerical Simulation and Experimental Validation of the Dynamics of Multiple Bubble Merger During Pool Boiling Under Microgravity Conditions. Annals of the New York Academy of Sciences, 2004, 1027, 235-258.	3.8	17
372	Simulation of front evolving liquid film flowing down an inclined plate using level set method. Computational Mechanics, 2004, 34, 271.	4.0	7
373	A level set based finite element algorithm for the simulation of dendritic growth. Computing and Visualization in Science, 2004, 7, 97-110.	1.2	13
374	A CIP-based method for numerical simulations of violent free-surface flows. Journal of Marine Science and Technology, 2004, 9, 143-157.	2.9	158
375	Numerical modeling of breaking waves generated by a ship?s hull. Journal of Marine Science and Technology, 2004, 9, 158-170.	2.9	12
376	Numerical modeling of turbulent nonpremixed lifted flames. Journal of Mechanical Science and Technology, 2004, 18, 167-172.	0.4	1
377	Numerical simulation of spilled oil by fictitious domain method. Japan Journal of Industrial and Applied Mathematics, 2004, 21, 219-236.	0.9	17
378	Tracking and reconstruction methods for moving-interfaces. Applied Mathematics and Mechanics (English Edition), 2004, 25, 307-321.	3.6	3
379	Simulation of biocube-fluid mixture using combined formulation. Journal of Mechanical Science and Technology, 2004, 18, 1418-1427.	0.4	0
380	A particle-level set-based sharp interface cartesian grid method for impact, penetration, and void collapse. Journal of Computational Physics, 2004, 193, 469-510.	3.8	97
381	A decomposed immersed interface method for variable coefficient elliptic equations with non-smooth and discontinuous solutions. Journal of Computational Physics, 2004, 197, 364-386.	3.8	88
382	Second-order accurate volume-of-fluid algorithms for tracking material interfaces. Journal of Computational Physics, 2004, 199, 465-502.	3.8	519
383	Interaction of porosity with a planar solid/liquid interface. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2004, 35, 1525-1538.	2.2	31
384	Modeling of laser cladding with powder injection. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2004, 35, 1139-1150.	2.1	151
385	Physically-based simulation of plant leaf growth. Computer Animation and Virtual Worlds, 2004, 15, 237-244.	1.2	15
386	Discrete simulation of gas-liquid bubble columns and gas-liquid-solid fluidized beds. AICHE Journal, 2004, 50, 288-301	3.6	70

#	Article	IF	CITATIONS
387	A projection scheme for incompressible multiphase flow using adaptive Eulerian grid. International Journal for Numerical Methods in Fluids, 2004, 45, 1-19.	1.6	25
388	Level-set based numerical simulation of a migrating and dissolving liquid drop in a cylindrical cavity. International Journal for Numerical Methods in Fluids, 2004, 44, 409-429.	1.6	5
389	Numerical analysis of moving interfaces using a level set method coupled with adaptive mesh refinement. International Journal for Numerical Methods in Fluids, 2004, 45, 921-944.	1.6	36
390	Numerical analysis of deformed free surface under AC magnetic fields. International Journal for Numerical Methods in Fluids, 2004, 46, 1155-1168.	1.6	3
391	Updated Lagrangian free surface flow simulations with natural neighbour Galerkin methods. International Journal for Numerical Methods in Engineering, 2004, 60, 2105-2129.	2.8	38
392	Modelling heat transfer in two-fluid interfacial flows. International Journal for Numerical Methods in Engineering, 2004, 61, 1028-1048.	2.8	12
393	Numerical modelling of impulse wave generated by fast landslides. International Journal for Numerical Methods in Engineering, 2004, 59, 1633-1656.	2.8	81
394	A pseudocompressibility method for the numerical simulation of incompressible multifluid flows. International Journal of Multiphase Flow, 2004, 30, 901-937.	3.4	48
395	Thermofluid modeling and experiments for free surface flows of low-conductivity fluid in fusion systems. Fusion Engineering and Design, 2004, 72, 63-81.	1.9	5
396	Numerical investigation of the influence of laser beam mode on melt pool. International Journal of Heat and Mass Transfer, 2004, 47, 4385-4402.	4.8	93
397	Induced anisotropy in foams forming processes: modelling and simulation. Journal of Materials Processing Technology, 2004, 155-156, 1482-1488.	6.3	7
398	A cell-centred finite volume method for modelling viscoelastic flow. Journal of Non-Newtonian Fluid Mechanics, 2004, 117, 47-61.	2.4	29
399	A partial differential equation approach to multidimensional extrapolation. Journal of Computational Physics, 2004, 193, 349-355.	3.8	193
400	Spectral distributed Lagrange multiplier method: algorithm and benchmark tests. Journal of Computational Physics, 2004, 195, 695-717.	3.8	32
401	A numerical method for three-dimensional gas–liquid flow computations. Journal of Computational Physics, 2004, 196, 126-144.	3.8	46
402	A surface marker algorithm coupled to an area-preserving marker redistribution method for three-dimensional interface tracking. Journal of Computational Physics, 2004, 197, 555-584.	3.8	72
403	A level set based Eulerian method for paraxial multivalued traveltimes. Journal of Computational Physics, 2004, 197, 711-736.	3.8	43
404	An interface interaction method for compressible multifluids. Journal of Computational Physics, 2004, 198, 35-64.	3.8	111

		CITATION REP	ORT	
#	Article		IF	CITATIONS
405	Wave overtopping over a sea dike. Journal of Computational Physics, 2004, 198, 686-7	26.	3.8	64
406	A front-tracking/front-capturing method for the simulation of 3D multi-fluid flows with surfaces. Journal of Computational Physics, 2004, 198, 469-499.	free	3.8	100
407	Imaging of location and geometry for extended targets using the response matrix. Jour Computational Physics, 2004, 199, 317-338.	nal of	3.8	51
408	High-order surface tension VOF-model for 3D bubble flows with high density ratio. Jour Computational Physics, 2004, 200, 153-176.	nal of	3.8	83
409	Local level set method in high dimension and codimension. Journal of Computational P 200, 368-382.	hysics, 2004,	3.8	65
410	A surfactant-conserving volume-of-fluid method for interfacial flows with insoluble surf Journal of Computational Physics, 2004, 201, 685-722.	actant.	3.8	180
411	Analyzing and enhancing the robustness of implicit representations. , 0, , .			1
412	Numerical simulation of heterogeneous propellant combustion by a level set method. ( Theory and Modelling, 2004, 8, 227-254.	Combustion	1.9	61
413	Quick and robust initialization of level set methods. , 0, , .			0
414	3D volume segmentation of MRA data sets using level sets. Academic Radiology, 2004	, 11, 419-435.	2.5	33
415	Large-Eddy Simulation of Realistic Gas Turbine Combustors. , 2004, , .			16
416	The Level Set Method on Adaptive Cartesian Grid for Interface Capturing. , 2004, , .			6
417	Numerical Study of Two-Phase Flows in Microchannels Using the Level Set Method. , 20	)04, , .		5
418	Properties of Nonturbulent Round Liquid Jets in Uniform Crossflows. , 2004, , .			10
419	Level set and PDE methods for computer graphics. , 2004, , .			7
420	A Simple Mesh Generator in MATLAB. SIAM Review, 2004, 46, 329-345.		8.4	1,131
421	A Boundary Condition–Capturing Multigrid Approach to Irregular Boundary Problems. S of Scientific Computing, 2004, 25, 1982-2003.	SIAM Journal	2.8	18
422	Difference Approximations of the Neumann Problem for the Second Order Wave Equat Journal on Numerical Analysis, 2004, 42, 1292-1323.	ion. SIAM	2.3	65

#	Article	IF	CITATIONS
423	Numerical Simulation for large deformation fluid-structure interaction problems using CIP-EDEM method. Journal of Applied Mechanics, 2004, 7, 1117-1124.	0.1	0
424	A New Mesh Re-Generation Technique for Free Surface Flow Analysis Based on Interface-Tracking Method. Journal of Applied Mechanics, 2004, 7, 313-321.	0.1	0

425 CIP-EDEM法ã«ã, ĩa, c自ç"±æ¶²é¢ã¨å¼³¼æ€§ä¼2"é•啕連æˆè§£æž• Proceedings of Coastal Engineering Jsce, 2004).51, 41-46.

426	Multiphase Dynamic Labeling for Variational Recognition-Driven Image Segmentation. Lecture Notes in Computer Science, 2004, , 74-86.	1.3	20
427	Numerical Analysis of Sloshing and Wave Breaking in a Small Vessel by CIP-LSM. JSME International Journal Series B, 2004, 47, 709-715.	0.3	15
428	Three-Dimensional Numerical Simulations of the Motion of a Gas Bubble Rising in Viscous Liquids. Journal of Chemical Engineering of Japan, 2004, 37, 968-975.	0.6	14
429	Numerical Simulation of Growth of a Vapor Bubble During Flow Boiling of Water in a Microchannel. , 2004, , 565.		8
430	Bouncing and Coalescence of a Bubble Approaching to Free Surface. 880-02 Nihon Kikai Gakkai Ronbunshū Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2004, 70, 863-870.	0.2	2
431	Level-Set Computations of Free Surface Rotational Flows. Journal of Fluids Engineering, Transactions of the ASME, 2005, 127, 1111-1121.	1.5	24
432	Numerical methods for multi-phase flow in curvilinear coordinate systems. , 2005, , 599-655.		0
433	Treating Moving Interfaces in Thermal Models with the C-NEM. , 2005, , 255-269.		0
434	Effect of Contact Angle on the Heat Transfer to an Evaporating Meniscus on a Moving Heated Surface. , 2005, , 989.		0
435	Numerical Analysis of Vapor Bubble Growth and Wall Heat Transfer During Flow Boiling of Water in a Microchannel. , 2005, , 347.		0
436	Single Bubble Dynamics During Flow Boiling on a Horizontal Surface at Different Gravity Levels. , 2005, , 1035.		0
437	Title is missing!. Journal of Applied Mechanics, 2005, 8, 295-302.	0.1	4
438	LES OF OPEN-CHANNEL FLOW USING MODIFIED HSMAC METHOD. Proceedings of Hydraulic Engineering, 2005, 49, 661-666.	0.0	4
439	DEVELOPMENT OF VOLUME CORRECTION METHOD FOR FREE SURFACE FLOW ANALYSIS USING DENSITY FUNCTION METHOD. Proceedings of Hydraulic Engineering, 2005, 49, 697-702.	0.0	1
440	A GAS-LIQUID TWO-PHASE APPROACH TO TURBULENT OPEN-CHANNEL FLOWS. Proceedings of Hydraulic Engineering, 2005, 49, 715-720.	0.0	0

#	Article	IF	CITATIONS
441	New Challenges in Computational Thermal Hydraulics. Nuclear Technology, 2005, 152, 239-251.	1.2	4
442	Title is missing!. Journal of Applied Mechanics, 2005, 8, 319-326.	0.1	0
443	Segmentation guided registration for medical images. , 2005, , .		1
444	Level Set Based Finite Element Method of Bubble-in-Liquid Simulation. , 2005, , 403.		0
445	Following multi-dimensional type Ia supernova explosion models to homologous expansion. Astronomy and Astrophysics, 2005, 432, 969-983.	5.1	96
446	Numerical Simulation of a Falling Droplet of Liquid Metal into a Liquid Layer in the Presence of a Uniform Vertical Magnetic Field. ISIJ International, 2005, 45, 954-961.	1.4	12
447	Implementation of a Level Set Interface Tracking Method in the FIDAP and CFX-4 Codes. Journal of Fluids Engineering, Transactions of the ASME, 2005, 127, 674-686.	1.5	11
448	Numerical Solution of Two-Fluid Electroosmotic Flow. , 2005, , 343.		0
449	Combustion LES for premixed and diffusion flames. Progress in Computational Fluid Dynamics, 2005, 5, 363.	0.2	12
450	Computational Fluid Dynamics for nuclear applications: from CFD to multi-scale CMFD. Nuclear Engineering and Design, 2005, 235, 153-164.	1.7	53
451	The simulation of multidimensional multiphase flows. Nuclear Engineering and Design, 2005, 235, 1043-1060.	1.7	93
452	Three-dimensional numerical simulation of flows with complex geometries in a regular Cartesian grid and its application to blood flow in cerebral artery with multiple aneurysms. Journal of Computational Physics, 2005, 202, 1-19.	3.8	40
453	A numerical method for solving variable coefficient elliptic equation with interfaces. Journal of Computational Physics, 2005, 202, 411-445.	3.8	134
454	A fourth order accurate discretization for the Laplace and heat equations on arbitrary domains, with applications to the Stefan problem. Journal of Computational Physics, 2005, 202, 577-601.	3.8	194
455	Numerical simulation of high Schmidt number flow over a droplet by using moving unstructured mesh. Journal of Computational Physics, 2005, 203, 221-249.	3.8	18
456	A continuous surface tension force formulation for diffuse-interface models. Journal of Computational Physics, 2005, 204, 784-804.	3.8	221
457	A multi-phase flow method with a fast, geometry-based fluid indicator. Journal of Computational Physics, 2005, 205, 391-400.	3.8	15
458	A coupled quadrilateral grid level set projection method applied to ink jet simulation. Journal of Computational Physics, 2005, 206, 227-251.	3.8	27

#	Article	IF	CITATIONS
459	Adaptive unstructured volume remeshing – II: Application to two- and three-dimensional level-set simulations of multiphase flow. Journal of Computational Physics, 2005, 208, 626-650.	3.8	87
460	Sharp interface Cartesian grid method I: An easily implemented technique for 3D moving boundary computations. Journal of Computational Physics, 2005, 210, 1-31.	3.8	215
461	Numerical modeling of unidirectional stratified flow with and without phase change. International Journal of Heat and Mass Transfer, 2005, 48, 477-486.	4.8	34
462	Numerical simulation of two-fluid electroosmotic flow in microchannels. International Journal of Heat and Mass Transfer, 2005, 48, 5103-5111.	4.8	31
463	On improving mass conservation of level set by reducing spatial discretization errors. International Journal of Multiphase Flow, 2005, 31, 1329-1336.	3.4	40
464	Simulating nonlinear waves on the free surface in surf zones with two-dimensional sloping beach. Ocean Engineering, 2005, 32, 57-84.	4.3	4
465	Fast sub-voxel re-initialization of the distance map for level set methods. Pattern Recognition Letters, 2005, 26, 1532-1542.	4.2	24
466	Study of the growth and motion of graphitic foam bubbles. Carbon, 2005, 43, 3075-3087.	10.3	23
467	The constrained natural element method (C-NEM) for treating thermal models involving moving interfaces. International Journal of Thermal Sciences, 2005, 44, 559-569.	4.9	30
468	Numerical simulation of interphase mass transfer with the level set approach. Chemical Engineering Science, 2005, 60, 2643-2660.	3.8	90
469	Numerical simulation of gas bubbles behaviour using a three-dimensional volume of fluid method. Chemical Engineering Science, 2005, 60, 2999-3011.	3.8	313
470	Bubble modulation using acoustic standing waves in a bubbling system. Chemical Engineering Science, 2005, 60, 5971-5981.	3.8	12
471	Effects of viscosity on coalescence of a bubble upon impact with a free surface. Chemical Engineering Science, 2005, 60, 5372-5384.	3.8	73
472	Mathematical models and numerical simulations for the America's Cup. Computer Methods in Applied Mechanics and Engineering, 2005, 194, 1001-1026.	6.6	48
473	Comparison of two mathematical models for solving the dam break problem using the FEM method. Computer Methods in Applied Mechanics and Engineering, 2005, 194, 3984-4005.	6.6	38
474	Computation of incompressible bubble dynamics with a stabilized finite element level set method. Computer Methods in Applied Mechanics and Engineering, 2005, 194, 4565-4587.	6.6	101
475	Numerical simulations of free-interface fluids by a multi-integrated moment method. Computers and Structures, 2005, 83, 409-423.	4.4	55
476	IVA_5M numerical method for analysis of three-fluid multi-component flows in boundary-fitted multi-blocks. Computers and Structures, 2005, 83, 499-523.	4.4	3

#	Article	IF	CITATIONS
477	Fluid–structure coupling within a monolithic model involving free surface flows. Computers and Structures, 2005, 83, 2100-2111.	4.4	146
478	Vortex shedding behind a rising bubble and two-bubble coalescence: A numerical approach. Applied Mathematical Modelling, 2005, 29, 615-632.	4.2	19
479	On the reinitialization procedure in a narrow-band locally refined level set method for interfacial flows. International Journal for Numerical Methods in Engineering, 2005, 63, 1478-1512.	2.8	67
480	An adaptive fixed mesh method for modelling and simulating of unsteady two-phase flows with sharp physical interfaces. International Journal for Numerical Methods in Engineering, 2005, 64, 1256-1273.	2.8	2
481	A level set characteristic Galerkin finite element method for free surface flows. International Journal for Numerical Methods in Fluids, 2005, 49, 521-547.	1.6	78
482	A finite element strategy for the solution of interface tracking problems. International Journal for Numerical Methods in Fluids, 2005, 49, 1305-1327.	1.6	5
483	A semi-Lagrangian level set method for incompressible Navier-Stokes equations with free surface. International Journal for Numerical Methods in Fluids, 2005, 49, 1111-1146.	1.6	17
484	A mass-conserving Level-Set method for modelling of multi-phase flows. International Journal for Numerical Methods in Fluids, 2005, 47, 339-361.	1.6	155
485	Finite-element/level-set/operator-splitting (FELSOS) approach for computing two-fluid unsteady flows with free moving interfaces. International Journal for Numerical Methods in Fluids, 2005, 48, 231-269.	1.6	50
486	Nonlinear simulation of tumor necrosis, neo-vascularization and tissue invasion via an adaptive finite-element/level-set method. Bulletin of Mathematical Biology, 2005, 67, 211-259.	1.9	213
487	A fast and accurate semi-Lagrangian particle level set method. Computers and Structures, 2005, 83, 479-490.	4.4	197
488	A parallelized, adaptive algorithm for multiphase flows in general geometries. Computers and Structures, 2005, 83, 435-444.	4.4	70
489	A computational study of the effect of initial bubble conditions on the motion of a gas bubble rising in viscous liquids. International Journal of Multiphase Flow, 2005, 31, 223-237.	3.4	79
490	A CFD level-set method for soft tissue growth: theory and fundamental equations. Journal of Biomechanics, 2005, 38, 185-190.	2.1	22
491	A Eulerian level set/vortex sheet method for two-phase interface dynamics. Journal of Computational Physics, 2005, 203, 539-571.	3.8	34
492	Numerical simulation of free surface incompressible liquid flows surrounded by compressible gas. Journal of Computational Physics, 2005, 203, 626-649.	3.8	40
493	Discretization of Dirac delta functions in level set methods. Journal of Computational Physics, 2005, 207, 28-51.	3.8	162
494	A conservative level set method for two phase flow. Journal of Computational Physics, 2005, 210, 225-246.	3.8	994

	CITATION RE	PORT	
#	Article	IF	CITATIONS
495	A Lagrangian particle level set method. Journal of Computational Physics, 2005, 210, 342-367.	3.8	140
496	Numerical simulation of growth of a vapor bubble during flow boiling of water in a microchannel. Microfluidics and Nanofluidics, 2005, 1, 137-145.	2.2	139
497	Flame Surface Density in Turbulent Premixed V-Flame with Buoyancy. Flow, Turbulence and Combustion, 2005, 74, 273-289.	2.6	1
498	Modeling and 3D-Simulation of the Kinetic Effects in the Post-Flame Region of Turbulent Premixed Flames Based on the G-Equation Approach. Flow, Turbulence and Combustion, 2005, 75, 191-216.	2.6	8
499	Modelling Turbulent Premixed Combustion Using the Level Set Approach for Reynolds Averaged Models. Flow, Turbulence and Combustion, 2005, 74, 387-407.	2.6	10
500	Approximations of Shape Metrics and Application to Shape Warping and Empirical Shape Statistics. Foundations of Computational Mathematics, 2005, 5, 1-58.	2.5	119
501	Assessment of the volume of fluid method for free-surface wave flow. Journal of Marine Science and Technology, 2005, 10, 173-180.	2.9	32
502	Numerical simulation of two-phase free surface flows. Archives of Computational Methods in Engineering, 2005, 12, 165-224.	10.2	50
503	Detecting Codimension—Two Objects in an Image with Ginzburg-Landau Models. International Journal of Computer Vision, 2005, 65, 29-42.	15.6	15
504	On the Evolution of Vector Distance Functions of Closed Curves. International Journal of Computer Vision, 2005, 65, 5-27.	15.6	2
505	Motion Competition: A Variational Approach to Piecewise Parametric Motion Segmentation. International Journal of Computer Vision, 2005, 62, 249-265.	15.6	214
506	Discontinuous Galerkin Methods Applied to Shock and Blast Problems. Journal of Scientific Computing, 2005, 22-23, 227-243.	2.3	17
508	A coupled level set-boundary integral method for moving boundary simulations. Interfaces and Free Boundaries, 2005, 7, 277-302.	0.8	19
509	Simulations numériques d'écoulements diphasiques gaz-liquide par la méthode de volume fini dans de géométries confines. Houille Blanche, 2005, 91, 91-104.	<sup>S</sup> 0.3	8
510	On a diphasic low mach number system. ESAIM: Mathematical Modelling and Numerical Analysis, 2005, 39, 487-514.	1.9	14
511	CFD Investigation of the Effects of Different Diluents on the Emissions in a Swirl Stabilized Premixed Combustion System. , 2005, , 507.		1
512	Mould filling simulation with consideration of surface tension and its application to a practical casting problem. International Journal of Cast Metals Research, 2005, 18, 202-208.	1.0	5
514	Stable but nondissipative water. ACM Transactions on Graphics, 2005, 24, 81-97.	7.2	90

		CITATION REPORT	
#	Article	IF	Citations
515	Advanced Segmentation Techniques. , 2005, , 479-533.		6
516	Optics, Mechanics, and Hamilton–Jacobi Skeletons. Advances in Imaging and Electron Physics, 2005, 135, 1-39.	0.2	2
517	Mirror fluid method for numerical simulation of sedimentation of a solid particle in a Newtonian fluid. Physical Review E, 2005, 71, 036704.	2.1	7
518	Development of Grid-Based Tiled Display Wall for Networked Visualization. , 0, , .		1
519	A Numerical Method for Multiphase Incompressible Thermal Flows with Solid–Liquid and Liquid–Vapor Phase Transformations. Numerical Heat Transfer, Part B: Fundamentals, 2005, 48, 125-145.	0.9	32
520	LATTICE BOLTZMANN SIMULATIONS OF DROP–DROP INTERACTIONS IN TWO-PHASE FLOWS. International Journal of Modern Physics C, 2005, 16, 25-44.	1.7	18
521	Total variation and level set methods in image science. Acta Numerica, 2005, 14, 509-573.	10.7	35
522	Numerical Analysis for Propellant Management in Rocket Tanks. Journal of Propulsion and Power, 2005, 21, 76-86.	2.2	29
523	Numerical Study on Splash Conditions of an Integrated Droplet-type Divertor. , 2005, , .		0
524	A New Multi-phase Level Set Framework for 3D Medical Image Segmentation Based on TPBG. , 2005, 2005, 3394-7.		0
525	Geometric Observers for Dynamically Evolving Curves. , 0, , .		2
526	Segmentation Guided Robust Multimodal Image Registration Using Local Correlation. , 2005, 2005, 3047-50.		0
527	The numerical simulation of two-dimensional aluminized composite solid propellent combustion. Combustion Theory and Modelling, 2005, 9, 171-197.	1.9	18
528	Numerical Study of the Effect of Inlet Constriction on Bubble Growth During Flow Boiling in Microchannels. , 2005, , 73.		36
529	A Level Set Method for Simulation of Coalescence of Droplets. , 2005, , 723.		2
530	New Physically Based Approach of Mass Conservation Correction in Level Set Formulation for Incompressible Two-Phase Flows. Journal of Fluids Engineering, Transactions of the ASME, 2005, 127, 554-563.	1.5	6
531	The Explicit Simplified Interface Method for Compressible Multicomponent Flows. SIAM Journal of Scientific Computing, 2005, 27, 208-230.	2.8	7
532	Bubble dispenser in microfluidic devices. Physical Review E, 2005, 72, 037302.	2.1	121

#	Article	IF	CITATIONS
533	A Level Set Formulation for Incompressible Two-Phase Flows on Nonorthogonal Grids. Numerical Heat Transfer, Part B: Fundamentals, 2005, 48, 303-316.	0.9	14
535	Numerical simulation of binary liquid droplet collision. Physics of Fluids, 2005, 17, 082105.	4.0	124
536	Surface Reconstruction Via Contour Metamorphosis: An Eulerian Approach With Lagrangian Particle Tracking. , 0, , .		4
537	A shape-based segmentation approach: an improved technique using level sets. , 2005, , .		26
538	Simple Representation of Contact-Line Dynamics in a Level-Set Model of an Immiscible Fluid Interface. Industrial & Engineering Chemistry Research, 2005, 44, 1194-1198.	3.7	9
540	Modeling interfacial heat transfer from single or multiple deforming droplets. International Journal of Computational Fluid Dynamics, 2005, 19, 105-113.	1.2	5
541	A LEVEL SET METHOD FOR INCOMPRESSIBLE TWO-FLUID FLOWS WITH IMMERSED SOLID BOUNDARIES. Numerical Heat Transfer, Part B: Fundamentals, 2005, 47, 473-489.	0.9	43
542	A survey on level set methods for inverse problems and optimal design. European Journal of Applied Mathematics, 2005, 16, 263-301.	2.9	216
543	Motion of contact line of a crystal over the edge of solid mask in epitaxial lateral overgrowth. Computational Materials Science, 2005, 32, 203-216.	3.0	5
544	Quantitative Imaging of Lymphocyte Membrane Protein Reorganization and Signaling. Biophysical Journal, 2005, 88, 579-589.	0.5	6
545	Numerical method for interaction between multiparticle and complex structures. Physical Review E, 2005, 72, 046713.	2.1	10
546	Large eddy simulation of turbulent open-channel flow with free surface simulated by level set method. Physics of Fluids, 2005, 17, 025108.	4.0	46
547	Free-surface fluctuations behind microbreakers: space–time behaviour and subsurface flow field. Journal of Fluid Mechanics, 2005, 529, 311-347.	3.4	29
548	Computer simulation of two-phase immiscible fluid motion in unsaturated complex fractures using a volume of fluid method. Water Resources Research, 2005, 41, .	4.2	63
549	Level Set Evolution without Re-Initialization: A New Variational Formulation. , 0, , .		555
550	Building Blocks Towards VR-Based Flow Sculpting. , 2005, , .		18
551	Multi-Phase Flow Computation with Semi-Lagrangian Level Set Method on Adaptive Cartesian Grids. , 2005, , .		3
552	Numerical Simulations of Two-Phase Flows in Micro Gas/Liquid Mixing Sections. , 2005, , .		3

#	Article	IF	CITATIONS
553	Sloshing Prediction in the Propellant Tanks of VTVL Rocket Vehicle. , 2005, , .		3
554	Boundary Integral Formulation of Electric Fields in Level Set Simulations of Charged Droplets. , 2005, , .		1
555	Parallel AMR Scheme for Turbulent Multi-Phase Rocket Motor Core Flows. , 2005, , .		8
556	A Conservative Compressible Multifluid Model for Multiphase Flow: Shock-Interface Interaction Problems. , 2005, , .		5
557	Adaptive Strategies for Mass Conservation in Level Set Treatment. , 2005, , .		5
558	Sharp Treatment of Surface Tension and Viscous Stresses in Multifluid Dynamics. , 2005, , .		8
560	Maximum likelihood segmentation of ultrasound images with Rayleigh distribution. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2005, 52, 947-960.	3.0	168
561	Phase-field approach to three-dimensional vesicle dynamics. Physical Review E, 2005, 72, 041921.	2.1	176
562	Three-dimensional simulation of impingement of a liquid droplet on a flat surface in the Leidenfrost regime. Physics of Fluids, 2005, 17, 027104.	4.0	62
563	Fast Distance Preserving Level Set Evolution for Medical Image Segmentation. , 2006, , .		20
564	A New High-Order Immersed Interface Method for Multi-Phase Flow Simulation. , 2006, , .		5
565	Breakup of Turbulent and Non-Turbulent Liquid jets in Gaseous Crossflows. , 2006, , .		19
566	Level-Set Flamelet/Large-Eddy Simulation of a Premixed Augmentor Flame Holder. , 2006, , .		8
567	Modeling of Spray Cooling: Convective Flow Effect on Vapor Bubble Dynamics and Heat Transfer. , 2006, , .		3
568	Simulation of Charge and Mass Distributions of Indium Droplets Created by Field Emission. , 2006, , .		2
569	Numerical and Experimental Investigation on Free-surface Flows Driven by Capillary Forces. , 2006, , .		0
570	A High-Fidelity Level-Set Flamelet Approach for Predicting Turbulent Reacting Flows. , 2006, , .		0
571	A Fast Level Set Method with Particle Correction on Adaptive Cartesian Grid. , 2006, , .		0

#	Article	IF	CITATIONS
572	Towards a fully parallel integrated geometry kernel, mesh generator, flow solver & post-processor. , 2006, , .		6
573	A binary level set model and some applications to Mumford-Shah image segmentation. IEEE Transactions on Image Processing, 2006, 15, 1171-1181.	9.8	294
574	Central WENO Schemes for Hamilton–Jacobi Equations on Triangular Meshes. SIAM Journal of Scientific Computing, 2006, 28, 2229-2247.	2.8	34
575	Free and Moving Boundary Problems. , 2006, , 429-500.		3
577	Simulation of a diffusion flame in turbulent mixing layer by the flame hole dynamics model with level-set method. Combustion Theory and Modelling, 2006, 10, 219-240.	1.9	5
578	3D distance fields: a survey of techniques and applications. IEEE Transactions on Visualization and Computer Graphics, 2006, 12, 581-599.	4.4	297
579	A Lagrangian Particleâ€Wavelet Method. Multiscale Modeling and Simulation, 2006, 5, 980-995.	1.6	65
580	A Sharp-Interface Cartesian Grid Method for Computations of Droplet Impact and Spreading on Surfaces of Arbitrary Shape. , 2006, , 293-300.		1
581	A Local Level Set Method for Paraxial Geometrical Optics. SIAM Journal of Scientific Computing, 2006, 28, 206-223.	2.8	19
582	Skull-stripping magnetic resonance brain images using a model-based level set. NeuroImage, 2006, 32, 79-92.	4.2	134
583	A numerical study on the breakup process of laminar liquid jets into a gas. Physics of Fluids, 2006, 18, 052101.	4.0	53
584	Direct numerical simulation of homogeneous turbulence in combination with premixed combustion at low Mach number modelled by the \$G\$-equation. Journal of Fluid Mechanics, 2006, 565, 25.	3.4	47
585	Shear flow past two-dimensional droplets pinned or moving on an adhering channel wall at moderate Reynolds numbers: a numerical study. Journal of Fluid Mechanics, 2006, 561, 439.	3.4	54
586	A free-surface capturing method for two fluid flows with moving bodies. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2006, 462, 21-42.	2.1	65
587	Simulation of multigrain thin film growth. Interfaces and Free Boundaries, 2006, 8, 1-19.	0.8	1
588	STUDY ON VOLUME CORRECTION METHOD FOR FREE SURFACE FLOW ANALYSIS USING DENSITY FUNCTION METHOD. Doboku Gakkai Ronbunshuu B, 2006, 62, 122-127.	0.1	4
589	DIRECT NUMERICAL SIMULATION OF IMPACT PRESSURE CAUSED BY WAVE BREAKING AND DYNAMIC ANALYSIS OF COASTAL STRUCTURE. Doboku Gakkai Ronbunshuu B, 2006, 62, 224-237.	0.1	1
590	A GAS-LIQUID TWO-PHASE APPROACH TO FREE-SURFACE TURBULENCE AND ITS APPLICATION TO TURBULENT OPEN-CHANNEL FLOWS. Doboku Gakkai Ronbunshuu B, 2006, 62, 419-436.	0.1	0

#	Article	IF	CITATIONS
591	A NEW MESH RE-GENERATION METHOD FOR FREE SURFACE FLOW ANALYSIS BASED ON INTERFACE-TRACKING METHOD. Structural Engineering/Earthquake Engineering, 2006, 23, 269s-277s.	0.3	1
592	NUMERICAL ANALYSIS OF BUBBLE MOTION BY LEVEL-SET METHOD. Proceedings of Hydraulic Engineering, 2006, 50, 1363-1368.	0.0	0
593	Effect of Thermal Conductivity and Latent Heat of Vaporization of Liquid on Heat Transfer in Spray Cooling. , 0, , .		3
594	An Advanced VOF Algorithm for Oil Boom Design. International Journal of Modelling and Simulation, 2006, 26, 36-44.	3.3	4
595	An Enhanced Level-Set Method and its Application to Incompressible Gas-Liquid Two-Phase Flows. Journal of Applied Mechanics, 2006, 9, 755-763.	0.1	0
596	Topology optimization analysis by VOF method using triangular and tetrahedral elements. Journal of Applied Mechanics, 2006, 9, 353-363.	0.1	0
597	A Hybrid Method for Simulating Flows Including Fluid Particles. , 2006, , 43.		0
598	Spray Cooling Development Effort for Microgravity Environments. AIP Conference Proceedings, 2006,	0.4	5
599	Effect of Vapor Bubble Size on Heat Transfer in Spray Cooling. AIP Conference Proceedings, 2006, , .	0.4	2
600	Numerical Simulation of a Contaminated Droplet by Front-Tracking Method Taking the Effect of Surfactant Transport on the Interface. , 2006, , 635.		1
601	Hybrid Particle/Grid Method for Predicting Motion of Micro- and Macrofree Surfaces. Journal of Fluids Engineering, Transactions of the ASME, 2006, 128, 921-930.	1.5	35
602	Investigations of Numerical Methods for Compressible Two-Phase Flows with the Ghost Fluid Method (1st Report, Influence of Numerical Diffusion on Interface Capturing). 880-02 Nihon Kikai Gakkai Ronbunshū Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2006, 72, 2634-2642	0.2	0
604	The Nonlinear Behavior of Interface between Two-Phase Shear Flow with Large Density Ratios. Journal of Hydrodynamics, 2006, 18, 587-592.	3.2	2
605	Fractional-Step Finite Element Method for Calculation of 3-D Free Surface Problem Using Level Set Method. Journal of Hydrodynamics, 2006, 18, 742-747.	3.2	7
606	A comparison of numerical models for one-dimensional Stefan problems. Journal of Computational and Applied Mathematics, 2006, 192, 445-459.	2.0	126
607	The effect of small vibrations on Marangoni convection and the free surface of a liquid bridge. Acta Astronautica, 2006, 58, 622-632.	3.2	23
608	Simulation of interfacial mass transfer by droplet dynamics using the level set method. Chemical Engineering Science, 2006, 61, 6486-6498.	3.8	48
609	Meshless methods with application to metal forming. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 6661-6675.	6.6	40

#	Article	IF	CITATIONS
610	Application of level-set approach to moving interfaces and free surface problems in flow through porous media. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 1-25.	6.6	33
611	A level set discontinuous Galerkin method for free surface flows. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 3406-3429.	6.6	42
612	On the simulation of flows with violent free surface motion. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 5597-5620.	6.6	83
613	Numerical simulation of liquid/gas phase flow during mold filling. Computer Methods in Applied Mechanics and Engineering, 2006, 196, 697-713.	6.6	24
614	Advances in the numerical treatment of grain-boundary migration: Coupling with mass transport and mechanics. Computer Methods in Applied Mechanics and Engineering, 2006, 196, 595-607.	6.6	18
615	Spatially adaptive techniques for level set methods and incompressible flow. Computers and Fluids, 2006, 35, 995-1010.	2.5	176
616	Unsteady RANS simulation of the ship forward speed diffraction problem. Computers and Fluids, 2006, 35, 545-570.	2.5	51
617	Enriched finite elements and level sets for damage tolerance assessment of complex structures. Engineering Fracture Mechanics, 2006, 73, 1176-1201.	4.3	141
618	Direct numerical simulations of gas/liquid multiphase flows. Fluid Dynamics Research, 2006, 38, 660-681.	1.3	77
619	Direct simulation of falling droplet in a closed channel. International Journal of Heat and Mass Transfer, 2006, 49, 366-376.	4.8	43
620	Comparison of volume-of-fluid methods for surface tension-dominant two-phase flows. International Journal of Heat and Mass Transfer, 2006, 49, 740-754.	4.8	220
621	3-D modeling of the dynamics and heat transfer characteristics of subcooled droplet impact on a surface with film boiling. International Journal of Heat and Mass Transfer, 2006, 49, 4231-4249.	4.8	50
622	A coupled numerical model for simulation of wave breaking and hydraulic performances of a composite seawall. Ocean Engineering, 2006, 33, 773-787.	4.3	15
623	Shear-induced fractal morphology of immiscible reactive polymer blends. Polymer, 2006, 47, 6099-6106.	3.8	14
624	Combining geometrical and textured information to perform image classification. Journal of Visual Communication and Image Representation, 2006, 17, 1004-1023.	2.8	35
625	Numerical simulation of two-phase flows in the presence of a magnetic field. Mathematics and Computers in Simulation, 2006, 72, 212-219.	4.4	19
626	A variational approach to path planning in three dimensions using level set methods. Journal of Computational Physics, 2006, 211, 179-197.	3.8	13
627	A quadrature-free discontinuous Galerkin method for the level set equation. Journal of Computational Physics, 2006, 212, 338-357.	3.8	80

#	Article	IF	CITATIONS
628	A level-set method for interfacial flows with surfactant. Journal of Computational Physics, 2006, 212, 590-616.	3.8	162
629	Adaptive characteristics-based matching for compressible multifluid dynamics. Journal of Computational Physics, 2006, 213, 500-529.	3.8	148
630	Hydrodynamic simulation of air bubble implosion using a level set approach. Journal of Computational Physics, 2006, 215, 98-132.	3.8	63
631	An adaptive coupled level-set/volume-of-fluid interface capturing method for unstructured triangular grids. Journal of Computational Physics, 2006, 217, 364-394.	3.8	140
632	New finite-element/finite-volume level set formulation for modelling two-phase incompressible flows. Journal of Computational Physics, 2006, 218, 479-494.	3.8	18
633	A stabilized finite element method using a discontinuous level set approach for solving two phase incompressible flows. Journal of Computational Physics, 2006, 219, 780-800.	3.8	97
634	Maintaining the point correspondence in the level set framework. Journal of Computational Physics, 2006, 220, 339-354.	3.8	21
635	Direct Computational Simulations and Experiments for Film Condensation inside Tubes and Channels. Annals of the New York Academy of Sciences, 2006, 1077, 471-507.	3.8	1
636	A Multiphase Dynamic Labeling Model for Variational Recognition-driven Image Segmentation. International Journal of Computer Vision, 2006, 66, 67-81.	15.6	87
637	Higher Order Active Contours. International Journal of Computer Vision, 2006, 69, 27-42.	15.6	102
638	Kernel Density Estimation and Intrinsic Alignment for Shape Priors in Level Set Segmentation. International Journal of Computer Vision, 2006, 69, 335-351.	15.6	311
639	Dynamic Tubular Grid: An Efficient Data Structure and Algorithms for High Resolution Level Sets. Journal of Scientific Computing, 2006, 26, 261-299.	2.3	82
640	Denoising by BV-duality. Journal of Scientific Computing, 2006, 28, 411-444.	2.3	15
641	Numerical simulation of violent sloshing by a CIP-based method. Journal of Marine Science and Technology, 2006, 11, 111-122.	2.9	79
642	A finite element based level set method for two-phase incompressible flows. Computing and Visualization in Science, 2006, 9, 239-257.	1.2	72
643	A topology optimization approach using VOF method. Structural and Multidisciplinary Optimization, 2006, 31, 470-479.	3.5	5
644	Mesh size functions for implicit geometries and PDE-based gradient limiting. Engineering With Computers, 2006, 22, 95-109.	6.1	70
645	Uniform preconditioners for a parameter dependent saddle point problem with application to generalized Stokes interface equations. Numerische Mathematik, 2006, 105, 159-191.	1.9	45
#	Article	IF	CITATIONS
-----	--	-----	-----------
646	Tracking discontinuities in shallow water equations and ideal magnetohydrodynamics equations via Ghost Fluid Method. Applied Numerical Mathematics, 2006, 56, 1555-1569.	2.1	10
647	Numerical simulation of turbulent Bunsen flames with a level set flamelet model. Combustion and Flame, 2006, 145, 357-375.	5.2	43
648	An ignition and combustion model based on the level-set method for spark ignition engine multidimensional modeling. Combustion and Flame, 2006, 145, 1-15.	5.2	178
649	Effects of exit-condition, gravity, and surface-tension on stability and noise-sensitivity issues for steady condensing flows inside tubes and channels. International Journal of Heat and Mass Transfer, 2006, 49, 2058-2076.	4.8	18
650	Direct simulation of spray cooling: Effect of vapor bubble growth and liquid droplet impact on heat transfer. International Journal of Heat and Mass Transfer, 2006, 49, 4265-4278.	4.8	84
651	The numerical approximation of a delta function with application to level set methods. Journal of Computational Physics, 2006, 211, 77-90.	3.8	104
652	Fourth order partial differential equations on general geometries. Journal of Computational Physics, 2006, 216, 216-246.	3.8	109
653	A level set approach to simulate magnetohydrodynamic instabilities in aluminum reduction cells. Journal of Computational Physics, 2006, 217, 295-311.	3.8	8
654	Modelling dendritic solidification with melt convection using the extended finite element method. Journal of Computational Physics, 2006, 218, 200-227.	3.8	49
655	Towards realistic simulations of lava dome growth using the level set method. Acta Geotechnica, 2006, 1, 225-236.	5.7	7
656	A level set formulation for the numerical simulation of impact of surge fronts. Sadhana - Academy Proceedings in Engineering Sciences, 2006, 31, 697-707.	1.3	4
657	Melting and flowing in multiphase environment. Computers and Graphics, 2006, 30, 519-528.	2.5	26
658	Radial basis functions and level set method for structural topology optimization. International Journal for Numerical Methods in Engineering, 2006, 65, 2060-2090.	2.8	260
659	A BEM-level set domain-decomposition strategy for non-linear and fragmented interfacial flows. International Journal for Numerical Methods in Engineering, 2006, 67, 1385-1419.	2.8	35
660	Flow simulation on moving boundary-fitted grids and application to fluid-structure interaction problems. International Journal for Numerical Methods in Fluids, 2006, 50, 437-468.	1.6	30
661	A simulation of free surface waves for incompressible two-phase flows using a curvilinear level set formulation. International Journal for Numerical Methods in Fluids, 2006, 51, 305-330.	1.6	20
662	A PLIC volume tracking method for the simulation of two-fluid flows. International Journal for Numerical Methods in Fluids, 2006, 52, 1093-1134.	1.6	22
663	A boundary element approach for topology optimization problem using the level set method. Communications in Numerical Methods in Engineering, 2006, 23, 405-416.	1.3	25

#	Article	IF	CITATIONS
664	Numerical simulation of behavior of gas bubbles using a 3-D front-tracking method. AICHE Journal, 2006, 52, 99-110.	3.6	113
665	Numerical Study of the Effect of Surface Tension on Vapor Bubble Growth During Flow Boiling in Microchannels. , 2006, , 61.		4
666	Numerical Study of an Evaporating Meniscus on a Moving Heated Surface. Journal of Heat Transfer, 2006, 128, 1285-1292.	2.1	20
667	The Hybrid Particle-Level-Set Method Applied to Two-Phase Flows. , 2006, , 537.		2
668	Projection and Simple Methods for Single-Fluid and Multiple-Fluid Incompressible Unsteady Flows—General Formula. Numerical Heat Transfer, Part B: Fundamentals, 2006, 50, 395-408.	0.9	6
669	Three-dimensional direct numerical simulation for film-boiling contact of moving particle and liquid droplet. Physics of Fluids, 2006, 18, 117104.	4.0	11
670	ALE finite element method for FSI problems with free surface using mesh re-generation method based on background mesh. International Journal of Computational Fluid Dynamics, 2006, 20, 229-236.	1.2	14
671	Solving steady interface problems using residual velocities. IMA Journal of Applied Mathematics, 2006, 71, 877-897.	1.6	4
673	Multiregion Level Set Tracking with Transformation Invariant Shape Priors. Lecture Notes in Computer Science, 2006, , 674-683.	1.3	6
674	High-order Techniques for Calculating Surface Tension Forces. International Series of Numerical Mathematics, 2006, , 425-434.	1.1	12
675	Direct Numerical Simulations of Bubbly Flows. , 2006, , 273-281.		7
676	3-D Direct Numerical Simulation of Gas–Liquid and Gas–Liquid–Solid Flow Systems Using the Level-Set and Immersed-Boundary Methods. Advances in Chemical Engineering, 2006, , 1-63.	0.9	19
677	Numerical and Experimental Study on Ship Wash Including Wave-Breaking on Shore. Journal of Waterway, Port, Coastal and Ocean Engineering, 2006, 132, 369-378.	1.2	1
678	A variant of the level set method and applications to image segmentation. Mathematics of Computation, 2006, 75, 1155-1175.	2.1	166
679	A Tree-Like Multiphase Level Set Framework for 2-D and 3-D Medical Image Segmentation. , 2006, , .		1
680	Statistics and Analysis of Shapes. Modeling and Simulation in Science, Engineering and Technology, 2006, , .	0.6	20
681	Research on Fast Initialization for the Level Set Method. , 2006, , .		0
682	Surface tension in incompressible Rayleigh–Taylor mixing flow. Journal of Turbulence, 2006, 7, N71.	1.4	24

ARTICLE IF CITATIONS # A Global Mass Correction Scheme for the Level-Set Method. Numerical Heat Transfer, Part B: 0.9 45 684 Fundamentals, 2006, 50, 455-472. Large Deformation Fluid-Structure Interaction – Advances in ALE Methods and New Fixed Grid Approaches., 2006, , 195-232. 686 Sonoluminescence and the Search for Sonofusion. Advances in Heat Transfer, 2006, 39, 1-168. 0.9 11 RECONSTRUCTION OF SINGULAR SURFACES BY SHAPE SENSITIVITY ANALYSIS AND LEVEL SET METHOD. Mathematical Models and Methods in Applied Sciences, 2006, 16, 1347-1373. NUMERICAL STUDY OF 2D MULTIPHASE FLOWS OVER GROOVED SURFACE BY LATTICE BOLTZMANN METHOD. 688 1.7 13 International Journal of Modern Physics C, 2007, 18, 492-500. A Simple and Robust Advection Upwind Flux Splitting to Simulate Transient Cavitated Water-Vapor 689 2.1 Flows. Numerical Heat Transfer; Part A: Applications, 2007, 51, 679-696. 690 Relaxation dynamics of a free elongated liquid ligament. Physics of Fluids, 2007, 19, . 4.0 23 Understanding High Heat Transfer in Spray Cooling for Different Droplet Velocities and Wall Superheats by 3D Multiphase Flow Modeling. , 2007, , 755. Numerical simulation of timeâ€dependent heat and fluid flows inside and around single rising bubbles 692 using a moving axisymmetric boundaryâ€fitted mesh system. International Journal of Numerical Methods 2.8 2 for Heat and Fluid Flow, 2007, 17, 418-438. Numerical Study of Single Bubble Dynamics During Flow Boiling. Journal of Heat Transfer, 2007, 129, 2.1 46 864-876. Nonlinear Stability of the Classical Nusselt Problem of Film Condensation and Wave Effects. Journal 694 2.2 26 of Applied Mechanics, Transactions ASME, 2007, 74, 279-290. Numerical Study of a Single Bubble Sliding on a Downward Facing Heated Surface. Journal of Heat 2.1 Transfer, 2007, 129, 877-883. Numerical Simulation of Thermal Inkjet with Bubble Growth, Droplet Ejection and Ink Refill Motion. 696 0.4 0 AIP Conference Proceedings, 2007, , . Simulation of bubbles in foam with the volume control method. ACM Transactions on Graphics, 2007, 7.2 26, 98. 698 Simulation of bubbles in foam with the volume control method., 2007, , . 27 Bubble Dynamics and Heat Transfer during Pool and Flow Boiling. Heat Transfer Engineering, 2007, 28, 699 1.9 49 608-624. Modeling breakup and relaxation of Newtonian droplets using the advected phase-field approach. 700 2.112 Physical Review E, 2007, 75, 021405. Level Set Segmentation Algorithm Based on Image Entropy and Simulated Annealing., 2007, , .

#	Article	IF	Citations
702	Canny Operator Based Level Set Segmentation Algorithm for Medical Images. , 2007, , .		11
704	Numerical Simulation of Solitary Wave Propagation Using Surface Caputuring Method. 880-02 Nihon Kikai Gakkai Ronbunshū Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2007, 73, 1592-1598.	0.2	0
705	Numerical Calculation of Liquid Film Flowing down Flat Plates with Protrusions. 880-02 Nihon Kikai Gakkai Ronbunshū Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2007, 73, 2297-2302.	0.2	0
706	Modification of Surface Capturing Method Using WENO Scheme. 880-02 Nihon Kikai Gakkai Ronbunshū Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2007, 73, 52-57.	0.2	0
707	High Speed Digital Video Capillaroscopy: Nailfold Capillary Shape Analysis and Red Blood Cell Velocity Measurement. Journal of Biomechanical Science and Engineering, 2007, 2, 81-92.	0.3	6
708	The sharp-interface approach for fluids with phase change: Riemann problems and ghost fluid techniques. ESAIM: Mathematical Modelling and Numerical Analysis, 2007, 41, 1089-1123.	1.9	37
709	Direct Numerical Simulation of the Slow Formation Process of Single Bubbles in a Viscous Liquid. Journal of Chemical Engineering of Japan, 2007, 40, 939-943.	0.6	13
710	Spray Cooling Modeling: Liquid Film Thickness Effect on Heat Transfer. AIP Conference Proceedings, 2007, , .	0.4	8
711	Image segmentation based on level set method. , 2007, , .		0
712	Fluid Dynamic Study on Budd-Chiari Syndrome: Sensitivity Study of Vessel Reconstruction on Image-Based Simulation. Journal of Biomechanical Science and Engineering, 2007, 2, 69-80.	0.3	2
713	Local and Instantaneous Definition of Liquid-Vapor Interface at the Microscopic Scale. 880-02 Nihon Kikai Gakkai Ronbunshū Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2007, 73, 118-125.	0.2	3
714	Grain–continuum modelling of material behaviour. , 2007, , 148-188.		0
715	REPRODUCTION OF SLOSHING PHENOMENA AND SLOSHING DAMPER DEVICE BY CFD. Proceedings of Hydraulic Engineering, 2007, 51, 859-864.	0.0	0
716	Title is missing!. Journal of Applied Mechanics, 2007, 10, 255-262.	0.1	0
717	On the Modeling of Gas Bubble Evolution and Transport Using Coupled Level-Set/CFD Method. Nuclear Technology, 2007, 158, 261-274.	1.2	5
718	Direct numerical simulation of dynamic three-fluid flow. Progress in Computational Fluid Dynamics, 2007, 7, 176.	0.2	1
719	A flame detection technique based on fast mean shift and level set method. Proceedings of SPIE, 2007, ,	0.8	0
720	A probabilistic level set formulation for interactive organ segmentation. , 2007, , .		26

#	Article	IF	CITATIONS
721	Interface modeling in incompressible media using level sets in Escript. Physics of the Earth and Planetary Interiors, 2007, 163, 23-34.	1.9	67
722	Dissipative particle dynamics simulation of multiphase fluid flow in microchannels and microchannel networks. Physics of Fluids, 2007, 19, 033302.	4.0	53
723	A three-dimensional model for particle dissolution in binary alloys. Computational Materials Science, 2007, 39, 767-774.	3.0	23
724	Highâ€Resolution Fluxâ€Based Level Set Method. SIAM Journal of Scientific Computing, 2007, 29, 579-597.	2.8	27
725	Curve/Surface Representation and Evolution Using Vector Level Sets with Application to the Shape-Based Segmentation Problem. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2007, 29, 945-958.	13.9	46
726	Advections with Significantly Reduced Dissipation and Diffusion. IEEE Transactions on Visualization and Computer Graphics, 2007, 13, 135-144.	4.4	82
727	Numerical Simulation of Acoustic Streaming on Surface Acoustic Wave-driven Biochips. SIAM Journal of Scientific Computing, 2007, 29, 2352-2380.	2.8	62
728	Simulation of flows with violent free surface motion and moving objects using unstructured grids. International Journal for Numerical Methods in Fluids, 2007, 53, 1315-1338.	1.6	59
729	Finite Element Discretization Error Analysis of a Surface Tension Force in Two-Phase Incompressible Flows. SIAM Journal on Numerical Analysis, 2007, 45, 1679-1700.	2.3	56
730	A Combined Level-Set/Mixture Fraction/Progress-Variable Approach for Partially-Premixed Turbulent Reacting Flows. , 2007, , .		6
731	Large-Eddy Simulation of Breaking Waves Using Embedded-Boundary/Level-Set Method. , 2007, , .		13
732	How to solve compressible multifluid equations: a simple, robust and accurate method. , 2007, , .		2
733	A Sharp Interface Method for Two-Phase Flows Interacting with Moving Bodies. , 2007, , .		8
734	Viscous Layer Meshes from Level Sets on Cartesian Meshes. , 2007, , .		22
735	Numerical and Experimental Investigation on Sloshing in Rocket Tanks with Damping Devices. , 2007, , .		4
737	Improvements in level set segmentation of 3D small animal imagery. , 2007, , .		3
739	Numerical Simulation of Subcooled Nucleate Boiling by Coupling Level-Set Method with Moving-Mesh Method. Numerical Heat Transfer, Part B: Fundamentals, 2007, 51, 535-563.	0.9	35
740	Multigrid Geometric Active Contour Models. IEEE Transactions on Image Processing, 2007, 16, 229-240.	9.8	77

#	Article	IF	CITATIONS
741	Delaunay Deformable Models: Topology-Adaptive Meshes Based on the Restricted Delaunay Triangulation. , 2007, , .		33
742	An improved three-dimensional model for interface pressure calculations in free-surface flows. International Journal of Computational Fluid Dynamics, 2007, 21, 87-97.	1.2	14
743	Calcul parallèle appliqué aux écoulements de fluides complexes. European Journal of Computational Mechanics, 2007, 16, 703-722.	0.6	0
744	Full-scale solutions to particle-laden flows: Multidirect forcing and immersed boundary method. Physical Review E, 2007, 76, 066709.	2.1	108
745	A Level Set Method for Analysis of Film Boiling on an Immersed Solid Surface. Numerical Heat Transfer, Part B: Fundamentals, 2007, 52, 153-177.	0.9	98
746	Using the level set method to model endogenous lava dome growth. Journal of Geophysical Research, 2007, 112, .	3.3	27
747	Transient and steady state of a rising bubble in a viscoelastic fluid. Journal of Fluid Mechanics, 2007, 589, 215-252.	3.4	82
748	Droplet–particle collision mechanics with film-boiling evaporation. Journal of Fluid Mechanics, 2007, 573, 311-337.	3.4	51
749	Dissipative particle dynamics simulation of pore-scale multiphase fluid flow. Water Resources Research, 2007, 43, .	4.2	44
751	A Sharp Surface Tension Modeling Method for Capillarity-Dominant Two-Phase Incompressible Flows. , 2007, , .		0
752	Characterization of Surface Wave Propagation Due to Capillary Force. Journal of the Japan Society for Aeronautical and Space Sciences, 2007, 55, 273-281.	0.1	5
753	Quelques méthodes de paramÃ <sup>~</sup> tre d'ordre avec applications à la modélisation de processus cancéreux. ESAIM: Proceedings and Surveys, 2007, 18, 163-180.	0.4	1
754	Computational modelling of free surface flows for offshore application. Marine Systems and Ocean Technology, 2007, 3, 113-122.	1.0	2
755	Numerical Simulation of Liquid Metal Free-surface Flows in the Presence of a Uniform Static Magnetic Field. ISIJ International, 2007, 47, 574-581.	1.4	11
756	A study of the representation of cracks with level sets. International Journal for Numerical Methods in Engineering, 2007, 70, 1261-1302.	2.8	153
757	A bridge between projection methods and SIMPLE type methods for incompressible Navier–Stokes equations. International Journal for Numerical Methods in Engineering, 2007, 72, 1490-1512.	2.8	33
758	Simple finite element-based computation of distance functions in unstructured grids. International Journal for Numerical Methods in Engineering, 2007, 72, 1095-1110.	2.8	38
759	Numerical simulation of drop deformation and breakup in shear flow. Heat Transfer - Asian Research, 2007, 36, 286-294.	2.8	4

#	Article	IF	CITATIONS
760	An unsteady single-phase level set method for viscous free surface flows. International Journal for Numerical Methods in Fluids, 2007, 53, 229-256.	1.6	142
761	A two-phase flow interface capturing finite element method. International Journal for Numerical Methods in Fluids, 2007, 53, 735-751.	1.6	5
762	The development of a Cartesian cut cell method for incompressible viscous flows. International Journal for Numerical Methods in Fluids, 2007, 54, 1033-1053.	1.6	35
763	On level set modelling of bi-fluid capillary flow. International Journal for Numerical Methods in Fluids, 2007, 53, 1297-1314.	1.6	6
764	Critical evaluation of CFD codes for interfacial simulation of bubble-train flow in a narrow channel. International Journal for Numerical Methods in Fluids, 2007, 55, 537-564.	1.6	30
765	Coupled ghost fluid/two-phase level set method for curvilinear body-fitted grids. International Journal for Numerical Methods in Fluids, 2007, 55, 867-897.	1.6	54
766	Tracking entropy wave in ideal MHD equations by weighted ghost fluid method. Applied Mathematical Modelling, 2007, 31, 2503-2514.	4.2	7
767	Phase field computations for ternary fluid flows. Computer Methods in Applied Mechanics and Engineering, 2007, 196, 4779-4788.	6.6	112
768	A modified immersed boundary method for simulations of fluid–particle interactions. Computer Methods in Applied Mechanics and Engineering, 2007, 197, 36-46.	6.6	41
769	A molecular dynamics study on liquid–vapor interface adsorbed by impurities. Computers and Fluids, 2007, 36, 69-76.	2.5	16
770	On the application of the single-phase level set method to naval hydrodynamic flows. Computers and Fluids, 2007, 36, 868-886.	2.5	87
771	Level-Set method and stability condition for curvature-driven flows. Comptes Rendus Mathematique, 2007, 344, 703-708.	0.3	6
772	Bubble formation and dynamics in gas–liquid–solid fluidization—A review. Chemical Engineering Science, 2007, 62, 2-27.	3.8	207
773	Numerical simulation of periodic bubble formation at a submerged orifice with constant gas flow rate. Chemical Engineering Science, 2007, 62, 2109-2125.	3.8	116
774	Numerical simulations of drop impact and spreading on horizontal and inclined surfaces. Chemical Engineering Science, 2007, 62, 7214-7224.	3.8	158
775	Numerical simulations of bubble formation on submerged orifices: Period-1 and period-2 bubbling regimes. Chemical Engineering Science, 2007, 62, 7119-7132.	3.8	74
776	A numerical method to compute solidification and melting processes. Applied Mathematical Modelling, 2007, 31, 93-119.	4.2	63
777	The accuracy of the modified ghost fluid method for gas–gas Riemann problem. Applied Numerical Mathematics, 2007, 57, 721-733.	2.1	18

#	Article	IF	Citations
778	A study of numerical methods for the level set approach. Applied Numerical Mathematics, 2007, 57, 837-846.	2.1	9
779	Numerical simulation of gas–liquid two-phase flow and convective heat transfer in a micro tube. International Journal of Heat and Fluid Flow, 2007, 28, 72-82.	2.4	90
780	An interface-capturing method for incompressible two-phase flows. Validation and application to bubble dynamics. International Journal of Multiphase Flow, 2007, 33, 109-133.	3.4	116
781	Nonlinear simulation of the effect of microenvironment on tumor growth. Journal of Theoretical Biology, 2007, 245, 677-704.	1.7	174
782	Computer modeling of liquid–solid impacts. Mathematical and Computer Modelling, 2007, 45, 162-176.	2.0	0
783	A level set method for segmentation of the thalamus and its nuclei in DT-MRI. Signal Processing, 2007, 87, 309-321.	3.7	62
784	A sharp interface method for incompressible two-phase flows. Journal of Computational Physics, 2007, 221, 469-505.	3.8	327
785	An extended level set method for shape and topology optimization. Journal of Computational Physics, 2007, 221, 395-421.	3.8	176
786	A numerical method for capillarity-dominant free surface flows. Journal of Computational Physics, 2007, 221, 506-523.	3.8	55
787	Dissipative particle dynamics simulation of fluid motion through an unsaturated fracture and fracture junction. Journal of Computational Physics, 2007, 222, 110-130.	3.8	53
788	Multi-physics treatment in the vicinity of arbitrarily deformable gas–liquid interfaces. Journal of Computational Physics, 2007, 222, 504-535.	3.8	70
789	A level set based sharp interface method for the multiphase incompressible Navier–Stokes equations with phase change. Journal of Computational Physics, 2007, 222, 536-555.	3.8	295
790	Numerical resolution of a potential diphasic low Mach number system. Journal of Computational Physics, 2007, 223, 151-187.	3.8	12
791	High-fidelity interface tracking in compressible flows: Unlimited anchored adaptive level set. Journal of Computational Physics, 2007, 224, 836-866.	3.8	112
792	An extended pressure finite element space for two-phase incompressible flows with surface tension. Journal of Computational Physics, 2007, 224, 40-58.	3.8	167
793	A stabilized finite element method using a discontinuous level set approach for the computation of bubble dynamics. Journal of Computational Physics, 2007, 225, 949-974.	3.8	75
794	A new high-order immersed interface method for solving elliptic equations with imbedded interface of discontinuity. Journal of Computational Physics, 2007, 225, 1066-1099.	3.8	65
795	A volume of fluid method for a two-dimensional plasma expansion problem. Journal of Computational Physics, 2007, 225, 1937-1960.	3.8	1

ARTICLE IF CITATIONS Advecting normal vectors: A new method for calculating interface normals and curvatures when 796 3.8 38 modeling two-phase flows. Journal of Computational Physics, 2007, 226, 774-797. Efficient implementation of THINC scheme: A simple and practical smoothed VOF algorithm. Journal of 797 3.8 Computational Physics, 2007, 226, 1985-2002. Diffuse interface model for incompressible two-phase flows with large density ratios. Journal of 798 3.8 524 Computational Physics, 2007, 226, 2078-2095. Efficient level set methods for constructing wavefronts in three spatial dimensions. Journal of 799 Computational Physics, 2007, 226, 2250-2270. A Lagrangian Approach to Dynamic Interfaces through Kinetic Triangulation of the Ambient Space. 800 3.0 10 Computer Graphics Forum, 2007, 26, 227-239. Textured Liquids based on the Marker Level Set. Computer Graphics Forum, 2007, 26, 457-466. 3.0 Studying the influence of a solid shell on lava dome growth and evolution using the level set 802 2.4 12 method. Geophysical Journal International, 2007, 170, 1431-1438. A Coupled Minimization Problem for Medical Image Segmentation with Priors. International Journal 15.6 38 of Computer Vision, 2007, 71, 259-272. A novel approach to three-dimensional semiconductor process simulation: Application to thermal 804 2.5 6 oxidation. Journal of Computational Electronics, 2007, 5, 291-295. Level Set Based Simulations of Two-Phase Oilâ€"Water Flows in Pipes. Journal of Scientific Computing, 2.3 2007, 31, 153-184. Level Set Calculations for Incompressible Two-Phase Flows on a Dynamically Adaptive Grid. Journal of 806 12 2.3Scientific Computing, 2007, 31, 75-98. On Boundary Condition Capturing for Multiphase Interfaces. Journal of Scientific Computing, 2007, 31, 2.3 99-125. Flux-free Finite Element Method with Lagrange Multipliers for Two-fluid Flows. Journal of Scientific 808 2.3 3 Computing, 2007, 32, 147-173. Simulations of fibre orientation in dilute suspensions with front moving in the filling process of a 809 2.4 rectangular channel using level-set method. Rheologica Acta, 2007, 46, 427-447. Novel heat transfer issues associated with the design and safe operation of the MEGAPIE spallation 810 1.9 1 source target. Journal of Thermal Science, 2007, 16, 63-78. Visual Simulation of Multiple Unmixable Fluids. Journal of Computer Science and Technology, 2007, 22, 156-160. Numerical study of single bubbles with dynamic contact angle during nucleate pool boiling. 812 4.8 129 International Journal of Heat and Mass Transfer, 2007, 50, 127-138. Coupling level set/VOF/ghost fluid methods: Validation and application to 3D simulation of the 3.4 primary break-up of a liquid jet. International Journal of Multiphase Flow, 2007, 33, 510-524.

#	ARTICLE	IF	CITATIONS
814	Two-phase viscoelastic jetting. Journal of Computational Physics, 2007, 220, 568-585.	3.8	44
815	A Level Set Method for vaporizing two-phase flows. Journal of Computational Physics, 2007, 221, 837-853.	3.8	223
816	A second order accurate level set method on non-graded adaptive cartesian grids. Journal of Computational Physics, 2007, 225, 300-321.	3.8	192
817	A conservative level set method for two phase flow II. Journal of Computational Physics, 2007, 225, 785-807.	3.8	436
818	A level set method for three dimensional vector Stefan problems: Dissolution of stoichiometric particles in multi-component alloys. Journal of Computational Physics, 2007, 224, 222-240.	3.8	18
819	High order numerical methods to a type of delta function integrals. Journal of Computational Physics, 2007, 226, 1952-1967.	3.8	25
820	Inverse scattering by a continuation method with initial guesses from a direct imaging algorithm. Journal of Computational Physics, 2007, 227, 755-762.	3.8	42
821	An augmented approach for Stokes equations with a discontinuous viscosity and singular forces. Computers and Fluids, 2007, 36, 622-635.	2.5	67
822	Stratified smooth two-phase flow using the immersed interface method. Computers and Fluids, 2007, 36, 1273-1289.	2.5	13
823	Migration and deformation of leukocytes in pressure driven flows. Mechanics Research Communications, 2007, 34, 411-422.	1.8	24
824	Numerical simulations for the motion of soap bubbles using level set methods. Computers and Fluids, 2008, 37, 524-535.	2.5	8
825	On improving mass-conservation properties of the hybrid particle-level-set method. Computers and Fluids, 2008, 37, 1320-1331.	2.5	21
826	Fast PDE approach to surface reconstruction from large cloud of points. Computer Vision and Image Understanding, 2008, 112, 274-285.	4.7	10
827	Free-surface flows under impacting droplets. Journal of Computational Physics, 2008, 227, 2344-2365.	3.8	35
828	Prior Knowledge, Level Set Representations & Visual Grouping. International Journal of Computer Vision, 2008, 76, 231-243.	15.6	95
829	On the Numerical Approximation of the Length ofÂ(Implicit) Level Curves. Journal of Scientific Computing, 2008, 35, 99-113.	2.3	1
830	An Unconditionally Stable MacCormack Method. Journal of Scientific Computing, 2008, 35, 350-371.	2.3	212
831	The Flexible, Extensible and Efficient Toolbox ofÂLevelÂSet Methods. Journal of Scientific Computing, 2008, 35, 300-329.	2.3	198

#	Article	IF	CITATIONS
832	Second-Order Accurate Computation of Curvatures in a Level Set Framework Using Novel High-Order Reinitialization Schemes. Journal of Scientific Computing, 2008, 35, 114-131.	2.3	60
833	A Local Semi-Implicit Level-Set Method for Interface Motion. Journal of Scientific Computing, 2008, 35, 330-349.	2.3	20
834	A Numerical Method for Free-Surface Flows and Its Application to Droplet Impact on a Thin Liquid Layer. Journal of Scientific Computing, 2008, 35, 372-396.	2.3	49
835	Modelling Gravitational Instabilities: Slab Break–off and Rayleigh–Taylor Diapirism. Pure and Applied Geophysics, 2008, 165, 1491-1510.	1.9	52
836	Numerical simulation of Marangoni effects of single drops induced by interphase mass transfer in liquid-liquid extraction systems by the level set method. Science in China Series B: Chemistry, 2008, 51, 684-694.	0.8	19
837	A volume-amending method to improve mass conservation of level set approach for incompressible two-phase flows. Science in China Series B: Chemistry, 2008, 51, 1132-1140.	0.8	1
838	Wave overtopping simulations over coastal structures. Journal of Mechanical Science and Technology, 2008, 22, 1222-1229.	1.5	3
839	Multiscale simulation of mixing processes using 3D-parallel, fluid-structure interaction techniques. International Journal of Material Forming, 2008, 1, 1131-1134.	2.0	7
840	Computing three-dimensional two-phase flows with a mass-conserving level set method. Computing and Visualization in Science, 2008, 11, 221-235.	1.2	21
841	Computational heat transfer and two-phase flow topology in miniature tubes. Microfluidics and Nanofluidics, 2008, 4, 261-271.	2.2	111
842	Adherence and bouncing of liquid droplets impacting on dry surfaces. Microfluidics and Nanofluidics, 2008, 5, 469-478.	2.2	59
843	Geometric shapes of the interface surface of bicomponent flows between two concentric rotating cylinders. Applied Mathematics and Mechanics (English Edition), 2008, 29, 1363-1376.	3.6	0
844	A New Splitting Active Contour Framework Based on Chan-Vese Piecewise Smooth Model. Zidonghua Xuebao/Acta Automatica Sinica, 2008, 34, 659-664.	1.5	2
845	The Transient Dynamics of a Small Bubble Rising in a Low Morton Number Regime. Chemical Engineering and Technology, 2008, 31, 1350-1357.	1.5	15
846	The immersed/fictitious element method for fluid–structure interaction: Volumetric consistency, compressibility and thin members. International Journal for Numerical Methods in Engineering, 2008, 74, 32-55.	2.8	41
847	A combined extended finite element and level set method for biofilm growth. International Journal for Numerical Methods in Engineering, 2008, 74, 848-870.	2.8	109
848	A discontinuousâ€Galerkinâ€based immersed boundary method. International Journal for Numerical Methods in Engineering, 2008, 76, 427-454.	2.8	80
849	Direct simulation of the buoyant rise of bubbles in infinite liquid using level set method. Canadian Journal of Chemical Engineering, 2008, 86, 267-275.	1.7	25

#	Article	IF	CITATIONS
850	A hybrid Lagrangian–Eulerian particleâ€level set method for numerical simulations of twoâ€fluid turbulent flows. International Journal for Numerical Methods in Fluids, 2008, 56, 2271-2300.	1.6	19
851	An accurate finite element scheme with moving meshes for computing 3Dâ€axisymmetric interface flows. International Journal for Numerical Methods in Fluids, 2008, 57, 119-138.	1.6	50
852	Numerical simulations of droplet formation in a crossâ€junction microchannel by the lattice Boltzmann method. International Journal for Numerical Methods in Fluids, 2008, 57, 793-810.	1.6	18
853	Detailed comparisons of frontâ€capturing methods for turbulent twoâ€phase flow simulations. International Journal for Numerical Methods in Fluids, 2008, 56, 1543-1549.	1.6	15
854	A further work on multiâ€phase twoâ€fluid approach for compressible multiâ€phase flows. International Journal for Numerical Methods in Fluids, 2008, 58, 879-896.	1.6	38
855	Free surface tracking with polynomial reconstruction and error correction. International Journal for Numerical Methods in Fluids, 2008, 58, 1237-1255.	1.6	0
856	Transient adaptivity applied to two-phase incompressible flows. Journal of Computational Physics, 2008, 227, 1923-1942.	3.8	29
857	A balanced force refined level set grid method for two-phase flows on unstructured flow solver grids. Journal of Computational Physics, 2008, 227, 2674-2706.	3.8	269
858	Numerical simulation of 3D bubbles rising in viscous liquids using a front tracking method. Journal of Computational Physics, 2008, 227, 3358-3382.	3.8	184
859	Redistancing by flow of time dependent eikonal equation. Journal of Computational Physics, 2008, 227, 4002-4017.	3.8	52
860	Direct numerical simulation of evaporating droplets. Journal of Computational Physics, 2008, 227, 5215-5237.	3.8	164
861	On stability condition for bifluid flows with surface tension: Application to microfluidics. Journal of Computational Physics, 2008, 227, 6140-6164.	3.8	86
862	Differential equation based constrained reinitialization for level set methods. Journal of Computational Physics, 2008, 227, 6821-6845.	3.8	76
863	A higher-order generalized ghost fluid method for the poor for the three-dimensional two-phase flow computation of underwater implosions. Journal of Computational Physics, 2008, 227, 7674-7700.	3.8	100
864	An accurate conservative level set/ghost fluid method for simulating turbulent atomization. Journal of Computational Physics, 2008, 227, 8395-8416.	3.8	327
865	Front tracking with moving-least-squares surfaces. Journal of Computational Physics, 2008, 227, 9643-9669.	3.8	24
866	A variational level set method for the topology optimization of steady-state Navier–Stokes flow. Journal of Computational Physics, 2008, 227, 10178-10195.	3.8	167
867	Zero frequency shift of an oscillating-rotating liquid droplet. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 482-485.	2.1	6

#	Article	IF	CITATIONS
868	A wildland fire model with data assimilation. Mathematics and Computers in Simulation, 2008, 79, 584-606.	4.4	111
869	Deformation of a viscoelastic droplet passing through a microfluidic contraction. Journal of Non-Newtonian Fluid Mechanics, 2008, 155, 67-79.	2.4	43
870	Shape-topology optimization of stokes flow via variational level set method. Applied Mathematics and Computation, 2008, 202, 200-209.	2.2	21
872	Simulation of incompressible two-phase flows with large density differences employing lattice Boltzmann and level set methods. Computer Methods in Applied Mechanics and Engineering, 2008, 198, 223-233.	6.6	22
873	Study on the potential of BML-approach and G-equation concept-based models for predicting swirling partially premixed combustion systems: URANS computations. Combustion and Flame, 2008, 152, 548-572.	5.2	23
874	Numerical simulation of oscillations and rotations of a free liquid droplet using the level set method. Computers and Fluids, 2008, 37, 91-98.	2.5	20
875	Numerical simulation of conventional capillary flow and no-flow underfill in flip-chip packaging. Computers and Fluids, 2008, 37, 520-523.	2.5	26
876	Computational fluid dynamics (CFD) software tools for microfluidic applications – A case study. Computers and Fluids, 2008, 37, 218-235.	2.5	124
877	A level set embedded interface method for conjugate heat transfer simulations of low speed 2D flows. Computers and Fluids, 2008, 37, 1262-1275.	2.5	11
878	Numerical investigations of shock–bubble interactions in mercury. Fluid Dynamics Research, 2008, 40, 510-520.	1.3	21
879	Phase-Field simulation of small capillary-number two-phase flow in a microtube. Fluid Dynamics Research, 2008, 40, 497-509.	1.3	40
880	Numerical simulation of unsteady mass transfer by the level set method. Chemical Engineering Science, 2008, 63, 3141-3151.	3.8	48
881	Numerical study of dynamics of single bubbles and bubble swarms. Applied Mathematical Modelling, 2008, 32, 641-659.	4.2	55
882	Interaction of two-phase flow with animated models. Graphical Models, 2008, 70, 33-42.	2.4	8
883	Three-dimensional simulation of saturated film boiling on a horizontal cylinder. International Journal of Heat and Mass Transfer, 2008, 51, 1156-1167.	4.8	61
884	Combined multi-direct forcing and immersed boundary method for simulating flows with moving particles. International Journal of Multiphase Flow, 2008, 34, 283-302.	3.4	221
885	Three-dimensional lattice Boltzmann simulations of droplet formation in a cross-junction microchannel. International Journal of Multiphase Flow, 2008, 34, 852-864.	3.4	98
886	Turbulent Combustion in Thermonuclear Supernovae. Lecture Notes in Physics, 2008, , 255-289.	0.7	7

#	Article	IF	CITATIONS
887	Seismic ray tracing and wavefront tracking in laterally heterogeneous media. Advances in Geophysics, 2008, 49, 203-273.	2.8	90
888	Lava dome growth and evolution with an independently deformable talus. Geophysical Journal International, 2008, 174, 391-417.	2.4	33
889	Modeling cellular deformations using the level set formalism. BMC Systems Biology, 2008, 2, 68.	3.0	73
890	Level set framework for the numerical modelling of primary recrystallization in polycrystalline materials. Scripta Materialia, 2008, 58, 1129-1132.	5.2	103
891	The transition from endogenous to exogenous growth of lava domes with the development of shear bands. Journal of Volcanology and Geothermal Research, 2008, 171, 237-257.	2.1	72
892	Interacting two-dimensional bubbles and droplets in a yield-stress fluid. Physics of Fluids, 2008, 20, .	4.0	45
893	Multiphase Flow. , 2009, , 335-501.		2
894	Level set simulation of coupled advectionâ€diffusion and pore structure evolution due to mineral precipitation in porous media. Water Resources Research, 2008, 44, .	4.2	55
895	High Performance Computing in Science and Engineering `07. , 2008, , .		1
896	Levee Erosion by Overtopping in New Orleans during the Katrina Hurricane. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2008, 134, 618-632.	3.0	130
897	DNA Microarrays. , 2008, , 391-396.		0
898	Preliminary Investigation on Heat Exchange Enhanced by Sloshing. , 2008, , .		0
899	Further Development of a High-Order Prediction Tool for Combustion at All Speeds. , 2008, , .		0
900	Comparison of Particle Level Set and CLSVOF Methods for Interfacial Flows. , 2008, , .		7
901	Towards Topology-Free Optimization: An Application to Turbine Internal Cooling Geometries. , 2008, , .		10
902	Adaptive moving mesh level set method for structure topology optimization. Engineering Optimization, 2008, 40, 529-558.	2.6	50
903	Numerical study of droplet motion in a microchannel with different contact angles. Journal of Mechanical Science and Technology, 2008, 22, 2590.	1.5	12
904	Flow simulations using particles. , 2008, , .		9

#	Article	IF	CITATIONS
905	DOUAR: A new three-dimensional creeping flow numerical model for the solution of geological problems. Physics of the Earth and Planetary Interiors, 2008, 171, 76-91.	1.9	101
906	Comparison of Eulerian and Lagrangian numerical techniques for the Stokes equations in the presence of strongly varying viscosity. Physics of the Earth and Planetary Interiors, 2008, 171, 92-111.	1.9	96
907	A model comparison study of large-scale mantle–lithosphere dynamics driven by subduction. Physics of the Earth and Planetary Interiors, 2008, 171, 224-234.	1.9	43
908	A finite element-based level-set method of an interface motion driven by a diffusion field: Application to a phase transformation problem. Computational Materials Science, 2008, 44, 792-801.	3.0	6
909	Geometric Observers for Dynamically Evolving Curves. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2008, 30, 1093-1108.	13.9	18
910	AN OVERVIEW ON SMOOTHED PARTICLE HYDRODYNAMICS. International Journal of Computational Methods, 2008, 05, 135-188.	1.3	90
911	Modeling Primary Atomization. Annual Review of Fluid Mechanics, 2008, 40, 343-366.	25.0	369
912	Numerical prediction of interfacial instabilities: Sharp interface method (SIM). Journal of Computational Physics, 2008, 227, 3940-3970.	3.8	59
913	Robust second-order accurate discretizations of the multi-dimensional Heaviside and Dirac delta functions. Journal of Computational Physics, 2008, 227, 9686-9695.	3.8	49
914	Spray Cooling Modeling: Droplet Sub-Cooling Effect on Heat Transfer. AIP Conference Proceedings, 2008, , .	0.4	3
915	Dielectrophoretic Motion of Particles and Cells. , 2008, , 357-364.		0
916	Bubble Dynamics, Flow, and Heat Transfer during Flow Boiling in Parallel Microchannels. Numerical Heat Transfer; Part A: Applications, 2008, 54, 390-405.	2.1	19
917	Bubble Dynamics and Heat Transfer During Nucleate Boiling in a Microchannel. Numerical Heat Transfer; Part A: Applications, 2008, 53, 1074-1090.	2.1	45
918	High Order Numerical Quadratures to One Dimensional Delta Function Integrals. SIAM Journal of Scientific Computing, 2008, 30, 1825-1846.	2.8	16
919	The three-dimensional numerical simulation of aluminized composite solid propellant combustion. Combustion Theory and Modelling, 2008, 12, 45-71.	1.9	18
920	Self-Repelling Snakes for Topology-Preserving Segmentation Models. IEEE Transactions on Image Processing, 2008, 17, 767-779.	9.8	52
921	Simulations of Dam-Break Flows Using Free Surface Capturing Method. Journal of Mechanics, 2008, 24, 391-403.	1.4	7
922	The residual velocity method applied to a steady free boundary-value problem of vector Laplacian type. IMA Journal of Applied Mathematics, 2008, 74, 74-84.	1.6	0

#	Article	IF	CITATIONS
923	Numerical investigation of the deformation mechanism of a bubble or a drop rising or falling in another fluid. Chinese Physics B, 2008, 17, 3847-3855.	1.4	14
924	Simulation of Two-phase Flow Using Smoothed Particle Hydrodynamics. , 2008, , .		2
925	Front-Tracking for 3-D Fluid Animation Using Particle Level Set Method. , 2008, , .		0
926	Numerical Study of Droplet Motion in a Hydrophilic/Hydrophobic Microchannel. , 2008, , .		Ο
927	Bubble Rise and Departure From a Viscous Liquid Free Surface. , 2008, , .		0
928	Development of a Computer Simulation Model for Blowing Glass Containers. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2008, 130, .	2.2	9
929	An a Priori Study for the Modelling of Subgrid-Scale Phenomena in the Interaction Between a Liquid Sheet and a Decaying Turbulence. , 2008, , .		0
930	Rapid Prototyping Design Optimization Using Flow Sculpting. Journal of Turbomachinery, 2008, 130, .	1.7	3
931	Linking plastic deformation to recrystallization in metals using digital microstructures. Philosophical Magazine, 2008, 88, 3691-3712.	1.6	55
932	Numerical study on the shear-induced lift force acting on a spherical bubble in aqueous surfactant solutions. Physics of Fluids, 2008, 20, .	4.0	45
933	Medial Representations. Computational Imaging and Vision, 2008, , .	0.6	160
934	A Differential Geometry Approach to Mesh Generation. Series in Contemporary Applied Mathematics, 2008, , 222-292.	0.8	2
935	Multicomponent and multiphase modeling and simulation of reactive wetting. Physical Review E, 2008, 77, 056313.	2.1	26
936	A Level-Set Method for Simulation of a Thermal Inkjet Process. Numerical Heat Transfer, Part B: Fundamentals, 2008, 54, 138-156.	0.9	35
937	Nonlinear evolution of the Richtmyer–Meshkov instability. Journal of Fluid Mechanics, 2008, 612, 311-338.	3.4	43
938	A Study of Interfacial Volume Tracking Method for Unstructured Grid System Based on MARS. 880-02 Nihon Kikai Gakkai Ronbunshū Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2008, 74, 1303-1309.	0.2	0
939	Numerical Simulation of a Contaminated Water Drop Sinking in a Oil by a Front-tracking Method. Journal of Computational Science and Technology, 2008, 2, 246-257.	0.4	6
940	Effect of external magnetic fields on various free-surface flows. Progress in Computational Fluid Dynamics, 2008, 8, 461.	0.2	2

#		IE	CITATIONS
#		IF	CHATIONS
941	A Numerical Study of Bubbly Flow in a Rectangular Microchannel. , 2008, , .		3
942	Development of a Numerical Optimisation Method for Blowing Glass Parison Shapes. , 2008, , .		2
943	Numerical Investigation on Self-Organized Interconnection Using Anisotropic Conductive Adhesive with Low Melting Point Alloy Filler. Materials Transactions, 2008, 49, 2572-2578.	1.2	1
944	A Finite Element Simulation of Interface Motion Driven by Diffusion Field in Solid Materials Based on the Level-set Method. Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A, 2008, 74, 1191-1197.	0.2	Ο
945	Numerial Analysis on High-Speed Droplet Impact on a Solid Surface (Study on Cavitation Inception). 880-02 Nihon Kikai Gakkai Ronbunshū Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2008, 74, 1717-1724.	0.2	0
946	Design of Compliant Thermal Actuators Using Structural Optimization Based on the Level Set Method. , 2008, , .		2
947	Modeling of Droplet-Based Processing for the Production of High-Performance Particulate Materials Using Level Set Method. , 2008, , .		0
948	Two-Phase Flows of Droplets in Contractions and Double Bends. Engineering Applications of Computational Fluid Mechanics, 2008, 2, 299-308.	3.1	12
949	A Numerical Study on Flow Boiling in Parallel Microchannels. , 2008, , .		0
950	Simulation of the break-up of diphasic jets in a microchannel. ESAIM: Proceedings and Surveys, 2008, 25, 80-90.	0.4	Ο
951	Direct Numerical Simulation of the First Stages of a Plunging Breaker Using a Level Set Method. , 2009, , .		0
952	Simulation of Droplet Formation Dynamics. Journal of the Japan Institute of Marine Engineering, 2009, 44, 393-398.	0.0	0
953	A Coupled Implicit Interface and Level Contour Reconstruction Method for Multiphase Flow Simulation(Fluids Engineering). 880-02 Nihon Kikai Gakkai Ronbunshū Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2009, 75, 2003-2010.	0.2	0
954	Turbulence-interface interactions in a two-fluid homogeneous flow. Physics of Fluids, 2009, 21, .	4.0	11
955	An immersed boundary/level-set method for incompressible viscous flows in complex geometries with good conservation properties. European Journal of Computational Mechanics, 2009, 18, 561-587.	0.6	1
956	Object Contour Extraction Based on Intensity and Texture Information. , 2009, , .		0
957	Numerical simulation of free surface flows with the level set method using an extremely high-order accuracy WENO advection scheme. International Journal of Computational Fluid Dynamics, 2009, 23, 233-243.	1.2	14
958	Modeling Thermal-Boundary-Layer Effect on Liquid-Vapor Interface Dynamics in Spray Cooling. Journal of Thermophysics and Heat Transfer, 2009, 23, 356-370.	1.6	8

	CITATION RE	PORT	
Article		IF	CITATIONS
Thermal Modeling of Spray Cooling: Gravitational Effect on Droplet and Bubble Dynam Thermophysics and Heat Transfer, 2009, 23, 560-570.	ics. Journal of	1.6	4
Finite element model of primary recrystallization in polycrystalline aggregates using a framework. Modelling and Simulation in Materials Science and Engineering, 2009, 17,	level set 064006.	2.0	92
AN INTRODUCTION TO THE IMMERSED BOUNDARY AND THE IMMERSED INTERFACE Notes Series, Institute for Mathematical Sciences, 2009, , 1-67.	METHODS. Lecture	0.2	3
Numerical Optimisation of Blowing Glass Parison Shapes. , 2009, , .			2
Direct Numerical Simulation of Heat Transfer in Spray Cooling Through 3D Multiphase Using Parallel Computing. Journal of Heat Transfer, 2009, 131, .	Flow Modeling	2.1	27
A Fuel-Spray Simulation Considering Fuel-Jet Breakup Near Fuel Injector and Compositi Mixture. , 2009, , .	ion of Air/Fuel		1

3

965	Simulation of Multi-Mode Film Boiling Using	g Level Set Method 2009
900	Simulation of Multi Mode Film bolling using	g Level Jet Method, 2007, .

966	A Direct 3D Numerical Simulation Code for Extrusion and Mixing Processes. International Polymer Processing, 2009, 24, 141-147.	0.5	27
967	Level-set segmentation of pulmonary nodules in radiographs using a CT prior. Proceedings of SPIE, 2009, , .	0.8	3
968	Unsteady Reynolds Averaged Navier–Stokes Method for Free-Surface Wave Flows around Surface-Piercing Cylindrical Structures. Journal of Waterway, Port, Coastal and Ocean Engineering, 2009, 135, 135-143.	1.2	17
969	Interfaces and hydrophobic interactions in receptor-ligand systems: A level-set variational implicit solvent approach. Journal of Chemical Physics, 2009, 131, 144102.	3.0	40
970	Numerical simulation of liquid sloshing in a partially filled container with inclusion of compressibility effects. Physics of Fluids, 2009, 21, .	4.0	18
971	Lattice Boltzmann study of droplet motion inside a grooved channel. Physics of Fluids, 2009, 21, .	4.0	52
972	A numerical study of the relaxation and breakup of an elongated drop in a viscous liquid. Journal of Fluid Mechanics, 2009, 640, 235-264.	3.4	18
973	Dynamics of drop coalescence at fluid interfaces. Journal of Fluid Mechanics, 2009, 620, 333-352.	3.4	91
974	Modeling growth of hydrogen bubbles in aluminum castings using the level-set method. Scripta Materialia, 2009, 61, 216-219.	5.2	15
975	Numerical simulation of cavity roughness effects on melt filling in microinjection molding. Advances in Polymer Technology, 2008, 27, 89-97.	1.7	4

On surface tension modelling using the level set method. International Journal for Numerical Methods in Fluids, 2009, 59, 147-171. 976

#

959

961

963

964

#	ARTICLE	IF	CITATIONS
977	The intrinsic XFEM for twoâ€fluid flows. International Journal for Numerical Methods in Fluids, 2009, 60, 437-471.	1.6	53
978	Some improvements on free surface simulation by the particle finite element method. International Journal for Numerical Methods in Fluids, 2009, 60, 1032-1054.	1.6	12
979	A hybrid scheme based on finite element/volume methods for two immiscible fluid flows. International Journal for Numerical Methods in Fluids, 2009, 61, 930-944.	1.6	11
980	Numerical simulation of a single bubble by compressible twoâ€phase fluids. International Journal for Numerical Methods in Fluids, 2010, 62, 591-631.	1.6	15
981	Numerical simulation of bubble and droplet deformation by a level set approach with surface tension in three dimensions. International Journal for Numerical Methods in Fluids, 2010, 62, 963-993.	1.6	22
982	Numerical simulation of freeâ€surface flow using the levelâ€set method with global mass correction. International Journal for Numerical Methods in Fluids, 2010, 63, 651-680.	1.6	16
983	On accuracy and efficiency of constrained reinitialization. International Journal for Numerical Methods in Fluids, 2010, 63, 1347-1358.	1.6	3
984	A sharp surface tension modeling method for twoâ€phase incompressible interfacial flows. International Journal for Numerical Methods in Fluids, 2010, 64, 709-732.	1.6	14
985	Assessment and modification of subâ€cellâ€fix method for reâ€initialization of levelâ€set distance function. International Journal for Numerical Methods in Fluids, 2010, 62, 211-236.	1.6	1
986	An Eulerian particle level set method for compressible deforming solids with arbitrary EOS. International Journal for Numerical Methods in Engineering, 2009, 79, 1175-1202.	2.8	10
987	Regression fronts in random sphere packs: Application to composite solid propellant burning rate. Proceedings of the Combustion Institute, 2009, 32, 2115-2122.	3.9	9
988	CFD simulations of wave–current-body interactions including greenwater and wet deck slamming. Computers and Fluids, 2009, 38, 970-980.	2.5	41
989	Numerical simulation of liquid sloshing phenomena in partially filled containers. Computers and Fluids, 2009, 38, 830-842.	2.5	74
990	A variational approach to multi-phase motion of gas, liquid and solid based on the level set method. Computer Physics Communications, 2009, 180, 1145-1149.	7.5	10
991	Formulation of fully implicit method for simulation of flows with interfaces using primitive variables. International Journal of Heat and Mass Transfer, 2009, 52, 3217-3224.	4.8	7
992	Flux-blending schemes for interface capture in two-fluid flows. International Journal of Heat and Mass Transfer, 2009, 52, 5547-5556.	4.8	41
993	Development of a dispersively accurate conservative level set scheme for capturing interface in two-phase flows. Journal of Computational Physics, 2009, 228, 661-686.	3.8	46
994	Immersed boundary method for the simulation of 2D viscous flow based on vorticity–velocity formulations. Journal of Computational Physics, 2009, 228, 1504-1520.	3.8	67

#	Article	IF	Citations
995	Modeling merging and breakup in the moving mesh interface tracking method for multiphase flow simulations. Journal of Computational Physics, 2009, 228, 2660-2675.	3.8	55
996	An accurate adaptive solver for surface-tension-driven interfacial flows. Journal of Computational Physics, 2009, 228, 5838-5866.	3.8	1,000
997	An interaction potential based lattice Boltzmann method with adaptive mesh refinement (AMR) for two-phase flow simulation. Journal of Computational Physics, 2009, 228, 6456-6478.	3.8	109
998	Sharp interface immersed-boundary/level-set method for wave–body interactions. Journal of Computational Physics, 2009, 228, 6590-6616.	3.8	157
999	An Hamiltonian interface SPH formulation for multi-fluid and free surface flows. Journal of Computational Physics, 2009, 228, 8380-8393.	3.8	281
1000	A high order kinetic flux-vector splitting method for the reduced five-equation model of compressible two-fluid flows. Journal of Computational Physics, 2009, 228, 9059-9078.	3.8	14
1001	Computation of Dendritic Growth with Level Set Model Using a Multi-Mesh Adaptive Finite Element Method. Journal of Scientific Computing, 2009, 39, 441-453.	2.3	9
1002	Some numerical studies of interface advection properties of level set method. Sadhana - Academy Proceedings in Engineering Sciences, 2009, 34, 271-298.	1.3	19
1003	Surface Oscillation of a Liquid Bridge Induced by Single and Multiple Vibrations. Microgravity Science and Technology, 2009, 21, 31-37.	1.4	18
1004	Dynamics for Droplets in Normal Gravity and Microgravity. Microgravity Science and Technology, 2009, 21, 247-254.	1.4	7
1005	Optimal damping of a membrane and topological shape optimization. Structural and Multidisciplinary Optimization, 2009, 38, 43-52.	3.5	8
1006	Secondary atomization. Experiments in Fluids, 2009, 46, 371-402.	2.4	431
1007	A mathematical analysis of physiological and morphological aspects of wound closure. Journal of Mathematical Biology, 2009, 59, 605-630.	1.9	54
1008	A coupled level set and volume-of-fluid method for sharp interface simulation of plunging breaking waves. International Journal of Multiphase Flow, 2009, 35, 227-246.	3.4	146
1009	On the direct numerical simulation of two-phase flows. Nuclear Engineering and Design, 2009, 239, 867-879.	1.7	19
1010	Numerical investigations of wave overtopping at coastal structures. Coastal Engineering, 2009, 56, 190-202.	4.0	27
1011	Simulations of free surface flows with implementation of surface tension and interface sharpening in the two-fluid model. International Journal of Heat and Fluid Flow, 2009, 30, 741-750.	2.4	57
1012	The effect of inlet constriction on bubble growth during flow boiling in microchannels. International Journal of Heat and Mass Transfer, 2009, 52, 5204-5212.	4.8	72

#	Article	IF	CITATIONS
1013	A spectrally refined interface approach for simulating multiphase flows. Journal of Computational Physics, 2009, 228, 1658-1677.	3.8	49
1014	A coupled arbitrary Lagrangian–Eulerian and Lagrangian method for computation of free surface flows with insoluble surfactants. Journal of Computational Physics, 2009, 228, 2859-2873.	3.8	53
1015	Numerical simulation of premixed combustion using an enriched finite element method. Journal of Computational Physics, 2009, 228, 3605-3624.	3.8	15
1016	A front-tracking/ghost-fluid method for fluid interfaces in compressible flows. Journal of Computational Physics, 2009, 228, 4012-4037.	3.8	218
1017	High order numerical methods to two dimensional delta function integrals in level set methods. Journal of Computational Physics, 2009, 228, 4273-4290.	3.8	18
1018	Numerical simulation of drop impact on a liquid–liquid interface with a multiple marker front-capturing method. Journal of Computational Physics, 2009, 228, 4444-4467.	3.8	54
1019	A numerical scheme for the Stefan problem on adaptive Cartesian grids with supralinear convergence rate. Journal of Computational Physics, 2009, 228, 5803-5818.	3.8	51
1020	An improved particle correction procedure for the particle level set method. Journal of Computational Physics, 2009, 228, 5819-5837.	3.8	55
1021	Consistent projection methods for variable density incompressible Navier–Stokes equations with continuous surface forces on a rectangular collocated mesh. Journal of Computational Physics, 2009, 228, 6938-6956.	3.8	18
1022	Frequency shift and aspect ratio of a rotating–oscillating liquid droplet. Physics Letters, Section A: General, Atomic and Solid State Physics, 2009, 373, 867-870.	2.1	9
1023	Bubble evolution through submerged orifice using smoothed particle hydrodynamics: Basic formulation and model validation. Chemical Engineering Science, 2009, 64, 2281-2290.	3.8	57
1024	On the CFD modelling of Taylor flow in microchannels. Chemical Engineering Science, 2009, 64, 2941-2950.	3.8	303
1025	Generalized Navier boundary condition and geometric conservation law for surface tension. Computer Methods in Applied Mechanics and Engineering, 2009, 198, 644-656.	6.6	65
1026	The level-set method applied to droplet dynamics in the presence of an electric field. Computers and Fluids, 2009, 38, 358-369.	2.5	36
1027	Comparison and validation of compressible flow simulations of laser-induced cavitation bubbles. Computers and Fluids, 2009, 38, 1850-1862.	2.5	44
1028	Numerical simulation of a film coating flow at low capillary numbers. Computers and Fluids, 2009, 38, 1823-1832.	2.5	5
1029	Simulation of spilling breaking waves using a two phase flow CFD model. Computers and Fluids, 2009, 38, 1995-2005.	2.5	51
1030	Modelling of two-phase incompressible flows in ducts. Applied Mathematical Modelling, 2009, 33, 1201-1212.	4.2	2

#	Article	IF	CITATIONS
1031	Comparison of measured and modelled droplet–hot wall interactions. Applied Thermal Engineering, 2009, 29, 1398-1405.	6.0	36
1032	Modelling of fast catastrophic landslides and impulse waves induced by them in fjords, lakes and reservoirs. Engineering Geology, 2009, 109, 124-134.	6.3	70
1033	A totally Eulerian finite volume solver for multi-material fluid flows. European Journal of Mechanics, B/Fluids, 2009, 28, 475-485.	2.5	19
1034	Contribution of thin-film evaporation during flow boiling inside microchannels. International Journal of Thermal Sciences, 2009, 48, 2025-2035.	4.9	41
1035	Modelling and simulation of wave transformation in porous structures using VOF based two-phase flow model. Applied Mathematical Modelling, 2009, 33, 343-360.	4.2	29
1036	Numerical studies of the influence of the dynamic contact angle on a droplet impacting on a dry surface. Physics of Fluids, 2009, 21, .	4.0	239
1037	A Level-Set Approach for Large Scale Cavitation. , 2009, , .		1
1038	Numerical Simulations of Bubble Formation and Rise in Microchannels. Industrial & Engineering Chemistry Research, 2009, 48, 8109-8120.	3.7	22
1039	Computing Interfaces in Diverse Applications. , 2009, , 327-341.		0
1040	Numerical simulation of droplets, bubbles and waves: state of the art. Fluid Dynamics Research, 2009, 41, 065001.	1.3	155
1041	On Derivation and Physical Interpretation of Level Set Method–Based Equations for Two-Phase Flow Simulations. Numerical Heat Transfer, Part B: Fundamentals, 2009, 56, 307-322.	0.9	44
1042	Level-set segmentation with contour based object representation. , 2009, , .		2
1043	Sharp-interface simulations of drop deformation in electric fields. IEEE Transactions on Dielectrics and Electrical Insulation, 2009, 16, 475-482.	2.9	22
1044	The Development of Numerical Fluid Mechanics and Aerodynamics since the 1960s: US and Canada. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, 2009, , 159-185.	0.3	3
1045	Some New Advances in Level Set Methods with Applications to Multiphase Flows. , 2009, , .		0
1046	Using Level Sets as the Basis for a Scalable, Parallel Geometry Engine and Mesh Generation System (Invited). , 2009, , .		6
1047	Unstructured Grid Solution Approach for Eikonal Equation with Acoustics in Mind. , 2009, , .		3
1048	Hybrid Finite Element and Finite Volume Methods for Two Immiscible Fluid Flows. , 2009, , .		1

#	Article	IF	CITATIONS
1049	A Level-Set Approach for Compressible, Multiphase Fluid Flows with Mass Transfer. , 2009, , .		2
1050	Computations of Two-Phase Interface Capturing Mixture Flow Models based on Preconditioning. , 2009, , .		0
1051	Investigation on Heat Exchange Enhanced by Sloshing. , 2009, , .		1
1052	Large Eddy Simulation of the Turbulent Flowfield in a Swirl Stabilized Annular Combustor. , 2009, , .		6
1053	A Practical Demonstration of Scalable, Parallel Mesh Generation. , 2009, , .		34
1054	Numerical And Experimental Investigations on Atomization of Air-blasted Liquid Film. , 2009, , .		0
1055	Laplacian Operator Based Level Set Segmentation Algorithm for Medical Images. , 2009, , .		2
1056	Numerical study of electric field effects on the deformation of two-dimensional liquid drops in simple shear flow at arbitrary Reynolds number. Journal of Fluid Mechanics, 2009, 626, 367-393.	3.4	41
1057	Shape-Based Active Contours for Fast Video Segmentation. IEEE Signal Processing Letters, 2009, 16, 857-860.	3.6	22
1058	High Order Weighted Essentially Nonoscillatory Schemes for Convection Dominated Problems. SIAM Review, 2009, 51, 82-126.	8.4	677
1059	Topological Shape Optimum Design of Structures via X-FEM and Level Set Method. Journal of Solid Mechanics and Materials Engineering, 2009, 3, 887-897.	0.5	0
1060	GPU-Accelerated Simulation of Two-Phase Incompressible Fluid Flow Using a Level-Set Method for Interface Capturing. , 2009, , .		2
1061	Numerical study of the effects of the breaking intensity on wave breaking flows. Journal of Fluid Mechanics, 2009, 622, 371-411.	3.4	87
1062	Development of Micro Metallic Valve for µTAS. Journal of Solid Mechanics and Materials Engineering, 2009, 3, 729-738.	0.5	2
1063	Fully implicit method for simulation of flows with interfaces. Progress in Computational Fluid Dynamics, 2009, 9, 158.	0.2	3
1064	Three-Dimensional Simulations of the Dynamic Motion of Single Drops Rising in Viscoelastic FENE-CR Model Fluids. Journal of Chemical Engineering of Japan, 2009, 42, 705-712.	0.6	7
1065	On the Computation of Multiphase Flows. Nuclear Technology, 2009, 167, 29-45.	1.2	5
1066	Simulation of Single Bubble Dynamics in Nucleate Pool Boiling Using a Conservative Level Set Method. , 2009, , .		0

#	Article	IF	CITATIONS
1067	Marangoni effects caused by contaminants adsorbed on bubble surfaces. Journal of Fluid Mechanics, 2010, 647, 143-161.	3.4	21
1068	Free-surface flow around an appended hull. IOP Conference Series: Earth and Environmental Science, 2010, 12, 012079.	0.3	1
1069	Levelâ€set segmentation of pulmonary nodules in megavolt electronic portal images using a CT prior. Medical Physics, 2010, 37, 5703-5710.	3.0	7
1070	A second-order accurate method for solving the signed distance function equation. Communications in Applied Mathematics and Computational Science, 2010, 5, 81-97.	1.8	2
1071	Efficient Simulation of Fully Coupled Wave-Body Interactions Using a Sharp Interface Immersed-Boundary/Level-Set Method. , 2010, , .		2
1073	Multi-Scale Modeling of Wind-Wave Interaction in the Presence of Offshore Structures for Renewable Energy Applications. , 2010, , .		0
1074	Numerical Analysis of Free-Surface Flows under Various Conditions in Acceleration : Improvement of CIP-LSM : CIP-Based Level Set & MARS( <special issue="">The Forefront of Multi-Physics CFD/EFD). 880-02 Nihon Kikai Gakkai Ronbunshū Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2010, 76, 778-788.</special>	0.2	8
1075	Direct Numerical Simulation of Liquid Flow Field below the Surface at the Impingement of a Single Liquid Drop(Fluids Engineering). 880-02 Nihon Kikai Gakkai Ronbunshū Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2010, 76, 2065-2074.	0.2	0
1076	Direct Numerical Simulation of Multiphase Flows( <special issue="">The Forefront of Multi-Physics) Tj ETQq0 0 Engineers Series B B-hen, 2010, 76, 712-719.</special>	0 rgBT /0 0.2	verlock 10 Tf 0
1077	Simulation of Air/Fuel Mixture Considering Liquid-Film Breakup near Fuel Injector(Fluids Engineering). 880-02 Nihon Kikai Gakkai Ronbunshū Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2010, 76, 1363-1369.	0.2	0
1078	Gas-Phase Mixing in Droplet Arrays. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, 2010, , 409-415.	0.3	1
1079	A Lagrangian particle method for reaction–diffusion systems on deforming surfaces. Journal of Mathematical Biology, 2010, 61, 649-663.	1.9	33
1080	A free boundary problem modeling thrombus growth. Journal of Mathematical Biology, 2010, 61, 805-818.	1.9	17
1081	A level set based method for the optimization of cast part. Structural and Multidisciplinary Optimization, 2010, 41, 735-747.	3.5	88
1082	The LS-STAG method: A new immersed boundary/level-set method for the computation of incompressible viscous flows in complex moving geometries with good conservation properties. Journal of Computational Physics, 2010, 229, 1043-1076.	3.8	83
1083	Efficient symmetric discretization for the Poisson, heat and Stefan-type problems with Robin boundary conditions. Journal of Computational Physics, 2010, 229, 875-889.	3.8	74
1084	An anti-diffusive numerical scheme for the simulation of interfaces between compressible fluids by means of a five-equation model. Journal of Computational Physics, 2010, 229, 2773-2809.	3.8	85
1085	A novel coupled level set and volume of fluid method for sharp interface capturing on 3D tetrahedral grids. Journal of Computational Physics, 2010, 229, 2573-2604.	3.8	56

#	Article	IF	CITATIONS
1086	Shape and topology optimization based on the phase field method and sensitivity analysis. Journal of Computational Physics, 2010, 229, 2697-2718.	3.8	291
1087	Simulation of axisymmetric jets with a finite element Navier–Stokes solver and a multilevel VOF approach. Journal of Computational Physics, 2010, 229, 6853-6873.	3.8	23
1088	Improved CE/SE scheme with particle level set method for numerical simulation of spall fracture due to high-velocity impact. Journal of Computational Physics, 2010, 229, 7503-7519.	3.8	23
1089	High order finite volume methods on wavelet-adapted grids with local time-stepping on multicore architectures for the simulation of shock-bubble interactions. Journal of Computational Physics, 2010, 229, 8364-8383.	3.8	48
1090	Simulation of cooling of liquid Al–33wt.% Cu droplet impinging on a metallic substrate and its experimental validation. Acta Materialia, 2010, 58, 122-133.	7.9	38
1091	Validated simulation of droplet sedimentation with finite-element and level-set methods. Chemical Engineering Science, 2010, 65, 2037-2051.	3.8	46
1092	CFD modelling of flow and heat transfer in the Taylor flow regime. Chemical Engineering Science, 2010, 65, 2094-2107.	3.8	119
1093	Formation of radially expanding liquid sheet by impinging two round jets. Applied Mathematics and Mechanics (English Edition), 2010, 31, 937-946.	3.6	0
1094	Modeling, with a unified level-set representation, of the expansion of a hollow in the ground under different physical phenomena. Computational Mechanics, 2010, 46, 315-327.	4.0	5
1095	Numerical Simulation of Steady Thermocapillary Convection in a Two-Layer System Using Level Set Method. Microgravity Science and Technology, 2010, 22, 223-232.	1.4	13
1096	Thermocapillary Migration of Deformable Bubbles at Moderate to Large Marangoni Number in Microgravity. Microgravity Science and Technology, 2010, 22, 295-303.	1.4	30
1097	Smoothed Particle Hydrodynamics (SPH): an Overview andÂRecent Developments. Archives of Computational Methods in Engineering, 2010, 17, 25-76.	10.2	1,335
1098	An Efficient Data Structure and Accurate Scheme toÂSolve Front Propagation Problems. Journal of Scientific Computing, 2010, 42, 251-273.	2.3	15
1099	Geometric Applications of the Split Bregman Method: Segmentation and Surface Reconstruction. Journal of Scientific Computing, 2010, 45, 272-293.	2.3	353
1100	Higher-order symmetries and conservation laws of the G-equation for premixed combustion and resulting numerical schemes. Journal of Engineering Mathematics, 2010, 66, 121-140.	1.2	11
1101	Simulation of Non-isothermal Injection Molding for a Non-Newtonian Fluid by Level Set Method. Chinese Journal of Chemical Engineering, 2010, 18, 600-608.	3.5	14
1102	A finite elementâ€based level set method for structural optimization. International Journal for Numerical Methods in Engineering, 2010, 82, 805-842.	2.8	31
1103	A structural optimization method based on the level set method using a new geometryâ€based reâ€initialization scheme. International Journal for Numerical Methods in Engineering, 2010, 83, 1580-1624.	2.8	87

#	Article	IF	CITATIONS
1104	An extended finite element method applied to levitated droplet problems. International Journal for Numerical Methods in Engineering, 2010, 84, 757-773.	2.8	10
1105	A parallel Eulerian interface tracking/Lagrangian point particle multi-scale coupling procedure. Journal of Computational Physics, 2010, 229, 745-759.	3.8	170
1106	A self-adaptive oriented particles Level-Set method for tracking interfaces. Journal of Computational Physics, 2010, 229, 1353-1380.	3.8	27
1107	The constrained reinitialization equation for level set methods. Journal of Computational Physics, 2010, 229, 1514-1535.	3.8	117
1108	On reinitializing level set functions. Journal of Computational Physics, 2010, 229, 2764-2772.	3.8	94
1109	A gradient-augmented level set method with an optimally local, coherent advection scheme. Journal of Computational Physics, 2010, 229, 3802-3827.	3.8	75
1110	Variational piecewise constant level set methods for shape optimization of a two-density drum. Journal of Computational Physics, 2010, 229, 5062-5089.	3.8	24
1111	An Eulerian method for multi-component problems in non-linear elasticity with sliding interfaces. Journal of Computational Physics, 2010, 229, 5518-5540.	3.8	53
1112	Level-set based topology optimization for electromagnetic dipole antenna design. Journal of Computational Physics, 2010, 229, 6915-6930.	3.8	91
1113	Numerical method for solving matrix coefficient elliptic equation with sharp-edged interfaces. Journal of Computational Physics, 2010, 229, 7162-7179.	3.8	67
1114	Simulation of surface tension in 2D and 3D with smoothed particle hydrodynamics method. Journal of Computational Physics, 2010, 229, 7238-7259.	3.8	77
1115	A numerical method for the simulation of low Mach number liquid–gas flows. Journal of Computational Physics, 2010, 229, 8844-8867.	3.8	21
1116	Numerical investigation on bubble dynamics during flow boiling using moving particle semi-implicit method. Nuclear Engineering and Design, 2010, 240, 3830-3840.	1.7	55
1117	Numerical simulation of impact loads using a particle method. Ocean Engineering, 2010, 37, 164-173.	4.3	43
1118	Integrating local distribution information with level set for boundary extraction. Journal of Visual Communication and Image Representation, 2010, 21, 343-354.	2.8	27
1119	The Chebyshev spectral viscosity method for the time dependent Eikonal equation. Mathematical and Computer Modelling, 2010, 52, 70-86.	2.0	7
1120	The dynamics of the piezo inkjet printhead operationâ <sup>~</sup> †. Physics Reports, 2010, 491, 77-177.	25.6	405
1121	Numerical simulation of a bubble rising in shear-thinning fluids. Journal of Non-Newtonian Fluid Mechanics, 2010, 165, 555-567.	2.4	85

#	Article	IF	CITATIONS
1122	Modeling and simulation of the viscoelastic fluid mold filling process by level set method. Journal of Non-Newtonian Fluid Mechanics, 2010, 165, 1275-1293.	2.4	20
1123	A coupled volume-of-fluid and level set (VOSET) method for computing incompressible two-phase flows. International Journal of Heat and Mass Transfer, 2010, 53, 645-655.	4.8	228
1124	Simulation of liquid jet primary breakup: Dynamics of ligament and droplet formation. International Journal of Multiphase Flow, 2010, 36, 513-532.	3.4	366
1125	Direct numerical simulation of a freely decaying turbulent interfacial flow. International Journal of Multiphase Flow, 2010, 36, 891-907.	3.4	31
1126	LEIS for the prediction of turbulent multifluid flows applied to thermal-hydraulics applications. Nuclear Engineering and Design, 2010, 240, 2096-2106.	1.7	24
1127	Experimental investigation and numerical simulation of mass transfer during drop formation. Chemical Engineering Science, 2010, 65, 5517-5526.	3.8	20
1128	A topology optimization method based on the level set method incorporating a fictitious interface energy. Computer Methods in Applied Mechanics and Engineering, 2010, 199, 2876-2891.	6.6	486
1129	A quantitative sub-grid air entrainment model for bubbly flows – plunging jets. Computers and Fluids, 2010, 39, 77-86.	2.5	48
1130	Stencil adaptive diffuse interface method for simulation of two-dimensional incompressible multiphase flows. Computers and Fluids, 2010, 39, 936-944.	2.5	4
1131	Multiscale simulations of primary atomization. Computers and Fluids, 2010, 39, 1864-1874.	2.5	140
1132	Level set method for two-phase incompressible flows under magnetic fields. Computer Physics Communications, 2010, 181, 999-1007.	7.5	46
1133	Interfacial erosion: A three-dimensional numerical model. Comptes Rendus - Mecanique, 2010, 338, 333-337.	2.1	16
1134	Direct Numerical Simulation of Secondary Breakup of Liquid Drops. Chinese Journal of Aeronautics, 2010, 23, 153-161.	5.3	24
1135	Velocity and Energy Relaxation in Two-Phase Flows. Studies in Applied Mathematics, 2010, 125, 179.	2.4	3
1137	Applying Particle/Grid Hybrid Method to Fuel Spray With Collision Jet for Automobile Engines. , 2010, , .		0
1138	A Two-Way Coupled Polydispersed Simulation of Bubbly Flow Beneath a Plunging Liquid Jet. , 2010, , .		2
1139	The numerical studies of the laser processing parameters on copper and aluminum during laser cutting. , 2010, , .		5
1140	Numerical Simulation of Softness Abrasive Two-Phase Flow Field on Level Set Method. Advanced Materials Research, 0, 154-155, 197-201.	0.3	0

		CITATION R	EPORT	
#	Article		IF	Citations
1141	The sensitivity of drop motion due to the density and viscosity ratio. Physics of Fluids, 20	010, 22, .	4.0	28
1142	Deformable model guided by stochastic speed with application in cine images segmenta	ition. , 2010, , .		11
1143	Numerical Simulation of Buoyancy-driven Bubble Motion Using Level Set Method. Intern Journal for Computational Methods in Engineering Science and Mechanics, 2010, 11, 21	ational .1-229.	2.1	1
1144	A variationally based weighted re-initialization method for geometric active contours. , 2	.010, , .		1
1145	Shape-Appearance Guided Level-Set Deformable Model for Image Segmentation. , 2010,	· • •		28
1146	Parallel Computational Fluid Dynamics 2008. Lecture Notes in Computational Science at 2010, , .	nd Engineering,	0.3	3
1147	Multiphase Modeling of Wave Propagation Over Submerged Obstacles Using Weno and Methods. Coastal Engineering Journal, 2010, 52, 235-259.	l Level Set	1.9	14
1148	A MODIFIED SUB-CELL-FIX METHOD FOR RE-INITIALIZATION OF LEVEL-SET DISTANCE FU DEPENDENCE TESTS ON GRID STRETCHING. Modern Physics Letters B, 2010, 24, 1615-1	INCTION AND ITS 1629.	1.9	1
1149	DPD simulation of multiphase flow at small scales. , 2010, , .			1
1150	A Level Set Method Coupled With a Volume of Fluid Method for Modeling of Gas-Liquid Bubbly Flow. Journal of Fluids Engineering, Transactions of the ASME, 2010, 132, .	Interface in	1.5	28
1151	Smooth particle approach for surface tension calculation in moving particle semi-implicit Fluid Dynamics Research, 2010, 42, 035503.	t method.	1.3	10
1152	Numerical study of bubble rise and interaction in a viscous liquid. International Journal of Computational Fluid Dynamics, 2010, 24, 13-28.	f	1.2	10
1153	Linear and nonlinear instability waves in spatially developing two-phase mixing layers. Ph Fluids, 2010, 22, .	iysics of	4.0	14
1154	Numerical Study of Drop Interface Deformation and Breakup in Shear Flow. , 2010, , .			0
1155	Three Dimensional Modeling of the Hydrodynamics of Oblique Droplet-Hot Wall Interact the Reflood Phase After a LOCA. Journal of Engineering for Gas Turbines and Power, 201	ions During 0, 132, .	1.1	4
1156	Large Convective Heat Transfer Enhancement in Microchannels With a Train of Coflowin or Colloidal Droplets. Journal of Heat Transfer, 2010, 132, .	ıg Immiscible	2.1	39
1157	Numerical Studies on Non-Boiling Two-Phase Flows in Microtubes and Microchannels: A	Review. , 2010,		1
1158	Fuel Spray Simulation With Collision Jets for Automobile Engines. , 2010, , .			1

#	Article	IF	CITATIONS
1159	Negative capillary-pressure-induced cavitation probability in nanochannels. Nanotechnology, 2010, 21, 105706.	2.6	18
1160	Simultaneous segmentation and reconstruction: A level set method approach for limited view computed tomography. Medical Physics, 2010, 37, 2329-2340.	3.0	22
1161	Taylor Flow in Microchannels: A Review of Experimental and Computational Work. Journal of Computational Multiphase Flows, 2010, 2, 1-31.	0.8	128
1162	Distance Regularized Level Set Evolution and Its Application to Image Segmentation. IEEE Transactions on Image Processing, 2010, 19, 3243-3254.	9.8	1,744
1163	Medical Image Segmentation Using Active Contours and a Level Set Model: Application to Pulmonary Embolism (PE) Segmentation. , 2010, , .		13
1164	It takes three to tango: 1. Simulating buoyancyâ€driven flow in the presence of large viscosity contrasts. Journal of Geophysical Research, 2010, 115, .	3.3	27
1165	Modeling advection in geophysical flows with particle level sets. Geochemistry, Geophysics, Geosystems, 2010, 11, .	2.5	32
1167	Sharp Front Capturing Method for Carbon Dioxide Plume Propagation during Injection into a Deep Confined Aquifer. Energy & Fuels, 2010, 24, 1431-1440.	5.1	20
1168	A computational study of the dynamic motion of a bubble rising in Carreau model fluids. Fluid Dynamics Research, 2010, 42, 025501.	1.3	17
1169	Assessment of CFDâ^'VOF Method for Trickle-Bed Reactor Modeling in the Catalytic Wet Oxidation of Phenolic Wastewaters. Industrial & Engineering Chemistry Research, 2010, 49, 2638-2648.	3.7	14
1170	Marker Redistancing/Level Set Method for High-Fidelity Implicit Interface Tracking. SIAM Journal of Scientific Computing, 2010, 32, 320-348.	2.8	10
1171	Multi-scale heat and mass transfer modelling of cell and tissue cryopreservation. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2010, 368, 561-583.	3.4	48
1172	High Order Numerical Methods to Three Dimensional Delta Function Integrals in Level Set Methods. SIAM Journal of Scientific Computing, 2010, 32, 1288-1309.	2.8	16
1173	Development of Mathematical Models and Computational Framework for Multi-physics Interaction Processes. Mechanics of Advanced Materials and Structures, 2010, 17, 488-508.	2.6	3
1174	Influence of surfactant on drop deformation in an electric field. Physics of Fluids, 2010, 22, .	4.0	51
1175	A novel micropump droplet generator for aerosol drug delivery: Design simulations. Biomicrofluidics, 2010, 4, 044108.	2.4	20
1176	An Adaptive Dual-Mesh Method for Premixed Combustion Using the Level Set Approach. , 2010, , .		2
1177	Unsteady Flame Embedding (UFE) Subgrid Model for Turbulent Premixed Combustion Simulations. , 2010, , .		1

#	Article	IF	CITATIONS
1178	URANS Study of Air-Layer Drag Reduction in a High-Reynolds-Number Flat-Plate Turbulent Boundary Layer. , 2010, , .		3
1179	Heat Exchange and Pressure Drop Enhanced by Violent Sloshing. , 2010, , .		1
1180	Dispersion and attraction of particles floating on fluid–liquid surfaces. Soft Matter, 2010, 6, 4310.	2.7	47
1183	Hybrid Distributed-/Shared-Memory Parallelization For Re-initializing Level Set Functions. , 2010, , .		0
1184	Wall distance calculation using the Eikonal/Hamiltonâ€Jacobi equations on unstructured meshes. Engineering Computations, 2010, 27, 645-657.	1.4	10
1185	A Fast-Running Semi-Implicit Numerical Scheme for Transient Two-Phase Flows on Unstructured Grids. Numerical Heat Transfer, Part B: Fundamentals, 2010, 56, 432-454.	0.9	6
1186	Research on the precision processing method for softness abrasive two-phase flow based on LSM. , 2010, , .		2
1187	Numerical studies of droplet splashing on a dry surface: triggering a splash with the dynamic contact angle. Soft Matter, 2011, 7, 5120.	2.7	60
1188	Massively Parallel Fluid Simulations on Amazon's HPC Cloud. , 2011, , .		22
1189	Low-Reynolds-number gravity-driven migration and deformation of bubbles near a free surface. Physics of Fluids, 2011, 23, .	4.0	25
1190	A Comprehensive Sub-Grid Air Entrainment Model for RaNS Modeling of Free-Surface Bubbly Flows. Journal of Computational Multiphase Flows, 2011, 3, 41-56.	0.8	42
1191	Numerical modeling of erosion using an improvement of the extended finite element method. European Journal of Environmental and Civil Engineering, 2011, 15, 1187-1206.	2.1	1
1192	Numerical simulation of convective stability of the short-term storage of CO2 in saline aquifers. International Journal of Greenhouse Gas Control, 2011, 5, 986-994.	4.6	13
1193	On a Novel Dual-Grid Level-Set Method for Two-Phase Flow Simulation. Numerical Heat Transfer, Part B: Fundamentals, 2011, 59, 26-57.	0.9	50
1194	Comparison of experimental and numerical sloshing loads in partially filled tanks. Ships and Offshore Structures, 2011, 6, 15-43.	1.9	34
1195	Numerical methods for multi-phase flow in curvilinear coordinate systems. , 2011, , 603-651.		0
1196	Nonlinear Deformation of a Ferrofluid Droplet in a Uniform Magnetic Field. Langmuir, 2011, 27, 14834-14841.	3.5	111
1197	Modeling Wave Run-up along a Sloping or a Moving Wall Boundary. Journal of Coastal Research, 2011, 277, 1159-1169.	0.3	6

#	Article	IF	CITATIONS
1198	Study of Dynamic Response of the Sandy Soil by Cone Penetration Testing. Procedia Engineering, 2011, 24, 385-389.	1.2	2
1199	A regularization technique for closed contour segmentation in ultrasound images. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2011, 58, 1577-1589.	3.0	5
1200	Numerical prediction of droplet dynamics in turbulent flow, using the level set method. International Journal of Computational Fluid Dynamics, 2011, 25, 239-253.	1.2	7
1201	Photorealistic visualization and fluid animation: coupling of Maya with a two-phase Navier-Stokes fluid solver. Computing and Visualization in Science, 2011, 14, 371-383.	1.2	1
1204	Injection Molding. , 2011, , .		90
1205	Analytical and Level-Set Method-Based Numerical Study for Two-Phase Stratified Flow in a Plane Channel and a Square Duct. Numerical Heat Transfer; Part A: Applications, 2011, 60, 347-380.	2.1	23
1206	Phase Change Heat Transfer Simulation for Boiling Bubbles Arising from a Vapor Film by the VOSET Method. Numerical Heat Transfer; Part A: Applications, 2011, 59, 857-881.	2.1	76
1207	An Improved Volume of Fluid Method for Two-Phase Flow Computations on Collocated Grid System. Journal of Heat Transfer, 2011, 133, .	2.1	4
1208	Segmenting the Subthalamic Nucleus Using Narrow Band Limited Variational Level Set Method. , 2011, , .		0
1209	An improved particle distribution and correction procedure for particle level set method. , 2011, , .		0
1210	A projection method for multiphase flows. , 2011, , .		0
1211	Wall-Layer Modeling for Cartesian Grid Solver Using an Overset Boundary Layer Orthogonal Curvilinear Grid. , 2011, , .		2
1212	The Immersed Boundary Method for Water Entry Simulation. , 2011, , .		9
1213	Large Eddy Simulation of Combustion Dynamics of Bluff Body Stabilized Flame. , 2011, , .		2
1214	Numerical simulation of overflow at vertical weirs using a hybrid level set/VOF method. Advances in Water Resources, 2011, 34, 1320-1334.	3.8	46
1215	Numerical modeling of suffusion as an interfacial erosion process. European Journal of Environmental and Civil Engineering, 2011, 15, 1225-1241.	2.1	22
1216	Topology-Adaptive Mesh Deformation for Surface Evolution, Morphing, and Multiview Reconstruction. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2011, 33, 823-837.	13.9	38
1217	A Relay Level Set Method for Automatic Image Segmentation. IEEE Transactions on Systems, Man, and Cybernetics, 2011, 41, 518-525.	5.0	95

#	Article	IF	CITATIONS
1218	Numerical Simulation of Three-Dimensional Free-Surface Flows with Explicit Moving Particle Simulation Method. Transactions of the Atomic Energy Society of Japan, 2011, 10, 185-193.	0.3	27
1219	MODELLING WATER ENTRY OF A WEDGE BY MULTIPHASE SPH METHOD. Coastal Engineering Proceedings, 2011, , 10.	0.1	6
1220	Numerical Studies of Sessile Droplet Shape with Moving Contact Lines. Micro and Nanosystems, 2011, 3, 56-64.	0.6	4
1221	SPRAY CONTROL FOR MAXIMIZING ENERGY EFFICIENCY AND REDUCING EMISSION IN COMBUSTION ENGINES. Atomization and Sprays, 2011, 21, 553-574.	0.8	7
1222	Numerical studies of laser cutting on an active electrode material for lithium-ion batteries. , 2011, , .		2
1223	Examination of numerical simulation method for analyzing sloshing characteristics in fuel storage tanks. Journal of Japan Society of Civil Engineers Ser A2 (Applied Mechanics (AM)), 2011, 67, I_743-I_749.	0.1	0
1224	Surface Tension Evaluation method based on geometrical interface reconstruction. Journal of Japan Society of Civil Engineers Ser A2 (Applied Mechanics (AM)), 2011, 67, I_75-I_84.	0.1	0
1225	Interface Tracking Simulation of Mass Transfer from a Dissolving Bubble. Journal of Computational Multiphase Flows, 2011, 3, 247-261.	0.8	28
1226	Criteria of loop iteration break for level-set-based medical image segmentation. Proceedings of SPIE, 2011, , .	0.8	0
1227	Heat Exchange and Pressure Drop Enhanced by Sloshing. , 2011, , .		13
1228	Expectation for Micro-Scale Simulations in Tribology. Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A, 2011, 77, 1559-1570.	0.2	0
1229	Numerical Simulation of Two-Phase Flow Driven by Rotating Object. 880-02 Nihon Kikai Gakkai Ronbunshū Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2011, 77, 1699-1714.	0.2	9
1230	Application of Multigrid Ghost Fluid Method to the Interaction of Shock Waves with Bubbles in Liquids. 880-02 Nihon Kikai Gakkai Ronbunshū Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2011, 77, 20-32.	0.2	6
1231	Numerical Simulation of Formation and Breakup of a Three-Fluid Compound Jet. Journal of Fluid Science and Technology, 2011, 6, 252-263.	0.6	14
1232	Numerical Simulation of Formation and Breakup of a Compound Jet by the Front–Tracking/Finite Difference Method. , 2011, , .		0
1233	Approaches to Modeling of Recrystallization. Metals, 2011, 1, 16-48.	2.3	137
1234	Numerical Study of Surfactant-Laden Drop-Drop Interactions. Communications in Computational Physics, 2011, 10, 453-473.	1.7	18
1235	Interface Tracking Simulation of Mass Transfer From a Dissolving Bubble. , 2011, , .		3

#	Article	IF	CITATIONS
1236	A High Order Sharp-Interface Method with Local Time Stepping for Compressible Multiphase Flows. Communications in Computational Physics, 2011, 9, 205-230.	1.7	13
1237	Numerical Simulations of Droplets on the Hydrophobic and Hydrophilic Walls by Lattice Boltzmann Method. , 2011, , .		0
1238	Numerical Simulation of Low-Speed Two Phase Flows Based on Preconditioning. , 2011, , .		0
1239	A Conservative Modification to the Ghost Fluid Method for Compressible Multiphase Flows. Communications in Computational Physics, 2011, 10, 785-806.	1.7	12
1240	Simulation of central sloshing experiments with smoothed particle hydrodynamics (SPH) method. Nuclear Engineering and Design, 2011, 241, 3086-3096.	1.7	21
1241	A Correction Function Method for Poisson problems with interface jump conditions. Journal of Computational Physics, 2011, 230, 7567-7597.	3.8	41
1242	Level set framework for the finite-element modelling of recrystallization and grain growth in polycrystalline materials. Scripta Materialia, 2011, 64, 525-528.	5.2	100
1243	Computation of unsteady turbomachinery flows: Part 1—Progress and challenges. Progress in Aerospace Sciences, 2011, 47, 522-545.	12.1	108
1244	Robust numerical analysis of the dynamic bubble formation process in a viscous liquid. International Journal of Multiphase Flow, 2011, 37, 1059-1071.	3.4	40
1245	Surface instability and primary atomization characteristics of straight liquid jet sprays. International Journal of Multiphase Flow, 2011, 37, 1294-1304.	3.4	87
1246	Unsupervised skin lesions border detection via two-dimensional image analysis. Computer Methods and Programs in Biomedicine, 2011, 104, e1-e15.	4.7	90
1247	A multiphase compressible model for the simulation of multiphase flows. Computers and Fluids, 2011, 50, 24-34.	2.5	36
1248	Two-fluid modeling of bubbly flows around surface ships using a phenomenological subgrid air entrainment model. Computers and Fluids, 2011, 52, 50-57.	2.5	27
1249	The effect of the VOF–CSF static contact angle boundary condition on the dynamics of sliding and bouncing ellipsoidal bubbles. International Journal of Heat and Fluid Flow, 2011, 32, 964-972.	2.4	19
1250	Numerical prediction of turbulent thermocapillary convection in superposed fluid layers with a free interface. International Journal of Heat and Fluid Flow, 2011, 32, 1226-1239.	2.4	2
1251	Numerical simulation of viscoelastic two-phase flows using openFOAM®. Chemical Engineering Science, 2011, 66, 5487-5496.	3.8	50
1252	CFD approaches for the simulation of hydrodynamics and heat transfer in Taylor flow. Chemical Engineering Science, 2011, 66, 5575-5584.	3.8	106
1253	Linear stability analysis of capillary instabilities for concentric cylindrical shells. Journal of Fluid Mechanics, 2011, 683, 235-262.	3.4	27

#	Article	IF	CITATIONS
1254	New Variational Formulations for Level Set Evolution WithoutÂReinitializationÂwith Applications to Image Segmentation. Journal of Mathematical Imaging and Vision, 2011, 41, 194-209.	1.3	25
1255	Numerical Method for Interaction Among Multi-particle, Fluid and Arbitrary Shape Structure. Journal of Scientific Computing, 2011, 46, 166-181.	2.3	2
1256	Direct Numerical Simulation of Single Leukocyte Deformation in Microchannel Flow for Disease Diagnosis. Journal of Medical Systems, 2011, 35, 869-876.	3.6	15
1257	Towards multi-phase flow simulations in the PDE framework Peano. Computational Mechanics, 2011, 48, 365-376.	4.0	4
1258	Numerical simulation of interference effects for a high-speed catamaran. Journal of Marine Science and Technology, 2011, 16, 254-269.	2.9	31
1259	A full-Eulerian solid level set method for simulation of fluid–structure interactions. Microfluidics and Nanofluidics, 2011, 11, 557-567.	2.2	25
1260	Effects of Bubbles, Droplets or Particles on Heat Transfer in Turbulent Channel Flows. Flow, Turbulence and Combustion, 2011, 86, 343-367.	2.6	8
1261	A thermodynamic model of multiphase flows with moving interfaces and contact line. Continuum Mechanics and Thermodynamics, 2011, 23, 409-433.	2.2	20
1262	Modeling air entrainment and transport in a hydraulic jump using two-fluid RANS and DES turbulence models. Heat and Mass Transfer, 2011, 47, 911-919.	2.1	38
1263	Domain-decomposition strategy for marine applications with cavity entrapments. Journal of Fluids and Structures, 2011, 27, 567-585.	3.4	20
1264	Isogeometric analysis of free-surface flow. Journal of Computational Physics, 2011, 230, 4137-4152.	3.8	124
1265	Anti-diffusion method for interface steepening in two-phase incompressible flow. Journal of Computational Physics, 2011, 230, 5155-5177.	3.8	56
1266	Accuracies and conservation errors of various ghost fluid methods for multi-medium Riemann problem. Journal of Computational Physics, 2011, 230, 4975-4990.	3.8	26
1267	Topology optimization for negative permeability metamaterials using level-set algorithm. Acta Materialia, 2011, 59, 2624-2636.	7.9	73
1268	Treatment of uncertain material interfaces in compressible flows. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 284-308.	6.6	13
1269	Numerical modelling of interfacial soil erosion with viscous incompressible flows. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 383-391.	6.6	21
1270	Accurate adaptive level set method and sharpening technique for three dimensional deforming interfaces. Computers and Fluids, 2011, 44, 111-129.	2.5	17
1271	Numerical simulation of hot embossing filling stage using a viscoelastic constitutive model. Korea Australia Rheology Journal, 2011, 23, 139-146.	1.7	6

#	Article	IF	CITATIONS
1272	Multi-scale filling simulation of micro-injection molding process. Journal of Mechanical Science and Technology, 2011, 25, 117-124.	1.5	39
1273	A numerical analysis of drop impact on liquid film by using a level set method. Journal of Mechanical Science and Technology, 2011, 25, 2567-2572.	1.5	55
1274	Solving Dam Break Problem Considering Wall Adhesion. Microgravity Science and Technology, 2011, 23, 49-57.	1.4	4
1275	Numerical Simulation of Water Droplets Falling Near a Wall: Existence of Wall Repulsion. Microgravity Science and Technology, 2011, 23, 59-65.	1.4	9
1276	Bubble Motion near a Wall Under Microgravity: Existence of Attractive and Repulsive Forces. Microgravity Science and Technology, 2011, 23, 79-88.	1.4	7
1277	Flow Structure and Surface Deformation of High Prandtl Number Fluid Under Reduced Gravity and Microgravity. Microgravity Science and Technology, 2011, 23, 113-121.	1.4	8
1278	Simulation of Cooling of Double-Layered Splat and its Experimental Validation Using Jackson–Hunt Theory. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2011, 42, 269-273.	2.1	1
1279	Free-Surface Viscous Flow Solution Methods for Ship Hydrodynamics. Archives of Computational Methods in Engineering, 2011, 18, 1-41.	10.2	63
1280	Twoâ€fluid model with interface sharpening. International Journal for Numerical Methods in Engineering, 2011, 85, 575-590.	2.8	43
1281	Hanging nodes and XFEM. International Journal for Numerical Methods in Engineering, 2011, 86, 404-430.	2.8	73
1282	On the long time simulation of the Rayleigh–Taylor instability. International Journal for Numerical Methods in Engineering, 2011, 85, 1633-1647.	2.8	50
1283	A geometric massâ€preserving redistancing scheme for the level set function. International Journal for Numerical Methods in Fluids, 2011, 65, 989-1010.	1.6	46
1284	A coupling strategy based on anisotropic mesh adaptation for solving twoâ€fluid flows. International Journal for Numerical Methods in Fluids, 2011, 66, 1226-1247.	1.6	6
1285	Development of level set method with good area preservation to predict interface in twoâ€phase flows. International Journal for Numerical Methods in Fluids, 2011, 67, 109-134.	1.6	20
1286	A new method for simulating rigid body motion in incompressible twoâ€phase flow. International Journal for Numerical Methods in Fluids, 2011, 67, 713-732.	1.6	21
1287	Advances in the simulation of multiâ€fluid flows with the particle finite element method. Application to bubble dynamics. International Journal for Numerical Methods in Fluids, 2011, 67, 1516-1539.	1.6	31
1288	A highâ€precision unstructured adaptive mesh technique for gas–liquid twoâ€phase flows. International Journal for Numerical Methods in Fluids, 2011, 67, 1571-1589.	1.6	11
1289	A direct reinitialization approach of levelâ€set/splitting finite element method for simulating incompressible twoâ€phase flows. International Journal for Numerical Methods in Fluids, 2011, 67, 1637-1654.	1.6	26

#	Article	IF	CITATIONS
1290	Waveletâ€adaptive solvers on multi ore architectures for the simulation of complex systems. Concurrency Computation Practice and Experience, 2011, 23, 172-186.	2.2	6
1291	Direct numerical simulation of multiphase flows involving dispersed components with deformable interfaces. Heat Transfer - Asian Research, 2011, 40, 387-403.	2.8	1
1292	Confined bubble growth during flow boiling in a mini-/micro-channel of rectangular cross-section part II: Approximate 3-D numerical simulation. International Journal of Thermal Sciences, 2011, 50, 267-273.	4.9	67
1293	Feature based volumes for implicit intersections. Computers and Graphics, 2011, 35, 524-531.	2.5	2
1294	Step-by-step improvement of MPS method in simulating violent free-surface motions and impact-loads. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 1113-1125.	6.6	209
1295	An extended residual-based variational multiscale method for two-phase flow including surface tension. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 1866-1876.	6.6	31
1296	A level-set based adaptive-grid method for premixed combustion. Combustion and Flame, 2011, 158, 1318-1339.	5.2	35
1297	Level-set method for the modelling of liquid bridge formation and break-up. Computers and Fluids, 2011, 40, 42-51.	2.5	9
1298	A second-order curvilinear to Cartesian transformation of immersed interfaces and boundaries. Application to fictitious domains and multiphase flows. Computers and Fluids, 2011, 46, 422-428.	2.5	13
1299	An efficient block parallel AMR method for two phase interfacial flow simulations. Computers and Fluids, 2011, 44, 339-357.	2.5	40
1300	A finite difference real ghost fluid method on moving meshes with corner-transport upwind interpolation. Computers and Fluids, 2011, 49, 247-257.	2.5	3
1301	Modelling and simulation of moving interfaces in gas-assisted injection moulding process. Applied Mathematical Modelling, 2011, 35, 257-275.	4.2	24
1302	Level set based multi-scale methods for large deformation contact problems. Applied Numerical Mathematics, 2011, 61, 428-442.	2.1	10
1303	Numerical study of bubble growth and wall heat transfer during flow boiling in a microchannel. International Journal of Heat and Mass Transfer, 2011, 54, 3702-3718.	4.8	105
1304	Characterization of plunging liquid jets: A combined experimental and numerical investigation. International Journal of Multiphase Flow, 2011, 37, 722-731.	3.4	50
1305	A New modelling strategy for phase-change heat transfer in turbulent interfacial two-phase flow. International Journal of Multiphase Flow, 2011, 37, 627-639.	3.4	23
1306	Wetting phenomena during processing of high-viscosity shear-thinning fluid. Journal of Non-Newtonian Fluid Mechanics, 2011, 166, 723-733.	2.4	32
1307	Numerical simulation of dynamic contact angle using a force based formulation. Journal of Non-Newtonian Fluid Mechanics, 2011, 166, 900-907.	2.4	15
# 1308	ARTICLE Robust contour tracking based on a coupling between geodesic active contours and conditional random fields. Journal of Visual Communication and Image Representation, 2011, 22, 33-47.	IF 2.8	CITATIONS 6
-----------	--	-----------	----------------
1309	The effect of air–water interface on the vortex shedding from a vertical circular cylinder. Journal of Fluids and Structures, 2011, 27, 1-22.	3.4	49
1310	Gas bubbles in simulation and experiment. Journal of Colloid and Interface Science, 2011, 354, 364-372.	9.4	8
1311	A full Eulerian finite difference approach for solving fluid–structure coupling problems. Journal of Computational Physics, 2011, 230, 596-627.	3.8	139
1312	Space–time discontinuous Galerkin finite element method for two-fluid flows. Journal of Computational Physics, 2011, 230, 789-817.	3.8	39
1313	Fictitious domains and level sets for moving boundary problems. Applications to the numerical simulation of tumor growth. Journal of Computational Physics, 2011, 230, 1335-1358.	3.8	5
1314	The extended finite element method for two-phase and free-surface flows: A systematic study. Journal of Computational Physics, 2011, 230, 3369-3390.	3.8	73
1315	Parallel re-initialization of level set functions on distributed unstructured tetrahedral grids. Journal of Computational Physics, 2011, 230, 4437-4453.	3.8	10
1316	A conservative level set method suitable for variable-order approximations and unstructured meshes. Journal of Computational Physics, 2011, 230, 4536-4558.	3.8	117
1317	A nonlinear PDE model for reconstructing a regular surface from sampled data using a level set formulation on triangular meshes. Journal of Computational Physics, 2011, 230, 4636-4656.	3.8	3
1318	A simple multigrid scheme for solving the Poisson equation with arbitrary domain boundaries. Journal of Computational Physics, 2011, 230, 4756-4771.	3.8	125
1319	Simulations of multiphase flows with multiple length scales using moving mesh interface tracking with adaptive meshing. Journal of Computational Physics, 2011, 230, 5430-5448.	3.8	18
1320	A nonlinear PSE method for two-fluid shear flows with complex interfacial topology. Journal of Computational Physics, 2011, 230, 6756-6777.	3.8	9
1321	Simulation of buoyant bubble motion in viscous flows employing lattice Boltzmann and level set methods. Scientia Iranica, 2011, 18, 231-240.	0.4	14
1322	Simulation of Droplet-Formation and -Interaction in Emulsification Processes. Engineering Applications of Computational Fluid Mechanics, 2011, 5, 406-415.	3.1	12
1323	Shock wave–bubble interaction near soft and rigid boundaries during lithotripsy: numerical analysis by the improved ghost fluid method. Physics in Medicine and Biology, 2011, 56, 6421-6440.	3.0	51
1324	PhysBAM., 2011,,.		8
1325	Joining of dissimilar metals: Issues and modelling techniques. Science and Technology of Welding and Joining, 2011, 16, 313-317.	3.1	18

#	Article	IF	CITATIONS
1326	Simulation of a premixed turbulent flame by a conservative level set method. International Journal of Computer Mathematics, 2011, 88, 2154-2166.	1.8	1
1327	Sheathless hydrodynamic positioning of buoyant drops and bubbles inside microchannels. Physical Review E, 2011, 84, 036302.	2.1	46
1328	Numerical computations of cardiac AP using level set based geometries. , 2011, , .		0
1329	Patient-specific modelling of whole heart anatomy, dynamics and haemodynamics from four-dimensional cardiac CT images. Interface Focus, 2011, 1, 286-296.	3.0	105
1330	A Parallel Strategy for a Level Set Simulation of Droplets Moving in a Liquid Medium. Lecture Notes in Computer Science, 2011, , 200-209.	1.3	7
1331	Simulation of Free Surface Benchmark Problems Using Level Set and SPH Methods. , 2011, , .		0
1332	Design of Compliant Thermal Actuators Using Structural Optimization Based on the Level Set Method. Journal of Computing and Information Science in Engineering, 2011, 11, .	2.7	14
1333	Application of an Improved Ghost Fluid Method to the Collapse of Non-Spherical Bubbles in a Compressible Liquid. , 2011, , .		3
1334	Direct Numerical Simulation Study of Premixed Flame Response to Fuel-Air Ratio Oscillations. , 2011, , .		5
1335	Modeling the Blow-Blow Forming Process in Glass Container Manufacturing: A Comparison Between Computations and Experiments. Journal of Fluids Engineering, Transactions of the ASME, 2011, 133, .	1.5	5
1336	Secondary-Drop-Breakup Simulation Integrated With Fuel-Breakup Simulation Near Injector Outlet. Journal of Fluids Engineering, Transactions of the ASME, 2011, 133, .	1.5	18
1337	Hull Slamming. Applied Mechanics Reviews, 2011, 64, .	10.1	120
1338	Comparison of a least-square weighted residual method and the Taylor Galerkin method based on level set formulation for interface capturing. Progress in Computational Fluid Dynamics, 2011, 11, 169.	0.2	0
1339	A Graph Model for Minimizing the Storage Overhead of Distributing Data for the Parallel Solution of Two-Phase Flows. , 2011, , .		1
1340	PARTICLE SIMULATIONS OF MORPHOGENESIS. Mathematical Models and Methods in Applied Sciences, 2011, 21, 955-1006.	3.3	17
1342	Challenging issues in computer simulation of casting. International Journal of Cast Metals Research, 2011, 24, 133-138.	1.0	2
1343	Development of a Numerical Optimization Method for Blowing Glass Parison Shapes. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2011, 133, .	2.2	3
1344	A Numerthod for the Simulation of Free Surface Flows of Viscoplastic Fluid in 3D. Journal of Computational Mathematics, 2011, 29, 605-622.	0.4	21

#	Article	IF	CITATIONS
1345	Free-Surface Flow and Fluid-Object Interaction Modeling With Emphasis on Ship Hydrodynamics. Journal of Applied Mechanics, Transactions ASME, 2012, 79, .	2.2	126
1346	A Full Eulerian Fluid-Membrane Coupling Method with a Smoothed Volume-of-Fluid Approach. Communications in Computational Physics, 2012, 12, 544-576.	1.7	23
1347	Shape optimization approach based on the extended finite element method. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2012, 31, 477-497.	0.9	1
1348	Adaptive Regularized Level Set Method for Weak Boundary Object Segmentation. Mathematical Problems in Engineering, 2012, 2012, 1-16.	1.1	10
1349	Numerical Simulation of GMAW Process Based on Level Set Method. Advanced Materials Research, 0, 503-504, 65-68.	0.3	0
1350	A Study on Application of Smoothed Particle Hydrodynamics to Multi-Phase Flows. International Journal of Nonlinear Sciences and Numerical Simulation, 2012, 13, .	1.0	21
1351	NUMERICAL SIMULATION OF 2D LIQUID SLOSHING. International Journal of Applied Mechanics, 2012, 04, 1250014.	2.2	1
1352	Development of numerical simulation model for FSW employing particle method. Science and Technology of Welding and Joining, 2012, 17, 255-263.	3.1	38
1353	Numerical analysis of moving contact line with contact angle hysteresis using feedback deceleration technique. Physics of Fluids, 2012, 24, .	4.0	16
1354	A novel spinal vertebrae segmentation framework combining geometric flow and shape prior with level set method. , 2012, , .		6
1355	Droplet impingement dynamics in ink-jet deposition. Virtual and Physical Prototyping, 2012, 7, 49-64.	10.4	5
1356	Skull Stripping Using Geodesic Active Contours in Magnetic Resonance Images. , 2012, , .		1
1357	Shape Sensitivity of Free-Surface Interfaces Using a Level Set Methodology. , 2012, , .		6
1358	Extended smoothed boundary method for solving partial differential equations with general boundary conditions on complex boundaries. Modelling and Simulation in Materials Science and Engineering, 2012, 20, 075008.	2.0	86
1359	Two Fluids Level Set: High Performance Simulation and Post Processing. , 2012, , .		1
1360	Numerical prediction for oil amount leaked from a damaged tank using two-dimensional Moving Particle Simulation method. , 2012, , .		0
1361	A Two-Phase Flow Model with VOF for Free Surface Flow Problems. Applied Mechanics and Materials, 0, 232, 279-283.	0.2	5
1362	CFD technology for 3D simulation of large-scale hydrodynamic events and disasters. Russian Journal of Numerical Analysis and Mathematical Modelling, 2012, 27, .	0.6	7

ARTICLE IF CITATIONS Multi-relaxation-time lattice Boltzmann front tracking method for two-phase flow with surface 1363 1.4 8 tension. Chinese Physics B, 2012, 21, 124703. Numerical Simulation of Thermocapillary-Buoyant Convection in an Annular Pool under Various 1364 3.3 Gravity Levels. Chinese Physics Letters, 2012, 29, 074704. 1365 Numerical Analysis of Condensation of R134a in a Single Microchannel., 2012, , . 2 Numerical Simulation of Thermohydraulic Characteristics of Dross Ejection Process in Laser Steel 1366 Cutting., 2012,,. A Two-Way Coupled Polydispersed Two-Fluid Model for the Simulation of Air Entrainment Beneath a 1367 1.5 13 Plunging Liquid Jet. Journal of Fluids Engineering, Transactions of the ASME, 2012, 134, . Continuous Deposition of a Liquid Thread onto a Moving Substrate. Numerical Analysis and 1368 1.5 Comparison With Experiments. Journal of Fluids Engineering, Transactions of the ASME, 2012, 134, . A Level-Set Method for Particle Deposition on Surfaces., 2012,,. 1369 1 A Constrained Level Set Method for Simulating the Formation of Liquid Bridges. Communications in 1.7 1370 Computational Physics, 2012, 12, 577-594. RECENT ADVANCES IN COMPUTATIONAL MECHANICS FOR CIVIL ENGINEERING. Journal of Japan Society of 1371 0.1 0 Civil Engineers Ser A2 (Applied Mechanics (AM)), 2012, 68, 31-50. A SIMPLE WETTING AND DRYING SCHEME FOR ENVIRONMENTAL FLUID FLOW. Journal of Japan Society of 0.1 Civil Engineers Ser B1 (Hydraulic Engineering), 2012, 68, I\_1249-I\_1254. Numerical Simulation of Free Surface by an Area-Preserving Level Set Method. Communications in 1373 4 1.7 Computational Physics, 2012, 11, 1347-1371. Phase-Field Models for Multi-Component Fluid Flows. Communications in Computational Physics, 2012, 1374 1.7 390 12,613-661. Numerical Analysis of Bubble Collapse with Nonequilibrium Phase Transition by the Ghost Fluid 1375 Method. 880-02 Nihon Kikai Gakkai Ronbunshū Transactions of the Japan Society of Mechanical 0.2 2 Engineers Series B B-hen, 2012, 78, 1302-1317. Numerical Study of Liquid Fuel / Cavitation Bubble Mixture Injection Technique. 880-02 Nihon Kikai Gakkai Ronbunshū Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2012, 78, 1376 0.2 1584-1597. 1377 Shape Characterization for Droplet Impingement Dynamics in Ink-Jet Deposition., 2012, , . 0 The Space-Time CE/SE Method for Solving Reduced Two-Fluid Flow Model. Communications in 1378 Computational Physics, 2012, 12, 1070-1095. Observations on ISS of Bubble Dynamics During Boiling., 2012, , . 1379 0 Efficient Algorithm for Level Set Method Preserving Distance Function. IEEE Transactions on Image Processing, 2012, 21, 4722-4734.

#	Article	IF	CITATIONS
1381	Numerical simulation of two-dimensional binary droplets collision outcomes using the level set method. International Journal of Computational Fluid Dynamics, 2012, 26, 1-21.	1.2	11
1382	Threeâ€dimensional wave impact on a rigid structure using smoothed particle hydrodynamics. International Journal for Numerical Methods in Fluids, 2012, 68, 1471-1496.	1.6	67
1383	A numerical investigation of droplet impact on a heated wall in the film boiling regime. Heat and Mass Transfer, 2012, 48, 1525-1538.	2.1	20
1384	Computation of the signed distance function to a discrete contour on adapted triangulation. Calcolo, 2012, 49, 193-219.	1.1	53
1385	Numerical simulation of multiphase flows of CO2 storage in saline aquifers in Daqingzijing oilfield, China. Clean Technologies and Environmental Policy, 2012, 14, 609-618.	4.1	22
1386	Relative Permeability Calculations from Two-Phase Flow Simulations Directly on Digital Images of Porous Rocks. Transport in Porous Media, 2012, 94, 487-504.	2.6	184
1387	The buoyancy-driven motion of a single skirted bubble or drop rising through a viscous liquid. Physics of Fluids, 2012, 24, .	4.0	33
1388	A synthesis of numerical methods for modeling wave energy converter-point absorbers. Renewable and Sustainable Energy Reviews, 2012, 16, 4352-4364.	16.4	214
1389	WENO Scheme with Subcell Resolution for Computing Nonconservative Euler Equations with Applications to One-Dimensional Compressible Two-Medium Flows. Journal of Scientific Computing, 2012, 53, 222-247.	2.3	13
1390	Numerical modeling of 3D turbulent free surface flow in natural waterways. Advances in Water Resources, 2012, 40, 23-36.	3.8	63
1391	A conjugate gradient algorithm for solving the Galerkin-characteristic approximation of interfacial flows. Applied Numerical Mathematics, 2012, 62, 1197-1214.	2.1	2
1392	Direct numerical simulation of mass transfer from Taylor bubble flow through a circular capillary. International Journal of Heat and Mass Transfer, 2012, 55, 5959-5971.	4.8	64
1393	Analysis and applications of the Voronoi Implicit Interface Method. Journal of Computational Physics, 2012, 231, 6051-6085.	3.8	51
1394	Modelling two-phase flow in porous media at the pore scale using the volume-of-fluid method. Journal of Computational Physics, 2012, 231, 5653-5668.	3.8	393
1395	A level-set continuum method for two-phase flows with insoluble surfactant. Journal of Computational Physics, 2012, 231, 5897-5909.	3.8	56
1396	A hybrid level set-volume constraint method for incompressible two-phase flow. Journal of Computational Physics, 2012, 231, 6438-6471.	3.8	52
1397	A subgrid computation of the curvature by a particle/level-set method. Application to a front-tracking/ghost-fluid method for incompressible flows. Journal of Computational Physics, 2012, 231, 6990-7010.	3.8	13
1398	A re-evaluation of metal diapir breakup and equilibration in terrestrial magma oceans. Earth and Planetary Science Letters, 2012, 313-314, 105-114.	4.4	52

~		<u> </u>	
		IV F D(	<b>DDT</b>
$\sim$	IIAI	IVE F	

#	Article	IF	CITATIONS
1399	Subgrid-scale modelling of surface tension within interface tracking-based Large Eddy and Interface Simulation of 3D interfacial flows. Computers and Fluids, 2012, 63, 27-46.	2.5	28
1400	The Marker-density method in cartesian grids applied to nonlinear ship waves. Computers and Fluids, 2012, 63, 57-69.	2.5	8
1401	An efficient multiple marker front-capturing method for two-phase flows. Computers and Fluids, 2012, 63, 47-56.	2.5	8
1402	Numerical Simulation of Laminar and Turbulent Two-Phase Flow in Pressure-Swirl Atomizers. AIAA Journal, 2012, 50, 2091-2101.	2.6	25
1403	Idealized numerical simulation of breaking water wave propagating over a viscous mud layer. Physics of Fluids, 2012, 24, .	4.0	30
1404	Evolution of surface topography in one-dimensional laser machining of structural alumina. Journal of the European Ceramic Society, 2012, 32, 4205-4218.	5.7	56
1405	XFEM with hanging nodes for two-phase incompressible flow. Computer Methods in Applied Mechanics and Engineering, 2012, 245-246, 290-312.	6.6	20
1406	Rollers in low-head dams – Challenges and solutions. Communications in Nonlinear Science and Numerical Simulation, 2012, 17, 5273-5285.	3.3	4
1407	A model for growth and engulfment of gas microporosity during aluminum alloy solidification process. Computational Materials Science, 2012, 65, 383-394.	3.0	27
1408	Mammography segmentation with maximum likelihood active contours. Medical Image Analysis, 2012, 16, 1167-1186.	11.6	67
1409	Simulations of the Kirkendall-Effect-Induced Deformation of Thermodynamically Ideal Binary Diffusion Couples with General Geometries. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 3481-3500.	2.2	15
1410	Thermocapillary Convection in a Floating Half Zone. Applied Mechanics and Materials, 0, 248, 218-223.	0.2	0
1411	Computational transport processes for micromixers. , 2012, , 73-112.		0
1412	CFD Simulation of Gas–Liquid–Liquid Three-Phase Flow in an Annular Centrifugal Contactor. Industrial & Engineering Chemistry Research, 2012, 51, 11245-11253.	3.7	34
1413	Cell-encapsulating droplet formation and freezing. Applied Physics Letters, 2012, 101, 133701.	3.3	8
1414	Evaluating the performance of the two-phase flow solver interFoam. Computational Science & Discovery, 2012, 5, 014016.	1.5	567
1415	Toward free-surface modeling of planing vessels: simulation of the Fridsma hull using ALE-VMS. Computational Mechanics, 2012, 50, 719-727.	4.0	104
1416	Numerical investigation of volume of fluid and level set interface capturing methods for bubble growth and detachment. Journal of Physics: Conference Series, 2012, 395, 012166.	0.4	5

ARTICLE IF CITATIONS Numerical simulation of flow fields induced by a supersonic projectile moving in tubes. Shock Waves, 1417 1.9 9 2012, 22, 417-425. Hybrid Energy-Minimization Simulation of Equilibrium Droplet Shapes on Hydrophilic/Hydrophobic 1418 3.5 Pátterned Surfaces. Langmuir, 2012, 28, 15450-15453. A Workflow for Patient-Individualized Virtual Angiogram Generation Based on CFD Simulation. 1419 1.3 83 Computational and Mathematical Methods in Medicine, 2012, 2012, 1-24. Numerical tensile test on a mushy zone sample. IOP Conference Series: Materials Science and 1420 Engineering, 2012, 33, 012054. THE MICRO INJECTION MOULDING PROCESS FOR POLYMERIC COMPONENTS MANUFACTURING., 2012, , . 1421 17 Volumetric Methods for Surface Reconstruction and Manipulation., 2012, , 287-308. Visualizing millisecond chaotic mixing dynamics in microdroplets: A direct comparison of experiment 1423 2.4 37 and simulation. Biomicrofluidics, 2012, 6, 12810-1281012. Explicit levelâ€setâ€based topology optimization using an exact Heaviside function and consistent 1424 2.8 58 sensitivity analysis. International Journal for Numerical Methods in Engineering, 2012, 91, 67-97. Regularized Dirac delta functions for phase field models. International Journal for Numerical 1425 2.8 40 Methods in Engineering, 2012, 91, 269-288. A new level set method for topology optimization of distributed compliant mechanisms. International 1426 2.8 Journal for Numerical Methods in Engineering, 2012, 91, 843-871. Fracture modeling using meshless methods and level sets in 3D: Framework and modeling. 1427 292 2.8 International Journal for Numerical Methods in Engineering, 2012, 92, 969-998. Combining a levelâ€set method and a mixed stabilized P1/P1 formulation for coupling Stokes–Darcy 1.6 flows. International Journal for Numerical Methods in Fluids, 2012, 69, 459-480. An augmented Lagrangian approach to simulating yield stress fluid flows around a spherical gas 1429 1.6 8 bubble. International Journal for Numerical Methods in Fluids, 2012, 69, 731-746. Experimental and numerical analysis of a sphere falling into a viscous fluid. International Journal for Numerical Methods in Fluids, 2012, 69, 1496-1521. 1430 1.6 A simple incompressible flux splitting for sharp free surface capturing. International Journal for 1431 1.6 5 Numerical Methods in Fluids, 2012, 69, 1661-1678. A conservative local interface sharpening scheme for the constrained interpolation profile method. 1432 International Journal for Numerical Methods in Fluids, 2012, 70, 441-467. A Q2Q1 finite element/levelâ€set method for simulating twoâ€phase flows with surface tension. 1433 1.6 12 International Journal for Numerical Methods in Fluids, 2012, 70, 468-492. A markerâ€andâ€cell approach to free surface 2â€D multiphase flows. International Journal for Numerical 1434 Methods in Fluids, 2012, 70, 1543-1557.

#	Article	IF	CITATIONS
1435	A robust framework for face contour detection from clutter background. International Journal of Machine Learning and Cybernetics, 2012, 3, 111-118.	3.6	5
1436	Numerical simulation of multiphase flows with material interface on an unstructured grid system. Journal of Mechanical Science and Technology, 2012, 26, 1347-1354.	1.5	4
1437	Simulation of polymer molding filling process with an adaptive weld line capturing algorithm. International Journal of Material Forming, 2012, 5, 25-37.	2.0	7
1438	Thermocapillary migration of a planar droplet at moderate and large Marangoni numbers. Acta Mechanica, 2012, 223, 609-626.	2.1	23
1439	Numerical modeling of multiphase flows in microfluidics and micro process engineering: a review of methods and applications. Microfluidics and Nanofluidics, 2012, 12, 841-886.	2.2	338
1440	Channel size distribution of complex three-dimensional microstructures calculated from the topological characterization of isodistance structures. Acta Materialia, 2012, 60, 2509-2517.	7.9	5
1441	Mixing of thermally stratified water layer by a free rising wobbling air bubble. Chemical Engineering Science, 2012, 72, 155-171.	3.8	11
1442	The effect of Weber number on the central binary collision outcome between unequal-sized droplets. International Journal of Heat and Mass Transfer, 2012, 55, 2137-2150.	4.8	40
1443	Adaptive level set evolution starting with a constant function. Applied Mathematical Modelling, 2012, 36, 3217-3228.	4.2	27
1444	Numerical modeling of turbulence-induced interfacial instability in two-phase flow with moving interface. Applied Mathematical Modelling, 2012, 36, 3593-3611.	4.2	8
1445	Large time-step explicit integration method for solving problems with dominant convection. Computer Methods in Applied Mechanics and Engineering, 2012, 217-220, 168-185.	6.6	49
1446	Two-dimensional unsteady aerodynamics analysis based on a multiphase perspective. Computers and Fluids, 2012, 53, 105-116.	2.5	2
1447	Analytical and level-set method based numerical study on oil–water smooth/wavy stratified-flow in an inclined plane-channel. International Journal of Multiphase Flow, 2012, 38, 99-117.	3.4	22
1448	A review on numerical studies of slug flow hydrodynamics and heat transfer in microtubes and microchannels. International Journal of Multiphase Flow, 2012, 39, 88-104.	3.4	155
1449	Effects of surfactant on terminal velocity of a Taylor bubble in a vertical pipe. International Journal of Multiphase Flow, 2012, 39, 78-87.	3.4	79
1450	DNS analysis of turbulent mixing in two-phase flows. International Journal of Multiphase Flow, 2012, 40, 93-105.	3.4	49
1451	Accurate implementation of forcing terms for two-phase flows into SIMPLE algorithm. International Journal of Multiphase Flow, 2012, 45, 40-52.	3.4	17
1452	Simulating free surface flow problems using hybrid particle element free Galerkin method. Engineering Analysis With Boundary Elements, 2012, 36, 372-384.	3.7	8

#	Article	IF	CITATIONS
1453	Simulations of a stretching bar using a plasticity model from the shear transformation zone theory. Journal of Computational Physics, 2012, 231, 2155-2179.	3.8	31
1454	A level set method for vapor bubble dynamics. Journal of Computational Physics, 2012, 231, 1533-1552.	3.8	29
1455	Semi-implicit surface tension formulation with a Lagrangian surface mesh on an Eulerian simulation grid. Journal of Computational Physics, 2012, 231, 2092-2115.	3.8	27
1456	An interface capturing method with a continuous function: The THINC method with multi-dimensional reconstruction. Journal of Computational Physics, 2012, 231, 2328-2358.	3.8	124
1457	A new volume-of-fluid method with a constructed distance function on general structured grids. Journal of Computational Physics, 2012, 231, 3703-3722.	3.8	66
1458	A new contact line treatment for a conservative level set method. Journal of Computational Physics, 2012, 231, 3887-3895.	3.8	29
1459	Computation of feed-paths for casting solidification using level-set-method. Journal of Materials Processing Technology, 2012, 212, 1236-1249.	6.3	21
1460	Prior Shape Level Set Segmentation on Multistep Generated Probability Maps of MR Datasets for Fully Automatic Kidney Parenchyma Volumetry. IEEE Transactions on Medical Imaging, 2012, 31, 312-325.	8.9	39
1461	Fundamental validation of the finite volume particle method for 3D sloshing dynamics. International Journal for Numerical Methods in Fluids, 2012, 68, 1-17.	1.6	8
1462	A leastâ€square weighted residual method for level set formulation. International Journal for Numerical Methods in Fluids, 2012, 68, 887-904.	1.6	16
1463	Out-of-Core Computations of High-Resolution Level Sets by Means of Code Transformation. Journal of Scientific Computing, 2012, 50, 368-404.	2.3	1
1464	Numerical simulation of a single rising bubble by VOF with surface compression. International Journal for Numerical Methods in Fluids, 2013, 71, 960-982.	1.6	167
1465	An efficient operator splitting method for local region Chan-Vese model. Eurasip Journal on Advances in Signal Processing, 2013, 2013, .	1.7	1
1466	A critical comparative assessment of differential equation-driven methods for structural topology optimization. Structural and Multidisciplinary Optimization, 2013, 48, 685-710.	3.5	37
1467	Topology optimization of hinge-free compliant mechanisms with multiple outputs using level set method. Structural and Multidisciplinary Optimization, 2013, 47, 659-672.	3.5	58
1468	3D phase field modeling of electrohydrodynamic multiphase flows. International Journal of Multiphase Flow, 2013, 57, 1-9.	3.4	55
1469	Modified CIP-CSL/FV method for incompressible flows. Computers and Fluids, 2013, 86, 240-250.	2.5	1
1470	A 3D strongly coupled implicit discontinuous Galerkin level set-based method for modeling two-phase flows. Computers and Fluids, 2013, 87, 144-155.	2.5	19

#	Article	IF	CITATIONS
1471	Bi-planar image segmentation based on variational geometrical active contours with shape priors. Medical Image Analysis, 2013, 17, 165-181.	11.6	13
1472	Numerical study of obstacle configuration for droplet splitting in a microchannel. Computers and Fluids, 2013, 84, 351-358.	2.5	18
1473	Benchmark numerical simulations of segmented two-phase flows in microchannels using the Volume of Fluid method. Computers and Fluids, 2013, 86, 28-36.	2.5	179
1474	Three-dimensional volume-conserving immersed boundary model for two-phase fluid flows. Computer Methods in Applied Mechanics and Engineering, 2013, 257, 36-46.	6.6	24
1475	ON THE VOLUME OF FLUID METHOD FOR MULTIPHASE FLUID FLOW SIMULATION. International Journal of Modeling, Simulation, and Scientific Computing, 2013, 04, 1350002.	1.4	3
1476	Ultrasound kidney segmentation with a global prior shape. Journal of Visual Communication and Image Representation, 2013, 24, 937-943.	2.8	28
1477	Calculation of the interface curvature and normal vector with the level-set method. Computers and Fluids, 2013, 84, 218-230.	2.5	10
1478	Direct numerical simulation of interfacial instabilities: A consistent, conservative, all-speed, sharp-interface method. Journal of Computational Physics, 2013, 242, 946-990.	3.8	86
1479	A weak formulation for solving elliptic interface problems without body fitted grid. Journal of Computational Physics, 2013, 249, 80-95.	3.8	52
1480	Optimal control oriented to therapy for a free-boundary tumor growth model. Journal of Theoretical Biology, 2013, 325, 1-11.	1.7	10
1481	A level-set method for convective–diffusive particle deposition. Applied Mathematical Modelling, 2013, 37, 5245-5259.	4.2	13
1482	One-dimensional multipulse laser machining of structural alumina: evolution of surface topography. International Journal of Advanced Manufacturing Technology, 2013, 68, 69-83.	3.0	62
1483	Moving Objects Localization by Local Regions Based Level Set: Application on Urban Traffic. Journal of Mathematical Imaging and Vision, 2013, 46, 258-274.	1.3	0
1484	Design of free-surface interfaces using RANS equations. , 2013, , .		2
1485	Fully Eulerian fluid–structure interaction for time-dependent problems. Computer Methods in Applied Mechanics and Engineering, 2013, 255, 14-26.	6.6	39
1486	Free-Surface Flow and Fluid-Object Interaction. Computational Methods in Applied Sciences (Springer), 2013, , 49-63.	0.3	0
1487	Coupling of fully Eulerian and arbitrary Lagrangian–Eulerian methods for fluid-structure interaction computations. Computational Mechanics, 2013, 52, 1113-1124.	4.0	22
1488	Crystallization of supercooled water: A level-set-based modeling of the dendrite tip velocity. International Journal of Heat and Mass Transfer, 2013, 66, 830-837.	4.8	21

#	Article	IF	CITATIONS
1489	Numerical simulation of drops inside an asymmetric microchannel with protrusions. Computers and Fluids, 2013, 82, 14-28.	2.5	7
1490	Lattice Boltzmann model for combustion and detonation. Frontiers of Physics, 2013, 8, 94-110.	5.0	56
1491	Gradient augmented reinitialization scheme for the level set method. International Journal for Numerical Methods in Fluids, 2013, 73, 1011-1041.	1.6	7
1492	Finite volume simulation of unsteady shockâ€cavitation in compressible water. International Journal for Numerical Methods in Fluids, 2013, 72, 632-649.	1.6	7
1493	A minimization-based finite element formulation for interface-preserving level set reinitialization. Computing (Vienna/New York), 2013, 95, 13-25.	4.8	21
1494	Application of the level-set method to a mixed-mode driven Stefan problem in 2 \$\$D\$\$ and 3 \$\$D\$\$. Computing (Vienna/New York), 2013, 95, 553-572.	4.8	3
1495	Modeling of boiling flow in microchannels for nucleation characteristics and performance optimization. International Journal of Heat and Mass Transfer, 2013, 64, 706-718.	4.8	29
1496	Experimental investigation and numerical simulation of Marangoni effect induced by mass transfer during drop formation. AICHE Journal, 2013, 59, 4424-4439.	3.6	27
1497	Simulation of twoâ€phase flow–body interaction problems using direct forcing/fictitious domain–level set method. International Journal for Numerical Methods in Fluids, 2013, 73, 250-265.	1.6	6
1498	A coupled volume-of-fluid and level set (VOSET) method on dynamically adaptive quadtree grids. International Journal of Heat and Mass Transfer, 2013, 67, 70-73.	4.8	28
1499	An adaptive level set evolution equation for contour extraction. Applied Mathematics and Computation, 2013, 219, 11420-11429.	2.2	12
1500	A subspace projection method for the implementation of interface conditions in a single-drop flow problem. Journal of Computational Physics, 2013, 252, 438-457.	3.8	10
1501	Eliminating spurious velocities with a stable approximation of viscous incompressible two-phase Stokes flow. Computer Methods in Applied Mechanics and Engineering, 2013, 267, 511-530.	6.6	27
1502	A numerical analysis on hydrodynamic deformation of molten droplets in a water pool. Annals of Nuclear Energy, 2013, 53, 228-237.	1.8	19
1503	A Meshless Particle Method for Poisson and Diffusion Problems with Discontinuous Coefficients and Inhomogeneous Boundary Conditions. SIAM Journal of Scientific Computing, 2013, 35, A2469-A2493.	2.8	4
1504	Phase-field-based lattice Boltzmann model for incompressible binary fluid systems with density and viscosity contrasts. Physical Review E, 2013, 87, 043301.	2.1	227
1505	Nonlinear Partial Differential Equations with Applications. International Series of Numerical Mathematics, 2013, , .	1.1	245
1506	Numerical Simulation of Pool Boiling: A Review. Journal of Heat Transfer, 2013, 135, .	2.1	115

#	Article	IF	CITATIONS
1507	Stanford University Unstructured (SU <sup>2</sup> ): An open-source integrated computational environment for multi-physics simulation and design. , 2013, , .		264
1508	A sharp-interface phase change model for a mass-conservative interface tracking method. Journal of Computational Physics, 2013, 249, 127-161.	3.8	165
1509	A level set-based shape optimization method for periodic sound barriers composed of elastic scatterers. Journal of Sound and Vibration, 2013, 332, 5283-5301.	3.9	7
1510	Two-phase flow boiling in small channels: A brief review. Sadhana - Academy Proceedings in Engineering Sciences, 2013, 38, 1083-1126.	1.3	19
1511	Analysis of the Disintegration of Charged Droplets Employing Boundary Element Method and Particle Method. IEEE Transactions on Magnetics, 2013, 49, 1737-1740.	2.1	4
1512	A three-dimensional sharp interface Cartesian grid method for solving high speed multi-material impact, penetration and fragmentation problems. Journal of Computational Physics, 2013, 241, 308-332.	3.8	61
1513	Modeling and simulation of conditionally volume averaged viscoelastic twoâ€phase flows. AICHE Journal, 2013, 59, 3914-3927.	3.6	8
1514	Parallelization of an unstructured Navier–Stokes solver using a multi-color ordering method for OpenMP. Computers and Fluids, 2013, 88, 496-509.	2.5	24
1515	Mass transfer characteristics of gas–liquid absorption during Taylor flow in mini/microchannel reactors. Chemical Engineering Science, 2013, 101, 69-80.	3.8	88
1516	What controls dynamics of droplet shape evolution upon impingement on a solid surface?. AICHE Journal, 2013, 59, 3071-3082.	3.6	29
1517	Analytical and numerical study for two-phase stratified-flow in a plane channel subjected to different thermal boundary conditions. International Journal of Thermal Sciences, 2013, 71, 88-102.	4.9	12
1518	An accurate low-Mach scheme for a compressible two-fluid model applied to free-surface flows. Journal of Computational Physics, 2013, 252, 1-19.	3.8	27
1519	A hybrid level set–front tracking finite element approach for fluid–structure interaction and two-phase flow applications. Journal of Computational Physics, 2013, 255, 228-244.	3.8	18
1520	Volume of fluid-based numerical modeling of condensation heat transfer and fluid flow characteristics in microchannels. International Journal of Heat and Mass Transfer, 2013, 65, 62-72.	4.8	137
1521	An adaptive level set method based on twoâ€level uniform meshes and its application to dislocation dynamics. International Journal for Numerical Methods in Engineering, 2013, 94, 573-597.	2.8	7
1522	Simulation and modelling of sub-30 nm polymeric channels fabricated by electrostatic induced lithography. RSC Advances, 2013, 3, 11839.	3.6	20
1523	An effective segmentation of moving objects by a novel local regions-based level set. , 2013, , .		0
1524	Terminal velocities of clean and fully-contaminated drops in vertical pipes. International Journal of Multiphase Flow, 2013, 49, 8-23.	3.4	47

#	Article	IF	CITATIONS
1525	Development of a free surface flow solver for the simulation of wave/body interactions. European Journal of Mechanics, B/Fluids, 2013, 38, 1-17.	2.5	7
1526	Recent ship hydrodynamics developments in the parallel two-fluid flow solver Alya. Computers and Fluids, 2013, 80, 168-177.	2.5	6
1527	A coupled level-set and volume-of-fluid method for the buoyant rise of gas bubbles in liquids. International Journal of Heat and Mass Transfer, 2013, 58, 240-259.	4.8	112
1528	On the analysis of bubble growth and detachment at low Capillary and Bond numbers using Volume of Fluid and Level Set methods. Chemical Engineering Science, 2013, 90, 77-91.	3.8	75
1529	The stable XFEM for two-phase flows. Computers and Fluids, 2013, 87, 41-49.	2.5	74
1530	Simulations of single bubbles rising through viscous liquids using Smoothed Particle Hydrodynamics. International Journal of Multiphase Flow, 2013, 50, 98-105.	3.4	66
1531	High Resolution Sharp Computational Methods for Elliptic and Parabolic Problems in Complex Geometries. Journal of Scientific Computing, 2013, 54, 369-413.	2.3	34
1532	A Neumann–Neumann preconditioned iterative substructuring approach for computing solutions to Poisson's equation with prescribed jumps on an embedded boundary. Journal of Computational Physics, 2013, 235, 683-700.	3.8	2
1533	An Eulerian–Lagrangian moving immersed interface method for simulating burning solids. Journal of Computational Physics, 2013, 241, 364-387.	3.8	9
1534	A monolithic mass tracking formulation for bubbles in incompressible flow. Journal of Computational Physics, 2013, 247, 17-61.	3.8	25
1535	Solving incompressible two-phase flows on multi-GPU clusters. Computers and Fluids, 2013, 80, 356-364.	2.5	44
1536	Geometric optimization of liquid–liquid slug flow in a flow-focusing millifluidic device for synthesis of nanomaterials. Chemical Engineering Journal, 2013, 217, 447-459.	12.7	31
1537	Extended Vofire algorithm for fast transient fluid–structure dynamics with liquid–gas flows and interfaces. Journal of Fluids and Structures, 2013, 39, 102-125.	3.4	14
1538	A volume-conservative PLIC algorithm on three-dimensional fully unstructured meshes. Computers and Fluids, 2013, 88, 250-261.	2.5	28
1539	Numerical investigation of Newtonian and non-Newtonian multiphase flows using ISPH method. Computer Methods in Applied Mechanics and Engineering, 2013, 254, 99-113.	6.6	114
1540	Flow of a drop through a constricted microcapillary. Computers and Fluids, 2013, 87, 50-56.	2.5	23
1541	Designing the 3D-microbattery geometry using the level-set method. Journal of Power Sources, 2013, 244, 417-428.	7.8	22
1542	Level Set Analysis of Two-fluid Interfacial Flows. Procedia Computer Science, 2013, 18, 2420-2423.	2.0	0

		CITATION REPORT		
#	Article		IF	CITATIONS
1543	A multiresolution and smooth fictitious domain method for one-dimensional elliptical an problems. Mathematical and Computer Modelling, 2013, 58, 1727-1737.	nd Stefan	2.0	1
1544	A modified level set approach to 2D modeling of dynamic recrystallization. Modelling ar in Materials Science and Engineering, 2013, 21, 085012.	nd Simulation	2.0	57
1545	A new framework for optimal classifier design. Pattern Recognition, 2013, 46, 2249-22	55.	8.1	21
1546	Numerical prediction of oil amount leaked from a damaged tank using two-dimensional particle simulation method. Ocean Engineering, 2013, 69, 70-78.	moving	4.3	40
1547	Numerical investigation of evaporation of a single ethanol/iso-octane droplet. Fuel, 201	3, 107, 724-739.	6.4	39
1548	Improving primary atomization modeling through DNS of two-phase flows. Internationa Multiphase Flow, 2013, 55, 130-137.	al Journal of	3.4	65
1549	A new method for the level set equation using a hierarchical-gradient truncation and re- technique. Computer Physics Communications, 2013, 184, 1547-1554.	mapping	7.5	5
1550	A numerical study of quasi-static gas injected bubble growth: Some aspects of gravity. I Journal of Heat and Mass Transfer, 2013, 64, 468-482.	International	4.8	25
1551	An oriented particle level set method based on surface coordinates. Journal of Computa Physics, 2013, 251, 237-250.	itional	3.8	7
1552	Topology optimization of steady Navier–Stokes flow with body force. Computer Met Mechanics and Engineering, 2013, 255, 306-321.	hods in Applied	6.6	47
1554	Region-based object and background extraction via active contours. Optik, 2013, 124,	6020-6026.	2.9	6
1555	Adaptive mesh refinement techniques for the immersed interface method applied to flo Computers and Structures, 2013, 122, 249-258.	w problems.	4.4	9
1556	A numerical method for the calculation of drag and lift of a deformable droplet in shear Journal of Computational Physics, 2013, 241, 35-57.	flow.	3.8	12
1557	Numerical simulation of water resources problems: Models, methods, and trends. Advar Resources, 2013, 51, 405-437.	nces in Water	3.8	73
1558	Pore-scale imaging and modelling. Advances in Water Resources, 2013, 51, 197-216.		3.8	1,407
1559	A Novel Level Set-Based Immersed-Boundary Method for CFD Simulation of Moving-Bou Numerical Heat Transfer, Part B: Fundamentals, 2013, 63, 304-326.	indary Problems.	0.9	25
1560	A VOF-Based Conservative Interpolation Scheme for Interface Tracking (CISIT) of Two-F Numerical Heat Transfer, Part B: Fundamentals, 2013, 63, 263-283.	luid Flows.	0.9	13
1562	Level-set methods for structural topology optimization: a review. Structural and Multidi Optimization, 2013, 48, 437-472.	isciplinary	3.5	682

ARTICLE IF CITATIONS Advanced simulation of transient multiphase flow & amp; flow assurance in the oil & amp; gas industry. 1563 1.7 16 Canadian Journal of Chemical Engineering, 2013, 91, 1201-1214. Lattice Boltzmann simulations of a single n-butanol drop rising in water. Physics of Fluids, 2013, 25, 1564 4.0 042102. Phase field modeling of Taylor flow in mini/microchannels, Part I: Bubble formation mechanisms and 1565 3.8 25 phase field parameters. Chemical Engineering Science, 2013, 94, 138-149. Reinitialization-Free Level Set Evolution via Reaction Diffusion. IEEE Transactions on Image Processing, 1566 9.8 179 2013, 22, 258-271. A Mass Conservation Scheme for Level Set Method Applied to Multiphase Incompressible Flows. International Journal for Computational Methods in Engineering Science and Mechanics, 2013, 14, 1567 2.1 9 271-289. Numerical investigation of hydrodynamics and heat transfer of elongated bubbles during flow 4.8 168 boiling in a microchannel. International Journal of Heat and Mass Transfer, 2013, 59, 451-471. Ignition dynamics of an annular combustor equipped with multiple swirling injectors. Combustion 1569 5.2 93 and Flame, 2013, 160, 1398-1413. A level set method for simulating capillaryâ€controlled displacements at the pore scale with nonzero 4.2 94 contact angles. Water Resources Research, 2013, 49, 4645-4661. Eulerian adaptive finite-difference method for high-velocity impact and penetration problems. Journal 1571 3.8 51 of Computational Physics, 2013, 240, 76-99. An adaptive Cartesian cut-cell/level-set method to simulate incompressible two-phase flows with 2.5 embedded moving solid boundaries. Computers and Fluids, 2013, 71, 469-486. Influence of surface tension implementation in Volume of Fluid and coupled Volume of Fluid with Level Set methods for bubble growth and detachment. International Journal of Multiphase Flow, 2013, 1573 3.4 249 53, 11-28. Comparative assessment of Volume-of-Fluid and Level-Set methods by relevance to dendritic ice 1574 2.5 growth in supercooled water. Computers and Fluids, 2013, 79, 44-52. Numerical investigation of the influence of leading and sequential bubbles on slug flow boiling 1575 4.9 65 within a microchannel. International Journal of Thermal Sciences, 2013, 71, 36-52. Electrostatic charging and control of droplets in microfluidic devices. Lab on A Chip, 2013, 13, 962. 6.0 Three-dimensional CFD–VOF–DPM simulations of effects of low-holdup particles on single-nozzle 1577 12.7 55 bubbling behavior in gas–liquid–solid systems. Chemical Engineering Journal, 2013, 222, 292-306. Dilution of molybdenum on aluminum during laser surface alloying. Journal of Alloys and Compounds, 2013, 570, 133-143. A discontinuous Galerkin conservative level set scheme for interface capturing in multiphase flows. 1579 3.8 57 Journal of Computational Physics, 2013, 249, 275-302. Finite-difference ghost-point multigrid methods on Cartesian grids for elliptic problems in arbitrary 3.8 domains. Journal of Computational Physics, 2013, 241, 464-501.

#	Article	IF	CITATIONS
1581	A 3D Unsplit Forward/Backward Volume-of-Fluid Approach and Coupling to the Level Set Method. Journal of Computational Physics, 2013, 233, 10-33.	3.8	60
1582	A practical numerical framework for free surface flows based on CLSVOF method, multi-moment methods and density-scaled CSF model: Numerical simulations of droplet splashing. Journal of Computational Physics, 2013, 232, 252-271.	3.8	98
1583	A level set approach for diffusion and Stefan-type problems with Robin boundary conditions on quadtree/octree adaptive Cartesian grids. Journal of Computational Physics, 2013, 233, 241-261.	3.8	46
1584	A composite Level Set and Extended-Domain-Eigenfunction Method for simulating 2D Stokes flow involving a free surface. Journal of Computational and Applied Mathematics, 2013, 237, 389-402.	2.0	1
1585	Turbulence modulation across the interface of a large deformable drop. Journal of Turbulence, 2013, 14, 27-43.	1.4	20
1586	Velocity and temperature profiles extending over the liquid and gas phases of two-phase flow falling down vertical plates. Applied Thermal Engineering, 2013, 51, 827-832.	6.0	8
1587	Experimental and numerical study of the periodic bubbling regime in planar co-flowing air–water sheets. International Journal of Multiphase Flow, 2013, 50, 106-119.	3.4	11
1588	On the transient phase of the Faraday instability. Physics of Fluids, 2013, 25, .	4.0	3
1589	An Improved Level-Set Re-initialization Method and Application Research. , 2013, , .		0
1590	Direct Numerical Simulation of Bubble Dynamics Using Phase-Field Model and Lattice Boltzmann Method. Industrial & Engineering Chemistry Research, 2013, 52, 11391-11403.	3.7	38
1591	Introducing Willmore Flow Into Level Set Segmentation of Spinal Vertebrae. IEEE Transactions on Biomedical Engineering, 2013, 60, 115-122.	4.2	63
1592	Optimization of unsteady incompressible Navier–Stokes flows using variational level set method. International Journal for Numerical Methods in Fluids, 2013, 71, 1475-1493.	1.6	26
1593	GAS–LIQUID FLOW SIMULATION IN REFRIGERANT DISTRIBUTOR FOR AIR CONDITIONER. International Journal of Air-Conditioning and Refrigeration, 2013, 21, 1350017.	0.7	3
1594	Application of Coupled Lattice Boltzmann and Phase-Field Methods for Multiphase Flow Simulations. , 2013, , .		0
1595	Numerical Analysis of Droplet Impact, Deformation of a Droplet Train in Direct Print Technology. , 2013, , .		0
1596	Numerical Simulation of Flows Past Partially-Submerged Horizontal Circular Cylinders in Free Surface Waves. , 2013, , .		3
1597	Effect of Gravity on Droplet Growth and Detachment Inside a Simulated PEM Fuel Cell Air Flow Channel With Hydrophobic Walls. , 2013, , .		0
1598	A Level-Set Method for Multi-Species Particle Deposition. , 2013, , .		0

#	Article	IF	CITATIONS
1599	Calculation of Wave Forces on Cylindrical Piles Using a 3D Numerical Wave Tank. , 2013, , .		3
1600	Simulations of Unsteady Shocks and Detonation Interactions with Structures. , 2013, , .		4
1601	Gaseous bubble dynamics in a pulsational viscous flow. Journal of Physics: Conference Series, 2013, 416, 012030.	0.4	1
1602	Simulation of Water Droplet Merging under Shock Wave Using Real Ghost Fluid Method. Applied Mechanics and Materials, 2013, 444-445, 628-632.	0.2	0
1603	Flow Characteristics for High Prandtl Number Fluid under Zero Gravity. Applied Mechanics and Materials, 0, 353-356, 3611-3614.	0.2	0
1604	Numerical Study on High Prandtl Number Liquid Bridge. Advanced Materials Research, 2013, 712-715, 1630-1633.	0.3	0
1605	Confidence shape metric for image segmentation. Journal of Electronic Imaging, 2013, 22, 023009.	0.9	1
1607	Numerical Method for Solving Matrix Coefficient Elliptic Equation on Irregular Domains with Sharp-Edged Boundaries. Advances in Numerical Analysis, 2013, 2013, 1-10.	0.2	4
1608	A geodesic-active-contour-based variational model for short-axis cardiac MR image segmentation. International Journal of Computer Mathematics, 2013, 90, 124-139.	1.8	11
1609	Binary Level-Set Shape Optimization Model and Algorithm for Volumetric Modulated Arc Therapy in Radiotherapy Treatment. SIAM Journal of Scientific Computing, 2013, 35, B1321-B1340.	2.8	7
1610	An efficient active contour with Gaussian distribution fitting energy. , 2013, , .		2
1611	Electric-field-driven contact-line dynamics of two immiscible fluids over chemically patterned surfaces in narrow confinements. Physical Review E, 2013, 88, 023022.	2.1	59
1612	A Semi-Lagrangian Particle Level Set Finite Element Method for Interface Problems. SIAM Journal of Scientific Computing, 2013, 35, A1815-A1846.	2.8	8
1613	Geometryâ€Aware Volumeâ€ofâ€Fluid Method. Computer Graphics Forum, 2013, 32, 379-388.	3.0	5
1614	A stable extended FEM formulation for multiâ€phase problems enforcing the accuracy of the fluxes through Lagrange multipliers. International Journal for Numerical Methods in Engineering, 2013, 96, 303-322.	2.8	7
1615	Influence of cold walls on PET image quantification and volume segmentation: A phantom study. Medical Physics, 2013, 40, 082505.	3.0	32
1616	A finite elementâ€based level set method for fluid–elastic solid interaction with surface tension. International Journal for Numerical Methods in Engineering, 2013, 93, 919-941.	2.8	18
1617	Visualization of piecewise linear interface calculation. , 2013, , .		8

#	Article	IF	CITATIONS
1619	Analysis on Nonspherical Oscillation of Microbubble with Two-Dimensional Numerical Fluid Simulation. Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C, 2013, 79, 1327-1335.	0.2	0
1620	Structural Optimization of Electrostatic Actuators Based on the Level Set Method. Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C, 2013, 79, 3234-3247.	0.2	0
1621	Free-surface Flow Simulation of Impinging Jet Nozzles for Liquid-propellant Thrusters. , 2013, , .		0
1622	Shape optimization and level set method in full waveform inversion with 3D body reconstruction. , 2013, , .		26
1623	Microscale Phase Separation Through Nanoporous Membranes. , 2013, , .		0
1624	Topology Optimization for Stokes Problem Under Multiple Flow Cases Using an Improved Level Set Method. , 2013, , .		3
1625	Numerical Boundary Conditions for Specular Reflection in a Level-Sets-Based Wavefront Propagation Method. Communications in Computational Physics, 2013, 14, 509-536.	1.7	2
1626	Comparison of the VOF and CLSVOF Methods in Interface Capturing of a Rising Bubble. Journal of Computational Multiphase Flows, 2013, 5, 43-55.	0.8	12
1627	From Empirical to Micro-scale Modeling of Multiphase Flow; Bridging the Gap of R&D. , 2013, , .		1
1628	Computation of Free Surface Flows around Box-Shaped Ships by an Unstructured Navier-Stokes Solver. Ship Technology Research, 2013, 60, 104-117.	2.5	0
1629	Effects of Segmentation and Skeletonisation Algorithms on Pore Networks and Predicted Multiphase Transport Properties on Reservoir Rock Samples. , 2013, , .		0
1630	An improved CE/SE scheme for incompressible multiphase flows and its applications. Progress in Computational Fluid Dynamics, 2013, 13, 285.	0.2	4
1631	Spreading-Droplet Simulation With Surface Tension Model Using Inter-Particle Force in Particle Method. , 2013, , .		2
1632	Implicit conservation numerical algorithm for compressible fluid. Journal of Japan Society of Civil Engineers Ser A2 (Applied Mechanics (AM)), 2013, 69, I_51-I_58.	0.1	0
1633	An efficient, scalable, and adaptable framework for solving generic systems of level-set PDEs. Frontiers in Neuroinformatics, 2013, 7, 35.	2.5	4
1634	Numerical and Experimental Analysis of the Growth of Gravitational Interfacial Instability Generated by Two Viscous Fluids of Different Densities. Journal of Fluids, 2013, 2013, 1-11.	1.4	0
1635	VOF Modeling and Analysis of the Segmented Flow in Y-Shaped Microchannels for Microreactor Systems. Advances in High Energy Physics, 2013, 2013, 1-6.	1.1	14
1636	On the Reconstruction of Dynamic Permeability of Cancellous Bones. , 2013, , .		0

#	Article	IF	CITATIONS
1637	Simulating Bubble Shape during its Rise in Carreau-Yasuda Fluids Using WC-SPH Method. Nihon Reoroji Gakkaishi, 2014, 41, 319-329.	1.0	9
1638	Study of Factors Influencing Non-Uniform Gas-Liquid Distribution in the Refrigerant Distributor in an Air Conditioner. , 2014, , .		0
1639	FDA's Nozzle Numerical Simulation Challenge: Non-Newtonian Fluid Effects and Blood Damage. PLoS ONE, 2014, 9, e92638.	2.5	15
1640	Narrow Band Region-Based Active Contours Model for Noisy Color Image Segmentation. Scientific World Journal, The, 2014, 2014, 1-13.	2.1	3
1641	Using the level set method in geodynamical modeling of multi-material flows and Earth's free surface. Solid Earth, 2014, 5, 1087-1098.	2.8	20
1642	Static magnetic fields to liquid bridges: A numerical study. International Journal of Applied Electromagnetics and Mechanics, 2014, 45, 3-10.	0.6	1
1643	A level set based deformable model for segmentation of human brain MR images. , 2014, , .		1
1644	Fully-Coupled Balanced-Force VOF Framework for Arbitrary Meshes with Least-Squares Curvature Evaluation from Volume Fractions. Numerical Heat Transfer, Part B: Fundamentals, 2014, 65, 218-255.	0.9	84
1645	CLSVOF Method to Study the Formation Process of Taylor Cone in Crater-Like Electrospinning of Nanofibers. Journal of Nanomaterials, 2014, 2014, 1-12.	2.7	4
1646	Stokes–Darcy coupling in severe regimes using multiscale stabilisation for mixed finite elements: monolithic approach versus decoupled approach. European Journal of Computational Mechanics, 2014, 23, 113-137.	0.6	13
1647	Surface Oscillation and Flow Structure of a Liquid Bridge under Small Vibration. Chinese Physics Letters, 2014, 31, 044701.	3.3	5
1648	Numerical simulation of breaking wave generated sediment suspension and transport process based on CLSVOF algorithm. China Ocean Engineering, 2014, 28, 701-712.	1.6	1
1649	Time-optimal path planning in dynamic flows using level set equations: theory and schemes. Ocean Dynamics, 2014, 64, 1373-1397.	2.2	114
1650	Influence of the viscosity ratio on drop dynamics and breakup for a drop rising in an immiscible low-viscosity liquid. Journal of Fluid Mechanics, 2014, 752, 383-409.	3.4	12
1651	NUMERICAL SIMULATION OF RAYLEIGH–TAYLOR INSTABILITY BASED ON AN IMPROVED PARTICLE LEVEL SET METHOD. International Journal of Computational Methods, 2014, 11, 1350094.	1.3	1
1652	An Improved Non-Traditional Finite Element Formulation for Solving the Elliptic Interface Problems. Journal of Computational Mathematics, 2014, 32, 39-57.	0.4	9
1653	Potential of Two-Phase Flows DNS to Characterize Interactions between Turbulence and Widely Deformed Interface. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, 2014, , 55-63.	0.3	0
1654	Short Spray Penetration for Direct Injection Gasoline Engines With Secondary-Drop-Breakup Simulation Integrated With Fuel-Breakup Simulation. Journal of Engineering for Gas Turbines and Power, 2014, 136, .	1.1	3

ARTICLE IF CITATIONS Multiphase Flow., 2014, , 369-536. 6 1655 A fast marching approach to multidimensional extrapolation. Journal of Computational Physics, 2014, 3.8 274, 393-412. Transient Analysis of Rising Bubble Using Image Analysis. Applied Mechanics and Materials, 0, 553, 1657 0.2 0 162-167. Excitable Nanoparticles for Trapped Oil Mobilization., 2014,,. 1658 Effects of Numerical Treatment of Viscous and Surface Tension Forces on Predicted Motion of 1659 0.8 6 Interface. Journal of Computational Multiphase Flows, 2014, 6, 111-126. 1660 Development of Boiling Heat Transfer Analysis Method., 2014, , . Mass Transfer From Single Carbon Dioxide Bubbles in Contaminated Water., 2014,,. 1661 0 A New Particle Method for Two-Phase Flows With Large Density Difference., 2014,,. 1662 Level Set, Phase-Field, and Immersed Boundary Methods for Two-Phase Fluid Flows. Journal of Fluids 1663 1.5 22 Engineering, Transactions of the ASME, 2014, 136, . Analysis of Wave Interaction With Cylinders Using a 3D Numerical Wave Tank., 2014, , . 1664 Numerical Simulation of Bubble Growth During Nanofluid Flow Boiling in a Microchannel., 2014,,. 1665 1 Numerical Shape Optimization in Industrial Glass Blowing. Journal of Pressure Vessel Technology, 1666 0.6 Transactions of the ASME, 2014, 136, . Comparison between 1D and 3D Approaches for Twin-Screw Extrusion Simulation. International 1667 0.5 24 Polymer Processing, 2014, 29, 641-648. Efficient methods for implicit geometrical representation of complex material microstructures. 1668 2.8 International Journal for Numerical Methods in Engineering, 2014, 98, 79-91. Evaluation of advanced automatic PET segmentation methods using nonspherical thinâ€wall inserts. 1669 3.015 Medical Physics, 2014, 41, 022502. Physics of puffing and microexplosion of emulsion fuel droplets. Physics of Fluids, 2014, 26, . Computational investigations of the mixing performance inside liquid slugs generated by a 1671 2.4 25 microfluidic T-junction. Biomicrofluidics, 2014, 8, 054125. Three-dimensional pore-scale modelling of dentinal infiltration. Computer Methods in Biomechanics 1672 1.6 and Biomedical Engineering, 2014, 17, 632-642.

#	Article	IF	Citations
1673	A level set approach for the analysis of flow and compaction during resin infusion in composite materials. Composites Part A: Applied Science and Manufacturing, 2014, 67, 299-307.	7.6	18
1674	Numerical Simulation of Concentrationâ€Induced Marangoni Convection at Single Rising Droplets. Chemie-Ingenieur-Technik, 2014, 86, 185-195.	0.8	4
1675	Quasistatic analysis on configuration of two-phase flow in Y-shaped tubes. Computers and Mathematics With Applications, 2014, 68, 1905-1914.	2.7	3
1676	Trends in PDE Constrained Optimization. International Series of Numerical Mathematics, 2014, , .	1.1	15
1677	Application of centerline detection and deformable contours algorithms to segmenting the carotid lumen. Journal of Electronic Imaging, 2014, 23, 023006.	0.9	3
1678	An extended finite-element model coupled with level set method for analysis of growth of corrosion pits in metallic structures. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2014, 470, 20140001.	2.1	21
1679	Numerical investigation of water-entry of a hemisphere cylinder used for micro-communication sonobuoy casing. , 2014, , .		0
1680	Perturbation theory and numerical modelling of weakly and moderately nonlinear dynamics of the incompressible Richtmyer–Meshkov instability. Journal of Fluid Mechanics, 2014, 751, 432-479.	3.4	32
1681	Finite volume Hermite WENO schemes for solving the Hamilton–Jacobi equations II: Unstructured meshes. Computers and Mathematics With Applications, 2014, 68, 1137-1150.	2.7	6
1682	Effects of Segmentation and Skeletonization Algorithms on Pore Networks and Predicted Multiphase-Transport Properties of Reservoir-Rock Samples. SPE Reservoir Evaluation and Engineering, 2014, 17, 473-483.	1.8	15
1683	The Effect of the Surface Inclination on the Hydrodynamics and Thermodynamics of Leidenfrost Droplets. Journal of Mechanics, 2014, 30, 145-151.	1.4	6
1684	A Review of Computational Modelling of Flow Boiling in Microchannels. Journal of Computational Multiphase Flows, 2014, 6, 79-110.	0.8	35
1685	An adaptive mesh refinement method for a medium with discrete fracture network: The enriched Persson's method. Finite Elements in Analysis and Design, 2014, 86, 41-50.	3.2	12
1686	A narrow-band gradient-augmented level set method for multiphase incompressible flow. Journal of Computational Physics, 2014, 273, 12-37.	3.8	21
1687	Bubble in flow field: A new experimental protocol for investigating dynamic adsorption layers by using capillary pressure tensiometry. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 460, 369-376.	4.7	19
1688	A dual grid level set method based study of interface-dynamics for a liquid jet injected upwards into another liquid. International Journal of Multiphase Flow, 2014, 59, 206-220.	3.4	17
1689	Dynamics of the interface between immiscible liquids of different densities with low Froude number. Nonlinear Analysis: Real World Applications, 2014, 15, 361-366.	1.7	3
1690	A novel model for biofilm growth and its resolution by using the hybrid immersed interface-level set method. Computers and Mathematics With Applications, 2014, 67, 34-51.	2.7	20

#	Article	IF	Citations
1691	An FEM/VOF hybrid formulation for fracture grouting modelling. Computers and Geotechnics, 2014, 58, 14-27.	4.7	44
1692	A Nonlinear Adaptive Level Set for Image Segmentation. IEEE Transactions on Cybernetics, 2014, 44, 418-428.	9.5	85
1693	Analysis of time discretization methods for Stokes equations with a nonsmooth forcing term. Numerische Mathematik, 2014, 126, 293-319.	1.9	2
1694	Ship underwater noise assessment by the Acoustic Analogy part II: hydroacoustic analysis of a ship scaled model. Journal of Marine Science and Technology, 2014, 19, 52-74.	2.9	54
1695	3D ALE Finite-Element Method for Two-Phase Flows With Phase Change. Heat Transfer Engineering, 2014, 35, 537-547.	1.9	27
1696	Level set reinitialization at a contact line. Journal of Computational Physics, 2014, 265, 34-49.	3.8	20
1697	The influence of inertia and contact angle on the instability of partially wetting liquid strips: A numerical analysis study. Physics of Fluids, 2014, 26, .	4.0	11
1698	Thermocapillary Convection in Floating Zone with Axial Magnetic Fields. Microgravity Science and Technology, 2014, 25, 285-293.	1.4	12
1699	Deformation behavior of a composite drop in a simple shear flow. Doklady Physical Chemistry, 2014, 454, 8-11.	0.9	1
1700	Variational Dynamics of Free Triple Junctions. Journal of Scientific Computing, 2014, 59, 386-411.	2.3	2
1701	A gradient augmented level set method for unstructured grids. Journal of Computational Physics, 2014, 258, 47-72.	3.8	14
1702	Stabilized finite element formulations for liquid membranes and their application to droplet contact. International Journal for Numerical Methods in Fluids, 2014, 75, 519-545.	1.6	22
1703	A localized re-initialization equation for the conservative level set method. Journal of Computational Physics, 2014, 262, 408-426.	3.8	35
1704	Transient analysis of a single rising bubble used for numerical validation for multiphase flow. Chemical Engineering Science, 2014, 112, 25-34.	3.8	26
1705	A 3D moving mesh Finite Element Method for two-phase flows. Journal of Computational Physics, 2014, 270, 366-377.	3.8	25
1706	Comparative study of mass-conserving interface capturing frameworks for two-phase flows with surface tension. International Journal of Multiphase Flow, 2014, 61, 37-47.	3.4	29
1707	Continuous finite element schemes for a phase field model in two-layer fluid Bénard–Marangoni convection computations. Computer Physics Communications, 2014, 185, 63-78.	7.5	19
1708	Enhanced distance regularization for re-initialization free level set evolution with application to image segmentation. Neurocomputing, 2014, 141, 223-235.	5.9	41

#	Article	IF	CITATIONS
1709	A level-set method for two-phase flows with moving contact line and insoluble surfactant. Journal of Computational Physics, 2014, 263, 71-90.	3.8	65
1710	An optimization-based approach to enforcing mass conservation in level set methods. Journal of Computational and Applied Mathematics, 2014, 258, 78-86.	2.0	8
1711	A new level set model for multimaterial flows. Journal of Computational Physics, 2014, 262, 1-16.	3.8	24
1712	The impact of Marangoni convection on fluid dynamics and mass transfer at deformable single rising droplets – A numerical study. Chemical Engineering Science, 2014, 116, 208-222.	3.8	37
1713	A numerical investigation of an engine oil droplet normally impinging onto oil pan within crankcase of an IC engine. Computers and Fluids, 2014, 92, 34-44.	2.5	0
1714	A Morphological Approach to Curvature-Based Evolution of Curves and Surfaces. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2014, 36, 2-17.	13.9	193
1715	Numerical simulation of slugging of stagnant liquid at a V-shaped elbow in a pipeline. Applied Mathematical Modelling, 2014, 38, 4238-4248.	4.2	4
1716	Numerical Simulation of a Falling Ferrofluid Droplet in a Uniform Magnetic Field by the VOSET Method. Numerical Heat Transfer; Part A: Applications, 2014, 66, 144-164.	2.1	56
1717	Finite Volumes for Complex Applications VII-Elliptic, Parabolic and Hyperbolic Problems. Springer Proceedings in Mathematics and Statistics, 2014, , .	0.2	1
1718	Progress in Industrial Mathematics at ECMI 2012. Mathematics in Industry, 2014, , .	0.3	0
1719	A finite-volume/level-set method for simulating two-phase flows on unstructured grids. International Journal of Multiphase Flow, 2014, 64, 55-72.	3.4	85
1720	Finite element implementation of an improved conservative level set method for two-phase flow. Computers and Fluids, 2014, 100, 138-154.	2.5	34
1722	Phase-field-based multiple-relaxation-time lattice Boltzmann model for incompressible multiphase flows. Physical Review E, 2014, 89, 053320.	2.1	166
1723	A robust method for calculating interface curvature and normal vectors using an extracted local level set. Journal of Computational Physics, 2014, 257, 259-277.	3.8	22
1724	Proposed models, ongoing experiments, and latest numerical simulations of microchannel two-phase flow boiling. International Journal of Multiphase Flow, 2014, 59, 84-101.	3.4	117
1725	A phase-field model for grain growth with trijunction drag. Acta Materialia, 2014, 67, 134-144.	7.9	21
1726	Benchmarks and numerical methods for the simulation of boiling flows. Journal of Computational Physics, 2014, 264, 1-22.	3.8	96
1727	Fluid dynamics modeling of cell and membrane deformations. , 2014, , .		0

#	Article	IF	CITATIONS
1728	Fast and Accurate Redistancing by Directional Optimization. SIAM Journal of Scientific Computing, 2014, 36, A219-A231.	2.8	8
1729	Numerical Simulation of Single Bubble Dynamics During Flow Boiling Conditions on a Horizontal Surface. Heat Transfer Engineering, 2014, 35, 461-471.	1.9	4
1730	Fluid flow and mass transfer on particle scale. , 2014, , 5-73.		0
1731	Permeation of concentrated oil-in-water emulsions through a membrane pore: numerical simulation using a coupled level set and the volume-of-fluid method. Soft Matter, 2014, 10, 7985-7992.	2.7	41
1732	Modified level set equation and its numerical assessment. Journal of Computational Physics, 2014, 278, 1-30.	3.8	11
1733	A meshless numerical approach based on Integrated Radial Basis Functions and level set method for interfacial flows. Applied Mathematical Modelling, 2014, 38, 5743-5766.	4.2	1
1734	A global minimization hybrid active contour model with applications to oil spill images. Computers and Mathematics With Applications, 2014, 68, 353-362.	2.7	10
1735	Food Freezing and Thawing Calculations. SpringerBriefs in Food, Health and Nutrition, 2014, , .	0.5	20
1736	A numerical method for the quasi-incompressible Cahn–Hilliard–Navier–Stokes equations for variable density flows with a discrete energy law. Journal of Computational Physics, 2014, 276, 486-507.	3.8	81
1737	Numerical modeling of coupled seabed scour and pipe interaction. International Journal of Solids and Structures, 2014, 51, 3449-3460.	2.7	5
1738	Numerical modeling of the non-isothermal liquid droplet impact on a hot solid substrate. International Journal of Heat and Mass Transfer, 2014, 78, 670-687.	4.8	16
1739	An upwind finite volume method for incompressible inviscid free surface flows. Computers and Fluids, 2014, 101, 170-182.	2.5	12
1740	A density-scaled continuum surface force model within a balanced force formulation. Journal of Computational Physics, 2014, 278, 221-228.	3.8	68
1741	A New Level-Set Model for the Representation of Non-Smooth Geometries. Journal of Scientific Computing, 2014, 61, 649-672.	2.3	4
1742	Application of the level-set method to the analysis of an evolving microstructure. Computational Materials Science, 2014, 85, 46-58.	3.0	19
1743	Sintering at Particle Scale: An Eulerian Computing Framework to Deal with Strong Topological and Material Discontinuities. Archives of Computational Methods in Engineering, 2014, 21, 141-187.	10.2	17
1744	Numerical simulations of impact flows with incompressible smoothed particle hydrodynamics. Journal of Mechanical Science and Technology, 2014, 28, 2179-2188.	1.5	17
1745	Numerical Investigation of Thermocapillary Convection in a Liquid Layer with Free Surface. Microgravity Science and Technology, 2014, 25, 335-341.	1.4	6

#	Article	IF	CITATIONS
1746	CFD Simulation of Droplet Formation in Microchannels by a Modified Level Set Method. Industrial & & & & & & & & & & & & & & & & & & &	3.7	45
1747	Computational Methods and Clinical Applications for Spine Imaging. Lecture Notes in Computational Vision and Biomechanics, 2014, , .	0.5	3
1748	A Coupled Level Set and Volume of Fluid method with multi-directional advection algorithms for two-phase flows with and without phase change. International Journal of Heat and Mass Transfer, 2014, 79, 532-550.	4.8	64
1749	A study on the effect of the cushion pressure on a planing surface. Ocean Engineering, 2014, 91, 122-132.	4.3	0
1750	Adaptive multi-resolution method for compressible multi-phase flows with sharp interface model and pyramid data structure. Journal of Computational Physics, 2014, 262, 131-152.	3.8	49
1751	Line-of-sight-attenuation chemical species tomography through the level set method. Journal of Quantitative Spectroscopy and Radiative Transfer, 2014, 143, 25-34.	2.3	11
1752	Simulation of vapour keyhole and weld pool dynamics during laser beam welding. Production Engineering, 2014, 8, 499-511.	2.3	20
1753	A level set two-way wave equation approach for Eulerian interface tracking. Journal of Computational Physics, 2014, 259, 617-635.	3.8	4
1754	Computational and experimental studies of rapid free-surface granular flows around obstacles. Computers and Fluids, 2014, 89, 179-190.	2.5	7
1755	Three-dimensional adaptive domain remeshing, implicit domain meshing, and applications to free and moving boundary problems. Journal of Computational Physics, 2014, 262, 358-378.	3.8	172
1756	On the diffuse interface method using a dual-resolution Cartesian grid. Journal of Computational Physics, 2014, 273, 243-254.	3.8	30
1757	A parametric study on phase change heat transfer due to Taylor-Bubble coalescence in a square minichannel. International Journal of Heat and Mass Transfer, 2014, 76, 16-32.	4.8	17
1758	Optimal control for mass conservative level set methods. Journal of Computational and Applied Mathematics, 2014, 270, 343-352.	2.0	4
1759	Multivariate spline approximation of the signed distance function. Journal of Computational and Applied Mathematics, 2014, 265, 276-289.	2.0	3
1761	Numerical solution of the two-phase incompressible Navier–Stokes equations using a GPU-accelerated meshless method. Engineering Analysis With Boundary Elements, 2014, 40, 36-49.	3.7	15
1762	Improved conservative level set method. International Journal for Numerical Methods in Fluids, 2014, 75, 575-590.	1.6	25
1763	Relationship between momentum of an impinging drop and intensities of vortex rings generated below free surface. International Journal of Multiphase Flow, 2014, 65, 1-10.	3.4	5
1764	The influence of Marangoni convection on fluid dynamics of oscillating single rising droplets. Chemical Engineering Science, 2014, 117, 114-124.	3.8	23

ARTICLE IF CITATIONS A penalization technique applied to the "Volume-Of-Fluid―method: Wettability condition on immersed 1765 2.5 32 boundaries. Computers and Fluids, 2014, 100, 255-266. An active contour model and its algorithms with local and global Gaussian distribution fitting 1766 6.9 energies. Information Sciences, 2014, 263, 43-59. A 3-D Volume-of-Fluid advection method based on cell-vertex velocities for unstructured meshes. 1767 2.553 Computers and Fluids, 2014, 94, 14-29. Simulation of chemical reactions induced by droplet in a phase separating media using Lattice 1768 2.5 Boltzmann–kinetic Monte-Carlo framework. Computer's and Fluids, 2014, 89, 133-142. Heat Transfer, Solidification, and Microstructural Evolution in Alī£;33<scp>C</scp>u Alloy During the 1769 1.8 10 Starting of Twin Roll Strip Casting. Steel Research International, 2014, 85, 207-218. High-order methods for computing distances to implicitly defined surfaces. Communications in Applied Mathematics and Computational Science, 2014, 9, 107-141. 1.8 1771 Steady and Unsteady Simulations for Annular Internal Condensing Flows in a Channel., 2014, , . 2 REBOUND OF LIQUID DROPLETS CAUSED BY SUDDEN DECREASE OF GRAVITY. Interfacial Phenomena and 0.8 Heat Transfer, 2014, 2, 41-54. A Second Order Finite-Difference Ghost-Point Method for Elasticity Problems on Unbounded Domains 1773 1.7 19 with Applications to Volcanology. Communications in Computational Physics, 2014, 16, 983-1009. An Accurate Cartesian Method for Incompressible Flows with Moving Boundaries. Communications in 1774 1.7 Computational Physics, 2014, 15, 1266-1290. Variational approaches and level sets., 0,, 275-294. 1775 0 Robust Conservative Level Set Method for 3D Mixed-Element Meshes â€" Application to LES of Primary 1776 1.7 Liquid-Sheet Breakup. Communications in Computational Physics, 2014, 16, 403-439. Advanced Numerical Approach to Simulate GDI Sprays Under Engine-Like Conditions., 2014,,. 1778 0 Nonlinear ship waves and computational fluid dynamics. Proceedings of the Japan Academy Series B: 1779 3.8 Physical and Biological Sciences, 2014, 90, 278-300. Numerical Study on Mobilization of Oil Slugs in Capillary Model with Level set Approach. Engineering 1780 9 3.1Applications of Computational Fluid Mechanics, 2014, 8, 422-434. Extension and Comparative Study of AUSM-Family Schemes for Compressible Multiphase Flow 1781 Simulations. Communications in Computational Physics, 2014, 16, 632-674. Azimuthal shear instability of a liquid jet injected into a gaseous cross-flow. Journal of Fluid 1782 3.4 39 Mechanics, 2015, 767, 146-172. Three-dimensional simulation of sintering crunodes of metal powders or fibers by level set method. 1783 Journal of Central South University, 2015, 22, 2446-2455.

#	Article	IF	CITATIONS
1784	Extracting multiple interacting root systems using Xâ€ray microcomputed tomography. Plant Journal, 2015, 84, 1034-1043.	5.7	40
1785	Direct numerical simulations of bubbly flows. Mechanical Engineering Reviews, 2015, 2, 15-00220-15-00220.	4.7	7
1786	Numerical simulation of the backscattering of pressure waves from a bubble interface. Transactions of the JSME (in Japanese), 2015, 81, 15-00034-15-00034.	0.2	4
1787	Experimental and Modeling Studies of Episodic Air-Water Two-Phase Flow in Fractures and Fracture Networks. Geophysical Monograph Series, 0, , 209-228.	0.1	4
1788	Testing a simple model of gas bubble dynamics in porous media. Water Resources Research, 2015, 51, 1036-1049.	4.2	22
1789	Dynamics of two-dimensional bubbles. Physical Review E, 2015, 91, 063013.	2.1	14
1790	Steady-state deformation behavior of confined composite droplets under shear flow. Physical Review E, 2015, 91, 063002.	2.1	15
1791	3D Shape Optimization based on Unstructured Triangle/Tetrahedral Mesh Deformation. , 2015, , .		3
1792	Piecewise Constant Level Set Algorithm for an Inverse Elliptic Problem in Nonlinear Electromagnetism. Advances in Applied Mathematics and Mechanics, 2015, 7, 387-406.	1.2	0
1793	Microscale Layering of Liquid and Vapor Phases Within Microstructures for Self-Regulated Flow Delivery to Local Hot Spots. , 2015, , .		0
1794	A Total Lagrangian ANCF Liquid Sloshing Approach for Multibody System Applications. , 2015, , .		0
1795	Simulation of Incompressible Free Surface Flow Using the Volume Preserving Level Set Method. Communications in Computational Physics, 2015, 18, 931-956.	1.7	5
1796	Numerical Study of Bubble Instability During Microchannel Flow Boiling. , 2015, , .		0
1797	Non-linear shape oscillations of rising drops and bubbles: Experiments and simulations. Physics of Fluids, 2015, 27, 123305.	4.0	21
1798	Modelling aerated flows with smoothed particle hydrodynamics. Journal of Hydroinformatics, 2015, 17, 493-504.	2.4	8
1799	Energy consistent discontinuous Galerkin methods for a quasi-incompressible diffuse two phase flow model. ESAIM: Mathematical Modelling and Numerical Analysis, 2015, 49, 275-301.	1.9	14
1800	A Total Lagrangian ANCF Liquid Sloshing Approach for Multibody System Applications. Journal of Computational and Nonlinear Dynamics, 2015, 10, .	1.2	21
1801	Late-Fuel Simulation Near Nozzle Outlet of Fuel Injector During Closing Valve. , 2015, , .		0

		15	Ciziziana
#		IF	CITATIONS
1802	ALE-FEM for Two-Phase Flows With Heat and Mass Transfer in Microchannels. , 2015, , .		0
1803	A Numerical Method for Solving Matrix Coefficient Heat Equations with Interfaces. Numerical Mathematics, 2015, 8, 475-495.	1.3	0
1804	A Shape-Maintained and Low-Dissipation Fluid Guiding Pipeline. , 2015, , .		0
1805	An accurate and robust finite element level set redistancing method. IMA Journal of Numerical Analysis, 2015, 35, 1913-1933.	2.9	4
1806	A new hydrodynamics code for Type Ia supernovae. Monthly Notices of the Royal Astronomical Society, 2015, 454, 1238-1259.	4.4	32
1807	Adaptive subdivision piecewise linear interface calculation (ASPLIC) for 2D multiâ€material hydrodynamic simulation codes. International Journal for Numerical Methods in Fluids, 2015, 77, 418-439.	1.6	3
1808	Effects of Surfactants on Mass Transfer from Single Carbon Dioxide Bubbles in Vertical Pipes. Chemical Engineering and Technology, 2015, 38, 1955-1964.	1.5	22
1809	Radial Basis Function Based Gridfree Scheme for Interface Capturing: Preliminary Results. Procedia Engineering, 2015, 127, 215-220.	1.2	0
1810	Numerical simulation of bubble collapse and the transfer of vapor and noncondensable gas through the bubble interface using the ghost fluid method. Journal of Physics: Conference Series, 2015, 656, 012021.	0.4	0
1811	A faceâ€oriented stabilized Nitscheâ€type extended variational multiscale method for incompressible twoâ€phase flow. International Journal for Numerical Methods in Engineering, 2015, 104, 721-748.	2.8	48
1812	A Study on the Stern Shape Optimization of a Container Ship using Navier-Stokes Analysis. Journal of the Japan Society of Naval Architects and Ocean Engineers, 2015, 22, 1-13.	0.2	1
1813	Numerical simulations of fluid–structure interaction based on Cartesian grids with two boundary velocities. International Journal for Numerical Methods in Fluids, 2015, 79, 138-161.	1.6	4
1814	Flow of concentrated suspensions through fractures: small variations in solid concentration cause significant inâ€plane velocity variations. Geofluids, 2015, 15, 24-36.	0.7	12
1815	Shape evolution of multiple interacting droplets in inkjet deposition. Rapid Prototyping Journal, 2015, 21, 373-385.	3.2	12
1816	Numerical Simulation of the Soluteâ€Induced Marangoni Effect with the Semiâ€Lagrangian Advection Scheme. Chemical Engineering and Technology, 2015, 38, 155-163.	1.5	10
1817	Highâ€order time integrators for frontâ€ŧracking finiteâ€element analysis of viscous freeâ€surface flows. International Journal for Numerical Methods in Fluids, 2015, 77, 668-693.	1.6	6
1818	Incompressible multiphase flow and encapsulation simulations using the momentâ€ofâ€fluid method. International Journal for Numerical Methods in Fluids, 2015, 79, 456-490.	1.6	31
1819	Development of Numerical Simulation Method for Compressible Gas-Liquid Two-Phase Flows. Journal of Physics: Conference Series, 2015, 656, 012141.	0.4	0

#	Article	IF	CITATIONS
1820	An efficient nonâ€newtonian fluidâ€flow simulator for variable aperture fractures. Canadian Journal of Chemical Engineering, 2015, 93, 1902-1915.	1.7	16
1821	Stability analysis of a polymer film casting problem. International Journal for Numerical Methods in Fluids, 2015, 78, 436-454.	1.6	8
1822	A particle method for twoâ€phase flows with large density difference. International Journal for Numerical Methods in Engineering, 2015, 103, 235-255.	2.8	30
1823	Enablers for highâ€order level set methods in fluid mechanics. International Journal for Numerical Methods in Fluids, 2015, 79, 654-675.	1.6	12
1824	Laser Machining of Structural Alumina: Influence of Moving Laser Beam on the Evolution of Surface Topography. International Journal of Applied Ceramic Technology, 2015, 12, 665-678.	2.1	10
1825	COMPARISON OF 2D AND 3D SIMULATIONS OF AN OWC DEVICE IN DIFFERENT CONFIGURATIONS. Coastal Engineering Proceedings, 2015, 1, 66.	0.1	4
1826	Controlling entrainment in the smoke cloud using level set-based front tracking. Meteorologische Zeitschrift, 2015, 23, 661-674.	1.0	2
1827	Numerical Simulations of Growth and Collapse of a Bubble Between Two Parallel Walls. , 2015, , .		2
1828	A Comprehensive Review on Fluid Dynamics and Transport of Suspension/Liquid Droplets and Particles in High-Velocity Oxygen-Fuel (HVOF) Thermal Spray. Coatings, 2015, 5, 576-645.	2.6	54
1829	Convergence Improved Lax-Friedrichs Scheme Based Numerical Schemes and Their Applications in Solving the One-Layer and Two-Layer Shallow-Water Equations. Mathematical Problems in Engineering, 2015, 2015, 1-10.	1.1	1
1830	Numerical Analysis of Rising Bubble in Reduced-pressure Environment. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2015, 101, 109-116.	0.4	4
1831	Dynamics of Fluids and Transport in Complex Fractured-Porous Systems. Geophysical Monograph Series, 2015, , .	0.1	10
1832	Numerical simulation of vapor bubble condensation in turbulent subcooled flow boiling. Nuclear Engineering and Design, 2015, 289, 126-143.	1.7	17
1833	Novel fuzzy active contour model with kernel metric for image segmentation. Applied Soft Computing Journal, 2015, 34, 301-311.	7.2	50
1834	A Splitting Method for Numerical Simulation of Free Surface Flows of Incompressible Fluids with Surface Tension. Computational Methods in Applied Mathematics, 2015, 15, 59-77.	0.8	7
1835	Phase-field simulations of GaN growth by selective area epitaxy from complex mask geometries. Journal of Applied Physics, 2015, 117, .	2.5	14
1836	Level set method for computational multi-fluid dynamics: A review on developments, applications and analysis. Sadhana - Academy Proceedings in Engineering Sciences, 2015, 40, 627-652.	1.3	35
1837	Thermosolutocapillary Convection in an Open Rectangular Cavity With Dynamic Free Surface. Journal of Heat Transfer, 2015, 137, .	2.1	14

ARTICLE IF CITATIONS On Dual-Grid Level-Set Method for Computational-Electro-Multifluid-Dynamics Simulation. Numerical 1838 0.9 10 Heat Transfer, Part B: Fundamentals, 2015, 67, 161-185. Surface topography in three-dimensional laser machining of structural alumina. Journal of Manufacturing Processes, 2015, 19, 49-58. Analytical and Level Set Method-Based Numerical Study for Two-Phase Stratified Flow in a Pipe. 1840 2.1 9 Numerical Heat Transfer; Part A: Applications, 2015, 67, 1253-1281. Assessment of Numerical Treatments in Interface Capturing Simulations for Surface-Tension-Driven 1841 0.8 Interface Motion. Journal of Computational Multiphase Flows, 2015, 7, 15-32. Observation of Water-Droplet Impacts with Velocities of O(10 m/s) and Subsequent Flow Field. ECS 1842 7 1.8 Journal of Solid State Science and Technology, 2015, 4, N117-N123. 1843 A New Hllem-Type Riemann Solver for Compressible Multi-phase Flows with Surface Tension., 2015, , . Divergence-aided gradient vector flow snakes., 2015,,. 1844 0 The renal vessel segmentation for facilitation of partial nephrectomy., 2015, , . 1845 Numerical analysis of post-impact droplet deformation for direct-print. Engineering Applications of 1846 3.1 4 Computational Fluid Mechanics, 2015, 9, 543-555. 1847 A two-way coupling CFD method to simulate the dynamics of a wave energy converter. , 2015, , . Simulation of the oil storage process in the scopa of specialized bees. Computers and Fluids, 2015, 119, 1848 4 2.5 115-130. A numerical study of microfluidic droplet transport in a parallel-plate electrowetting-on-dielectric 1849 2.2 (EWOD) device. Microfluidics and Nanofluidics, 2015, 19, 1477-1495. Break-up of a non-Newtonian jet injected downwards in a Newtonian liquid. Sadhana - Academy 1850 1.3 3 Proceedings in Engineering Sciences, 2015, 40, 819-833. Analysis of Initial Bubble Acceleration Using the Level-Set Method. Journal of Computational 0.8 Multiphase Flows, 2015, 7, 129-142. Numerical Approach to Study Nonuniform Gas–Liquid Distribution in the Refrigerant Distributor in 1852 1.5 3 an Air Conditioner. Journal of Fluids Engineering, Transactions of the ASME, 2015, 137, . Towards Nonlinear Multimaterial Topology Optimization Using Unsupervised Machine Learning and Metamodel-Based Optimization., 2015, A Mathematical Model and MATLAB Code for Muscleâ€"Fluidâ€"Structure Simulations. Integrative and 1854 2.033 Comparative Biology, 2015, 55, 901-911. Multi-Scale Simulation of Primary Breakup in Gas-Assisted Atomization., 2015, , .

щ		IF	CITATIONS
#	An improved implicit re-initialization method for the level set function applied to shape and topology	IF 2 O	19
1820	optimization of fluid. Journal of Computational and Applied Mathematics, 2015, 281, 207-229.	2.0	12
1857	Effects of spatial and temporal variation in environmental conditions on simulation of wildfire spread. Environmental Modelling and Software, 2015, 67, 118-127.	4.5	45
1858	Filament capturing with the Multimaterial Moment-of-Fluid method. Journal of Computational Physics, 2015, 285, 149-172.	3.8	27
1860	A front propagation formulation for under-resolved reaction fronts. Journal of Computational Physics, 2015, 285, 193-207.	3.8	5
1861	A hybrid level-set/moving-mesh interface tracking method. Applied Numerical Mathematics, 2015, 92, 21-39.	2.1	1
1862	Hydrodynamics of flow over a transversely oscillating circular cylinder beneath a free surface. Journal of Fluids and Structures, 2015, 54, 27-73.	3.4	13
1863	A local level-set method for 3D inversion of gravity-gradient data. Geophysics, 2015, 80, G35-G51.	2.6	32
1864	Modelling of Heat Transport in Two-phase Flow and of Mass Transfer Between Phases Using the Level-set Method. Energy Procedia, 2015, 64, 53-62.	1.8	8
1865	A conservative sharp interface method for incompressible multiphase flows. Journal of Computational Physics, 2015, 284, 547-565.	3.8	41
1866	Mass transfer from single carbon dioxide bubbles in contaminated water in a vertical pipe. International Journal of Heat and Mass Transfer, 2015, 83, 652-658.	4.8	27
1867	Numerical modelling of three-fluid flow using the level-set method. Chemical Engineering Science, 2015, 126, 224-236.	3.8	24
1868	Simulations of surfactant effects on the dynamics of coalescing drops and bubbles. Physics of Fluids, 2015, 27, .	4.0	34
1869	Wall drag modification by large deformable droplets in turbulent channel flow. Computers and Fluids, 2015, 113, 87-92.	2.5	7
1870	Fluid dynamics of the droplet impact processes in cell printing. Microfluidics and Nanofluidics, 2015, 18, 569-585.	2.2	16
1871	Free Surface Deformation of Thermo-Solutocapillary Convection in Axisymmetric Liquid Bridge. Microgravity Science and Technology, 2015, 27, 39-47.	1.4	20
1872	Multiple-relaxation-time lattice Boltzmann model for binary mixtures of nonideal fluids based on the Enskog kinetic theory. Science Bulletin, 2015, 60, 634-647.	9.0	8
1873	A discontinuous Galerkinâ€based sharpâ€interface method to simulate threeâ€dimensional compressible twoâ€phase flow. International Journal for Numerical Methods in Fluids, 2015, 78, 413-435.	1.6	37
1874	Semi-implicit finite volume level set method for advective motion of interfaces in normal direction. Applied Numerical Mathematics, 2015, 95, 214-228.	2.1	11

#	Article	IF	CITATIONS
1875	Three-dimensional simulation of gas–solid–liquid flows using the DEM–VOF method. Chemical Engineering Science, 2015, 134, 531-548.	3.8	120
1876	Multiscale simulation of atomization with small droplets represented by a Lagrangian point-particle model. International Journal of Multiphase Flow, 2015, 76, 122-143.	3.4	111
1877	Evaluation of a coupled model for numerical simulation of a multiphase flow system in a porous medium and a surface fluid. Journal of Contaminant Hydrology, 2015, 180, 34-55.	3.3	5
1878	On the combined effects of surface tension force calculation and interface advection on spurious currents within Volume of Fluid and Level Set frameworks. Journal of Computational Physics, 2015, 297, 611-636.	3.8	87
1879	A multiple marker level-set method for simulation of deformable fluid particles. International Journal of Multiphase Flow, 2015, 74, 125-142.	3.4	44
1880	A new algorithm for surface tension forces in the framework of the FVCF–ENIP method. European Journal of Mechanics, B/Fluids, 2015, 50, 175-186.	2.5	3
1881	Influence of the nonequilibrium phase transition on the collapse of inertia nonspherical bubbles in a compressible liquid. Experimental Thermal and Fluid Science, 2015, 60, 374-384.	2.7	15
1882	Despinning and shape evolution of Saturn's moon lapetus triggered by a giant impact. Icarus, 2015, 252, 454-465.	2.5	5
1883	A fast particle level set method with optimized particle correction procedure for interface capturing. Journal of Computational Physics, 2015, 299, 804-819.	3.8	12
1884	An investigation of the influence of initial deformation on fluid dynamics of toluene droplets in water. International Journal of Multiphase Flow, 2015, 76, 144-157.	3.4	11
1885	Level-set simulations of buoyancy-driven motion of single and multiple bubbles. International Journal of Heat and Fluid Flow, 2015, 56, 91-107.	2.4	59
1886	Automated identification of keratinization and keratin pearl area from in situ oral histological images. Tissue and Cell, 2015, 47, 349-358.	2.2	30
1887	Numerical investigation of dynamic effects for sliding drops on wetting defects. Physical Review E, 2015, 91, 023013.	2.1	13
1888	Numerical study of the spreading and solidification of a molten particle impacting onto a rigid substrate under plasma spraying conditions. Thermal Science, 2015, 19, 277-284.	1.1	10
1889	Numerical investigation of heat transfer in three-fluid stratified flows. International Journal of Heat and Mass Transfer, 2015, 89, 576-587.	4.8	7
1890	A consistent solution of the re-initialization equation in the conservative level-set method. Journal of Computational Physics, 2015, 299, 487-525.	3.8	19
1891	A Unified Approach for Computing Tsunami, Waves, Floods, and Landslides. Lecture Notes in Computational Science and Engineering, 2015, , 643-650.	0.3	0
1892	A Lagrangian-Eulerian Volume-Tracking with Linearity-Preserving Interface Reconstruction. Numerical Heat Transfer, Part B: Fundamentals, 2015, 68, 459-478.	0.9	9

#	Article	IF	CITATIONS
1893	Moving Particle Level-Set (MPLS) method for incompressible multiphase flow computation. Computer Physics Communications, 2015, 196, 317-334.	7.5	26
1894	High-Order Quadrature Methods for Implicitly Defined Surfaces and Volumes in Hyperrectangles. SIAM Journal of Scientific Computing, 2015, 37, A993-A1019.	2.8	105
1896	GPU accelerated VOF based multiphase flow solver and its application to sprays. Computers and Fluids, 2015, 117, 287-303.	2.5	16
1897	Numerical simulation of Faraday waves oscillated by two-frequency forcing. Physics of Fluids, 2015, 27, .	4.0	10
1898	Bi-directional evolutionary level set method for topology optimization. Engineering Optimization, 2015, 47, 390-406.	2.6	14
1899	A locally extended finite element method for the simulation of multi-fluid flows using the Particle Level Set method. Computer Methods in Applied Mechanics and Engineering, 2015, 294, 1-18.	6.6	15
1900	An SPH modeling of bubble rising and coalescing in three dimensions. Computer Methods in Applied Mechanics and Engineering, 2015, 294, 189-209.	6.6	167
1901	Computational modelling of the interaction of shock waves with multiple gas-filled bubbles in a liquid. Physics of Fluids, 2015, 27, .	4.0	43
1902	A mass conserving level set method for detailed numerical simulation of liquid atomization. Journal of Computational Physics, 2015, 298, 495-519.	3.8	60
1903	Topology preserving advection of implicit interfaces on Cartesian grids. Journal of Computational Physics, 2015, 290, 219-238.	3.8	23
1904	Multifield hybrid approach for two-phase flow modeling – Part 1: Adiabatic flows. Computers and Fluids, 2015, 113, 106-111.	2.5	18
1905	An Immersed Boundary Method Based on the Kinematic Relation of the Velocity-Vorticity Formulation. Journal of Mechanics, 2015, 31, 171-181.	1.4	3
1906	An efficient and parallel level set reinitialization method – Application to micromechanics and microstructural evolutions. Applied Mathematical Modelling, 2015, 39, 7291-7302.	4.2	63
1907	Spurious interface fragmentation in multiphase SPH. International Journal for Numerical Methods in Engineering, 2015, 103, 625-649.	2.8	28
1908	Individualized production in die-based manufacturing processes using numerical optimization. International Journal of Advanced Manufacturing Technology, 2015, 80, 851-858.	3.0	18
1909	A numerical technique to simulate display pixels based on electrowetting. Microfluidics and Nanofluidics, 2015, 19, 465-482.	2.2	47
1910	A Stable Parametric Finite Element Discretization of Two-Phase Navier–Stokes Flow. Journal of Scientific Computing, 2015, 63, 78-117.	2.3	28
1911	An Enhanced Particle Reseeding Algorithm for the Hybrid Particle Level Set Method in Compressible Flows. Journal of Scientific Computing, 2015, 65, 431-453.	2.3	12

#	Article	IF	CITATIONS
1912	Thermocapillary Convection and Surface Fluctuation in a Liquid Bridge under Lateral Vibrations. Microgravity Science and Technology, 2015, 27, 1-10.	1.4	7
1913	Multiphysics Theoretical Evaluation of Thermal Stresses in Laser Machined Structural Alumina. Lasers in Manufacturing and Materials Processing, 2015, 2, 1-23.	2.2	20
1914	Improved three-dimensional bubble dynamics model based on boundary element method. Journal of Computational Physics, 2015, 294, 208-223.	3.8	163
1915	Implementation of a height function method to alleviate spurious currents in CFD modelling of annular flow in microchannels. Applied Mathematical Modelling, 2015, 39, 4665-4686.	4.2	40
1916	DGLSM based study of temporal instability and formation of satellite drop in a capillary jet breakup. Chemical Engineering Science, 2015, 130, 239-253.	3.8	14
1917	A direct numerical simulation study of interface propagation in homogeneous turbulence. Journal of Fluid Mechanics, 2015, 772, 127-164.	3.4	33
1918	A Numerical Study of Droplet Splitting and Merging in a Parallel-Plate Electrowetting-on-Dielectric Device. Journal of Heat Transfer, 2015, 137, .	2.1	12
1919	Control of the breakup process of viscous droplets by an external electric field inside a microfluidic device. Soft Matter, 2015, 11, 3884-3899.	2.7	37
1920	Numerical simulation of two-phase flows with heat and mass transfer. Discrete and Continuous Dynamical Systems, 2015, 35, 2325-2347.	0.9	8
1921	Handbook of Biomedical Imaging. , 2015, , .		10
1922	LV Segmentation Using Stochastic Resonance and Evolutionary Cellular Automata. International Journal of Pattern Recognition and Artificial Intelligence, 2015, 29, 1557002.	1.2	24
1923	Towards numerical simulations of supersonic liquid jets using ghost fluid method. International Journal of Heat and Fluid Flow, 2015, 53, 98-112.	2.4	9
1924	A Spectral-Element Approach for the Eikonal Equation. , 2015, , .		1
1925	The effect of air on solid body impact with water in two dimensions. Journal of Fluids and Structures, 2015, 59, 146-164.	3.4	15
1926	An adaptive weighting parameter selection for improved integrated active contour model. Optik, 2015, 126, 5331-5335.	2.9	3
1927	Thermo-hydrodynamic process simulation of craters formation and evolution on metal surfaces caused by intense pulsed ion beams. Vacuum, 2015, 120, 116-120.	3.5	20
1928	Gap geometry dictates epithelial closure efficiency. Nature Communications, 2015, 6, 7683.	12.8	118
1929	Numerical simulation of the direct contact condensation phenomena for PTS-related in single and combined-effect thermal hydraulic test facilities using TransAT CMFD code. Nuclear Engineering and Design, 2015, 293, 346-356.	1.7	3

#	Article	IF	CITATIONS
1930	Divergence of Gradient Convolution: Deformable Segmentation With Arbitrary Initializations. IEEE Transactions on Image Processing, 2015, 24, 3902-3914.	9.8	6
1931	Evaluating wave forces on groups of three and nine cylinders using a 3D numerical wave tank. Engineering Applications of Computational Fluid Mechanics, 2015, 9, 343-354.	3.1	21
1932	A contoured continuum surface force model for particle methods. Journal of Computational Physics, 2015, 298, 280-304.	3.8	69
1933	Arbitrary Lagrangian–Eulerian Method for Two-Phase Flows. , 2015, , 75-110.		0
1934	Residual-based turbulence models and arbitrary Lagrangian–Eulerian framework for free surface flows. Mathematical Models and Methods in Applied Sciences, 2015, 25, 2287-2317.	3.3	17
1935	Comparison of wave load effects on a TLP wind turbine by using computational fluid dynamics and potential flow theory approaches. Applied Ocean Research, 2015, 53, 142-154.	4.1	50
1936	An improved multiphase lattice Boltzmann flux solver for three-dimensional flows with large density ratio and high Reynolds number. Journal of Computational Physics, 2015, 302, 41-58.	3.8	82
1937	Effect of natural frequency modes on sloshing phenomenon in a rectangular tank. International Journal of Naval Architecture and Ocean Engineering, 2015, 7, 580-594.	2.3	42
1938	On the computation of viscous terms for incompressible two-phase flows with Level Set/Ghost Fluid Method. Journal of Computational Physics, 2015, 301, 289-307.	3.8	72
1939	Large-Eddy Simulation of Three-Dimensional Turbulent Free Surface Flow Past a Complex Stream Restoration Structure. Journal of Hydraulic Engineering, 2015, 141, .	1.5	20
1940	3D computation of an incipient motion of a sessile drop on a rigid surface with contact angle hysteresis. Theoretical and Computational Fluid Dynamics, 2015, 29, 373-390.	2.2	14
1941	Imposing mixed Dirichlet–Neumann–Robin boundary conditions in a level-set framework. Computers and Fluids, 2015, 121, 68-80.	2.5	12
1942	An Eulerian projection method for quasi-static elastoplasticity. Journal of Computational Physics, 2015, 300, 136-166.	3.8	15
1943	Simulations of impinging droplets with surfactant-dependent dynamic contact angle. Journal of Computational Physics, 2015, 301, 178-200.	3.8	21
1944	A path-conservative finite volume scheme for compressible multi-phase flows with surface tension. Applied Mathematics and Computation, 2015, 271, 959-978.	2.2	11
1945	A hybrid Taylor–Galerkin variational multi-scale stabilization method for the level set equation. Computers and Fluids, 2015, 121, 192-205.	2.5	5
1946	A time splitting projection scheme for compressible two-phase flows. Application to the interaction of bubbles with ultrasound waves. Journal of Computational Physics, 2015, 302, 439-468.	3.8	30
1947	Flow dynamics through a submerged bridge opening with overtopping. Journal of Hydraulic Research/De Recherches Hydrauliques, 2015, 53, 186-195.	1.7	48

#	Article	IF	Citations
1948	Direct numerical simulation of bubble dynamics in subcooled and near-saturated convective nucleate boiling. International Journal of Heat and Fluid Flow, 2015, 51, 16-28.	2.4	21
1949	Filter the shape sensitivity in level set-based topology optimization methods. Structural and Multidisciplinary Optimization, 2015, 51, 1035-1049.	3.5	4
1950	An SPH model for multiphase flows with complex interfaces and large density differences. Journal of Computational Physics, 2015, 283, 169-188.	3.8	154
1951	An original algorithm for VOF based method to handle wetting effect in multiphase flow simulation. Mechanics Research Communications, 2015, 63, 26-32.	1.8	10
1952	Topology optimization study of arterial bypass configurations using the level set method. Structural and Multidisciplinary Optimization, 2015, 51, 773-798.	3.5	31
1953	The use of Volume of Fluid technique to analyze multiphase flows: Specific case of bubble rising in still liquids. Applied Mathematical Modelling, 2015, 39, 3290-3305.	4.2	42
1954	Skeleton and level set for channel construction and flow simulation. Engineering With Computers, 2015, 31, 289-303.	6.1	2
1955	Engineering molecular dynamics simulation in chemical engineering. Chemical Engineering Science, 2015, 121, 200-216.	3.8	18
1956	Scale separation for multi-scale modeling of free-surface and two-phase flows with the conservative sharp interface method. Journal of Computational Physics, 2015, 280, 387-403.	3.8	17
1957	Numerical investigation of conjugated heat transfer in a channel with a moving depositing front. International Journal of Thermal Sciences, 2015, 88, 136-147.	4.9	6
1958	Robust image segmentation using local robust statistics and correntropy-based K-means clustering. Optics and Lasers in Engineering, 2015, 66, 187-203.	3.8	20
1959	Dissipative Particle Dynamics (DPD): An Overview and Recent Developments. Archives of Computational Methods in Engineering, 2015, 22, 529-556.	10.2	160
1961	Finite size Lagrangian particle tracking approach to simulate dispersed bubbly flows. Chemical Engineering Science, 2015, 122, 321-335.	3.8	5
1962	3D simulations of the hydrodynamic deformation of melt droplets in a water pool. Annals of Nuclear Energy, 2015, 75, 123-131.	1.8	13
1963	Sand erosion as an internal boundary value problem. Acta Geotechnica, 2015, 10, 333-342.	5.7	10
1964	Multiphase lattice Boltzmann flux solver for incompressible multiphase flows with large density ratio. Journal of Computational Physics, 2015, 280, 404-423.	3.8	174
1965	A Fixed-Mesh Approach for Gas-Liquid-Rigid Interaction Problems. IOP Conference Series: Earth and Environmental Science, 2016, 49, 062020.	0.3	1
1966	Numerical Study of Internal Combustion Engine using OpenFOAM®. , 2016, , .		1
ARTICLE IF CITATIONS Pressure Drop in Bubbly Flow., 2016, , 135-182. 2 1967 Efficient Local Level Set Method without Reinitialization and Its Appliance to Topology Optimization. 1969 1.1 Mathematical Problems in Engineering, 2016, 2016, 1-14. A rigorous setting for the reinitialization of first order level set equations. Interfaces and Free 1970 2 0.8 Boundaries, 2016, 18, 579-621. Integrated Computational Study for Total Atomization Process of Primary Breakup to Spray Droplet 1971 Formation in Injector Nozzle., Ó, , . Dynamics of a liquid drop in porous medium saturated by another liquid under gravity. Journal of 1972 0.4 1 Physics: Conference Series, 2016, 681, 012040. MODELING TEMPERATURE DISTRIBUTION INSIDE AN EMULSION FUEL DROPLET UNDER CONVECTIVE HEATING: 0.8 A KEY TO PREDICTING MICROEXPLOSION AND PUFFING. Atomization and Sprays, 2016, 26, 551-583. Introducing shape constraints into object-based traveltime tomography. Inverse Problems, 2016, 32, 1974 2.0 2 095002. From level set to volume of fluid and back again at secondâ€order accuracy. International Journal for 1.6 Numerical Methods in Fluids, 2016, 80, 231-255. An SPH pressure correction algorithm for multiphase flows with large density ratio. International 1976 1.6 12 Journal for Numerical Methods in Fluids, 2016, 81, 765-788. Fitted finite element discretization of twoâ€phase Stokes flow. International Journal for Numerical 1.6 Methods in Fluids, 2016, 82, 709-729. A two-dimensional simulation of solidification processes in materials with thermo-dependent properties using XFEM. International Journal of Numerical Methods for Heat and Fluid Flow, 2016, 26, 1978 2.8 11 1661-1683. Three-dimensional multi-relaxation-time lattice Boltzmann front-tracking method for two-phase 1979 1.4 flow. Chinese Physics B, 2016, 25, 014702. Fundamental Operations of Bone Machining., 2016, , 23-44. 1980 0 Fully automated liver segmentation using Sobolev gradientâ€based level set evolution. International 2.1 Journal for Numerical Methods in Biomedical Engineering, 2016, 32, e02765. A Q2Q1 integrated finite element method with the semiâ€implicit consistent CSF for solving 1982 incompressible twoâ€phase flows with surface tension effect. International Journal for Numerical 1.6 7 Methods in Fluids, 2016, 81, 284-308. Development of a hybrid particleâ€mesh method for twoâ€phase flow simulations. International Journal for Numerical Methods in Fluids, 2016, 82, 334-347. Modeling Separation and Cavitation Behind a Blunt Body., 2016, , . 1984 0 1985 Study of Water Impact and Entry of a Free Falling Wedge Using CFD Simulations., 2016, , .

#	Article	IF	Citations
1986	An augmented formulation of distributed compliant mechanism optimization using a level set method. Advances in Mechanical Engineering, 2016, 8, 168781401666448.	1.6	5
1987	Effects of Opening and Closing Fuel-Injector Valve on Air/Fuel Mixture. , 2016, , .		0
1988	Level set segmentation for brain region using CT scan images. , 2016, , .		3
1989	Wavelet-based improved Chan-Vese model for image segmentation. Proceedings of SPIE, 2016, , .	0.8	1
1990	Understanding casing flow in Pelton turbines by numerical simulation. IOP Conference Series: Earth and Environmental Science, 2016, 49, 022004.	0.3	6
1991	Level set formulation of two-dimensional Lagrangian vortex detection methods. Chaos, 2016, 26, 103102.	2.5	10
1992	A local level set method based on a finite element method for unstructured meshes. Journal of Mechanical Science and Technology, 2016, 30, 5539-5545.	1.5	0
1993	Three dimensional simulation of high speed remote laser cutting of cathode for lithium-ion batteries. Journal of Laser Applications, 2016, 28, .	1.7	18
1994	A fast and robust segmentation of magnetic resonance brain images using a combination of the pyramidal approach and level set method. International Journal of Imaging Systems and Technology, 2016, 26, 243-253.	4.1	1
1995	Segmentation of prostate from ultrasound images using level sets on active band and intensity variation across edges. Medical Physics, 2016, 43, 3090-3103.	3.0	20
1998	Numerical and Experimental Investigation of Breaking Wave Interaction with a Vertical Slender Cylinder. Energy Procedia, 2016, 94, 443-451.	1.8	5
1999	CFD Simulations of Non-Linear Sloshing in a Rotating Rectangular Tank Using the Level Set Method. , 2016, , .		1
2000	Gradient-augmented hybrid interface capturing method for incompressible two-phase flow. Chinese Physics B, 2016, 25, 064701.	1.4	0
2001	A power series formulation for two-dimensional wildfire shapes. International Journal of Wildland Fire, 2016, 25, 970.	2.4	5
2002	Bubble Tracking Simulations of Turbulent Two-Phase Flows. , 2016, , .		2
2003	Modelling for three dimensional coalescence of two bubbles. Physics of Fluids, 2016, 28, .	4.0	50
2004	A front-tracking shock-capturing method for two gases. Communications in Applied Mathematics and Computational Science, 2016, 11, 1-35.	1.8	3
2005	Effects of laser beam spatial distribution on laser-material interaction. Journal of Laser Applications, 2016, 28, .	1.7	32

		CITATION RE	PORT	
#	Article		IF	CITATIONS
2006	Breakup modes of fluid drops in confined shear flows. Physics of Fluids, 2016, 28, .		4.0	22
2007	Computational approaches to substrate-based cell motility. Npj Computational Material	s, 2016, 2, .	8.7	64
2008	The shape optimization of the arterial graft design by level set methods. Applied Mather 205-218.	natics, 2016, 31,	1.0	3
2009	Advanced Simulation. , 0, , 362-458.			0
2010	Multiscale modelling of evolving foams. Journal of Computational Physics, 2016, 315, 22	73-301.	3.8	12
2011	GPU-accelerated large-scale simulations of interfacial multiphase fluids for real-case appl Computers and Fluids, 2016, 141, 235-249.	ications.	2.5	2
2012	A level-set method for imaging salt structures using gravity data. Geophysics, 2016, 81,	G27-G40.	2.6	25
2013	A Curvature-Augmented, REA Approach to the Level Set Method. SIAM Journal of Scienti 2016, 38, A833-A855.	fic Computing,	2.8	3
2014	An octree-based adaptive semi-Lagrangian VOF approach for simulating the displacemer surfaces. Computers and Fluids, 2016, 131, 190-204.	ıt of free	2.5	13
2015	A three-dimensional particle method for violent sloshing under regular and irregular exci Ocean Engineering, 2016, 120, 52-63.	tations.	4.3	50
2016	A LES-based Eulerian–Lagrangian approach to predict the dynamics of bubble plumes. 2016, 97, 27-36.	Ocean Modelling,	2.4	76
2017	Puffing-enhanced fuel/air mixing of an evaporating -decane/ethanol emulsion droplet an group under convective heating. Journal of Fluid Mechanics, 2016, 793, 444-476.	d a droplet	3.4	27
2018	Application of a two phase lattice Boltzmann model in simulation of free surface jet imp transfer. International Communications in Heat and Mass Transfer, 2016, 75, 282-294.	ingement heat	5.6	9
2019	A Ghost Fluid/Level Set Method for boiling flows and liquid evaporation: Application to t Leidenfrost effect. Journal of Computational Physics, 2016, 316, 789-813.	he	3.8	73
2020	Development and elaboration of numerical method for simulating gas–liquid–solid based on particle method. International Journal of Computational Fluid Dynamics, 2016,	hree-phase flows 30, 120-128.	1.2	4
2021	Dissipative Particle Dynamics $\hat{a} \in$ " Applications. , 2016, , 127-190.			0
2022	Level set evolution model for image segmentation based on variable exponent p-Laplace Applied Mathematical Modelling, 2016, 40, 7739-7750.	equation.	4.2	18
2023	Numerical Simulation of Three-Fluid Stratified Flow Using the Level-Set Method. Internat of Computational Methods, 2016, 13, 1650033.	ional Journal	1.3	1

#	Article	IF	CITATIONS
2024	A ghost fluid method for sharp interface simulations of compressible multiphase flows. Journal of Mechanical Science and Technology, 2016, 30, 1581-1593.	1.5	8
2025	Effects of uniform magnetic field on the interaction of side-by-side rising bubbles in a viscous liquid. Korean Journal of Chemical Engineering, 2016, 33, 795-805.	2.7	3
2026	High fidelity anisotropic adaptive variational multiscale method for multiphase flows with surface tension. Computer Methods in Applied Mechanics and Engineering, 2016, 307, 44-67.	6.6	27
2027	A two-stage image segmentation via global and local region active contours. Neurocomputing, 2016, 205, 130-140.	5.9	52
2028	Implicit slicing for functionally tailored additive manufacturing. CAD Computer Aided Design, 2016, 77, 107-119.	2.7	86
2029	The hybrid RANS/LES of partially premixed supersonic combustion using G/Z flamelet model. Acta Astronautica, 2016, 127, 375-383.	3.2	22
2030	Simulation ofBacillus subtilisbiofilm growth on agar plate by diffusion–reaction based continuum model. Physical Biology, 2016, 13, 046002.	1.8	10
2031	Joint inversion of gravity and traveltime data using a level-set-based structural parameterization. Geophysics, 2016, 81, G107-G119.	2.6	26
2032	Oscillating characteristic of free surface from stability to instability of thermocapillary convection for high Prandtl number fluids. International Journal of Heat and Fluid Flow, 2016, 61, 298-308.	2.4	10
2033	A Numerical Review of Multi-Fluid SPH Algorithms for High Density Ratios. Modeling and Simulation in Science, Engineering and Technology, 2016, , 139-150.	0.6	2
2034	Comparison of laminar model, RANS, LES and VLES for simulation of liquid sloshing. Applied Ocean Research, 2016, 59, 638-649.	4.1	27
2035	Two-dimensional simulation of intermediate-sized bubbles in low viscous liquids using counter diffusion lattice Boltzmann method. Nuclear Engineering and Design, 2016, 305, 547-558.	1.7	2
2036	Fusion of segmented image using level set method and Chair-Varshney fusion rule. , 2016, , .		0
2037	Plasma–liquid interactions: a review and roadmap. Plasma Sources Science and Technology, 2016, 25, 053002.	3.1	1,111
2038	Level set jet schemes for stiff advection equations: The semijet method. Computer Methods in Applied Mechanics and Engineering, 2016, 310, 233-251.	6.6	6
2039	URANS Studies of Effect of Eccentricity on Ship–Lock Interactions. International Journal of Computational Methods, 2016, 13, 1641012.	1.3	0
2040	A conservative interface-interaction model with insoluble surfactant. Journal of Computational Physics, 2016, 327, 653-677.	3.8	3
2041	Self-consistent field theory simulations of polymers on arbitrary domains. Journal of Computational Physics, 2016, 327, 168-185.	3.8	14

#	Article	IF	CITATIONS
2042	A robust interface method for drop formation and breakup simulation at high density ratio using an extrapolated liquid velocity. Computers and Fluids, 2016, 136, 402-420.	2.5	23
2043	Bioinspired swimming simulations. Journal of Computational Physics, 2016, 323, 310-321.	3.8	11
2044	On the convergence of the weakly compressible sharp-interface method for two-phase flows. Journal of Computational Physics, 2016, 324, 94-114.	3.8	6
2045	The hydrodynamics of microlayer formation beneath vapour bubbles. International Journal of Heat and Mass Transfer, 2016, 102, 1282-1292.	4.8	21
2046	Three-dimensional ghost-fluid large-scale numerical investigation on air explosion. Computers and Fluids, 2016, 137, 70-79.	2.5	12
2047	Numerical Studies of Detonation Initiation by Supersonic Projectiles using a High-Order Adaptive Cut-cell Method. , 2016, , .		1
2048	Influence of spray characteristics on heat flux in dual phase spray impingement cooling of hot surface. AEJ - Alexandria Engineering Journal, 2016, 55, 1995-2004.	6.4	19
2049	An improved interface preserving level set method for simulating three dimensional rising bubble. International Journal of Heat and Mass Transfer, 2016, 103, 753-772.	4.8	19
2050	Multiple-relaxation-time color-gradient lattice Boltzmann model for simulating two-phase flows with high density ratio. Physical Review E, 2016, 94, 023310.	2.1	97
2051	A Low Complexity Algorithm for Non-Monotonically Evolving Fronts. Journal of Scientific Computing, 2016, 69, 1165-1191.	2.3	2
2052	A new level set numerical wave tank with improved density interpolation for complex wave hydrodynamics. Computers and Fluids, 2016, 140, 191-208.	2.5	157
2053	The effect of thixotropy on a rising gas bubble: A numerical study. Korea Australia Rheology Journal, 2016, 28, 207-216.	1.7	9
2054	A level-set aided single-phase model for the numerical simulation of free-surface flow on unstructured meshes. Computers and Fluids, 2016, 140, 97-110.	2.5	6
2055	A Simulation of the Liquid Shock and Cavitation Based on a Multi-Equation Model. International Journal of Computational Methods, 2016, 13, 1641010.	1.3	0
2056	Propulsive performance of a flapping plate near a free surface. Journal of Fluids and Structures, 2016, 65, 411-432.	3.4	7
2057	Finite volume method for radiative transport in multiphase flows with free surfaces. Numerical Heat Transfer; Part A: Applications, 2016, 70, 347-365.	2.1	4
2058	Understanding spray cloud formation by wave impact on marine objects. Cold Regions Science and Technology, 2016, 129, 114-136.	3.5	35
2059	Lattice Boltzmann method for binary fluids based on mass-conserving quasi-incompressible phase-field theory. Physical Review E, 2016, 93, 043303.	2.1	23

#	Article	IF	CITATIONS
2060	Structure and Mass Transport Characteristics at the Intrinsic Liquid–Vapor Interfaces of Alkanes. Journal of Physical Chemistry B, 2016, 120, 7207-7216.	2.6	10
2061	An overview of smoothed particle hydrodynamics for simulating multiphase flow. Applied Mathematical Modelling, 2016, 40, 9625-9655.	4.2	138
2062	Parallel level-set methods on adaptive tree-based grids. Journal of Computational Physics, 2016, 322, 345-364.	3.8	57
2063	Interfacial gauge methods for incompressible fluid dynamics. Science Advances, 2016, 2, e1501869.	10.3	20
2064	Resonant Deformable Matching: Simultaneous Registration and Reconstruction. Lecture Notes in Computer Science, 2016, , 51-68.	1.3	1
2065	A semiâ€implicit multiâ€fluid SPH algorithm suitable for GPU. Proceedings in Applied Mathematics and Mechanics, 2016, 16, 593-594.	0.2	0
2066	Numerical simulation of the electrohydrodynamic effects on bubble rising using the SPH method. International Journal of Heat and Fluid Flow, 2016, 62, 313-323.	2.4	21
2067	An adaptive interface sharpening methodology for compressible multiphase flows. Computers and Mathematics With Applications, 2016, 72, 2660-2684.	2.7	4
2068	A level-set model for thermocapillary motion of deformable fluid particles. International Journal of Heat and Fluid Flow, 2016, 62, 324-343.	2.4	29
2069	A SIMULATION OF LARGE SCALE SEDIMENT FLOW EXPERIMENT USING DEM. Journal of Japan Society of Civil Engineers Ser A2 (Applied Mechanics (AM)), 2016, 72, I_449-I_457.	0.1	1
2070	Practical Techniques in Ghost Fluid Method for Compressible Multi-Medium Flows. Communications in Computational Physics, 2016, 20, 619-659.	1.7	13
2071	Flux-based level-set method for two-phase flows on unstructured grids. Computing and Visualization in Science, 2016, 18, 31-52.	1.2	3
2072	Wave-Structure Interaction of Focussed Waves With REEF3D. , 2016, , .		1
2073	Late-Fuel Simulation Near Nozzle Outlet of Fuel Injector During Closing Valve. Journal of Engineering for Gas Turbines and Power, 2016, 138, .	1.1	4
2074	Permeation of oilâ€inâ€water emulsions through coalescing filter: Twoâ€dimensional simulation based on phaseâ€field model. AICHE Journal, 2016, 62, 2525-2532.	3.6	27
2075	A two-phase solver for complex fluids: Studies of the Weissenberg effect. International Journal of Multiphase Flow, 2016, 84, 98-115.	3.4	33
2076	A model and numerical method for high speed flows with capillary, viscous and heat conduction effects. , 2016, , .		1
2077	A High-Order Level-Set Method with Enhanced Stability for Curvature Driven Flows and Surface Diffusion Motion. Journal of Scientific Computing, 2016, 69, 1316-1345.	2.3	3

#	Article	IF	CITATIONS
2078	A Numerical Method on Eulerian Grids for Two-Phase Compressible Flow. Advances in Applied Mathematics and Mechanics, 2016, 8, 187-212.	1.2	2
2079	An improved Front-Tracking technique for the simulation of mass transfer in dense bubbly flows. Chemical Engineering Science, 2016, 152, 351-369.	3.8	32
2080	Numerical investigation on the influence of surface tension and viscous force on the bubble dynamics with a CLSVOF method. Journal of Mechanical Science and Technology, 2016, 30, 2547-2556.	1.5	22
2081	A GPU accelerated level set reinitialization for an adaptive discontinuous Galerkin method. Computers and Mathematics With Applications, 2016, 72, 755-767.	2.7	14
2082	Direct multiphase mesh generation from 3D images using anisotropic mesh adaptation and a redistancing equation. Computer Methods in Applied Mechanics and Engineering, 2016, 309, 288-306.	6.6	8
2083	Evolution of Free Surface in the Formation of Thermo-Solutocapillary Convection Within an Open Cavity. Microgravity Science and Technology, 2016, 28, 421-430.	1.4	14
2084	Heuristic and Eulerian interface capturing approaches for shallow water type flow and application to granular flows. Computer Methods in Applied Mechanics and Engineering, 2016, 304, 243-264.	6.6	6
2085	Capillary filling and Haines jump dynamics using free energy Lattice Boltzmann simulations. Advances in Water Resources, 2016, 92, 43-56.	3.8	59
2086	Unified adaptive Variational MultiScale method for two phase compressible–incompressible flows. Computer Methods in Applied Mechanics and Engineering, 2016, 308, 238-255.	6.6	18
2087	Smoothed particle hydrodynamics method for fluid flows, towards industrial applications: Motivations, current state, and challenges. Computers and Fluids, 2016, 136, 11-34.	2.5	304
2088	A Dual Grid Level Set Method based study on similarity and difference between interface dynamics for surface tension and radial electric field induced jet breakup. Chemical Engineering Science, 2016, 148, 238-255.	3.8	9
2089	Efficient two-phase mass-conserving level set method for simulation of incompressible turbulent free surface flows with large density ratio. Computers and Fluids, 2016, 136, 212-227.	2.5	9
2090	On two-phase flow solvers in irregular domains with contact line. Journal of Computational Physics, 2016, 321, 1217-1251.	3.8	38
2091	A Lagrangian-Eulerian advection scheme with moment-of-fluid interface reconstruction. Numerical Heat Transfer, Part B: Fundamentals, 2016, 69, 563-574.	0.9	5
2092	Development of new finite volume schemes on unstructured triangular grid for simulating the gas–liquid twoâ€phase flow. International Journal for Numerical Methods in Fluids, 2016, 81, 45-67.	1.6	11
2093	Analysis of melt ejection during long pulsed laser drilling. Chinese Physics B, 2016, 25, 054206.	1.4	11
2094	Grid studies for the simulation of resolved structures in an Eulerian two-fluid framework. Nuclear Engineering and Design, 2016, 305, 371-377.	1.7	11
2095	Rayleigh–Taylor instability of immiscible fluids in porous media. Continuum Mechanics and Thermodynamics, 2016, 28, 721-731.	2.2	6

2009Numerical Modeling and Experimental Validation of Free Surface Flow Problems. Archives of Computational Methods in Engineering, 2016, 23, 139-169.10.2262007Finite element simulation of impulse wave generated by landslides using a three phase model and the conservative level set method. Landslides, 2016, 13, 85-96.6.4192008A Large-Eddy-Simulation Study of Combustion Dynamics of Bluff-Body Stabilized Flames. Combustion Science and Technology, 2016, 188, 924-952.6.838382100A fourth-order accurate curvature computation in a level set framework for two phase flows subjected to surface tension forces. Journal of Computational Physics, 2016, 305, 838-876.8.8382101Numerical simulation of coalescence phenomena of oll-Inwater emulsions permeating through stryface at low Reynolds number. International Journal of Heat and Fluid Flow, 2016, 57, 58-78.2.4242103Particle velocimetry analysis of Immiscible two-phase flow in micromodels. Advances in Water3.8682104Hydrodynamic characteristics and geometric properties of plunging and spiling breakers over inpermeable slopes. Ocean Modeling, 2016, 95, 33-72.2.4412102Stabilised finite-element methods for solving the level set equation with mass conservation.3.8362103Stabilised finite-element methods for solving the level set equation with mass conservation.3.8362104Stabilised finite-element methods for solving the level set equation with mass conservation.3.8362105Stabilised finite-element methods for solving the level set equation with mass conservation.3.83.8 </th <th>#</th> <th>LE IF</th> <th>CITATIONS</th>	#	LE IF	CITATIONS
2007Finite element simulation of impulse wave generated by landslides using a three-phase model and the conservative level set method. Landslides, 2016, 13, 85-96.12008A Large-Eddy-Simulation Study of Combustion Dynamics of Bluff-Body Stabilized Flames. Combustion2.3282100A fourth-order accurate curvature computation in a level set framework for two-phase flows subjected to surface tension forces. Journal of Computational Physics, 2016, 305, 838-876.3.8332101Numerical simulation of coalescence phenomena of oil-in-water emulsions permeating through straight membrane pore. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 491, surface at low Reynolds number. International Journal of Heat and Fluid Flow, 2016, 57, 58-78.2.4242102Two-degree-of-freedom vortex induced vibration of low-mass horizontal circular cylinder near a free esources, 2016, 95, 199-211.3.8682103Particle velocimetry analysis of immiscible two-phase flow in micromodels. Advances in Water Resources, 2016, 95, 199-211.3.8682104Hydrodynamic characteristics and geometric properties of plunging and spilling breakers over heprmeable slopes. Ocean Modelling, 2016, 103, 53-72.2.4412103Stabilised finite-element methods for solving the level set equation with mass conservation. thermational Physics, 2016, 914, 80-92.3.8382104Stabilised finite-element methods for solving the level set equation without reinitialization. termational Journal of Computational Fluid Dynamics, 2016, 93, 48-57.3.8122105Stabilised finite-element methods for solving the level set equation without reinitialization.	2096	erical Modeling and Experimental Validation of Free Surface Flow Problems. Archives of 10.2 Dutational Methods in Engineering, 2016, 23, 139-169.	26
12009& Large-Eddy-Simulation Study of Combustion Dynamics of Bluff-Body Stabilized Flames. Combustion2.32.82100A fourth-order accurate curvature computation in a level set framework for two phase flows ubjected to surface tension forces. Journal of Computational Physics, 2016, 305, 838-876.3.83.82101Numerical simulation of coalescence phenomena of oil-in-water emulsions permeating through traight membrane pore. Colloids and Surfaces & Physicochemical and Engineering Aspects, 2016, 491, 4.72.22102Iwo-degree-of-freedom vortex induced vibration of low-mass horizontal circular cylinder near a free esources, 2016, 55, 199-211.2.42.42103Particle velocimetry analysis of immiscible two-phase flow in micromodels. Advances in Water mpermeable slopes. Ocean Modelling, 2016, 103, 53-72.3.86.82104Hydrodynamic characteristics and geometric properties of plunging and spilling breakers over mpermeable slopes. Ocean Modelling, 2016, 103, 53-72.2.412103Sami-implicit level set method for multiphase flows and fluidaff"structure interaction problems. ournal of Computational Physics, 2016, 314, 80-92.3.832104Stabilised finite-element methods for solving the level set equation with mass conservation. International Journal of Heat and Mass Transfer, 2016, 93, 38-55.3.8122105Stabilized finite element methods for solving the level set equation without reinitialization. International Journal of Heat and Mass Transfer, 2016, 93, 38-55.3.8272104Stabilized finite element methods for solving the level set equation without reinitialization. International Journal of Heat and Mass Transfer, 2016,	2097	element simulation of impulse wave generated by landslides using a three-phase model and the 5.4 ervative level set method. Landslides, 2016, 13, 85-96.	19
2100A fourth-order accurate curvature computation in a level set framework for two-phase flows subjected to surface tension forces. Journal of Computational Physics, 2016, 305, 838-876.3.83.83.82100Numerical simulation of coalescence phenomena of ol-in-water emulsions permeating through straight membrane pore. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 491, 70-77.4.7222102Woo-degree-of-freedom vortex induced vibration of low-mass horizontal circular cylinder near a free 	2098	ge-Eddy-Simulation Study of Combustion Dynamics of Bluff-Body Stabilized Flames. Combustion 2.3 ce and Technology, 2016, 188, 924-952.	28
12101Numerical simulation of coalescence phenomena of oli-in-water emulsions permeating through Sträght membrane pore. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 491, 40712112102Two-degree of-freedom vortex induced vibration of low-mass horizontal circular cylinder near a free surface at low Reynolds number. International Journal of Heat and Fluid Flow, 2016, 57, 58-78.2.42.412103Particle velocimetry analysis of immiscible two-phase flow in micromodels. Advances in Water3.86812104Hydrodynamic characteristics and geometric properties of plunging and spilling breakers over2.4.4112105Asemi-implicit level set method for multiphase flows and fluida@"structure interaction problems.3.8.1512106Stabilized finite-element methods for solving the level set equation with mass conservation.1.2.621210On sharp-interface level-set method for heat and/or mass transfer induced Stefan problem.1.2.611210Stabilized finite element methods for solving the level set equation without reinitialization.2.7.181210On sharp-interface level-set method for heat and/or mass transfer induced Stefan problem.2.5.111210Stabilized finite element methods for solving the level set equation without reinitialization.2.5.121211On sharp-interface level-set method: Compact Conservative Level Set (CCLS). Computers and Mathematics With Applications, 2016, 71, 1602-162312.121210Pevelopment of a high-order level set method: Compact Conservative Level Set (CCLS). Computers and2.5.111211	2100	rth-order accurate curvature computation in a level set framework for two-phase flows cted to surface tension forces. Journal of Computational Physics, 2016, 305, 838-876.	33
2102Two-degree-of-freedom vortex induced vibration of low-mass horizontal circular cylinder near a free2.42.42103Particle velocimetry analysis of immiscible two-phase flow in micromodels. Advances in Water Resources, 2016, 95, 199-211.3.8682104Hydrodynamic characteristics and geometric properties of plunging and spilling breakers over Impermeable slopes. Ocean Modelling, 2016, 103, 53-72.2.4412105Asemi-implicit level set method for multiphase flows and fluidâ€"structure interaction problems. International Journal of Computational Physics, 2016, 314, 80-92.3.8152104Stabilised finite-element methods for solving the level set equation with mass conservation. 	2101	rical simulation of coalescence phenomena of oil-in-water emulsions permeating through ht membrane pore. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 491, 4.7 '.	22
12101Patter and space of the spa	2102	degree-of-freedom vortex induced vibration of low-mass horizontal circular cylinder near a free ce at low Reynolds number. International Journal of Heat and Fluid Flow, 2016, 57, 58-78. 2.4	24
2104Hydrodynamic characteristics and geometric properties of plunging and spilling breakers over impermeable slopes. Ocean Modelling, 2016, 103, 53-72.2.44.12105A semi-implicit level set method for multiphase flows and fluidâ€"structure interaction problems. ournal of Computational Physics, 2016, 314, 80-92.3.81.52106Stabilised finite-element methods for solving the level set equation with mass conservation. International Journal of Computational Fluid Dynamics, 2016, 30, 38-55.1.262107On sharp-interface level-set method for heat and/or mass transfer induced Stefan problem. Remational Journal of Heat and Mass Transfer, 2016, 96, 458-473.4.82.72108Stabilized finite element methods for solving the level set equation without reinitialization. Computers and Mathematics With Applications, 2016, 71, 1602-1623.2.7182109Development of a high-order level set method: Compact Conservative Level Set (CCLS). Computers and Fluids, 2016, 129, 79-90.2.5112108Numerical simulation of dielectric bubbles coalescence under the effects of uniform magnetic field. Heoretical and Computational Fluid Dynamics, 2016, 30, 165-184.2.215	2103	le velocimetry analysis of immiscible two-phase flow in micromodels. Advances in Water 3.8 Irces, 2016, 95, 199-211.	68
2105A semi-implicit level set method for multiphase flows and fluidâ€" structure interaction problems.3.8152106Stabilised finite-element methods for solving the level set equation with mass conservation. International Journal of Computational Fluid Dynamics, 2016, 30, 38-55.1.262107On sharp-interface level-set method for heat and/or mass transfer induced Stefan problem. International Journal of Heat and Mass Transfer, 2016, 96, 458-473.4.8272108Stabilized finite element methods for solving the level set equation without reinitialization. Computers and Mathematics With Applications, 2016, 71, 1602-1623.2.7182109Development of a high-order level set method: Compact Conservative Level Set (CCLS). Computers and 	2104	odynamic characteristics and geometric properties of plunging and spilling breakers over 2.4 meable slopes. Ocean Modelling, 2016, 103, 53-72.	41
2106Stabilised finite-element methods for solving the level set equation with mass conservation.1.262107On sharp-interface level-set method for heat and/or mass transfer induced Stefan problem. International Journal of Heat and Mass Transfer, 2016, 96, 458-473.4.8272108Stabilized finite element methods for solving the level set equation without reinitialization. Computers and Mathematics With Applications, 2016, 71, 1602-1623.2.7182109Development of a high-order level set method: Compact Conservative Level Set (CCLS). Computers and Pluids, 2016, 129, 79-90.2.5112110Numerical simulation of dielectric bubbles coalescence under the effects of uniform magnetic field. 	2105	ni-implicit level set method for multiphase flows and fluid–structure interaction problems. 3.8 al of Computational Physics, 2016, 314, 80-92.	15
2107On sharp-interface level-set method for heat and/or mass transfer induced Stefan problem.4.8272108Stabilized finite element methods for solving the level set equation without reinitialization.2.7182109Development of a high-order level set method: Compact Conservative Level Set (CCLS). Computers and2.5112109Numerical simulation of dielectric bubbles coalescence under the effects of uniform magnetic field.2.215	2106	ised finite-element methods for solving the level set equation with mass conservation. 1.2 national Journal of Computational Fluid Dynamics, 2016, 30, 38-55.	6
2108Stabilized finite element methods for solving the level set equation without reinitialization. Computers and Mathematics With Applications, 2016, 71, 1602-1623.2.7182109Development of a high-order level set method: Compact Conservative Level Set (CCLS). Computers and Fluids, 2016, 129, 79-90.2.5112110Numerical simulation of dielectric bubbles coalescence under the effects of uniform magnetic field. Theoretical and Computational Fluid Dynamics, 2016, 30, 165-184.2.215	2107	arp-interface level-set method for heat and/or mass transfer induced Stefan problem. 4.8 national Journal of Heat and Mass Transfer, 2016, 96, 458-473.	27
2109Development of a high-order level set method: Compact Conservative Level Set (CCLS). Computers and Fluids, 2016, 129, 79-90.2.5112110Numerical simulation of dielectric bubbles coalescence under the effects of uniform magnetic field. Theoretical and Computational Fluid Dynamics, 2016, 30, 165-184.2.215	2108	ized finite element methods for solving the level set equation without reinitialization. 2.7 Duters and Mathematics With Applications, 2016, 71, 1602-1623.	18
Numerical simulation of dielectric bubbles coalescence under the effects of uniform magnetic field. 2.2 15 Theoretical and Computational Fluid Dynamics, 2016, 30, 165-184.	2109	opment of a high-order level set method: Compact Conservative Level Set (CCLS). Computers and 2.5 c, 2016, 129, 79-90.	11
	2110	erical simulation of dielectric bubbles coalescence under the effects of uniform magnetic field. 2.2 etical and Computational Fluid Dynamics, 2016, 30, 165-184.	15
2111Eulerian atomization modeling of a pressure-atomized spray for sprinkler irrigation. International Journal of Heat and Fluid Flow, 2016, 57, 142-149.2.415	2111	an atomization modeling of a pressure-atomized spray for sprinkler irrigation. International 2.4 al of Heat and Fluid Flow, 2016, 57, 142-149.	15
2112 Turbulent atomization subgrid model for two-phase flow large eddy simulation (theoretical) Tj ETQq1 1 0.784314 rgBT /Overlock	2112	lent atomization subgrid model for two-phase flow large eddy simulation (theoretical) Tj ETQq1 1 0.784314 rg $f BT$ /Ov	erlock 10 Tf
On dual-grid level-set method for contact line modeling during impact of a droplet on hydrophobic and superhydrophobic surfaces. International Journal of Multiphase Flow, 2016, 81, 54-66.	2113	ual-grid level-set method for contact line modeling during impact of a droplet on hydrophobic uperhydrophobic surfaces. International Journal of Multiphase Flow, 2016, 81, 54-66.	28
Numerical modeling of microscale droplet dispensing in parallel-plate electrowetting-on-dielectric (EWOD) devices with various reservoir designs. Microfluidics and Nanofluidics, 2016, 20, 1. 2.2 16	2114	erical modeling of microscale droplet dispensing in parallel-plate electrowetting-on-dielectric 2.2 DD) devices with various reservoir designs. Microfluidics and Nanofluidics, 2016, 20, 1.	16

#	Article	IF	CITATIONS
2115	Multifield Approach and Interface Locating Method for Two-Phase Flows in Nuclear Power Plant. Springer Water, 2016, , 483-500.	0.3	0
2116	Characterization of the velocity fields generated by flow initialization in the CFD simulation of multiphase flows. Applied Mathematical Modelling, 2016, 40, 6811-6830.	4.2	21
2117	Towards void formation and permeability predictions in LCM processes: A computational bifluid–solid mechanics framework dealing with capillarity and wetting issues. Comptes Rendus - Mecanique, 2016, 344, 236-250.	2.1	14
2118	An adaptive RBF finite collocation approach to track transport processes across moving fronts. Computers and Mathematics With Applications, 2016, 71, 278-300.	2.7	9
2119	Automatic brain hemorrhage segmentation and classification algorithm based on weighted grayscale histogram feature in a hierarchical classification structure. Biocybernetics and Biomedical Engineering, 2016, 36, 217-232.	5.9	69
2120	Macroscopic Model of Substrate-Based Cell Motility. Biological and Medical Physics Series, 2016, , 1-67.	0.4	6
2121	Modeling of Large Droplets Impingement Using a Hybrid Taylor-Galerkin Variational Multi-Scale Stabilized Level Set Method. , 2016, , .		0
2122	Capturing of interface topological changes in two-phase gas–liquid flows using a coupled volume-of-fluid and level-set method (VOSET). Computers and Fluids, 2016, 125, 82-100.	2.5	23
2123	Density-Scaled Balanced Continuum Surface Force Model with a Level Set Based Curvature Interpolation Technique. International Journal of Computational Methods, 2016, 13, 1641004.	1.3	5
2124	Spreading dynamics of droplet on an inclined surface. Theoretical and Computational Fluid Dynamics, 2016, 30, 237-252.	2.2	15
2125	Computations of two-fluid models based on a simple and robust hybrid primitive variable Riemann solver with AUSMD. Journal of Computational Physics, 2016, 308, 389-410.	3.8	16
2126	Microscale layering of liquid and vapor phases within microstructures for a new generation two-phase heat sink. International Journal of Heat and Mass Transfer, 2016, 95, 368-378.	4.8	20
2127	Numerical Solution of a Novel Biofilm Growth Model. Springer Proceedings in Physics, 2016, , 207-222.	0.2	0
2128	Three-dimensional modeling of fluid dynamics and heat transfer for two-fluid or phase change flows. International Journal of Heat and Mass Transfer, 2016, 93, 337-348.	4.8	14
2129	Active contours driven by divergence of gradient vector flow. Signal Processing, 2016, 120, 185-199.	3.7	43
2130	A coupled volume-of-fluid/level-set method for simulation of two-phase flows on unstructured meshes. Computers and Fluids, 2016, 124, 12-29.	2.5	89
2131	Topology optimization design of non-Newtonian roller-type viscous micropumps. Structural and Multidisciplinary Optimization, 2016, 53, 409-424.	3.5	29
2132	Full 3D Simulations of Two-Phase Core–Annular Flow in Horizontal Pipe Using Level Set Method. Journal of Scientific Computing, 2016, 66, 1025-1051.	2.3	9

ARTICLE IF CITATIONS Numerical simulation of wetting phenomena by a meshfree particle method. Journal of Computational 2133 2.0 8 and Applied Mathematics, 2016, 292, 469-485. Numerical simulation of two-phase flows in complex geometries by using the volume-of-fluid/immersed-boundary method. Chemical Engineering Science, 2016, 139, 221-240. 2134 3.8 Numerical simulation of displacement characteristics of CO2 injected in pore-scale porous media. 2135 8.1 17 Journal of Rock Mechanics and Geotechnical Engineering, 2016, 8, 87-92. Study on Ultra-fast Cooling Behaviors of Water Spray Cooled Stainless Steel Plates. Experimental 2136 Heat Transfer, 2016, 29, 299-321. GPGPU-based rising bubble simulations using a MRT lattice Boltzmann method coupled with level set 2137 2.5 14 interface capturing. Computers and Fluids, 2016, 124, 170-184. Resin infusion-based processes simulation : coupled Stokes-Darcy flows in orthotropic preforms undergoing finite strain. International Journal of Material Forming, 2017, 10, 43-54. A 3-D Active Contour Method for Automated Segmentation of the Left Ventricle From Magnetic 2139 4.2 44 Resonance Images. IEEE Transactions on Biomedical Engineering, 2017, 64, 134-144. Simulation of Convective Heat Transfer of Gas–Liquid Bubble Train Flow in Wet Microtube. Heat 2140 2.8 Transfer - Asian Research, 2017, 46, 331-346. Efficient Implementation of Volume/Surface Integrated Average-Based Multi-Moment Method. 2141 1.3 5 International Journal of Computational Methods, 2017, 14, 1750010. Progress in numerical simulation of yield stress fluid flows. Rheologica Acta, 2017, 56, 211-230. 2.4 2142 A new coupled level set and volume-of-fluid method to capture free surface on an overset grid 2143 3.4 20 system. International Journal of Multiphase Flow, 2017, 90, 144-155. Breakup of drops in simple shear flows with high-confinement geometry. Computers and Fluids, 2017, 2144 2.5 146, 23-41. Review of computational studies on boiling and condensation. International Journal of Heat and Mass 2145 4.8 322 Transfer, 2017, 108, 1164-1196. 10. Tagung Diesel- und Benzindirekteinspritzung 2016. Proceedings, 2017, , . 2146 0.3 Mold-Based Production Systems., 2017, , 113-174. 2 2147 Condensation on a horizontal surface with periodic asymmetrical structures – transient film 2148 4.8 growth. International Journal of Heat and Mass Transfér, 2017, 108, 1126-1139. Simulating the Linearly Elastic Solid–Solid Interaction with a Cut Cell Method. International Journal 2149 1.36 of Computational Methods, 2017, 14, 1750072. Fuel Spray Analysis Near Nozzle Outlet of Fuel Injector During Valve Movement. Proceedings, 2017, , 345-362.

ARTICLE IF CITATIONS # Inflow-Based Gradient Finite Volume Method for a Propagation in a Normal Direction in a Polyhedron 2151 2.3 7 Mesh. Journal of Scientific Computing, 2017, 72, 442-465. Numerical study of titanium melting by high frequency inductive heating. International Journal of 4.8 48 Heat and Mass Transfer, 2017, 108, 2021-2028. Improvement of moving particle semiâ&implicit method for simulation of progressive water waves. 2153 1.6 40 International Journal for Numerical Methods in Fluids, 2017, 85, 69-89. A front tracking method for direct numerical simulation of evaporation process in a multiphase 2154 system. Journal of Computational Physics, 2017, 337, 132-153. Numerical simulation of the zebra pattern formation on a three-dimensional model. Physica A: 2155 2.6 18 Statistical Mechanics and Its Applications, 2017, 475, 106-116. Large eddy simulation of free-surface flows. Journal of Hydrodynamics, 2017, 29, 1-12. 3.2 Dynamic mesh adaptation for front evolution using discontinuous Galerkin based weighted condition 2157 3.8 7 number relaxation. Journal of Computational Physics, 2017, 335, 664-687. 3D level set methods for evolving fronts on tetrahedral meshes with adaptive mesh refinement. 2158 3.8 21 Journal of Computational Physics, 2017, 336, 492-512. Coupled level-set and volume-of-fluid method for two-phase flow calculations. Numerical Heat 2159 0.9 29 Transfer, Part B: Fundamentals, 2017, 71, 173-185. A large scale interface multi-fluid model for simulating multiphase flows. Applied Mathematical 4.2 Modelling, 2017, 44, 189-204. Finite volume formulation of the MIB method for elliptic interface problems. Journal of 2161 2.0 6 Computational and Applied Mathematics, 2017, 321, 60-77. A sharp-interface treatment technique for two-phase flows in meshless methods. Computers and 2.5 Fluids, 2017, 147, 90-101. A model and numerical method for compressible flows with capillary effects. Journal of 2163 3.8 57 Computational Physics, 2017, 334, 468-496. A sharp interface method for compressible liquidâ€"vapor flow with phase transition and surface 2164 3.8 tension. Journal of Computational Physics, 2017, 336, 347-374. Shrinking instability of toroidal droplets. Proceedings of the National Academy of Sciences of the 2165 7.1 14 United States of America, 2017, 114, 2871-2875. Simulating wildfires backwards in time from the final fire perimeter in point-functional fire models. 2166 Environmental Modelling and Software, 2017, 92, 163-168. Investigation of water-water interface in dam break flow with a wet bed. Journal of Hydrology, 2017, 2168 5.434 548, 104-120. Buoyancy-driven bubbly flows: ordered and free rise at small and intermediate volume fraction. 2169 Journal of Fluid Mechanics, 2017, 816, 94-141.

#	Article	IF	CITATIONS
2170	A Flexible Coupled Level Set and Volume of Fluid (flexCLV) method to simulate microscale two-phase flow in non-uniform and unstructured meshes. International Journal of Multiphase Flow, 2017, 91, 276-295.	3.4	50
2171	A Coupled Level Set and Volume of Fluid method for automotive exterior water management applications. International Journal of Multiphase Flow, 2017, 91, 19-38.	3.4	62
2172	Study of Water Impact and Entry of a Free Falling Wedge Using Computational Fluid Dynamics Simulations. Journal of Offshore Mechanics and Arctic Engineering, 2017, 139, .	1.2	25
2173	Stable multiphase moving particle semi-implicit method for incompressible interfacial flow. Computer Methods in Applied Mechanics and Engineering, 2017, 318, 636-666.	6.6	87
2174	Interface transport scheme of a twoâ€phase flow by the method of characteristics. International Journal for Numerical Methods in Fluids, 2017, 83, 513-543.	1.6	3
2175	Numerical study on the dissipation of water waves over a viscous fluid-mud layer. Computers and Fluids, 2017, 158, 107-119.	2.5	8
2176	Comparison of PIV Experiment and Numerical Simulation on the Velocity Distribution of Intermediate Pressure Jets with Different Nozzle Parameters. Irrigation and Drainage, 2017, 66, 510-519.	1.7	5
2177	Evaluation of bubble-induced turbulence using direct numerical simulation. International Journal of Multiphase Flow, 2017, 93, 92-107.	3.4	47
2178	Assessment of WENO-extended two-fluid modelling in compressible multiphase flows. International Journal of Computational Fluid Dynamics, 2017, 31, 188-194.	1.2	3
2179	A numerical study of parallel-plate and open-plate droplet transport in electrowetting-on-dielectrode (EWOD). Numerical Heat Transfer; Part A: Applications, 2017, 71, 805-821.	2.1	9
2180	A Unified Momentum Equation Approach for Computing Flow-Induced Stresses in Structures with Arbitrarily-Shaped Stationary Boundaries. Communications in Computational Physics, 2017, 22, 39-63.	1.7	3
2181	Influence of thermal and solutal Marangoni effects on free surface deformation in an open rectangular cavity. Journal of Thermal Science, 2017, 26, 255-262.	1.9	6
2182	A free energy-based surface tension force model for simulation of multiphase flows by level-set method. Journal of Computational Physics, 2017, 345, 404-426.	3.8	30
2183	Implicit mesh discontinuous Galerkin methods and interfacial gauge methods for high-order accurate interface dynamics, with applications to surface tension dynamics, rigid body fluida€"structure interaction, and free surface flow: Part I. Journal of Computational Physics, 2017, 344, 647-682.	3.8	48
2184	Refined moment-of-fluid method. Numerical Heat Transfer, Part B: Fundamentals, 2017, 71, 574-591.	0.9	1
2185	Sharp interface models for two-phase flows: Insights towards new approaches. Computer Methods in Applied Mechanics and Engineering, 2017, 322, 238-261.	6.6	10
2186	Implementation of the Ghost Fluid Method for free surface flows in polyhedral Finite Volume framework. Computers and Fluids, 2017, 153, 1-19.	2.5	72
2187	Direct numerical simulation of incompressible multiphase flow with phase change. Journal of Computational Physics, 2017, 344, 381-418.	3.8	31

#	Article	IF	CITATIONS
2188	A volume-of-fluid (VOF) interface-sharpening method for two-phase incompressible flows. Computers and Fluids, 2017, 152, 104-119.	2.5	47
2189	A compressive interface-capturing scheme for computation of compressible multi-fluid flows. Computers and Fluids, 2017, 152, 164-181.	2.5	24
2190	Simultaneous left and right ventricle segmentation using topology preserving level sets. Biomedical Signal Processing and Control, 2017, 33, 88-95.	5.7	26
2191	Modelling of liquid sloshing using CLSVOF method and very large eddy simulation. Ocean Engineering, 2017, 129, 160-176.	4.3	25
2192	A multiple level-set method for 3D inversion of magnetic data. Geophysics, 2017, 82, J61-J81.	2.6	24
2193	Direct numerical simulation of nucleate pool boiling at large microscopic contact angle and moderate Jakob number. International Journal of Heat and Mass Transfer, 2017, 113, 662-682.	4.8	41
2194	Transport between Two Fluids across Their Mutual Flow Interface: The Streakline Approach. SIAM Journal on Applied Dynamical Systems, 2017, 16, 1015-1044.	1.6	6
2195	Numerical investigations of the XFEM for solving two-phase incompressible flows. International Journal of Computational Fluid Dynamics, 2017, 31, 135-155.	1.2	4
2196	Classification of small structures in piecewise-constant Mumford–Shah model. Neurocomputing, 2017, 269, 132-141.	5.9	0
2197	An efficient level set remedy approach for simulations of two-phase flow based on sigmoid function. Chemical Engineering Science, 2017, 172, 335-352.	3.8	21
2198	An immersed boundary method for fluid–structure interaction with compressible multiphase flows. Journal of Computational Physics, 2017, 346, 131-151.	3.8	76
2199	Turbulent water flow in a channel at <b>Re Ï,,</b> = 400 laden with 0.25 mm diameter air-bubbles clustered near the wall. Physics of Fluids, 2017, 29, .	4.0	9
2200	Experimental and numerical investigation of sloshing under roll excitation at shallow liquid depths. Ocean Engineering, 2017, 138, 73-85.	4.3	36
2201	A Robust Active Contour Segmentation Based on Fractional-Order Differentiation and Fuzzy Energy. IEEE Access, 2017, 5, 7753-7761.	4.2	30
2202	CFD Analysis of Taylor Bubble in a Co-Flow Microchannel with Newtonian and Non-Newtonian Liquid. Industrial & Engineering Chemistry Research, 2017, 56, 7401-7412.	3.7	43
2203	Evaluation of two-phase flow solvers using Level Set and Volume of Fluid methods. Journal of Computational Physics, 2017, 345, 665-686.	3.8	46
2204	An arbitrary Lagrangianâ€Eulerian framework with exact mass conservation for the numerical simulation of 2D rising bubble problem. International Journal for Numerical Methods in Engineering, 2017, 112, 2110-2134.	2.8	5
2205	Lattice Boltzmann simulation of pressure-driven two-phase flows in capillary tube and porous medium. Computers and Fluids, 2017, 155, 134-145.	2.5	26

#	Article	IF	CITATIONS
2206	Geometric discretization of the multidimensional Dirac delta distribution – Application to the Poisson equation with singular source terms. Journal of Computational Physics, 2017, 346, 71-90.	3.8	9
2207	Mass conservation and reduction of parasitic interfacial waves in level-set methods for the numerical simulation of two-phase flows: A comparative study. International Journal of Multiphase Flow, 2017, 95, 235-256.	3.4	26
2208	Efficient direct re-initialization approach of a level set method for unstructured meshes. Computers and Fluids, 2017, 154, 167-183.	2.5	13
2209	An conservative anti-diffusion technique for the level set method. Journal of Computational and Applied Mathematics, 2017, 321, 448-468.	2.0	17
2210	On the dynamics of instabilities in two-fluid models for bubbly flows. Chemical Engineering Science, 2017, 170, 184-194.	3.8	10
2211	A coupled Volume of Fluid and Immersed Boundary Method for simulating 3D multiphase flows with contact line dynamics in complex geometries. Chemical Engineering Science, 2017, 166, 28-41.	3.8	49
2212	Three-dimensional numerical simulation of rising bubbles in the presence of cylindrical obstacles, using lattice Boltzmann method. Journal of Molecular Liquids, 2017, 236, 151-161.	4.9	28
2213	Wave transformation over submerged breakwaters by the constrained interpolation profile method. Ocean Engineering, 2017, 136, 294-303.	4.3	17
2214	Effects of Opening and Closing Fuel-Injector Valve on Air/Fuel Mixture. Journal of Engineering for Gas Turbines and Power, 2017, 139, .	1.1	4
2215	Novel basin modelling concept for simulating deformation from mechanical compaction using level sets. Computational Geosciences, 2017, 21, 835-848.	2.4	2
2216	A parallel volume of fluid-Lagrangian Parcel Tracking coupling procedure for diesel spray modelling. Computers and Fluids, 2017, 150, 46-65.	2.5	18
2217	The evaluation of the diffuse interface method for phase change simulations using OpenFOAM. Heat Transfer - Asian Research, 2017, 46, 1173-1203.	2.8	28
2218	Numerical simulation of sediment suspension and transport under plunging breaking waves. Computers and Fluids, 2017, 158, 57-71.	2.5	25
2219	Numerical Investigation of Focused Waves and Their Interaction With a Vertical Cylinder Using REEF3D. Journal of Offshore Mechanics and Arctic Engineering, 2017, 139, .	1.2	36
2220	A multiphase MPS solver for modeling multi-fluid interaction with free surface and its application in oil spill. Computer Methods in Applied Mechanics and Engineering, 2017, 320, 133-161.	6.6	71
2221	A review of dendritic growth during solidification: Mathematical modeling and numerical simulations. Renewable and Sustainable Energy Reviews, 2017, 74, 1064-1079.	16.4	57
2222	A Simple Implementation of the Semi-Lagrangian Level-Set Method. Advances in Applied Mathematics and Mechanics, 2017, 9, 104-124.	1.2	2
2223	A Developed Numerical Method for Turbulent Unsteady Fluid Flow in Two-Phase Systems with Moving Interface. International Journal of Computational Methods, 2017, 14, 1750063.	1.3	1

#	Article	IF	CITATIONS
2224	Multiscale level-set method for accurate modeling of immiscible two-phase flow with deposited thin films on solid surfaces. Journal of Computational Physics, 2017, 333, 297-320.	3.8	31
2225	Computer vision based train rolling stock examination. Optik, 2017, 132, 427-444.	2.9	12
2226	The distortion of the level set gradient under advection. Journal of Computational Physics, 2017, 334, 81-101.	3.8	14
2227	Algebraic coupled level set-volume of fluid method for surface tension dominant two-phase flows. International Journal of Multiphase Flow, 2017, 90, 13-28.	3.4	33
2228	A comprehensive non-invasive framework for diagnosing prostate cancer. Computers in Biology and Medicine, 2017, 81, 148-158.	7.0	37
2229	A nonlinear computational modeling of wave energy converters: A tethered point absorber and a bottom-hinged flap device. Renewable Energy, 2017, 103, 774-785.	8.9	18
2230	Near-wall turbulence-bubbles interactions in a channel flow at Re Ï,, = 400: A DNS investigation. Nuclear Engineering and Design, 2017, 321, 180-189.	1.7	0
2231	Artificial viscosity model to mitigate numerical artefacts at fluid interfaces with surface tension. Computers and Fluids, 2017, 143, 59-72.	2.5	26
2232	Conjugate heat transfer in stratified two-fluid flows with a growing deposit layer. Applied Thermal Engineering, 2017, 113, 215-228.	6.0	6
2233	Smoothed profile-lattice Boltzmann method for non-penetration and wetting boundary conditions in two and three dimensions. Computers and Fluids, 2017, 159, 64-80.	2.5	6
2234	Development of a coupled level set and immersed boundary method for predicting dam break flows. Computer Physics Communications, 2017, 221, 1-18.	7.5	8
2235	A three-phases model for the simulation of landslide-generated waves using the improved conservative level set method. Computers and Fluids, 2017, 159, 243-253.	2.5	25
2236	Extreme Wave Generation, Breaking and Impact Simulations With REEF3D. , 2017, , .		3
2237	Experimental and numerical investigation of sloshing using different free surface capturing methods. Applied Ocean Research, 2017, 68, 307-324.	4.1	28
2238	Optimal Design of Nonlinear Multimaterial Structures for Crashworthiness Using Cluster Analysis. Journal of Mechanical Design, Transactions of the ASME, 2017, 139, .	2.9	12
2239	Pore-Scale Simulation of Interphase Multicomponent Mass Transfer for Subsurface Flow. Transport in Porous Media, 2017, 120, 287-308.	2.6	31
2240	Pore-scale modeling of wettability effects on CO2–brine displacement during geological storage. Advances in Water Resources, 2017, 109, 181-195.	3.8	52
2241	Numerical modeling of three-phase flow with phase change using the level-set method. International Journal of Heat and Mass Transfer, 2017, 115, 730-740.	4.8	17

#	Article	IF	Citations
2242	CFD analysis of microfluidic droplet formation in non–Newtonian liquid. Chemical Engineering Journal, 2017, 330, 245-261.	12.7	74
2243	DNS of the wall effect on the motion of bubble swarms. Procedia Computer Science, 2017, 108, 2008-2017.	2.0	21
2244	Direct numerical simulations of two-phase flow in an inclined pipe. Journal of Fluid Mechanics, 2017, 825, 189-207.	3.4	18
2245	Coalescence Prevention Algorithm for Level Set Method. Journal of Fluids Engineering, Transactions of the ASME, 2017, 139, .	1.5	10
2246	COMPARISON of SUBCRITICAL INTERFACE APPROXIMATIONS at HIGH TEMPERATURE and PRESSURE CONDITIONS. , 2017, , .		0
2247	Twin-Screw Extrusion and Applications. , 2017, , 433-519.		3
2248	Numerical simulation of gas jet in liquid crossflow with high mean jet to crossflow velocity ratio. Chemical Engineering Science, 2017, 172, 667-676.	3.8	14
2249	An Extended Discontinuous Galerkin Framework for Multiphase Flows. Advances in Mathematical Fluid Mechanics, 2017, , 65-91.	0.1	0
2250	Numerical simulation of artificial microswimmers driven by Marangoni flow. Journal of Computational Physics, 2017, 347, 467-489.	3.8	15
2251	Buoyancy-Thermocapillary Convection of Volatile Fluids in Confined and Sealed Geometries. Springer Theses, 2017, , .	0.1	7
2252	A level-set method for large-scale simulations of three-dimensional flows with moving contact lines. Journal of Computational Physics, 2017, 348, 151-170.	3.8	12
2253	A numerical simulation method for molten material behavior in nuclear reactors. Nuclear Engineering and Design, 2017, 322, 301-312.	1.7	21
2254	Doubly excited pulse waves on thin liquid films flowing down an inclined plane: An experimental and numerical study. Physical Review E, 2017, 96, 013118.	2.1	11
2255	Updated VOFIRE algorithm for fast fluid–structure transient dynamics with multi-component stiffened gas flows implementing anti-dissipation on unstructured grids. Journal of Fluids and Structures, 2017, 74, 64-89.	3.4	7
2256	Measurements and simulation of liquid films during drainage displacements and snap-off in constricted capillary tubes. Journal of Colloid and Interface Science, 2017, 507, 279-289.	9.4	55
2257	Implicit Function and Level Set Methods for Computation of Moving Elements During Microwave Heating. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 4773-4784.	4.6	23
2258	Numerical investigation of the bubble growth in horizontal rectangular microchannels. Numerical Heat Transfer; Part A: Applications, 2017, 71, 1175-1188.	2.1	15
2259	Bubble tracking analysis of PWR two-phase flow simulations based on the level set method. Nuclear Engineering and Design, 2017, 323, 68-77.	1.7	22

#	Article	IF	CITATIONS
2260	On a relation between the volume of fluid, level-set and phase field interface models. International Journal of Multiphase Flow, 2017, 97, 60-77.	3.4	14
2261	A Weak Formulation for Solving the Elliptic Interface Problems with Imperfect Contact. Advances in Applied Mathematics and Mechanics, 2017, 9, 1189-1205.	1.2	4
2262	Performance of active contour models in train rolling stock part segmentation on high-speed video data. Cogent Engineering, 2017, 4, 1279367.	2.2	9
2263	Flower segmentation with level sets evolution controlled by colour, texture and shape features. Cogent Engineering, 2017, 4, 1323572.	2.2	12
2264	Single-step reinitialization and extending algorithms for level-set based multi-phase flow simulations. Computer Physics Communications, 2017, 221, 63-80.	7.5	12
2265	An Adaptive Semi-Lagrangian Level-Set Method for Convection-Diffusion Equations on Evolving Interfaces. Advances in Applied Mathematics and Mechanics, 2017, 9, 1364-1382.	1.2	4
2266	An efficient multi-dimensional implementation of VSIAM3 and its applications to free surface flows. Physics of Fluids, 2017, 29, .	4.0	16
2267	Marker Re-Distancing (MRD) Algorithm for High-Fidelity Interface Tracking on Arbitrary Meshes. , 2017, , .		0
2268	Two-fluid flow under the constraint of external magnetic field. International Journal of Numerical Methods for Heat and Fluid Flow, 2017, 27, 2565-2581.	2.8	4
2269	Numerical simulation of turbulent channel flow over a viscous hyper-elastic wall. Journal of Fluid Mechanics, 2017, 830, 708-735.	3.4	71
2270	Numerical investigation of rising bubbles bursting at a free surface through a multiphase SPH model. Meccanica, 2017, 52, 2665-2684.	2.0	50
2271	A Sharp Interface Method for Compressible Multi-Phase Flows Based on the Cut Cell and Ghost Fluid Methods. Advances in Applied Mathematics and Mechanics, 2017, 9, 1052-1075.	1.2	18
2272	Hydrodynamic effects on the surface morphology evolution of aluminum alloy under intense pulsed ion beam irradiation. Nuclear Instruments & Methods in Physics Research B, 2017, 409, 158-162.	1.4	3
2273	Turbulent Flow Simulations of the NASA Common Research Model using the Immersed Boundary Method with a Wall Function. , 2017, , .		0
2274	Level-set simulations of soluble surfactant driven flows. Journal of Computational Physics, 2017, 348, 271-297.	3.8	29
2275	A CFD model for the coupling of multiphase, multicomponent and mass transfer physics for micro-scale simulations. International Journal of Heat and Mass Transfer, 2017, 113, 922-934.	4.8	13
2276	Non-conservative pressure-based compressible formulation for multiphase flows with heat and mass transfer. International Journal of Multiphase Flow, 2017, 96, 24-33.	3.4	8
2277	Influence of Ambient Airflow on Free Surface Deformation and Flow Pattern Inside Liquid Bridge With Large Prandtl Number Fluid (Pr > 100) Under Gravity. Journal of Heat Transfer, 2017, 139, .	2.1	7

#	Article	IF	CITATIONS
2278	Optimal control for reinitialization in finite element level set methods. International Journal for Numerical Methods in Fluids, 2017, 84, 292-305.	1.6	10
2279	Revisiting the redistancing problem using the Hopf–Lax formula. Journal of Computational Physics, 2017, 330, 268-281.	3.8	13
2280	MLPG_R method for modelling 2D flows of two immiscible fluids. International Journal for Numerical Methods in Fluids, 2017, 84, 385-408.	1.6	5
2281	Three-Dimensional Surface Evolution and Mesh Deformation for Aircraft Icing Applications. Journal of Aircraft, 2017, 54, 1047-1063.	2.4	14
2282	On representing complex configurations as asymptotic geometry. Applied Mathematical Modelling, 2017, 43, 33-44.	4.2	0
2283	Numerical simulation of subcooled flow boiling under conjugate heat transfer and microgravity condition in a vertical mini channel. Applied Thermal Engineering, 2017, 113, 170-185.	6.0	28
2284	Direct numerical simulation of the impact of a droplet onto a hot surface above the Leidenfrost temperature. International Journal of Heat and Mass Transfer, 2017, 104, 1090-1109.	4.8	63
2285	A combined level set/ghost cell immersed boundary representation for floating body simulations. International Journal for Numerical Methods in Fluids, 2017, 83, 905-916.	1.6	49
2286	Nucleate pool boiling simulations using the interface tracking method: Boiling regime from discrete bubble to vapor mushroom region. International Journal of Heat and Mass Transfer, 2017, 105, 505-524.	4.8	84
2287	A Locally Gradient-Preserving Reinitialization for Level Set Functions. Journal of Scientific Computing, 2017, 71, 274-302.	2.3	1
2288	A multiâ€level adaptive mesh refinement method for level set simulations of multiphase flow on unstructured meshes. International Journal for Numerical Methods in Engineering, 2017, 110, 947-971.	2.8	7
2289	A combination of parabolized Navier–Stokes equations and level-set method for stratified two-phase internal flow. International Journal of Multiphase Flow, 2017, 88, 50-62.	3.4	8
2290	Local Transverse-Slice-Based Level-Set Method for Segmentation of 3-D High-Frequency Ultrasonic Backscatter From Dissected Human Lymph Nodes. IEEE Transactions on Biomedical Engineering, 2017, 64, 1579-1591.	4.2	11
2291	Robust noise region-based active contour model via local similarity factor for image segmentation. Pattern Recognition, 2017, 61, 104-119.	8.1	193
2292	Experimental and numerical investigations of a two-phase wavy flow. Nuclear Engineering and Design, 2017, 321, 199-218.	1.7	4
2293	A Second-Order IMEX Method for Multi-Phase Flow Problems. International Journal of Computational Methods, 2017, 14, 1750056.	1.3	3
2294	A broadly-applicable unified closure relation for Taylor bubble rise velocity in pipes with stagnant liquid. International Journal of Multiphase Flow, 2017, 89, 345-358.	3.4	34
2295	Interfaceâ€preserving levelâ€set reinitialization for DGâ€FEM. International Journal for Numerical Methods in Fluids, 2017, 84, 183-198.	1.6	11

#	Article	IF	CITATIONS
2296	Modelling of a Single Bubble Rising in a Liquid Column. Lecture Notes in Mechanical Engineering, 2017, , 1059-1068.	0.4	3
2297	Highly accurate two-phase species transfer based on ALE Interface Tracking. International Journal of Heat and Mass Transfer, 2017, 104, 759-773.	4.8	23
2298	A highly efficient 3D level-set grain growth algorithm tailored for ccNUMA architecture. Modelling and Simulation in Materials Science and Engineering, 2017, 25, 084002.	2.0	11
2299	Influence of capillary end effects on steady-state relative permeability estimates from direct pore-scale simulations. Physics of Fluids, 2017, 29, .	4.0	17
2300	Fuel-Spray Simulation With Valve Motion Perpendicular to Closing Direction. , 2017, , .		1
2301	Simulation of Coarse Droplet and Liquid Column Formed Around Nozzle Outlets due to Valve Wobble of a GDI Injector. , 2017, , .		0
2302	An adaptive mesh refinement-multiphase lattice Boltzmann flux solver for simulation of complex binary fluid flows. Physics of Fluids, 2017, 29, .	4.0	28
2303	A framework on automated ventricular analysis of CMR images. , 2017, , .		2
2304	Simulation of Single Bubble Growth in a Planar Microchannel With Temperature Recovery Model. , 2017, , .		0
2305	Development of numerical simulation method for melt relocation behavior in nuclear reactors: validation and applicability for actual core structures. Mechanical Engineering Journal, 2017, 4, 16-00567-16-00567.	0.4	6
2306	Analysis of Bubble Coalescence Dynamics and Postrupture Oscillation of Capillary-Held Bubbles in Water. Industrial & Engineering Chemistry Research, 2017, 56, 14781-14792.	3.7	11
2308	Fluidic microoptics with adjustable focusing and beam steering for single cell optogenetics. Optics Express, 2017, 25, 16825.	3.4	4
2309	Computational modeling of bubble coalescence in a high-pressure steam-water flow. Nuclear Engineering and Design, 2017, 319, 28-39.	1.7	4
2310	Simulation of Underwater Explosions Initiated by High-Pressure Gas Bubbles of Various Initial Shapes. Applied Sciences (Switzerland), 2017, 7, 880.	2.5	12
2311	CFD Modeling of Chamber Filling in a Micro-Biosensor for Protein Detection. Biosensors, 2017, 7, 45.	4.7	6
2312	Modeling of Two-Phase Flow in Rough-Walled Fracture Using Level Set Method. Geofluids, 2017, 2017, 1-11.	0.7	11
2313	Emerging Developments in Interfaces and Free Boundaries. Oberwolfach Reports, 2017, 14, 267-338.	0.0	0
2314	Dispersed Two-Phase Flow Modelling for Nuclear Safety in the NEPTUNE_CFD Code. Science and Technology of Nuclear Installations, 2017, 2017, 1-41.	0.8	2

#	Article	IF	CITATIONS
2315	Numerical Study on Evaporation of Spherical Droplets Impinging on the Wall Using Volume of Fluid (VOF) Model. , 0, , .		6
2316	Computational wave dynamics for innovative design of coastal structures. Proceedings of the Japan Academy Series B: Physical and Biological Sciences, 2017, 93, 525-546.	3.8	19
2317	Numerical Study on the Generation and Transport of Spume Droplets in Wind over Breaking Waves. Atmosphere, 2017, 8, 248.	2.3	16
2318	Coupled Level-Set Volume of Fluid Simulations of Water Flowing Over a Simplified Drainage Channel With and Without Air Coflow. SAE International Journal of Passenger Cars - Mechanical Systems, 0, 10, 369-377.	0.4	8
2319	CFD Modeling of Varied Flow Conditions Over an Ogee-Weir. Periodica Polytechnica: Civil Engineering, 0, , .	0.6	5
2321	Semi-implicit second order schemes for numerical solution of level set advection equation on Cartesian grids. Applied Mathematics and Computation, 2018, 329, 129-142.	2.2	4
2322	Suspensions of deformable particles in a Couette flow. Journal of Non-Newtonian Fluid Mechanics, 2018, 262, 3-11.	2.4	33
2323	An implicit boundary integral method for computing electric potential of macromolecules in solvent. Journal of Computational Physics, 2018, 359, 199-215.	3.8	15
2324	An adaptive numerical scheme for solving incompressible 2â€phase and freeâ€surface flows. International Journal for Numerical Methods in Fluids, 2018, 87, 543-582.	1.6	2
2325	On the re-initialization of fluid interfaces in diffuse interface method. Computers and Fluids, 2018, 166, 209-217.	2.5	11
2326	A multiphase level-set approach for all-Mach numbers. Computers and Fluids, 2018, 167, 1-16.	2.5	8
2327	CFD Modelling of Alumina Feeding. Minerals, Metals and Materials Series, 2018, , 557-564.	0.4	8
2328	Formation characteristics of Taylor bubbles in power-law liquids flowing through a microfluidic co-flow device. Journal of Industrial and Engineering Chemistry, 2018, 65, 82-94.	5.8	25
2329	FGA-MMF method for the simulation of two-phase flows. Engineering Computations, 2018, 35, 1161-1182.	1.4	0
2330	Dynamics of tongue shaped cavity generated during the impact of high-speed microdrops. Physics of Fluids, 2018, 30, .	4.0	10
2331	An explicit algorithm for imbedding solid boundaries in Cartesian grids for the reactive Euler equations. Combustion Theory and Modelling, 2018, 22, 714-743.	1.9	3
2332	Turbulent Flow Simulations of the Common Research Model Using Immersed Boundary Method. AIAA Journal, 2018, 56, 2271-2282.	2.6	29
2333	Thermal simulation in multiphase incompressible flows using coupled meshfree and particle level set methods. Computer Methods in Applied Mechanics and Engineering, 2018, 336, 667-694.	6.6	24

#	Article	IF	CITATIONS
2334	Development of a finite element/discontinuous Galerkin/level set approach for the simulation of incompressible two phase flow. Advances in Engineering Software, 2018, 118, 45-59.	3.8	5
2335	Direct numerical simulation of nucleate boiling in micro-layer regime. International Journal of Heat and Mass Transfer, 2018, 123, 1128-1137.	4.8	73
2336	Topology optimization of thermal fluid flows with an adjoint Lattice Boltzmann Method. Journal of Computational Physics, 2018, 365, 376-404.	3.8	41
2337	An extended algebraic variational multiscale-multigrid-multifractal method (XAVM4) for large-eddy simulation of turbulent two-phase flow. Journal of Computational Physics, 2018, 359, 1-19.	3.8	7
2338	Second order finite-difference ghost-point multigrid methods for elliptic problems with discontinuous coefficients on an arbitrary interface. Journal of Computational Physics, 2018, 361, 299-330.	3.8	34
2339	The island dynamics model on parallel quadtree grids. Journal of Computational Physics, 2018, 361, 150-166.	3.8	11
2340	The effective diffusivity of ordered and freely evolving bubbly suspensions. Journal of Fluid Mechanics, 2018, 840, 215-237.	3.4	7
2342	A volume-of-fluid ghost-cell immersed boundary method for multiphase flows with contact line dynamics. Computers and Fluids, 2018, 165, 43-53.	2.5	16
2343	Level-set simulations of a 2D topological rearrangement in a bubble assembly: effects of surfactant properties. Journal of Fluid Mechanics, 2018, 838, 222-247.	3.4	9
2344	Simulation of micro-flow dynamics at low capillary numbers using adaptive interface compression. Computers and Fluids, 2018, 165, 13-32.	2.5	22
2345	Enhancement of a 2D front-tracking algorithm with a non-uniform distribution of Lagrangian markers. Journal of Computational Physics, 2018, 358, 173-200.	3.8	4
2346	A coupled level set and volume of fluid method on unstructured grids for the direct numerical simulations of two-phase flows including phase change. International Journal of Heat and Mass Transfer, 2018, 122, 182-203.	4.8	54
2347	An ISPH scheme for numerical simulation of multiphase flows with complex interfaces and high density ratios. Computers and Mathematics With Applications, 2018, 75, 2658-2677.	2.7	41
2348	Numerical modelling of 3D sloshing experiments in rectangular tanks. Applied Mathematical Modelling, 2018, 59, 357-378.	4.2	41
2349	Survey on segmentation and classification approaches of optic cup and optic disc for diagnosis of glaucoma. Biomedical Signal Processing and Control, 2018, 42, 162-189.	5.7	96
2350	Modeling and optimization of porous silica ingot melting during quartz glass synthesis. Applied Thermal Engineering, 2018, 131, 786-792.	6.0	10
2351	Numerical comparison of bubbling in a waste glass melter. Annals of Nuclear Energy, 2018, 113, 380-392.	1.8	22
2352	High-resolution method for evolving complex interface networks. Computer Physics Communications, 2018, 225, 10-27.	7.5	4

ARTICLE IF CITATIONS Smoothed Particle Hydrodynamics: A consistent model for interfacial multiphase fluid flow 2353 3.8 56 simulations. Journal of Computational Physics, 2018, 358, 53-87. Rounding, filleting and smoothing of implicit surfaces. Computer-Aided Design and Applications, 2018, 2354 0.6 15, 399-408. One-fluid formulation for fluidâ€"structure interaction with free surface. Computer Methods in 2355 6.6 14 Applied Mechanics and Engineering, 2018, 332, 102-135. Bubble flow simulations using the intersection marker (ISM) interface tracking method. International 2356 Journal of Numerical Methods for Heat and Fluid Flow, 2018, 28, 118-137. Effect of wettability on two-phase quasi-static displacement: Validation of two pore scale modeling 2357 3.3 18 approaches. Journal of Contaminant Hydrology, 2018, 212, 115-133. Modeling of Nanofluid-Fluid Two-Phase Flow and Heat Transfer. International Journal of 2358 1.3 Computational Methods, 2018, 15, 1850072. Computational Fluid Dynamics for Engineers and Scientists., 2018,,. 2360 10 Experimental and numerical investigation on slug initiation and initial development behavior in hilly-terrain pipeline at a low superficial liquid velocity. International Journal of Multiphase Flow, 3.4 26 2018, 101, 85-96. A generic algorithm for three-dimensional multiphase flows on unstructured meshes. International 2362 3.4 19 Journal of Multiphase Flow, 2018, 106, 228-242. Identifying arbitrary parameter zonation using multiple level set functions. Journal of Computational 3.8 Physics, 2018, 364, 257-273. An Accurate Fireâ€Spread Algorithm in the Weather Research and Forecasting Model Using the Levelâ€Set 2364 3.8 32 Method. Journal of Advances in Modeling Earth Systems, 2018, 10, 908-926. A methodology to reduce the computational cost of transient multiphysics simulations for waste 2365 3.8 vitrification. Čómputers and Chemical Engineering, 2018, 115, 64-80. Free surface flow over square bars at intermediate relative submergence. Journal of Hydraulic 2366 1.7 25 Research/De Recherches Hydrauliques, 2018, 56, 825-843. A direct IIM approach for two-phase Stokes equations with discontinuous viscosity on staggered grids. Computers and Fluids, 2018, 172, 549-563. 2.5 Direct numerical simulation of reactor two-phase flows enabled by high-performance computing. 2368 1.7 36 Nuclear Engineering and Design, 2018, 330, 409-419. High fidelity discontinuity-resolving reconstruction for compressible multiphase flows with moving 2369 interfaces. Journal of Computational Physics, 2018, 371, 945-966. A simple mass-conserved level set method for simulation of multiphase flows. Physics of Fluids, 2018, 2370 4.0 24 30, . A physical insight into electrospray process in cone-jet mode: Role of operating parameters. 2371 2.4 International Journal of Heat and Fluid Flow, 2018, 70, 315-335.

#	Article	IF	CITATIONS
2372	Entropic multiple-relaxation-time multirange pseudopotential lattice Boltzmann model for two-phase flow. Physics of Fluids, 2018, 30, .	4.0	42
2373	A fully coupled finite element formulation for liquid–solid–gas thermo-fluid flow with melting and solidification. Computer Methods in Applied Mechanics and Engineering, 2018, 336, 444-470.	6.6	49
2374	Parallel redistancing using the Hopf–Lax formula. Journal of Computational Physics, 2018, 365, 7-17.	3.8	7
2375	A Nonparametric Statistical Snake Model Using the Gradient Flow of Minimum Probability Density Integration. Journal of Mathematical Imaging and Vision, 2018, 60, 1150-1166.	1.3	0
2376	Overview of SPH-ALE applications for hydraulic turbines in ANDRITZ Hydro. Journal of Hydrodynamics, 2018, 30, 114-121.	3.2	14
2377	Approximate Riemann solver for compressible liquid vapor flow with phase transition and surface tension. Computers and Fluids, 2018, 169, 169-185.	2.5	26
2378	A Sharp-Interface Immersed Boundary Method for Simulating Incompressible Flows with Arbitrarily Deforming Smooth Boundaries. International Journal of Computational Methods, 2018, 15, 1750080.	1.3	27
2379	An improved <scp>SPH</scp> model for multiphase flows with large density ratios. International Journal for Numerical Methods in Fluids, 2018, 86, 167-184.	1.6	14
2380	Unified oneâ€fluid formulation for incompressible flexible solids and multiphase flows: Application to hydrodynamics using the immersed structural potential method (ISPM). International Journal for Numerical Methods in Fluids, 2018, 86, 78-106.	1.6	12
2381	Numerical Investigation on the Water Entry of Convex Objects Using a Multiphase Smoothed Particle Hydrodynamics Model. International Journal of Computational Methods, 2018, 15, 1850008.	1.3	9
2382	Interfaceâ€fitted moving mesh method for axisymmetric twoâ€phase flow in microchannels. International Journal for Numerical Methods in Fluids, 2018, 86, 201-217.	1.6	9
2383	A level-set method for two-phase flows with soluble surfactant. Journal of Computational Physics, 2018, 353, 336-355.	3.8	29
2384	High-order time-marching reinitialization for regional level-set functions. Journal of Computational Physics, 2018, 354, 311-319.	3.8	7
2385	A level set approach for shock-induced \$\$upalpha \$\$ α – \$\$upgamma \$\$ γ phase transition of RDX. Computational Mechanics, 2018, 61, 19-32.	4.0	7
2386	Large Eddy Simulation of liquid sheet breakup using a two-phase lattice Boltzmann method. Computers and Fluids, 2018, 160, 93-107.	2.5	17
2387	Effects of surfactant on lift coefficients of bubbles in linear shear flows. International Journal of Multiphase Flow, 2018, 99, 86-93.	3.4	19
2388	A review of level-set methods and some recent applications. Journal of Computational Physics, 2018, 353, 82-109.	3.8	262
2389	DNS of the Rising Motion of a Swarm of Bubbles in a Confined Vertical Channel. ERCOFTAC Series, 2018, , 125-131.	0.1	2

$\sim$			<b>_</b>		
CII	ΓΑΤΙ	ON	RE	PO	RT

#	Article	IF	CITATIONS
2390	Validation of a numerical method for interface-resolving simulation of multicomponent gas-liquid mass transfer and evaluation of multicomponent diffusion models. Heat and Mass Transfer, 2018, 54, 697-713.	2.1	5
2391	DEM-SPH study of molten slag trickle flow in coke bed. Chemical Engineering Science, 2018, 175, 25-39.	3.8	30
2392	Shape optimization using the cut finite element method. Computer Methods in Applied Mechanics and Engineering, 2018, 328, 242-261.	6.6	66
2393	Simulation of Taylor flow evaporation for bubble-pump applications. International Journal of Heat and Mass Transfer, 2018, 116, 231-247.	4.8	9
2394	3D simulation of polyurethane foam injection and reacting mold flow in a complex geometry. Heat and Mass Transfer, 2018, 54, 1281-1288.	2.1	3
2395	Computing interface curvature from volume fractions: A hybrid approach. Computers and Fluids, 2018, 161, 74-88.	2.5	10
2396	Pore-scale modelling of Ostwald ripening. Journal of Fluid Mechanics, 2018, 835, 363-392.	3.4	43
2397	Integrated experimental and computational approach to laser machining of structural bone. Medical Engineering and Physics, 2018, 51, 56-66.	1.7	8
2398	Corrective interface tracking approach to simulate finite-size bubbly flows. Chemical Engineering Science, 2018, 178, 61-69.	3.8	3
2399	Investigation of droplet behaviors for spray cooling using level set method. Annals of Nuclear Energy, 2018, 113, 162-170.	1.8	15
2400	An efficient MILU preconditioning for solving the 2D Poisson equation with Neumann boundary condition. Journal of Computational Physics, 2018, 356, 115-126.	3.8	2
2401	A dual grid, dual level set based cut cell immersed boundary approach for simulation of multi-phase flow. Chemical Engineering Science, 2018, 177, 180-194.	3.8	8
2402	A comparative study of the single-mode Richtmyer–Meshkov instability. Shock Waves, 2018, 28, 795-813.	1.9	8
2403	Accurate prediction of complex free surface flow around a high speed craft using a single-phase level set method. Computational Mechanics, 2018, 62, 421-437.	4.0	32
2404	An Improved Adaptive Level Set Method for Image Segmentation. International Journal of Pattern Recognition and Artificial Intelligence, 2018, 32, 1854013.	1.2	8
2405	On a free-surface problem with moving contact line: From variational principles to stable numerical approximations. Journal of Computational Physics, 2018, 355, 253-284.	3.8	1
2406	A Sixth-Order Weighted Essentially Non-oscillatory Schemes Based on Exponential Polynomials for Hamilton–Jacobi Equations. Journal of Scientific Computing, 2018, 75, 1675-1700.	2.3	11
2407	A simple weak formulation for solving two-dimensional diffusion equation with local reaction on the interface. Computers and Mathematics With Applications, 2018, 75, 1378-1389.	2.7	3

#	Article	IF	CITATIONS
2408	On comparison of the sharp-interface and diffuse-interface level set methods for 2D capillary or/and gravity induced flows. Chemical Engineering Science, 2018, 176, 77-95.	3.8	12
2409	An efficient mass-preserving interface-correction level set/ghost fluid method for droplet suspensions under depletion forces. Journal of Computational Physics, 2018, 353, 435-459.	3.8	34
2410	A unified momentum equation approach for computing thermal residual stresses during melting and solidification. Computer Physics Communications, 2018, 224, 230-244.	7.5	3
2411	Numerical Models of Surface Tension. Annual Review of Fluid Mechanics, 2018, 50, 49-75.	25.0	325
2412	Numerical investigation of slug characteristics in a horizontal air/water and air/oil pipe flow. Progress in Computational Fluid Dynamics, 2018, 18, 241.	0.2	3
2413	Numerical Simulations of Liquid Drop Dynamics in Porous Medium Using Adaptive Mesh. , 2018, , .		0
2414	Coupled level-set and immersed-boundary method for simulation of filling in a complex geometry based mold. Numerical Heat Transfer, Part B: Fundamentals, 2018, 74, 861-882.	0.9	4
2415	On Solving the Poisson Equation with Discontinuities on Irregular Interfaces: GFM and VIM. International Journal of Differential Equations, 2018, 2018, 1-8.	0.8	1
2416	Robust Three-Dimensional Level-Set Method for Evolving Fronts on Complex Unstructured Meshes. Mathematical Problems in Engineering, 2018, 2018, 1-15.	1.1	3
2417	Pressure generated at the instant of impact between a liquid droplet and solid surface. Royal Society Open Science, 2018, 5, 181101.	2.4	26
2418	High-precision Joint 2D Traveltime Calculation for Seismic Processing. Earth Sciences Research Journal, 2018, 22, 327-334.	0.6	1
2419	Review of Fluid Structure Interaction Methods Application to Floating Wave Energy Converter. International Journal of Fluid Machinery and Systems, 2018, 11, 63-76.	0.2	6
2420	A space-time discontinuous Galerkin spectral element method for the Stefan problem. Discrete and Continuous Dynamical Systems - Series B, 2018, 23, 3595-3622.	0.9	4
2421	Development of a mass-preserving level set redistancing algorithm for simulation of rising bubble. Numerical Heat Transfer, Part B: Fundamentals, 2018, 74, 699-727.	0.9	5
2422	Development of a New Analysis Method for Wastewater Purification Circulation Equipment. , 2018, , .		0
2423	ATOMIZATION AND BREAKUP OF LIQUID KEROSENE AT ELEVATED PRESSURE. Atomization and Sprays, 2018, 28, 1123-1144.	0.8	2
2424	Cooling mechanisms on run out table: A technical review. Materials Today: Proceedings, 2018, 5, 18162-18169.	1.8	1
2425	Solving a free boundary problem with nonconstant coefficients. Mathematical Methods in the Applied Sciences, 2018, 41, 3653-3671.	2.3	1

#	Article	IF	CITATIONS
2426	Direct Pore-Scale Modelling Of Dissolution And Trapping Of Supercritical CO2 In Reservoir Brine. , 2018, , .		2
2428	FROM HIGH-FIDELITY NUMERICAL SIMULATIONS OF A LIQUID-FILM ATOMIZATION TO A REGIME CLASSIFICATION. Atomization and Sprays, 2018, 28, 65-89.	0.8	3
2429	A New Analytical Procedure to Solve Two Phase Flow in Tubes. Mathematical and Computational Applications, 2018, 23, 26.	1.3	2
2430	A Method for Tracking a Solid Body in a Fluid Field in Immersed Boundary Methods. , 2018, , .		0
2431	Energy Minimization for Cirrus and Cumulus Cloud Separation in Atmospheric Images. , 2018, , .		1
2432	Simulation of Incompressible Multiphase Flows Using the Artificial Compressibility Method. , 2018, , .		0
2433	Effects of Flash Boiling in Nozzle Flow of GDI Injector on Air/Fuel Mixture. , 2018, , .		0
2434	Simplified multiphase lattice Boltzmann method for simulating multiphase flows with large density ratios and complex interfaces. Physical Review E, 2018, 98, .	2.1	54
2435	Field-induced control of ferrofluid emulsion rheology and droplet break-up in shear flows. Physics of Fluids, 2018, 30, 122110.	4.0	30
2436	Detection of Abnormalities in Ultrasound Images Using Texture and Shape Features. , 2018, , .		4
2437	Numerical investigation of electrowetting-based droplet splitting in closed digital microfluidic system: Dynamics, mode, and satellite droplet. Physics of Fluids, 2018, 30, .	4.0	25
2438	Numerical simulation for a rising bubble interacting with a solid wall: Impact, bounce, and thin film dynamics. Physics of Fluids, 2018, 30, .	4.0	14
2439	Modelling and Simulation of Moored-Floating Structures Using the Tension-Element-Method. , 2018, , .		2
2440	Computational Fluid Dynamics Simulations of Nonlinear Sloshing in a Rotating Rectangular Tank Using the Level Set Method. Journal of Offshore Mechanics and Arctic Engineering, 2018, 140, .	1.2	3
2441	Segmentation of the lumen and mediaâ€adventitial borders in intravascular ultrasound images using a geometric deformable model. IET Image Processing, 2018, 12, 1881-1891.	2.5	12
2442	Multiphase Flows with Moving Interfaces and Contact Line—Balance Laws. Advances in Geophysical and Environmental Mechanics and Mathematics, 2018, , 347-407.	0.2	0
2443	Wall stresses in dual bottom purged steel making ladles. Chemical Engineering Research and Design, 2018, 139, 335-345.	5.6	14
2444	Unifying Boundary, Region, Shape into Level Sets for Touching Object Segmentation in Train Rolling Stock High Speed Video. IEEE Access, 2018, 6, 70368-70377.	4.2	7

ARTICLE IF CITATIONS # An Efficient Multi-Scale Local Binary Fitting-Based Level Set Method for Inhomogeneous Image 2445 1.1 1 Segmentation. Journal of Sensors, 2018, 2018, 1-17. Numerical study of flow past an elliptic cylinder near a free surface. Physics of Fluids, 2018, 30, . 2446 4.0 Numerical experiments of ascending bubbles for fluid dynamic force calculations. Journal of the 2447 7 1.6 Brazilian Society of Mechanical Sciences and Engineering, 2018, 40, 1. Interface Tracking Simulations of Two-Phase Flow Utilizing Adaptive Meshing Capabilities., 2018, , . 2448 Protein pocket detection via convex hull surface evolution and associated Reeb graph. 2449 4.1 23 Bioinformatics, 2018, 34, i830-i837. High-Order Finite-Element Framework for the Efficient Simulation of Multifluid Flows. Mathematics, 2450 2.2 2018, 6, 203. Superficial transportation model using finite volume method. Theoretical and Computational Fluid 2451 2.2 0 Dynamics, 2018, 32, 689-711. Phase-field-based lattice Boltzmann model for multiphase ferrofluid flows. Physical Review E, 2018, 2.1 38 98,. 2453 Stabilized conservative level set method. Journal of Computational Physics, 2018, 375, 1033-1044. 3.8 14 A Robust Level Set Image Segmentation Model Driven by Markov Random Field and Dual Regularization. 2454 ,2018,,. A level set method based on local direction gradient for image segmentation with intensity 2455 3.9 5 inhomogeneity. Multimedia Tools and Applications, 2018, 77, 30703-30727. CFD for the Design and Optimization of Slurry Bubble Column Reactors., 2018, , . 2456 An approximate solver for multi-medium Riemann problem with Mie–Grüneisen equations of state. 2457 1.0 0 Research in Mathematical Sciences, 2018, 5, 1. Modeling impactâ€induced damage and debonding using level sets in a sharp interface Eulerian 2459 2.8 framework. International Journal for Numerical Methods in Engineering, 2018, 115, 1108-1137. A combined compact finite difference scheme for predicting the evolution of a mean curvature driven 2460 2.50 interface. Computers and Fluids, 2018, 170, 299-312. An advection velocity correction scheme for interface tracking using the level-set method. 2461 2.5 Computers and Fluids, 2018, 168, 232-244. Direct numerical simulation of wind turbulence over breaking waves. Journal of Fluid Mechanics, 2462 3.4 51 2018, 850, 120-155. Comparing thixotropic and Herschel–Bulkley parameterizations for continuum models of avalanches 2463 and subaqueous debris flows. Natural Hazards and Earth System Sciences, 2018, 18, 303-319.

#	Article	IF	CITATIONS
2464	Interface Tracking Methods. , 2018, , 27-72.		0
2465	Load Balancing for Parallel Multiphase Flow Simulation. Scientific Programming, 2018, 2018, 1-14.	0.7	0
2466	Highly scalable DNS solver for turbulent bubble-laden channel flow. Computers and Fluids, 2018, 172, 67-83.	2.5	29
2467	Coupled THINC and level set method: A conservative interface capturing scheme with high-order surface representations. Journal of Computational Physics, 2018, 373, 284-303.	3.8	36
2468	Accounting for local capillary effects in two-phase flows with relaxed surface tension formulation in enriched finite elements. Comptes Rendus - Mecanique, 2018, 346, 617-633.	2.1	12
2469	Direct numerical simulation of a bubble motion in a spherical tank under external forces and microgravity conditions. Journal of Fluid Mechanics, 2018, 849, 467-497.	3.4	19
2470	Hybrid lattice Boltzmann finite difference model for simulation of phase change in a ternary fluid. International Journal of Heat and Mass Transfer, 2018, 127, 704-716.	4.8	19
2471	Modeling Ignition and Combustion in Spark-Ignition Engines Based on Swept-Volume Method. , 2018, , .		6
2472	Fast and scalable algorithms for constructing Solvent-Excluded Surfaces of large biomolecules. Journal of Computational Physics, 2018, 374, 91-120.	3.8	12
2473	Interface-preserving level set method for simulating dam-break flows. Journal of Computational Physics, 2018, 374, 249-280.	3.8	37
2474	Simulation of Coarse Droplet and Liquid Column Formed around Nozzle Outlets Due to Valve Wobble of a Gasoline Direct Injection Injector. Journal of Engineering for Gas Turbines and Power, 2018, 140, .	1.1	0
2475	Characterization of a macro porous polymer membrane at micron-scale by Confocal-Laser-Scanning Microscopy and 3D image analysis. Journal of Membrane Science, 2018, 564, 543-551.	8.2	14
2476	Application of local least squares finite element method (LLSFEM) in the interface capturing of two-phase flow systems. Computers and Fluids, 2018, 174, 110-121.	2.5	9
2477	Three-dimensional numerical investigation of a single bubble behavior against non-linear forced vibration in a microgravity environment. International Journal of Multiphase Flow, 2018, 109, 84-97.	3.4	7
2478	Interaction of an Oscillating Flexible Plate and Nucleate Pool Boiling Vapor Bubble: Fluid-Structure Interaction in a Multimaterial Multiphase System. , 2018, , .		4
2479	Continuum and stochastic approach for cell adhesion process based on Eulerian fluid-capsule coupling with Lagrangian markers. Journal of Computational Physics, 2018, 374, 769-786.	3.8	6
2480	Conservative phase-field lattice-Boltzmann model for ternary fluids. Journal of Computational Physics, 2018, 374, 668-691.	3.8	66
2481	Deformation of a ferrofluid droplet in a simple shear flow under the effect of a constant magnetic field. Computers and Fluids, 2018, 173, 313-323	2.5	16

#	Article	IF	CITATIONS
2482	Analysis of Different Methods for Wave Generation and Absorption in a CFD-Based Numerical Wave Tank. Journal of Marine Science and Engineering, 2018, 6, 73.	2.6	62
2483	Numerical Methods for a Two-Species Competition-Diffusion Model with Free Boundaries. Mathematics, 2018, 6, 72.	2.2	8
2484	An improved penalty immersed boundary method for multiphase flow simulation. International Journal for Numerical Methods in Fluids, 2018, 88, 447-462.	1.6	9
2485	An SPH multiâ€fluid model based on quasi buoyancy for interface stabilization up to high density ratios and realistic wave speed ratios. International Journal for Numerical Methods in Fluids, 2018, 87, 487-507.	1.6	8
2486	Computational modeling of multiphase viscoelastic and elastoviscoplastic flows. International Journal for Numerical Methods in Fluids, 2018, 88, 521-543.	1.6	47
2487	Numerical investigation of an interaction between shock waves and bubble in a compressible multiphase flow using a diffuse interface method. International Journal of Heat and Mass Transfer, 2018, 127, 210-221.	4.8	16
2488	Mass conservative lattice Boltzmann scheme for a three-dimensional diffuse interface model with Peng-Robinson equation of state. Physical Review E, 2018, 98, 023306.	2.1	6
2489	Spontaneous imbibition in a microchannel: analytical solution and assessment of volume of fluid formulations. Microfluidics and Nanofluidics, 2018, 22, 1.	2.2	25
2490	Bubble dynamics in rotating flow under an accelerating field. Physics of Fluids, 2018, 30, 082108.	4.0	12
2491	A front tracking method for particle-resolved simulation of evaporation and combustion of a fuel droplet. Computers and Fluids, 2018, 174, 283-299.	2.5	16
2492	Prediction of filling time in capillary-driven underfill process through 3D numerical analysis. , 2018, , .		4
2493	Development of a Validation Approach for an Integrated Waste Glass Melter Model. Nuclear Technology, 2018, 203, 244-260.	1.2	14
2494	Numerical Simulation of Liquid Sheet Deformation Caused by Air Flow. Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan, 2018, 16, 319-327.	0.2	1
2495	Direct numerical simulation of a turbulent core-annular flow with water-lubricated high viscosity oil in a vertical pipe. Journal of Fluid Mechanics, 2018, 849, 419-447.	3.4	15
2496	A new compressive scheme to simulate species transfer across fluid interfaces using the Volume-Of-Fluid method. Chemical Engineering Science, 2018, 190, 405-418.	3.8	57
2497	Effect of dissolved gas on bubble growth on a biphilic surface: A diffuse-interface simulation approach. International Journal of Heat and Mass Transfer, 2018, 126, 816-829.	4.8	4
2498	An ALE/embedded boundary method for two-material flow simulations. Computers and Mathematics With Applications, 2019, 78, 335-361.	2.7	0
2499	CFD study on Taylor bubble characteristics in Carreauâ€Yasuda shear thinning liquids. Canadian Journal of Chemical Engineering, 2019, 97, 616-624.	1.7	9

#	Article	IF	CITATIONS
2500	Sharp interface approaches and deep learning techniques for multiphase flows. Journal of Computational Physics, 2019, 380, 442-463.	3.8	49
2501	A Space-Time Discontinuous Galerkin Spectral Element Method for Nonlinear Hyperbolic Problems. International Journal of Computational Methods, 2019, 16, 1850093.	1.3	7
2502	An immersed discontinuous finite element method for the Stokes problem with a moving interface. Journal of Computational and Applied Mathematics, 2019, 362, 540-559.	2.0	18
2503	Interface Tracking Investigation of Geometric Effects on the Bubbly Flow in PWR Subchannels. Nuclear Science and Engineering, 2019, 193, 46-62.	1.1	10
2505	LES analyses of the air-core vortex in intake flow field of pumping station. IOP Conference Series: Earth and Environmental Science, 2019, 240, 032037.	0.3	1
2506	Direct numerical simulation of nucleate boiling in zero gravity conditions. International Journal of Heat and Mass Transfer, 2019, 143, 118521.	4.8	19
2507	Conservative phase-field method with a parallel and adaptive-mesh-refinement technique for interface tracking. Physical Review E, 2019, 100, 023305.	2.1	14
2508	The role of surface wettability on the heat transfer in liquid-liquid two-phase flow in a microtube. Physics of Fluids, 2019, 31, 082004.	4.0	6
2509	Simulation of resin-impregnation, heat-transfer and cure in a resin-injection pultrusion process. AIP Conference Proceedings, 2019, , .	0.4	8
2510	On sharp-interface dual-grid level-set method for two-phase flow simulation. Numerical Heat Transfer, Part B: Fundamentals, 2019, 75, 67-91.	0.9	9
2511	Investigation of bubble formation and its detachment in shear-thinning liquids at low capillary and Bond numbers. Theoretical and Computational Fluid Dynamics, 2019, 33, 463-480.	2.2	3
2512	A semi-implicit and unconditionally stable approximation of the surface tension in two-phase fluids. Journal of Computational Physics, 2019, 397, 108829.	3.8	1
2513	Eulerian modelling of compressible three-fluid flows with surface tension. Russian Journal of Numerical Analysis and Mathematical Modelling, 2019, 34, 225-240.	0.6	6
2514	Numerical simulation of dam-break flow impacting a stationary obstacle by a CLSVOF/IB method. Communications in Nonlinear Science and Numerical Simulation, 2019, 79, 104934.	3.3	37
2515	An improvement of level set equations via approximation of a distance function. Applicable Analysis, 2019, 98, 1901-1915.	1.3	1
2516	Analysis of a constant-coefficient pressure equation method for fast computations of two-phase flows at high density ratios. Journal of Computational Physics, 2019, 398, 108904.	3.8	9
2517	Computational fluid dynamics. , 2019, , 21-238.		21
2518	Topology design optimization of conductive thermal problems subject to design-dependent load using density gradients. Advances in Mechanical Engineering, 2019, 11, 168781401985073.	1.6	7

ARTICLE IF CITATIONS A conservative finite volume-particle hybrid method for simulation of incompressible interfacial 2519 6.6 9 flow. Computer Methods in Applied Mechanics and Engineering, 2019, 355, 840-859. An energy stable coupling procedure for the compressible and incompressible Navier-Stokes 3.8 equations. Journal of Computational Physics, 2019, 396, 280-302. A multi-scale approach to simulate atomisation processes. International Journal of Multiphase Flow, 2521 3.4 19 2019, 119, 194-216. Conservative and adaptive level-set method for the simulation of two-fluid flows. Computers and Fluids, 2019, 191, 104223. A DLM immersed boundary method based wave-structure interaction solver for high density ratio 2523 3.8 37 multiphase flows. Journal of Computational Physics, 2019, 398, 108804. A sharp interface model for deterministic simulation of dendrite growth. Computational Materials 2524 3.0 Science, 2019, 169, 109097. Thermocapillary motion of a Newtonian drop in a dilute viscoelastic fluid. Journal of Non-Newtonian 2525 2.4 8 Fluid Mechanics, 2019, 270, 8-22. A volume of fluid method algorithm for simulation of surface tension dominant two-phase flows. 2526 10 Numerical Heat Transfer, Part B: Fundamentals, 2019, 76, 1-17. Segmentation of Kidney Stones in Medical Ultrasound Images. Communications in Computer and 2527 0.5 2 Information Science, 2019, , 200-208. Progress in Phenomenological Modeling of Turbulence Damping around a Two-Phase Interface. Fluids, 2528 1.7 2019, 4, 136. A semi-analytical model research of liquid collar shape and coalescence in pore throat during 2529 4 1.3 snap-off. Arabian Journal of Geosciences, 2019, 12, 1. Synchronized Multiple Drop Impacts into a Deep Pool. Fluids, 2019, 4, 141. 2530 Implementation of an immersed boundary method in the Meso-NH v5.2 model: applications to an 2531 3.6 10 idealized urban environment. Geoscientific Model Development, 2019, 12, 2607-2633. 2D Simulation of boiling heat transfer on the wall with an improved hybrid lattice Boltzmann model. 6.0 Applied Thermal Engineering, 2019, 159, 113788. VOF evaluation of the surface tension by using variational representation and Galerkin interpolation 2533 3.8 4 projection. Journal of Computational Physics, 2019, 395, 537-562. DNS of Mass Transfer from Bubbles Rising in a Vertical Channel. Lecture Notes in Computer Science, 2534 2019, , 596-610. Capillary, viscous, and geometrical effects on the buckling of power-law fluid filaments under 2535 2.57 compression stresses. Computers and Fluids, 2019, 190, 514-519. A simple iterative geometry-based interface-preserving reinitialization for the level set method. 1.2 International Journal of Computational Fluid Dynamics, 2019, 33, 371-392.

#	Article	IF	CITATIONS
2537	Interaction between a helium atmospheric plasma jet and targets and dynamics of the interface. Plasma Sources Science and Technology, 2019, 28, 115002.	3.1	27
2538	Numerical investigation on wave transmission characteristics of perforated and non-perforated pile breakwater. Journal of Physics: Conference Series, 2019, 1276, 012021.	0.4	1
2539	Solidification in Stratified Flow of Two Immiscible Fluids in a Double-Bend. Journal of Physics: Conference Series, 2019, 1276, 012032.	0.4	0
2540	Numerical simulation of surface diffusion motion and its application in MEMS fabrication. Journal of Physics: Conference Series, 2019, 1303, 012024.	0.4	0
2541	Three-dimensional simulation of a rising bubble in the presence of spherical obstacles by the immersed boundary–lattice Boltzmann method. Physics of Fluids, 2019, 31, .	4.0	31
2542	Direct numerical simulations of water flooding process through digitized porous rocks. Chemical Engineering Science: X, 2019, 4, 100041.	1.5	1
2543	Lubrication Analysis of Micro-Dimple Textured Die Surface by Direct Observation of Contact Interface in Sheet Metal Forming. Metals, 2019, 9, 917.	2.3	12
2544	multiUQ: An intrusive uncertainty quantification tool for gas-liquid multiphase flows. Journal of Computational Physics, 2019, 399, 108951.	3.8	5
2545	Medical Imaging Methods. , 2019, , .		0
2546	Multi-Fluid VoF model assessment to simulate the horizontal air–water intermittent flow. Chemical Engineering Research and Design, 2019, 152, 48-59.	5.6	56
2547	Flow features for two cylinders arranged in tandem configuration near a free surface. Journal of Fluids and Structures, 2019, 91, 102770.	3.4	7
2548	Numerical simulation of compressible multifluid flows using an adaptive positivityâ€preserving RKDGâ€GFM approach. International Journal for Numerical Methods in Fluids, 2019, 91, 615-636.	1.6	11
2549	A practical framework to assess the hydrodynamic impact of ship waves on river banks. River Research and Applications, 2019, 35, 1428-1442.	1.7	12
2550	A development of a sharp interface AUSMD scheme for an incompressible preconditiong multi-fluid model. Computers and Fluids, 2019, 192, 104269.	2.5	2
2551	Vibration-induced instability of a fluid film flowing down a vertical plane: Experimental and numerical comparison. Physics of Fluids, 2019, 31, 104111.	4.0	6
2552	High Order Anchoring and Reinitialization of Level Set Function for Simulating Interface Motion. Journal of Scientific Computing, 2019, 81, 1963-1986.	2.3	8
2553	Modified Ghost Fluid Method with Acceleration Correction (MGFM/AC). Journal of Scientific Computing, 2019, 81, 1906-1944.	2.3	9
2554	Computing interface curvature from volume fractions: A machine learning approach. Computers and Fluids, 2019, 193, 104263.	2.5	20

#	Article	IF	CITATIONS
2555	Smoothed particle hydrodynamics (SPH) for complex fluid flows: Recent developments in methodology and applications. Physics of Fluids, 2019, 31, .	4.0	241
2556	Implicitly coupled phase fraction equations for the Eulerian multi-fluid model. Computers and Fluids, 2019, 192, 104277.	2.5	7
2557	A Level Set Approach for Dynamics of Flow in Accelerating Rectangular Container. Journal of Physics: Conference Series, 2019, 1240, 012082.	0.4	0
2558	An immersed boundary method coupled with a dynamic overlapping-grids strategy. Computers and Fluids, 2019, 191, 104250.	2.5	9
2559	On the total mass conservation and the volume preservation in the diffuse interface method. Computers and Fluids, 2019, 193, 104291.	2.5	13
2560	A formulation for high-fidelity simulations of pool boiling in low gravity. International Journal of Multiphase Flow, 2019, 120, 103099.	3.4	17
2561	Topology Optimization of Electrolyte-Electrode Interfaces of Solid Oxide Fuel Cells based on the Adjoint Method. Journal of the Electrochemical Society, 2019, 166, F876-F888.	2.9	7
2562	A coupled volume-of-fluid and level-set method (VOSET) for capturing interface of two-phase flows in arbitrary polygon grid. International Journal of Heat and Mass Transfer, 2019, 143, 118565.	4.8	20
2563	Combined state and parameter estimation in level-set methods. Journal of Computational Physics, 2019, 399, 108950.	3.8	11
2564	Level Set method-based two-dimensional numerical model for simulation of nonuniform open-channel flow. PLoS ONE, 2019, 14, e0223167.	2.5	1
2565	Detailed nonlinear dynamics of the liquid spike development in gaseous medium caused by a three-dimensional Rayleigh-Taylor instability. International Journal of Multiphase Flow, 2019, 120, 103107.	3.4	9
2566	Numerical simulation of the growth and interaction of vapour bubbles in superheated liquid jets. International Journal of Multiphase Flow, 2019, 121, 103112.	3.4	8
2568	A multiphase smoothed particle hydrodynamics model with lower numerical diffusion. Journal of Computational Physics, 2019, 382, 177-201.	3.8	32
2569	Pore-Scale Level Set Simulations of Capillary-Controlled Displacement with Adaptive Mesh Refinement. Transport in Porous Media, 2019, 128, 123-151.	2.6	8
2570	A CutFEM method for two-phase flow problems. Computer Methods in Applied Mechanics and Engineering, 2019, 348, 185-206.	6.6	27
2571	Investigation of Two-Phase Liquid-Droplet Flow With Particle Deposition in the Heat Exchanger. Journal of Thermal Science and Engineering Applications, 2019, 11, .	1.5	0
2572	Breaking Focused Waves Generated Using the Transient Wave Packet Method and the Breaking Impact Forces on a Vertical Cylinder. Lecture Notes in Civil Engineering, 2019, , 585-590.	0.4	0
2573	A novel multiphase MPS algorithm for modeling crust formation by highly viscous fluid for simulating corium spreading. Nuclear Engineering and Design, 2019, 343, 218-231.	1.7	54

#	Article	IF	CITATIONS
2574	A Petrov-Galerkin finite element interface method for interface problems with Bloch-periodic boundary conditions and its application in phononic crystals. Journal of Computational Physics, 2019, 393, 117-138.	3.8	14
2575	Breaking Wave Interaction With a Group of Four Vertical Slender Cylinders in Two Square Arrangements. Journal of Offshore Mechanics and Arctic Engineering, 2019, 141, .	1.2	6
2576	A new numerical framework for large-eddy simulation of waves generated by objects piercing water surface. Theoretical and Applied Mechanics Letters, 2019, 9, 79-83.	2.8	0
2577	Numerical approach for generic threeâ€phase flow based on cutâ€cell and ghost fluid methods. International Journal for Numerical Methods in Fluids, 2019, 91, 419-447.	1.6	6
2578	Deformation, speed, and stability of droplet motion in closed electrowetting-based digital microfluidics. Physics of Fluids, 2019, 31, .	4.0	20
2580	Effects of following and opposing vertical current shear on nonlinear wave interactions. Applied Ocean Research, 2019, 89, 23-35.	4.1	19
2581	Fluid flow, relative permeabilities and capillary pressure curves through heterogeneous porous media. Applied Mathematical Modelling, 2019, 75, 481-493.	4.2	16
2582	Deformation and coalescence of water droplets in viscous fluid under a direct current electric field. International Journal of Multiphase Flow, 2019, 118, 1-9.	3.4	37
2583	A numerical study of subcooled flow boiling in a manifold microchannel heat sink with varying inlet-to-outlet width ratio. International Journal of Heat and Mass Transfer, 2019, 139, 554-563.	4.8	42
2584	Sloshing in liquid tank with the density function method. IOP Conference Series: Earth and Environmental Science, 2019, 240, 072024.	0.3	0
2585	Hysteretic heat transfer study of liquid–liquid two-phase flow in a T-junction microchannel. International Journal of Heat and Fluid Flow, 2019, 77, 366-376.	2.4	5
2586	Wave-Height Dissipation and Undertow of Spilling Breakers over Beaches of Varying Slopes. Journal of Waterway, Port, Coastal and Ocean Engineering, 2019, 145, 04019016.	1.2	3
2587	A multiphysics model for analysis of droplet formation in electrohydrodynamic 3D printing process. Journal of Aerosol Science, 2019, 135, 72-85.	3.8	40
2589	Numerical simulations of flows in cerebral aneurysms using the lattice Boltzmann method with single- and multiple-relaxation time collision models. Computers and Mathematics With Applications, 2019, 78, 2746-2760.	2.7	7
2590	A coupled THINC/QQ and LS framework for simulating incompressible free-surface flows with surface tension. Computers and Fluids, 2019, 187, 12-26.	2.5	0
2591	A locally discontinuous ALE finite element formulation for compressible phase change problems. Journal of Computational Physics, 2019, 393, 438-464.	3.8	7
2592	Updated Lagrangian Particle Hydrodynamics (ULPH) modeling and simulation of multiphase flows. Journal of Computational Physics, 2019, 393, 406-437.	3.8	31
2593	Studies on hydrodynamic deformation and fragmentation of melt jet injected into water pool using level set method. Results in Physics, 2019, 13, 102206.	4.1	1

		CITATION REPORT		
#	Article		IF	CITATIONS
2594	Numerical simulation of secondary atomization of an emulsion fuel droplet due to puff of wall interaction of a sessile droplet and comparison with a free droplet. Fuel, 2019, 2	ing: Dynamics 252, 475-487.	6.4	10
2595	The Velocity Field Underneath a Breaking Rogue Wave: Laboratory Experiments Versus Simulations. Fluids, 2019, 4, 68.	Numerical	1.7	10
2596	Numerical modeling of the dynamics of bubble oscillations subjected to fast variations pressure with a coupled level set and volume of fluid method. Physical Review E, 2019,	in the ambient 99, 043107.	2.1	7
2597	Sharp numerical simulation of incompressible two-phase flows. Journal of Computation 2019, 391, 91-118.	hal Physics,	3.8	20
2598	CFD model and simulation of pure substance condensation on horizontal tubes using fluid method. International Journal of Heat and Mass Transfer, 2019, 138, 420-431.	the volume of	4.8	17
2599	Single vapour bubble growth under flash boiling conditions using a modified HLLC Rier International Journal of Multiphase Flow, 2019, 116, 250-269.	nann solver.	3.4	8
2600	Comparison between the diffuse interface and volume of fluid methods for simulating flows. International Journal of Multiphase Flow, 2019, 116, 221-238.	two-phase	3.4	51
2601	A diffuse interface lattice Boltzmann model for thermocapillary flows with large density thermophysical parameters contrasts. International Journal of Heat and Mass Transfer, 809-824.	y ratio and 2019, 138,	4.8	25
2602	Self-driven droplet transport: Effect of wettability gradient and confinement. Physics o 31, .	f Fluids, 2019,	4.0	63
2603	Numerical study of rising bubbles with path instability using conservative level-set and refinement. Computers and Fluids, 2019, 187, 83-97.	adaptive mesh	2.5	20
2604	Immersed boundary method with irrotational discrete delta vector for droplet simulation density ratio. Journal of Computational Physics, 2019, 391, 280-302.	ons of large	3.8	4
2605	A level-set model for mass transfer in bubbly flows. International Journal of Heat and M 2019, 138, 335-356.	ass Transfer,	4.8	30
2606	Vaporization of liquid droplet with large deformation and high mass transfer rate, I: Constant-density, constant-property case. Journal of Computational Physics, 2019, 39	2, 56-70.	3.8	14
2607	Direct numerical simulation of pore scale particle-water-oil transport in porous media. J Petroleum Science and Engineering, 2019, 180, 159-175.	ournal of	4.2	23
2608	Phase-field simulation of core-annular pipe flow. International Journal of Multiphase Flo 14-24.	w, 2019, 117,	3.4	15
2609	Level set method for atomization and evaporation simulations. Progress in Energy and Science, 2019, 73, 65-94.	Combustion	31.2	53
2610	An isotropic unstructured mesh generation method based on a fluid relaxation analogy Methods in Applied Mechanics and Engineering, 2019, 350, 396-431.	/. Computer	6.6	18
2611	On the numerical modelling of Corium spreading using Volume-of-Fluid methods. Nucl and Design, 2019, 345, 216-232.	ear Engineering	1.7	5

#	Article	IF	CITATIONS
2612	Research on dam-break flow induced front wave impacting a vertical wall based on the CLSVOF and level set methods. Ocean Engineering, 2019, 178, 442-462.	4.3	18
2613	Modeling condensation on structured surfaces using lattice Boltzmann method. International Journal of Heat and Mass Transfer, 2019, 136, 196-212.	4.8	13
2614	Fluid dynamic and autoignition characteristics of early fuel sprays using hybrid atomization LES. Combustion and Flame, 2019, 203, 313-333.	5.2	7
2615	Study of non-isothermal liquid evaporation in synthetic micro-pore structures with hybrid lattice Boltzmann model. Journal of Fluid Mechanics, 2019, 866, 33-60.	3.4	53
2616	Three-dimensional modeling of coalescence of bubbles using Lattice Boltzmann model. Computers and Fluids, 2019, 184, 178-186.	2.5	7
2617	Fully parallelized Lattice Boltzmann scheme for fast extraction of biomedical geometry. Journal of Parallel and Distributed Computing, 2019, 128, 126-136.	4.1	4
2619	Improved hybrid model applied to liquid jet in crossflow. International Journal of Multiphase Flow, 2019, 114, 98-114.	3.4	17
2620	Advances in Understanding of Pool Boiling Heat Transfer—From Earth on to Deep Space. Journal of Heat Transfer, 2019, 141, .	2.1	3
2621	A mixed upwind/central WENO scheme for incompressible two-phase flows. Journal of Computational Physics, 2019, 387, 455-480.	3.8	17
2622	Numerical study on evaporation heat transfer characteristics of water in inclined microchannels with varying inlet vapor quality. World Journal of Engineering, 2019, 16, 125-131.	1.6	0
2623	Phase-field study on the growth of magnesium silicide occasioned by reactive diffusion on the surface of Si-foams. Acta Materialia, 2019, 170, 138-154.	7.9	14
2624	Using a Dynamic and Constant Mesh in Numerical Simulation of the Free-Rising Bubble. Fluids, 2019, 4, 38.	1.7	4
2625	Smoothed particle hydrodynamics (SPH) for modeling fluid-structure interactions. Science China: Physics, Mechanics and Astronomy, 2019, 62, 1.	5.1	137
2626	Isogeometric analysis for phase-field models of geometric PDEs and high-order PDEs on stationary and evolving surfaces. Computer Methods in Applied Mechanics and Engineering, 2019, 351, 599-642.	6.6	30
2627	Revealing electrical stresses acting on the surface of protoplast cells under electric field. European Journal of Mechanics, B/Fluids, 2019, 76, 292-302.	2.5	3
2628	A novel Roe solver for incompressible two-phase flow problems. Journal of Computational Physics, 2019, 390, 405-424.	3.8	5
2629	Effect of Bridge Abutment Length on Turbulence Structure and Flow through the Opening. Journal of Hydraulic Engineering, 2019, 145, .	1.5	20
2630	Numerical study of formation of a series of bubbles at a submerged orifice. Applied Mathematical Modelling, 2019, 73, 668-694.	4.2	11
#	Article	IF	CITATIONS
------	---	-----	-----------
2631	A multiphase level set approach to motion of disconnected fluid ganglia during capillary-dominated three-phase flow in porous media: Numerical validation and applications. Chemical Engineering Science, 2019, 203, 138-162.	3.8	18
2632	Numerical study of a laser generated cavitation bubble based on FVM and CLSVOF method. IOP Conference Series: Earth and Environmental Science, 2019, 240, 072021.	0.3	2
2633	Insights into the Impact of Water Salinity on Multiphase Flow at the Pore-Scale in Carbonate Formations. , 2019, , .		7
2634	A robust incompressible Navier-Stokes solver for high density ratio multiphase flows. Journal of Computational Physics, 2019, 390, 548-594.	3.8	60
2635	Phase-field method based on discrete unified gas-kinetic scheme for large-density-ratio two-phase flows. Physical Review E, 2019, 99, 043302.	2.1	38
2636	Direct Numerical Simulation of Gas-Liquid Drag-Reducing Cavity Flow by the VOSET Method. Polymers, 2019, 11, 596.	4.5	15
2637	Numerical modeling of breaking wave induced seawall scour. Coastal Engineering, 2019, 150, 108-120.	4.0	21
2638	A Level Set method for capturing interface deformation in immiscible stratified fluids. International Journal of Heat and Fluid Flow, 2019, 76, 170-186.	2.4	5
2640	A cut finite element method for incompressible two-phase Navier–Stokes flows. Journal of Computational Physics, 2019, 384, 77-98.	3.8	25
2641	Final evolution of super-AGB stars and supernovae triggered by electron capture. Publications of the Astronomical Society of Australia, 2019, 36, .	3.4	22
2642	A regularization scheme for explicit level-set XFEM topology optimization. Frontiers of Mechanical Engineering, 2019, 14, 153-170.	4.3	14
2643	Dynamic Regulation of Level Set Parameters Using 3D Convolutional Neural Network for Liver Tumor Segmentation. Journal of Healthcare Engineering, 2019, 2019, 1-17.	1.9	19
2644	The effect of viscosity on free surface flow inside an angularly oscillating rectangular tank. Computers and Fluids, 2019, 183, 160-176.	2.5	4
2645	High order finite difference hermite WENO schemes for the Hamilton–Jacobi equations on unstructured meshes. Computers and Fluids, 2019, 183, 53-65.	2.5	5
2646	A three-dimensional one-layer particle level set method. International Journal of Numerical Methods for Heat and Fluid Flow, 2019, 30, 3653-3684.	2.8	1
2647	Numerical simulation of liquid mass collision with a wall. Progress in Computational Fluid Dynamics, 2019, 19, 293.	0.2	8
2648	Numerical Simulations of Polymer Solution Droplet Impact on Surfaces of Different Wettabilities. Processes, 2019, 7, 798.	2.8	17
2649	DEVELOPMENT OF A COMPUTING PROCEDURE FOR THE SEQUENTIAL ATOMIZATION PROCESS OF A MULTIAPERTURE INJECTOR AND A SWIRL INJECTOR. Atomization and Sprays, 2019, <u>29, 799-820.</u>	0.8	0

#	Article	IF	CITATIONS
2650	DRAG CORRELATIONS OF ELLIPSOIDAL BUBBLES IN CLEAN AND FULLY CONTAMINATED SYSTEMS. Multiphase Science and Technology, 2019, 31, 215-234.	0.5	8
2651	AN IMPROVED PRESSURE CALCULATION METHOD FOR SIMULATIONS OF GAS–LIQUID TWO-PHASE FLOWS ON UNSTRUCTURED MESHES. Multiphase Science and Technology, 2019, 31, 109-131.	0.5	0
2652	Three-Dimensional Numerical Method for Simulating Large-Scale Free Water Surface by Massive Parallel Computing on a GPU. Water (Switzerland), 2019, 11, 2121.	2.7	2
2653	Methode zur Erfassung von Stofftransport an fluiden PhasengrenzflÄ <b>e</b> hen. Chemie-Ingenieur-Technik, 2019, 91, 1623-1632.	0.8	1
2654	An interface-compressed diffuse interface method and its application for multiphase flows. Physics of Fluids, 2019, 31, .	4.0	30
2655	Evolution of ONeMg Core in Super-ACB Stars toward Electron-capture Supernovae: Effects of Updated Electron-capture Rate. Astrophysical Journal, 2019, 886, 22.	4.5	37
2656	Design of Additively Manufactured Heatsinks for Power Electronics Thermal Management using Adjoint Level-set Topology Optimization. , 2019, , .		4
2657	Effect of flow and fluid properties on the mobility of multiphase flows through porous media. Chemical Engineering Science, 2019, 193, 243-254.	3.8	14
2658	An oil sloshing study: adaptive fixed-mesh ALE analysis and comparison with experiments. Computational Mechanics, 2019, 63, 985-998.	4.0	9
2659	Direct Numerical Simulation of Turbulent Flows Laden with Droplets or Bubbles. Annual Review of Fluid Mechanics, 2019, 51, 217-244.	25.0	185
2660	A fast computational approach for illusory contour reconstruction. Multimedia Tools and Applications, 2019, 78, 10449-10472.	3.9	5
2661	Simulating gas bubble shape during its rise in a confined polymeric solution by WC-SPH. European Journal of Mechanics, B/Fluids, 2019, 75, 1-14.	2.5	22
2662	Formulation and validation of a three-dimensional computational model of simultaneous interfacial evaporation and condensation in subcooled boiling. International Journal of Multiphase Flow, 2019, 112, 130-154.	3.4	3
2663	A parametric study on the droplet detachment process from the ceiling under the effect of gravity. Engineering Computations, 2019, 36, 445-465.	1.4	1
2664	A monolithic conservative level set method with built-in redistancing. Journal of Computational Physics, 2019, 379, 262-278.	3.8	14
2665	Law of Distribution and Variation of Electrostatic Potential in Oil Tanks during Filling Process. Process Safety Progress, 2019, 38, e12035.	1.0	3
2666	A three-dimensional numerical study on the dynamics and deformation of a bubble rising in a hybrid Carreau and FENE-CR modeled polymeric liquid. Journal of Non-Newtonian Fluid Mechanics, 2019, 265, 66-78.	2.4	18
2667	Development of a less-dissipative hybrid AUSMD scheme for multi-component flow simulations. Shock Waves, 2019, 29, 691-704.	1.9	6

#	Article	IF	CITATIONS
2668	A high-order and interface-preserving discontinuous Galerkin method for level-set reinitialization. Journal of Computational Physics, 2019, 378, 634-664.	3.8	7
2669	Axisymmetric lattice Boltzmann model for multiphase flows with large density ratio. International Journal of Heat and Mass Transfer, 2019, 130, 1189-1205.	4.8	74
2670	The electric field effect on the droplet collision with a heated surface in the Leidenfrost regime. Acta Mechanica, 2019, 230, 787-804.	2.1	9
2671	Effective Geometric Algorithms for Immersed Boundary Method Using Signed Distance Field. Journal of Fluids Engineering, Transactions of the ASME, 2019, 141, .	1.5	8
2672	A volume-conserving balanced-force level set method on unstructured meshes using a control volume finite element formulation. Journal of Computational Physics, 2019, 380, 119-142.	3.8	11
2673	Flow topologies in primary atomization of liquid jets: a direct numerical simulation analysis. Journal of Fluid Mechanics, 2019, 859, 819-838.	3.4	25
2674	Comparison Between the FLUIDICS Experiment and Direct Numerical Simulations of Fluid Sloshing in Spherical Tanks Under Microgravity Conditions. Microgravity Science and Technology, 2019, 31, 123-138.	1.4	18
2675	Sensitivity study of forced convection bubbling in a transparent viscous fluid as a proxy for molten borosilicate glass. Annals of Nuclear Energy, 2019, 125, 38-49.	1.8	5
2676	Simulation of free surface flows with non-hydrostatic pressure distribution. Sadhana - Academy Proceedings in Engineering Sciences, 2019, 44, 1.	1.3	2
2677	Toward free-surface flow simulations with correct energy evolution: An isogeometric level-set approach with monolithic time-integration. Computers and Fluids, 2019, 181, 77-89.	2.5	6
2678	A robust MoF method applicable to severely deformed polygonal mesh. Journal of Computational Physics, 2019, 377, 162-182.	3.8	6
2679	Level Set Method. , 2019, , 804-828.		7
2680	A weakly compressible scheme with a diffuse-interface method for low Mach number two-phase flows. Journal of Computational Physics, 2019, 376, 838-862.	3.8	15
2681	Flow and heat transfer in slug flow in microchannels: Effect of bubble volume. International Journal of Heat and Mass Transfer, 2019, 129, 812-826.	4.8	29
2682	Comparative Hydrodynamic Study of Rigid-Lid and Level-Set Methods for LES of Open-Channel Flow. Journal of Hydraulic Engineering, 2019, 145, 04018077.	1.5	23
2683	Numerical simulations of emulsions in shear flows. Acta Mechanica, 2019, 230, 667-682.	2.1	48
2684	Eulerian–Lagrangian spray atomization model coupled with interface capturing method for diesel injectors. International Journal of Multiphase Flow, 2019, 113, 325-342.	3.4	40
2685	A high-order elliptic PDE based level set reinitialisation method using a discontinuous Galerkin discretisation. Journal of Computational Physics, 2019, 379, 373-391.	3.8	9

#	Article	IF	CITATIONS
2686	Microlayer formation and depletion beneath growing steam bubbles. International Journal of Multiphase Flow, 2019, 111, 241-263.	3.4	26
2687	Extreme Wave Generation, Breaking, and Impact Simulations Using Wave Packets in REEF3D. Journal of Offshore Mechanics and Arctic Engineering, 2019, 141, .	1.2	7
2688	A Unified Three-Dimensional Numerical Model for Boiling Curve in a Temperature Controlled Mode1. Journal of Heat Transfer, 2019, 141, .	2.1	5
2689	Linear smoothed extended finite element method for fatigue crack growth simulations. Engineering Fracture Mechanics, 2019, 206, 551-564.	4.3	49
2690	A unified pipe-network-based numerical manifold method for simulating immiscible two-phase flow in geological media. Journal of Hydrology, 2019, 568, 119-134.	5.4	12
2691	Improved THINC/SW scheme for computing incompressible twoâ€phase flows. International Journal for Numerical Methods in Fluids, 2019, 89, 216-234.	1.6	6
2692	Improved Interface Capturing for Ship Hydrodynamics and Multiphase Flow Simulation. Lecture Notes in Civil Engineering, 2019, , 298-304.	0.4	0
2693	Spread and recoil of liquid droplets impacting on solid surfaces with various wetting properties. Surface and Coatings Technology, 2019, 357, 140-152.	4.8	17
2694	Direct numerical simulations of droplet condensation. International Journal of Heat and Mass Transfer, 2019, 129, 432-448.	4.8	24
2695	An efficient method for two-fluid incompressible flows appropriate for the immersed boundary method. Journal of Computational Physics, 2019, 376, 28-53.	3.8	15
2696	High viscosity polymeric fluid droplet formation in a flow focusing microfluidic device – Experimental and numerical study. Chemical Engineering Science, 2019, 195, 442-454.	3.8	25
2697	Self-Sufficient Modeling of Single Track Deposition of Ti–6Al–4V With the Prediction of Capture Efficiency. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2019, 141, .	2.2	24
2698	A Cartesian grid based multiphase flow model for water impact of an arbitrary complex body. International Journal of Multiphase Flow, 2019, 110, 132-147.	3.4	10
2699	Simulation of high density ratio interfacial flows on cell vertex/edge-based staggered octree grids with second-order discretization at irregular nodes. Journal of Computational Physics, 2019, 376, 478-507.	3.8	5
2700	Modeling surface tension in compressible flow on an adaptively refined mesh. Computers and Mathematics With Applications, 2019, 78, 504-516.	2.7	6
2701	Parallel computing investigations for the projection method applied to the interface transport scheme of a two-phase flow by the method of characteristics. Numerical Algorithms, 2019, 80, 447-467.	1.9	0
2702	SPH Method with Space-Based Variable Smoothing Length and Its Applications to Free Surface Flow. International Journal of Computational Methods, 2019, 16, 1846002.	1.3	3
2703	Isogeometric analysis of multi-phase flows with surface tension and with application to dynamics of rising bubbles. Computers and Fluids, 2019, 179, 777-789.	2.5	43

# 2704	ARTICLE Effects of geometry on simulation of two-phase flow in microchannel with density and viscosity	IF 3.6	CITATIONS 5
2705	Toward direct numerical simulation of high speed droplet impact. Meccanica, 2020, 55, 387-401.	2.0	14
2706	Current achievements on bubble dynamics analysis using MPS method. Progress in Nuclear Energy, 2020, 118, 103057.	2.9	21
2707	A novel 3D dual active contours approach. Pattern Analysis and Applications, 2020, 23, 581-591.	4.6	0
2708	Numerical studies of a class of reaction–diffusion equations with Stefan conditions. International Journal of Computer Mathematics, 2020, 97, 959-979.	1.8	8
2709	A level-set immersed interface method for simulating the electrohydrodynamics. Journal of Computational Physics, 2020, 400, 108956.	3.8	12
2710	An energy-preserving level set method for multiphase flows. Journal of Computational Physics, 2020, 400, 108991.	3.8	8
2711	Adaptive Eulerian framework for boiling and evaporation. Journal of Computational Physics, 2020, 401, 109030.	3.8	8
2712	A consistent and balanced-force model for incompressible multiphase flows on polyhedral unstructured grids. International Journal of Multiphase Flow, 2020, 122, 103125.	3.4	14
2713	A unified single-field Volume-of-Fluid-based formulation for multi-component interfacial transfer with local volume changes. Journal of Computational Physics, 2020, 402, 109024.	3.8	32
2714	Free boundary problems in fluids and materials. Handbook of Numerical Analysis, 2020, 21, 555-619.	1.8	1
2715	Dynamic study of ferrodroplet and bubbles merging in ferrofluid by a simplified multiphase lattice Boltzmann method. Journal of Magnetism and Magnetic Materials, 2020, 495, 165869.	2.3	14
2716	A finite difference discretization method for heat and mass transfer with Robin boundary conditions on irregular domains. Journal of Computational Physics, 2020, 400, 108890.	3.8	13
2717	Modeling and Simulation of Moored-Floating Structures Using the Tension Element Method. Journal of Offshore Mechanics and Arctic Engineering, 2020, 142, .	1.2	8
2718	Stochastic simulation of droplet breakup in turbulence. Chemical Engineering Journal, 2020, 380, 122502.	12.7	12
2719	Numerical Insights on Controlled Droplet Formation in a Microfluidic Flow-Focusing Device. Industrial & Engineering Chemistry Research, 2020, 59, 3702-3716.	3.7	50
2720	A levelâ€set method for the evolution of cells and tissue during curvatureâ€controlled growth. International Journal for Numerical Methods in Biomedical Engineering, 2020, 36, e3279.	2.1	13
2721	A new and improved cut-cell-based sharp-interface method for simulating compressible fluid elastic–perfectly plastic solid interaction. Mathematics and Computers in Simulation, 2020, 171, 246-263.	4.4	1

ARTICLE IF CITATIONS Comparison between hydrostatic and total pressure simulations of dam-break flows. Journal of 2722 1.7 2 Hydraulic Research/De Recherches Hydrauliques, 2020, 58, 725-737. A weakly compressible SPH method for violent multi-phase flows with high density ratio. Journal of 3.8 Computational Physics, 2020, 402, 109092. A 3D conservative sharp interface method for simulation of compressible two-phase flows. Journal of 2724 3.8 10 Computational Physics, 2020, 403, 109107. Improving the modified XFEM for optimal highâ€order approximation. International Journal for 2.8 Numerical Methods in Engineering, 2020, 121, 411-433. A conservative solver for surface-tension-driven multiphase flows on collocated unstructured 2726 3.8 8 grids. Journal of Computational Physics, 2020, 401, 109025. Onset of Thermal Buoyancy Convection in a Two-Layer System with Deformable Interface and Fixed Heat Flux at the Boundaries under Terrestrial and Microgravity Conditions. Microgravity Science and 1.4 Technology, 2020, <u>32, 295-304.</u> Surface tension for compressible fluids in ALE framework. Journal of Computational Physics, 2020, 2728 3.8 5 407, 109247. An explicit expression of the empirical factor in a widely used phase change model. International 2729 4.8 21 Journal of Heat and Mass Transfer, 2020, 150, 119279. A variational level set methodology without reinitialization for the prediction of equilibrium 2730 3.8 4 interfaces over arbitrary solid surfáces. Journal of Computational Physics, 2020, 406, 109184. On the development of LS-assisted VOF method for incompressible interfacial flows. Journal of 3.8 Computational Physics, 2020, 406, 109188. Consistent, essentially conservative and balanced-force Phase-Field method to model incompressible 2732 31 3.8 two-phase flows. Journal of Computational Physics, 2020, 406, 109192. A new finite element strategy to simulate microstructural evolutions. Computational Materials 3.0 Science, 2020, 172, 109335 Slope limiting the velocity field in a discontinuous Galerkin divergence-free two-phase flow solver. 2734 2.5 4 Computers and Fluids, 2020, 196, 104322. A locally second order symmetric method for discontinuous solution of Poisson's equation on 2.5 uniform cartesian grids. Computers and Fluids, 2020, 198, 104397 A hybrid < mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e2066" altimg="si3.svg"><mml:mi>l^</mml:mi></mml:math>-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e2071" 2736 0 2.7 altimg="si4.svg"><mml:mi>v</mml:mi></mml:math> HOC approach for surface tension driven flows in level set framework. Computers and Mathematics With Applications, 2020, 79, 2350-2375. Computational modelling of multi-material energetic materials and systems. Combustion Theory and Modelling, 2020, 24, 407-441. 1.9 A coupled level set and volume of fluid method with a re-initialisation step suitable for unstructured 2738 3.8 12 meshes. Journal of Computational Physics, 2020, 407, 109224. 2739 Particle detection in VOF-simulations with OpenFOAM. SoftwareX, 2020, 11, 100382.

#	Article	IF	CITATIONS
2740	Fluids-membrane interaction with a full Eulerian approach based on the level set method. Journal of Computational Physics, 2020, 406, 109171.	3.8	8
2741	Simulating water-entry/exit problems using Eulerian–Lagrangian and fully-Eulerian fictitious domain methods within the open-source IBAMR library. Applied Ocean Research, 2020, 94, 101932.	4.1	33
2742	Numerical study of mechanisms of air-core vortex evolution inÂanÂintakeÂflow. International Journal of Heat and Fluid Flow, 2020, 81, 108517.	2.4	19
2743	An improved subgrid scale model for frontâ€ŧracking based simulations of mass transfer from bubbles. AICHE Journal, 2020, 66, e16889.	3.6	16
2744	Variational shape prior segmentation with an initial curve based on image registration technique. Image and Vision Computing, 2020, 94, 103865.	4.5	7
2745	Finite volume method for multiphase flows with radiation and phase change. International Journal of Thermal Sciences, 2020, 149, 106201.	4.9	7
2746	Detailed modelling of packed-bed gas clogging due to thermal-softening of iron ore by Eulerian–Lagrangian approach. Chemical Engineering Journal, 2020, 392, 123643.	12.7	16
2747	Application of Genetic Algorithm for Optimum Hydrodynamic Performance of Twin Pontoon Floating Breakwater. Journal of Waterway, Port, Coastal and Ocean Engineering, 2020, 146, 04019040.	1.2	8
2748	A resolved CFD–DEM approach for the simulation of landslides and impulse waves. Computer Methods in Applied Mechanics and Engineering, 2020, 359, 112750.	6.6	45
2749	Investigation of underwater explosion near composite structures using a combined RKDC-FEM approach. Journal of Computational Physics, 2020, 404, 109113.	3.8	32
2750	Pore-scale modeling of carbonates. Marine and Petroleum Geology, 2020, 114, 104141.	3.3	35
2751	Coupling of volume of fluid and level set methods in condensing heat transfer simulations. International Journal of Computational Fluid Dynamics, 2020, 34, 25-38.	1.2	4
2752	Droplet dynamic response in lowâ€viscosity fluid subjected to a pulsed electric field and an alternating electric field. AICHE Journal, 2020, 66, e16869.	3.6	10
2753	An immersogeometric formulation for free-surface flows with application to marine engineering problems. Computer Methods in Applied Mechanics and Engineering, 2020, 361, 112748.	6.6	49
2754	A sharp-interface method for the simulation of shock-induced vaporization of droplets. Journal of Computational Physics, 2020, 405, 109005.	3.8	27
2755	A Numerical Investigation on Droplet Bag Breakup Behavior of Polymer Solution. Polymers, 2020, 12, 2172.	4.5	9
2756	A review on single bubble gas–liquid mass transfer. Chinese Journal of Chemical Engineering, 2020, 28, 2707-2722.	3.5	18
2757	Numerical simulation of sliding bubbles in saturated flow boiling. Chemical Engineering Science, 2020, 228, 115919.	3.8	9

#	Article	IF	CITATIONS
2758	Detailed CFD simulations of pure substance condensation on horizontal annular low finned tubes including a parameter study of the fin slope. International Journal of Heat and Mass Transfer, 2020, 163, 120363.	4.8	12
2759	Modeling droplet formation in microfluidic flow-focusing devices using the two-phases level set method. Materials Today: Proceedings, 2022, 48, 30-40.	1.8	9
2760	A conservative level set method on unstructured meshes for modeling multiphase thermo-fluid flow in additive manufacturing processes. Computer Methods in Applied Mechanics and Engineering, 2020, 372, 113348.	6.6	34
2761	Investigation of interface deformation dynamics during high-Weber number cylindrical droplet breakup. International Journal of Multiphase Flow, 2020, 132, 103409.	3.4	19
2762	Coupling mechanism of natural gas deflagration flame and continuous water in closed pipeline. Chemical Engineering Research and Design, 2020, 143, 177-185.	5.6	7
2763	Numerical simulation of free-surface flow and convection heat transfer using a modified Weakly Compressible Smoothed Particle Hydrodynamics (WCSPH) method. International Journal of Mechanical Sciences, 2020, 188, 105940.	6.7	12
2764	Consistent and conservative scheme for incompressible two-phase flows using the conservative Allen-Cahn model. Journal of Computational Physics, 2020, 420, 109718.	3.8	29
2765	Effects of external magnetic fields on the rheology and magnetization of dilute emulsions of ferrofluid droplets in shear flows. Physics of Fluids, 2020, 32, .	4.0	28
2766	Investigation on surface wave morphologies of a low-intermediate pressure jet with non-circular nozzles. AIP Advances, 2020, 10, .	1.3	2
2767	Interfacial flow dynamic micro-response and spatiotemporal evolution of flow pattern for thermocapillary–buoyancy convection in a liquid bridge. New Journal of Physics, 2020, 22, 083042.	2.9	1
2768	A survey of level set method for image segmentation with intensity inhomogeneity. Multimedia Tools and Applications, 2020, 79, 28525-28549.	3.9	17
2769	An enriched finite element/level-set method for simulating two-phase incompressible fluid flows with surface tension. Computer Methods in Applied Mechanics and Engineering, 2020, 370, 113277.	6.6	19
2770	Generalized conservative phase field model and its lattice Boltzmann scheme for multicomponent multiphase flows. International Journal of Multiphase Flow, 2020, 132, 103432.	3.4	25
2771	Computational Modeling of Bubbles Growth Using the Coupled Level Set—Volume of Fluid Method. Fluids, 2020, 5, 120.	1.7	5
2772	Physicochemical hydrodynamics of droplets out of equilibrium. Nature Reviews Physics, 2020, 2, 426-443.	26.6	126
2773	Lattice Boltzmann simulations of droplet dynamics in two-phase separation with temperature field. Physics of Fluids, 2020, 32, .	4.0	10
2774	A Comparison of Different Wave Modelling Techniques in An Open-Source Hydrodynamic Framework. Journal of Marine Science and Engineering, 2020, 8, 526.	2.6	17
2775	Development and validation of the eutectic reaction model in JUPITER code. Annals of Nuclear Energy, 2020, 145, 107606.	1.8	2

#	Article	IF	CITATIONS
2776	New Stability Estimates for an Unfitted Finite Element Method for Two-Phase Stokes Problem. SIAM Journal on Numerical Analysis, 2020, 58, 2165-2192.	2.3	5
2777	A Review on the optic disc and optic cup segmentation and classification approaches over retinal fundus images for detection of glaucoma. SN Applied Sciences, 2020, 2, 1.	2.9	14
2778	Stripped Electrode Based Electrowetting-on-Dielectric Digital Microfluidics for Precise and Controllable Parallel Microdrop Generation. Langmuir, 2020, 36, 9540-9550.	3.5	12
2779	Wettability and capillary effects: Dynamics of pinch-off in unconstricted straight capillary tubes. Physical Review E, 2020, 102, 023109.	2.1	7
2780	A viscoelastic two-phase solver using a phase-field approach. Journal of Non-Newtonian Fluid Mechanics, 2020, 284, 104364.	2.4	7
2781	PDE-Based Multidimensional Extrapolation of Scalar Fields over Interfaces with Kinks and High Curvatures. SIAM Journal of Scientific Computing, 2020, 42, A2344-A2359.	2.8	3
2782	Study of phase-field lattice Boltzmann models based on the conservative Allen-Cahn equation. Physical Review E, 2020, 102, 023305.	2.1	15
2783	Influence of the free surface on hydrodynamics in a bubble column. Chemical Engineering Science: X, 2020, 8, 100077.	1.5	0
2784	A HLLC-type finite volume method for incompressible two-phase flows. Computers and Fluids, 2020, 213, 104715.	2.5	6
2785	Numerical study of incompressible interfacial flows by an one-step level set method. Numerical Heat Transfer; Part A: Applications, 2020, 78, 636-655.	2.1	1
2786	Advancement of Shock Capturing Computational Fluid Dynamics Methods. , 2020, , .		3
2787	Dynamic Behavior in a Storage Tank in Reduced Gravity Using Dynamic Contact Angle Method. Microgravity Science and Technology, 2020, 32, 1039-1048.	1.4	12
2788	A numerical study of the metal jet induced by a shock wave. Journal of Applied Physics, 2020, 128, 134701.	2.5	0
2789	A Coupled Artificial Compressibility Method for Free Surface Flows. Journal of Marine Science and Engineering, 2020, 8, 590.	2.6	14
2790	Structural Safety Assessment of Connection between Sloshing Tank and 6-DOF Platform Using Co-Simulation of Fluid and Multi-Flexible-Body Dynamics. Water (Switzerland), 2020, 12, 2108.	2.7	4
2791	Effect of Horizontal Vibrations on Thermo-Solutocapillary Convection and Free Surface of Liquid Bridge. Microgravity Science and Technology, 2020, 32, 847-855.	1.4	4
2792	Retardation of droplet transport in confined microchannel by interfacial jamming of nanoparticles. Physics of Fluids, 2020, 32, .	4.0	15
2793	A Novel Approach of Crack Detection in Railway Track using Fuzzy C Means and Level Set Method. , 2020, , .		4

#	Article	IF	CITATIONS
2794	Turbulence, pseudo-turbulence, and local flow topology in dispersed bubbly flow. Physics of Fluids, 2020, 32, .	4.0	17
2795	Phase-field lattice Boltzmann model for interface tracking of a binary fluid system based on the Allen-Cahn equation. Physical Review E, 2020, 102, 053307.	2.1	20
2796	Computational Study in Bottom Gas Injection Using the Conservative Level Set Method. Processes, 2020, 8, 1643.	2.8	2
2797	Bubble entrapment during head-on binary collision with large deformation of unequal-sized tetradecane droplets. Physics of Fluids, 2020, 32, .	4.0	8
2798	Rigid body motion in viscous flows using the finite element method. Physics of Fluids, 2020, 32, 123311.	4.0	8
2799	Validation Strategy of Reduced-Order Two-Fluid Flow Models Based on a Hierarchy of Direct Numerical Simulations. Flow, Turbulence and Combustion, 2020, 105, 1381-1411.	2.6	1
2800	Analysis of thermal performance and pressure loss of subcooled flow boiling in manifold microchannel heat sink. International Journal of Heat and Mass Transfer, 2020, 162, 120362.	4.8	11
2801	Analysis of Capillary Flow in a Parallel Microchannel-Based Wick Structure with Circular and Noncircular Geometries. Langmuir, 2020, 36, 13485-13497.	3.5	8
2802	Atomization and evaporation process of liquid fuel jets in crossflows: A numerical study using Eulerian/Lagrangian method. International Journal of Multiphase Flow, 2020, 129, 103331.	3.4	36
2803	Modified ghost fluid method for threeâ€dimensional compressible multimaterial flows with interfaces exhibiting large curvature and topological change. International Journal for Numerical Methods in Fluids, 2020, 92, 1798-1825.	1.6	4
2804	Coal Matrix Pore Analysis Using Nanoscale Scanning Electron Microscopy and Direct Capillary Pressure Curve Simulation. Energy & Fuels, 2020, 34, 6761-6767.	5.1	3
2805	An Automatic In Situ Contact Angle Determination Based on Level Set Method. Water Resources Research, 2020, 56, e2020WR027107.	4.2	13
2806	3D-coupling of Volume-of-Fluid and Lagrangian particle tracking for spray atomization simulation in OpenFOAM. SoftwareX, 2020, 11, 100483.	2.6	22
2807	A semi-implicit conservative sharp-interface method for liquid-solid phase transition. International Journal of Heat and Mass Transfer, 2020, 155, 119800.	4.8	13
2808	An assessment and analysis of phase change models for the simulation of vapor bubble condensation. International Journal of Heat and Mass Transfer, 2020, 157, 119924.	4.8	40
2809	A multiple level-set approach for modelling containerless freezing process. Journal of Computational Physics, 2020, 415, 109527.	3.8	14
2810	A Kernel-Based explicit unconditionally stable scheme for Hamilton-Jacobi equations on nonuniform meshes. Journal of Computational Physics, 2020, 415, 109543.	3.8	2
2811	Three-dimensional flow breakup characteristics of a circular jet with different nozzle geometries. Biosystems Engineering, 2020, 193, 216-231.	4.3	10

#	Article	IF	CITATIONS
2812	Numerical Simulations of the Interaction of Solitary Waves and Elastic Structures with a Fully Eulerian Method. Water Waves, 2020, 2, 433-466.	1.0	4
2813	A Deformation of a Mercury Droplet under Acceleration in an Annular Groove. Biosensors, 2020, 10, 61.	4.7	2
2814	Numerical modeling of multiphase flow in gas stirred ladles: From a multiscale point of view. Powder Technology, 2020, 373, 14-25.	4.2	29
2815	A level-set method for moving contact lines with contact angle hysteresis. Journal of Computational Physics, 2020, 418, 109636.	3.8	20
2816	Computationally efficient CFD prediction of bubbly flow using physics-guided deep learning. International Journal of Multiphase Flow, 2020, 131, 103378.	3.4	30
2817	A level set method for simulating wrinkling of extruded viscoelastic sheets. Polymer Engineering and Science, 2020, 60, 1662-1675.	3.1	2
2818	Collision Modes of Two Eccentric Compound Droplets. Processes, 2020, 8, 602.	2.8	3
2819	Subgrid-scale Capillary Breakup Model for Liquid Jet Atomization. Combustion Science and Technology, 2020, 192, 1334-1357.	2.3	7
2820	Droplet Interactions and Spray Processes. Fluid Mechanics and Its Applications, 2020, , .	0.2	4
2821	Improvement of the Level-Set Chost-Fluid Method for the Compressible Euler Equations. Fluid Mechanics and Its Applications, 2020, , 17-29.	0.2	4
2822	Numerical investigation on formation and motion of bubble or droplet in quiescent flow. Physics of Fluids, 2020, 32, 032106.	4.0	8
2823	A New Active Contours Image Segmentation Model Driven by Generalized Mean with Outlier Restoration Achievements. International Journal of Pattern Recognition and Artificial Intelligence, 2020, 34, 2054026.	1.2	2
2824	Two-Dimensional Free-Surface Flow Modeling for Wave-Structure Interactions and Induced Motions of Floating Bodies. Water (Switzerland), 2020, 12, 543.	2.7	2
2825	An Oldroyd-B solver for vanishingly small values of the viscosity ratio: Application to unsteady free surface flows. Journal of Non-Newtonian Fluid Mechanics, 2020, 285, 104338.	2.4	12
2826	Interface capturing simulations of droplet interaction with spacer grids under DFFB conditions. Nuclear Engineering and Design, 2020, 364, 110685.	1.7	7
2827	Reference map technique for incompressible fluid–structure interaction. Journal of Fluid Mechanics, 2020, 898, .	3.4	17
2828	Lattice Boltzmann method for fractional Cahn-Hilliard equation. Communications in Nonlinear Science and Numerical Simulation, 2020, 91, 105443.	3.3	11
2829	Morphology-Safety Implications of Interfacial Evolution in Lithium Metal Anodes. Journal of Physical Chemistry C, 2020, 124, 16784-16795.	3.1	17

#	Article	IF	CITATIONS
2830	Numerical investigation of nucleate pool boiling outside a vertical tube under sub-atmospheric pressures. International Communications in Heat and Mass Transfer, 2020, 116, 104662.	5.6	6
2831	An interface-sharpening method with adaptive mesh refinement for volume-of-fluid simulations of two-phase compressible flows. Computers and Fluids, 2020, 210, 104648.	2.5	7
2832	An improvement of interface computation of incompressible two-phase flows based on coupling volume of fluid with level-set methods. International Journal of Computational Fluid Dynamics, 2020, 34, 75-89.	1.2	5
2833	Facile Fabrication of Highly Perforated Hollow Metallic Cylinder with Changeable Micro-Orifices by Electroforming-Extrusion Molding Hybrid Process. Micromachines, 2020, 11, 70.	2.9	3
2834	Deformation and coalescence of ferrodroplets in Rosensweig model using the phase field and modified level set approaches under uniform magnetic fields. Communications in Nonlinear Science and Numerical Simulation, 2020, 85, 105213.	3.3	10
2835	Experimental and simulation study of flow patterns in the combined flow focusing and T-junction device. Journal of Micromechanics and Microengineering, 2020, 30, 055001.	2.6	11
2836	Pore-scale study of water salinity effect on thin-film stability for a moving oil droplet. Journal of Colloid and Interface Science, 2020, 569, 366-377.	9.4	19
2837	Effect of a wake on drag and deformation of liquid column at high Weber numbers. Journal of Fluid Science and Technology, 2020, 15, JFST0006-JFST0006.	0.6	0
2838	Buoyancy Driven Flow with Gas-Liquid Coatings of Peristaltic Bubbly Flow in Elastic Walls. Coatings, 2020, 10, 115.	2.6	30
2839	Moving surface mesh-incorporated particle method for numerical simulation of a liquid droplet. Journal of Computational Physics, 2020, 409, 109349.	3.8	25
2840	Numerical simulation of solitary waves overtopping on a sloping sea dike using a particle method. Wave Motion, 2020, 95, 102535.	2.0	11
2841	An integrated smoothed particle hydrodynamics model for complex interfacial flows with large density ratios. International Journal for Numerical Methods in Fluids, 2020, 92, 950-975.	1.6	3
2842	Numerical investigation of continuous droplet transport in parallel-plate electrowetting-on-dielectric digital microfluidics (EWOD DMF) with stripped electrodes. Physics of Fluids, 2020, 32, .	4.0	12
2843	An efficient quasiâ€Newton method for twoâ€dimensional steady free surface flow. International Journal for Numerical Methods in Fluids, 2020, 92, 785-801.	1.6	6
2845	Parametric finite element approximations of curvature-driven interface evolutions. Handbook of Numerical Analysis, 2020, 21, 275-423.	1.8	23
2846	An ALE-FE method for two-phase flows with dynamic boundaries. Computer Methods in Applied Mechanics and Engineering, 2020, 362, 112820.	6.6	7
2847	Large-Eddy Simulations with an Immersed Boundary Method: Pollutant Dispersion over Urban Terrain. Atmosphere, 2020, 11, 113.	2.3	3
2848	Computational modeling of the fluid flow in type B aortic dissection using a modified finite element embedded formulation. Biomechanics and Modeling in <u>Mechanobiology</u> , 2020, 19, 1565-1583.	2.8	6

#	Article	IF	Citations
2849	Lagrangian Numerical Analysis of Liquid Jet in Subsonic Crossflow. , 2020, , .		0
2850	An exactly force-balanced boundary-conforming arbitrary-Lagrangian-Eulerian method for interfacial dynamics. Journal of Computational Physics, 2020, 408, 109237.	3.8	8
2851	An improved diffuse interface method for threeâ€dimensional multiphase flows with complex interface deformation. International Journal for Numerical Methods in Fluids, 2020, 92, 976-991.	1.6	5
2852	An unstructured finite element model for incompressible twoâ€phase flow based on a monolithic conservative level set method. International Journal for Numerical Methods in Fluids, 2020, 92, 1058-1080.	1.6	5
2853	An entropy–stable discontinuous Galerkin approximation for the incompressible Navier–Stokes equations with variable density and artificial compressibility. Journal of Computational Physics, 2020, 408, 109241.	3.8	13
2854	A new microchannel capillary flow assay (MCFA) platform with lyophilized chemiluminescence reagents for a smartphone-based POCT detecting malaria. Microsystems and Nanoengineering, 2020, 6, 5.	7.0	79
2855	Two-phase multiscale numerical framework for modeling thin films on curved solid surfaces in porous media. Journal of Computational Physics, 2020, 413, 109464.	3.8	15
2856	Unified momentum equation approach for fluid–structure interaction problems involving linear elastic structures. Journal of Computational Physics, 2020, 415, 109482.	3.8	4
2857	Sixth-Order Accurate Schemes for Reinitialization and Extrapolation in the Level Set Framework. Journal of Scientific Computing, 2020, 83, 1.	2.3	4
2858	An Accurate Sharp Interface Method for Two-Phase Compressible Flows at Low-Mach Regime. Flow, Turbulence and Combustion, 2020, 105, 1413-1444.	2.6	3
2860	Mixing dynamics in an uncovered unbaffled stirred tank using Large-Eddy Simulations and a passive scalar transport equation. Chemical Engineering Science, 2020, 222, 115658.	3.8	10
2861	A level set redistancing algorithm for simulation of two-phase flow. Numerical Heat Transfer, Part B: Fundamentals, 2020, 78, 30-53.	0.9	10
2862	A level-set algorithm for the inverse problem of full magnetic gradient tensor data. Applied Mathematics Letters, 2020, 107, 106416.	2.7	1
2863	Level set splitting in DEM for modeling breakage mechanics. Computer Methods in Applied Mechanics and Engineering, 2020, 365, 112961.	6.6	36
2864	A Lagrangian approach for the coupled simulation of fixed net structures in a Eulerian fluid model. Journal of Fluids and Structures, 2020, 94, 102962.	3.4	39
2865	Numerical Study of Bubble Rising Motion in a Vertical Wedge-Shaped Channel Based on a Modified Level Set Method. Fluid Dynamics, 2020, 55, 241-251.	0.9	4
2866	A coupled immersed interface and level set method for simulation of interfacial flows steered by surface tension. Experimental and Computational Multiphase Flow, 2021, 3, 21-37.	3.9	7
2867	An approximation approach for the simulation of vapor-liquid phase change by the volume-of-fluid method. International Journal of Multiphase Flow, 2021, 136, 103359.	3.4	2

#	Article	IF	CITATIONS
2868	Digital microstructure insights to phase evolution and thermal flow properties of hydrates by X-ray computed tomography. Science China Technological Sciences, 2021, 64, 187-202.	4.0	4
2869	Machineâ€learningâ€based surface tension model for multiphase flow simulation using particle method. International Journal for Numerical Methods in Fluids, 2021, 93, 356-368.	1.6	7
2870	Tetrahedral adaptive mesh refinement for twoâ€phase flows using conservative levelâ€set method. International Journal for Numerical Methods in Fluids, 2021, 93, 481-503.	1.6	7
2871	Multiphase smoothed particle hydrodynamics modeling of forced liquid sloshing. International Journal for Numerical Methods in Fluids, 2021, 93, 411-428.	1.6	6
2872	Accurate modeling of the interaction of constrained floating structures and complex free surfaces using a new quasistatic mooring model. International Journal for Numerical Methods in Fluids, 2021, 93, 504-526.	1.6	6
2873	Side wall boundary effect on the Rayleigh–Taylor instability. European Journal of Mechanics, B/Fluids, 2021, 85, 361-374.	2.5	6
2874	A step toward the numerical simulation of catalytic hydrogenation of nitrobenzene in Taylor flow at practical conditions. Chemical Engineering Science, 2021, 230, 116132.	3.8	12
2875	Shape evolution of drops on surfaces of different wettability gradients. Chemical Engineering Science, 2021, 229, 116136.	3.8	16
2876	High order ADER schemes and GLM curl cleaning for a first order hyperbolic formulation of compressible flow with surface tension. Journal of Computational Physics, 2021, 426, 109898.	3.8	23
2877	Implicitly coupled phase fraction equations for polydisperse flows. International Journal for Numerical Methods in Fluids, 2021, 93, 1627-1644.	1.6	1
2878	Lateral motion of a droplet impacting on a wettability-patterned surface: numerical and theoretical studies. Soft Matter, 2021, 17, 724-737.	2.7	7
2879	Variationally derived interface stabilization for discrete multiphase flows and relation with the ghost-penalty method. Computer Methods in Applied Mechanics and Engineering, 2021, 373, 113404.	6.6	9
2880	Deep learning interfacial momentum closures in coarse-mesh CFD two-phase flow simulation using validation data. International Journal of Multiphase Flow, 2021, 135, 103489.	3.4	14
2881	Application of SPH to Single and Multiphase Geophysical, Biophysical and Industrial Fluid Flows. International Journal of Computational Fluid Dynamics, 2021, 35, 22-78.	1.2	15
2882	Propagation of a solitary wave over a finite submerged thin plate. Applied Ocean Research, 2021, 106, 102425.	4.1	11
2883	A non-linear implicit approach for modelling the dynamics of porous tensile structures interacting with fluids. Journal of Fluids and Structures, 2021, 100, 103168.	3.4	23
2884	Automatic detection and segmentation of lumbar vertebrae from X-ray images for compression fracture evaluation. Computer Methods and Programs in Biomedicine, 2021, 200, 105833.	4.7	40
2885	A friction interface model for multi-material interactions in a Eulerian framework. Journal of Computational Physics, 2021, 433, 110057.	3.8	10

#	Article	IF	CITATIONS
2886	Variational multi-scale modeling of interfacial flows with a balanced-force surface tension model. Mechanics Research Communications, 2021, 112, 103608.	1.8	13
2887	Interaction of a pair of in-line bubbles ascending in an Oldroyd-B liquid: A numerical study. European Journal of Mechanics, B/Fluids, 2021, 85, 413-429.	2.5	13
2888	A conservative level set method for N-phase flows with a free-energy-based surface tension model. Journal of Computational Physics, 2021, 426, 109955.	3.8	14
2889	Direct numerical simulation of turbulent bubbly down flow using an efficient CLSVOF method. International Journal of Multiphase Flow, 2021, 135, 103500.	3.4	6
2890	A locally conservative multiphase level set method for capillary-controlled displacements in porous media. Journal of Computational Physics, 2021, 428, 109965.	3.8	16
2891	An enhancement of coupling method for interface computations in incompressible two-phase flows. Computers and Fluids, 2021, 214, 104763.	2.5	8
2892	Vacuum infusion in porous preform with different mould configurations: Flow simulation and experimental validation. Journal of Reinforced Plastics and Composites, 2021, 40, 321-338.	3.1	5
2893	A Computational Model of Thrombus Growth Based on Level Set Method. IEEE Access, 2021, 9, 100769-100780.	4.2	3
2894	Study on Efficient DRLSE-Oriented Edge-Based Medical Image Segmentation of Cardiac Images. Lecture Notes in Networks and Systems, 2021, , 823-831.	0.7	1
2895	A fast, edge-preserving, distance-regularized model with bilateral filtering for oil spill segmentation of SAR images. Journal of Oceanology and Limnology, 2021, 39, 1198.	1.3	4
2896	Sharp Interface Level Set Method on a Co-located Grid for High Density Ratio Two-Fluid Flow. Lecture Notes in Mechanical Engineering, 2021, , 91-98.	0.4	1
2897	Control of fingering instability by vibrations. Mathematical Modelling of Natural Phenomena, 2021, 16, 40.	2.4	9
2898	A coupled level set/volume of fluid method for simulation of two-phase flow on unstructured grids. Journal of Mechanical Science and Technology, 2021, 35, 625-634.	1.5	4
2899	The Effect of Surface Roughness on Immiscible Displacement Using Pore Scale Simulation. Transport in Porous Media, 2021, 140, 713-725.	2.6	28
2900	Global regularity for degenerate/singular parabolic equations involving measure data. Calculus of Variations and Partial Differential Equations, 2021, 60, 1.	1.7	4
2901	The Potts Model with Different Piecewise Constant Representations and Fast Algorithms: A Survey. , $2021,,1\text{-}41.$		0
2902	The Potts Model with Different Piecewise Constant Representations and Fast Algorithms: A Survey. , 2021, , 1-41.		1
2903	Development of Aerodynamic Force Model Based on Potential Flow for Liquid Droplets Analyzed by Particle Method. Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan, 2021, 19, 690-699.	0.2	0

#	Article	IF	CITATIONS
2904	Recent Advances and Complex Applications of the Compressible Ghost-Fluid Method. SEMA SIMAI Springer Series, 2021, , 155-176.	0.7	5
2905	Simultaneously recovering both domain and varying density in inverse gravimetry by efficient level-set methods. Inverse Problems and Imaging, 2021, 15, 387.	1.1	4
2906	A semantic contour based segmentation of lungs from chest xâ€rays for the classification of tuberculosis using NaÃ⁻ve Bayes classifier. International Journal of Imaging Systems and Technology, 2021, 31, 2189-2203.	4.1	4
2907	An interface capturing method for liquid-gas flows at low-Mach number. Computers and Fluids, 2021, 216, 104789.	2.5	5
2908	Two-Phase Turbulence Statistics from High Fidelity Dispersed Droplet Flow Simulations in a Pressurized Water Reactor (PWR) Sub-Channel with Mixing Vanes. Fluids, 2021, 6, 72.	1.7	4
2909	Numerical Study on an Interface Compression Method for the Volume of Fluid Approach. Fluids, 2021, 6, 80.	1.7	11
2910	Modeling Immiscible Fluid Displacement in a Porous Medium Using Lattice Boltzmann Method. Fluids, 2021, 6, 89.	1.7	3
2911	Cahn-Hilliard Navier-Stokes simulations for marine free-surface flows. Experimental and Computational Multiphase Flow, 0, , 1.	3.9	2
2912	Simulation of large-scale additive manufacturing process with a single-phase level set method: a process parameters study. International Journal of Advanced Manufacturing Technology, 2021, 113, 3343-3360.	3.0	6
2913	Numerical simulation of heat and mass transient behavior of single hexadecane droplet under forced convective conditions. International Journal of Heat and Mass Transfer, 2021, 167, 120736.	4.8	10
2914	A weighted essentially nonoscillatoryâ€based phase field lattice Boltzmann method for incompressible twoâ€phase flows with high density contrast. International Journal for Numerical Methods in Fluids, 2021, 93, 2272-2290.	1.6	1
2915	An accelerated conservative sharp-interface method for multiphase flows simulations. Journal of Computational Physics, 2021, 429, 110021.	3.8	6
2916	Global stability and nonlinear dynamics of wake flows with a two-fluid interface. Journal of Fluid Mechanics, 2021, 915, .	3.4	5
2917	Direct numerical simulation of incompressible flows on parallel Octree grids. Journal of Computational Physics, 2021, 428, 110084.	3.8	11
2918	A practical simulation of a hexanitrohexaazaisowurtzitane (CL-20) sphere detonated underwater with the Taylor wave solution and modified Tait parameters. Physics of Fluids, 2021, 33, .	4.0	8
2919	A level set approach to simulate grain growth with an evolving population of second phase particles. Modelling and Simulation in Materials Science and Engineering, 2021, 29, 035009.	2.0	10
2920	Numerical analysis of the nonlinear free surface flow around an advancing ship using moving particle semi-implicit method. AIP Advances, 2021, 11, .	1.3	4
2921	Hydrodynamic Properties of a Moored Floating Breakwater using CFD Approach. IOP Conference Series: Earth and Environmental Science, 2021, 698, 012030.	0.3	0

#	Article	IF	CITATIONS
2922	Improved multiple-relaxation-time lattice Boltzmann model for Allen–Cahn equation. International Journal of Modern Physics C, 2021, 32, 2150086.	1.7	1
2923	Computational Fluid Dynamics (CFD) Simulations of Taylor Bubbles in Vertical and Inclined Pipes with Upward and Downward Liquid Flow. SPE Journal, 2021, 26, 3832-3847.	3.1	9
2924	A numerical analysis on molten droplet hydrodynamics in sodium pool. IOP Conference Series: Earth and Environmental Science, 2021, 680, 012054.	0.3	0
2925	Computational Microfluidics for Geosciences. Frontiers in Water, 2021, 3, .	2.3	24
2926	Comparison of macro- and microscopic solutions of the Riemann problem II. Two-phase shock tube. Journal of Computational Physics, 2021, 429, 110027.	3.8	13
2927	Phase-Field Simulation of Imbibition for the Matrix-Fracture of Tight Oil Reservoirs Considering Temperature Change. Water (Switzerland), 2021, 13, 1004.	2.7	9
2928	Dual grid level set method based direct numerical simulations of nucleate boiling with oscillating base plate. International Journal of Thermal Sciences, 2021, 162, 106785.	4.9	7
2929	Numerical investigation of the impacting and freezing process of a single supercooled water droplet. Physics of Fluids, 2021, 33, .	4.0	32
2930	Progress in multiphase computational fluid dynamics. Nuclear Engineering and Design, 2021, 374, 111018.	1.7	17
2931	Computational interfacial rheology. Journal of Non-Newtonian Fluid Mechanics, 2021, 290, 104507.	2.4	38
2932	An efficient quasiâ€Newton method for threeâ€dimensional steady free surface flow. International Journal for Numerical Methods in Fluids, 2021, 93, 2581-2610.	1.6	4
2933	A Numerical Solution for Modelling Mooring Dynamics, Including Bending and Shearing Effects, Using a Geometrically Exact Beam Model. Journal of Marine Science and Engineering, 2021, 9, 486.	2.6	8
2934	Numerical convergence of volume of fluid based large eddy simulations of atomizing sprays. Physics of Fluids, 2021, 33, .	4.0	10
2935	Numerical Investigation on Bubble Growth and Merger in Microchannel Flow Boiling With Self-Rewetting Fluid. Journal of Heat Transfer, 2021, 143, .	2.1	5
2936	A novel interface method for two-dimensional multiphase SPH: Interface detection and surface tension formulation. Journal of Computational Physics, 2021, 431, 110119.	3.8	18
2937	Solving phase change problems via a precise time-domain expanding boundary element method combined with the level set method. Engineering Analysis With Boundary Elements, 2021, 126, 1-12.	3.7	7
2938	Effect of airflow pressure on the droplet breakup in the shear breakup regime. Physics of Fluids, 2021, 33, .	4.0	12
2939	A Method to Solve Hamilton–Jacobi Type Equation on Unstructured Meshes. Journal of Scientific Computing, 2021, 88, 1.	2.3	1

#	Article	IF	CITATIONS
2940	Free surface flow over square bars at different Reynolds numbers. Journal of Hydro-Environment Research, 2021, 36, 67-76.	2.2	5
2941	A consistent and parallelized height function based scheme for applying contact angle to 3D volume-of-fluid simulations. Journal of Computational Physics, 2021, 433, 110190.	3.8	5
2942	Image-based rock typing using local homogeneity filter and Chan-Vese model. Computers and Geosciences, 2021, 150, 104712.	4.2	5
2943	Direct numerical simulations of incompressible Rayleigh–Taylor instabilities at low and medium Atwood numbers. Physics of Fluids, 2021, 33, .	4.0	19
2944	Pressure-dependent threshold in a granular flow: Numerical modeling and experimental validation. Journal of Non-Newtonian Fluid Mechanics, 2021, 291, 104529.	2.4	3
2945	Parametric study of added resistance and ship motion in head waves through RANS : Calculation guideline. Applied Ocean Research, 2021, 110, 102573.	4.1	6
2946	Classification of abnormalities in breast ultrasound images using ANN, FIS and ANFIS classifier: A comparison. Journal of Physics: Conference Series, 2021, 1916, 012015.	0.4	2
2947	On the magnetization of dilute ferrofluid emulsions in shear flows. Physics of Fluids, 2021, 33, .	4.0	10
2948	Digital materials design by thermal-fluid science for multi-metal additive manufacturing. Acta Materialia, 2021, 210, 116825.	7.9	29
2949	An Optimal Multigrid Algorithm for the Combining \$\$P_1\$\$-\$\$Q_1\$\$ Finite Element Approximations of Interface Problems Based on Local Anisotropic Fitting Meshes. Journal of Scientific Computing, 2021, 88, 1.	2.3	3
2950	Liquid/solid flow field in a centrifugal pump with different impeller blade types by PIV. Measurement and Control, 2021, 54, 1219-1233.	1.8	3
2951	Numerical investigation of ventilated cavitating flow in the wake of a circular cylinder. Physical Review Fluids, 2021, 6, .	2.5	7
2952	Numerical investigation of droplet impact on a solid superhydrophobic surface. Physics of Fluids, 2021, 33, .	4.0	25
2953	Modeling of interfacial flows based on an explicit volume diffusion concept. Physics of Fluids, 2021, 33, .	4.0	4
2954	Presenting a novel higher-order bounded convection scheme for simulation of multiphase flows and convection heat transfer. International Journal of Heat and Mass Transfer, 2021, 172, 121163.	4.8	6
2955	Turbulent Flows With Drops and Bubbles: What Numerical Simulations Can Tell Us—Freeman Scholar Lecture. Journal of Fluids Engineering, Transactions of the ASME, 2021, 143, .	1.5	20
2956	Analysis of correlations between local geographic atrophy growth rates and local OCT angiography-measured choriocapillaris flow deficits. Biomedical Optics Express, 2021, 12, 4573.	2.9	11
2957	Inferring incompressible two-phase flow fields from the interface motion using physics-informed neural networks. Machine Learning With Applications, 2021, 4, 100029.	4.4	6

#	Article	IF	CITATIONS
2958	A novel diffuse-interface model and a fully-discrete maximum-principle-preserving energy-stable method for two-phase flow with surface tension and non-matching densities. Computer Methods in Applied Mechanics and Engineering, 2021, 379, 113751.	6.6	3
2959	Numerical study of natural oscillations of supported drops with free and pinned contact lines. Physics of Fluids, 2021, 33, .	4.0	14
2960	Towards a phenomenological model on the deformation and orientation dynamics of finite-sized bubbles in both quiescent and turbulent media. Journal of Fluid Mechanics, 2021, 920, .	3.4	4
2961	Numerical evaluation reveals the effect of branching morphology on vessel transport properties during angiogenesis. PLoS Computational Biology, 2021, 17, e1008398.	3.2	6
2962	A consistent and conservative model and its scheme for N-phase-M-component incompressible flows. Journal of Computational Physics, 2021, 434, 110229.	3.8	15
2963	Direct numerical simulation of permeation of particles through a realistic fibrous filter obtained from X-ray computed tomography images utilizing signed distance function. Powder Technology, 2021, 385, 131-143.	4.2	17
2964	Effect of Changing Crude Oil Grade on Slug Characteristics and Flow Induced Mechanical Stresses in Pipes. Applied Sciences (Switzerland), 2021, 11, 5215.	2.5	1
2965	Lesion segmentation in breast ultrasound images using the optimized marked watershed method. BioMedical Engineering OnLine, 2021, 20, 57.	2.7	8
2966	Numerical Investigation of Sloshing Under Roll Excitation at Shallow Liquid Depths and the Effect of Baffles. Journal of Marine Science and Application, 2021, 20, 185-200.	1.7	9
2967	Review on the fundamentals and investigations of falling film dehumidification/absorption refrigeration based on CFD technology. International Journal of Heat and Mass Transfer, 2021, 171, 121042.	4.8	16
2968	An Immersed Boundary Method for Multi-Step Ice Accretion using a Level-Set. , 2021, , .		7
2969	A numerical study on hydrodynamic and heat transfer characteristics of gas–liquid Taylor flow in horizontal mini tubes. Numerical Heat Transfer; Part A: Applications, 2021, 80, 487-504.	2.1	1
2970	A deterministic model for bubble propagation through simple and cascaded loops of microchannels in power-law fluids. Physics of Fluids, 2021, 33, .	4.0	7
2971	Direct numerical simulations of transient turbulent jets: vortex-interface interactions. Journal of Fluid Mechanics, 2021, 922, .	3.4	18
2972	A Low Mach Number IMEX Flux Splitting for the Level Set Ghost Fluid Method. Communications on Applied Mathematics and Computation, 0, , 1.	1.7	2
2973	A generalized high-order momentum preserving (HOMP) method in the one-fluid model for incompressible two phase flows with high density ratio. Journal of Computational Physics, 2021, 437, 110322.	3.8	7
2974	A discontinuous Galerkin approximation for a wall–bounded consistent three–component Cahn–Hilliard flow model. Computers and Fluids, 2021, 225, 104971.	2.5	2
2975	Piecewise linear interface-capturing volume-of-fluid method in axisymmetric cylindrical coordinates. Journal of Computational Physics, 2021, 436, 110291.	3.8	7

#	Article	IF	CITATIONS
2976	Numerical Simulation of Air-Water Mixing in Hydraulic Engineering with Large-Scale Interface Model. , 2021, , .		0
2977	Numerical investigation of gas–liquid and liquid–liquid <scp>T</scp> aylor flow through a circular microchannel with a sudden expansion. Canadian Journal of Chemical Engineering, 2022, 100, 1596-1612.	1.7	7
2978	A High-Order Level-Set Method Coupled with an Extended Discontinuous Galerkin Method for Simulating Moving Interface Problems. , 2021, , .		0
2979	Direct numerical simulation of evaporation and condensation with the geometric VOF method and a sharp-interface phase-change model. International Journal of Heat and Mass Transfer, 2021, 173, 121233.	4.8	36
2980	Investigations on the slug two-phase flow in horizontal pipes: Past, presents, and future directives. Chemical Engineering Science, 2021, 238, 116611.	3.8	22
2981	THINC scaling method that bridges VOF and level set schemes. Journal of Computational Physics, 2021, 436, 110323.	3.8	16
2982	A parallel interface tracking approach for evolving geometry problems. Engineering With Computers, 2022, 38, 4289-4305.	6.1	3
2983	CFD–based erosion and corrosion modeling in pipelines using a high–order discontinuous Galerkin multiphase solver. Wear, 2021, 478-479, 203882.	3.1	1
2984	Numerical study of single bubble rising dynamics for the variability of moderate Reynolds and sidewalls influence: A bi-phase SPH approach. Engineering Analysis With Boundary Elements, 2021, 129, 1-26.	3.7	5
2985	Numerical and experimental investigations of wave transmission behind a submerged WABCORE breakwater in low wave regime. Journal of Ocean Engineering and Marine Energy, 2021, 7, 405-420.	1.7	0
2986	Generalized pressure-correction for viscous potential flow simulations of multiphase flows using boundary element method. International Journal of Multiphase Flow, 2021, 141, 103646.	3.4	1
2987	A new finite element level set reinitialization method based on the shifted boundary method. Journal of Computational Physics, 2021, 438, 110360.	3.8	3
2988	Analysis of water entry impact load characteristics of rigid spheres based on experiments. Journal of Marine Science and Technology, 2022, 27, 439-451.	2.9	2
2989	Three-Dimensional Simulation of Vapor Bubble Growth in Superheated Water Due to the Convective Action by an Interface Tracking Method. Journal of Fluids Engineering, Transactions of the ASME, 2022, 144, .	1.5	2
2990	Numerical simulation of spherical bubble collapse by a uniform bubble pressure approximation and detailed description of heat and mass transfer with phase transition. Applied Mathematical Modelling, 2021, 96, 80-110.	4.2	4
2991	Stochastic sub-grid scale acceleration model (SSAM) for LES of primary atomization using iso-advector VOF method for ECN Spray-A. , 2021, 1, .		0
2992	Models for Droplet Motion on Hydrophilic and Hydrophobic Surfaces. Heat Transfer Engineering, 2022, 43, 1256-1268.	1.9	2
2993	Shock-induced combustion of aluminum particle clusters investigated with resolved sharp-interface two-dimensional simulations. Physical Review Fluids, 2021, 6, .	2.5	1

#	Article	IF	CITATIONS
2994	Integrating a learned probabilistic model with energy functional for ultrasound image segmentation. Medical and Biological Engineering and Computing, 2021, 59, 1917-1931.	2.8	1
2995	Fractional Differentiation-based Hybrid Active Contour Model for Noisy Image Segmentation. SSRG International Journal of Engineering Trends and Technology, 2021, 69, 243-259.	0.5	0
2996	Topology optimization for incompressible viscous fluid flow using the lattice kinetic scheme. Computers and Mathematics With Applications, 2021, 97, 251-266.	2.7	5
2997	Isogeometric Analysis for Two-Phase Liquid Sloshing. Lecture Notes in Electrical Engineering, 2022, , 729-738.	0.4	0
2998	Numerical Simulations of Flows in a Cerebral Aneurysm Using the Lattice Boltzmann Method with the Half-Way and Interpolated Bounce-Back Schemes. Fluids, 2021, 6, 338.	1.7	0
2999	Turbulent drag reduction over liquid-infused textured surfaces: effect of the interface dynamics. Journal of Turbulence, 2021, 22, 681-712.	1.4	1
3000	Particle methods in ocean and coastal engineering. Applied Ocean Research, 2021, 114, 102734.	4.1	174
3001	A multi-resolution method for two-phase fluids with complex equations of state by binomial solvers in three space dimensions. Applied Numerical Mathematics, 2021, 167, 92-107.	2.1	1
3002	Numerical study of complex modal characteristics in anguilliform mode of fish swimming. Journal of Mechanical Science and Technology, 2021, 35, 4511.	1.5	3
3003	A corrected WCSPH scheme with improved interface treatments for the viscous/viscoelastic two-phase flows. Computational Particle Mechanics, 2022, 9, 633-653.	3.0	3
3004	Numerical Analysis of a Finite Element Approximation to a Level Set Model for Free-Surface Flows. Computational Methods in Applied Mathematics, 2022, 22, 155-179.	0.8	2
3005	A mixed interface-capturing/interface-tracking formulation for thermal multi-phase flows with emphasis on metal additive manufacturing processes. Computer Methods in Applied Mechanics and Engineering, 2021, 383, 113910.	6.6	23
3006	The Coupled Volume of Fluid and Brinkman Penalization Methods for Simulation of Incompressible Multiphase Flows. Fluids, 2021, 6, 334.	1.7	6
3007	Numerical Investigation of Hydrodynamic Performance of a Light Buoy with Different Mooring Configurations in Regular Waves. Journal of Offshore Mechanics and Arctic Engineering, 0, , 1-26.	1.2	1
3008	A Computational Fluid Dynamics Approach for Modeling the Fluid–Structure Interaction of Offshore Aquaculture Cages and Waves. Journal of Offshore Mechanics and Arctic Engineering, 2022, 144, .	1.2	0
3009	A fractional-order PDE-based contour detection model with CeNN scheme for medical images. Journal of Real-Time Image Processing, 2022, 19, 147-160.	3.5	1
3010	Application of Radial Basis Functions for Partially-Parametric Modeling and Principal Component Analysis for Faster Hydrodynamic Optimization of a Catamaran. Journal of Marine Science and Engineering, 2021, 9, 1069.	2.6	9
3011	A consistent and conservative volume distribution algorithm and its applications to multiphase flows using Phase-Field models. International Journal of Multiphase Flow, 2021, 142, 103727.	3.4	12

#	Article	IF	CITATIONS
3012	A robust solver for incompressible high-Reynolds-number two-fluid flows with high density contrast. Journal of Computational Physics, 2021, 441, 110474.	3.8	13
3013	Numerical Modeling of Phase Transformations in Dual-Phase Steels Using Level Set and SSRVE Approaches. Materials, 2021, 14, 5363.	2.9	2
3014	Investigation on the effect of convective outflow boundary condition on the bubbles growth, rising and breakup dynamics of nucleate boiling. International Journal of Thermal Sciences, 2021, 167, 106877.	4.9	19
3015	Pool boiling enhancement through induced vibrations in the liquid pool due to moving solid bodies—A numerical study using lattice Boltzmann method (LBM). Physics of Fluids, 2021, 33, .	4.0	8
3016	A new DNS formalism dedicated to turbulent two-phase flows with phase change. International Journal of Multiphase Flow, 2021, 143, 103762.	3.4	9
3017	An efficient, robust and high accuracy framework for direct numerical simulation of 2D and 2D axisymmetric immiscible flow with large property contrast. Computers and Fluids, 2021, 229, 105083.	2.5	0
3018	Numerical simulation of gas-liquid two-phase flow in the micro-fracture networks in fractured reservoirs. Journal of Natural Gas Science and Engineering, 2021, 94, 104101.	4.4	8
3019	Three dimensional modeling of liquid droplet spreading on solid surface: An enriched finite element/level-set approach. Journal of Computational Physics, 2021, 442, 110480.	3.8	10
3020	Three-dimensional cellwise conservative unsplit geometric VOF schemes. Journal of Computational Physics, 2021, 442, 110479.	3.8	8
3021	Accurate hybrid AUSMD type flux algorithm with generalized discontinuity sharpening reconstruction for two-fluid modeling. Journal of Computational Physics, 2021, 443, 110540.	3.8	1
3022	Convergence effect of droplet coalescence under AC and pulsed DC electric fields. International Journal of Multiphase Flow, 2021, 143, 103776.	3.4	11
3023	Numerical analysis on dynamics and thermodynamics of a supercooled water droplet considering the dynamic contact angle. Physics of Fluids, 2021, 33, .	4.0	11
3024	Multi-physics methodology for phase change due to rapidly depressurised two-phase flows. International Journal of Multiphase Flow, 2021, 144, 103788.	3.4	1
3025	An all-Mach, low-dissipation strategy for simulating multiphase flows. Journal of Computational Physics, 2021, 445, 110602.	3.8	9
3026	A high order conservative finite difference scheme for compressible two-medium flows. Journal of Computational Physics, 2021, 445, 110597.	3.8	4
3027	Investigation on the air-core vortex in a vertical hydraulic intake system. Renewable Energy, 2021, 177, 1333-1345.	8.9	10
3028	Fully implicit and accurate treatment of jump conditions for two-phase incompressible Navier–Stokes equations. Journal of Computational Physics, 2021, 445, 110587.	3.8	4
3029	Implementation of a probabilistic surface density volume of fluid approach for spray atomisation. Computers and Fluids, 2021, 230, 105121.	2.5	10

Сіт	TATION REPORT	
Article	IF	CITATIONS
Gas-liquid two-phase flows simulation based on weakly compressible scheme with interface-adapted AMR method. Journal of Computational Physics, 2021, 445, 110605.	3.8	8
A higher-order finite element method with unstructured anisotropic mesh adaption for two phase flows with surface tension. Computers and Fluids, 2021, 230, 105154.	2.5	3
Numerical investigation of the mechanism of interfacial dynamics of the melt pool and defects during laser powder bed fusion. Optics and Laser Technology, 2021, 143, 107289.	4.6	17
Level set-based topology optimization for two dimensional turbulent flow using an immersed boundary method. Journal of Computational Physics, 2021, 446, 110630.	3.8	10
On the performance of a highly-scalable Computational Fluid Dynamics code on AMD, ARM and Intel processor-based HPC systems. Computer Physics Communications, 2021, 269, 108105.	7.5	12
Topology- and convexity-preserving image segmentation based on image registration. Applied Mathematical Modelling, 2021, 100, 218-239.	4.2	8
Resin infusion in porous preform in the presence of HPM during VARTM: Flow simulation using level set and experimental validation. Composites Part A: Applied Science and Manufacturing, 2021, 151, 106641.	7.6	9
Geometrical level set reinitialization using closest point method and kink detection for thin filaments, topology changes and two-phase flows. Journal of Computational Physics, 2022, 448, 11070	04. <sup>3.8</sup>	4
Equilibrium droplet shapes on chemically patterned surfaces: theoretical calculation, phase-field simulation, and experiments. Journal of Colloid and Interface Science, 2022, 606, 1077-1086.	9.4	18
An interface treatment for two-material multi-species flows involving thermally perfect gases with chemical reactions. Journal of Computational Physics, 2022, 448, 110707.	3.8	3
Level set-based BEM topology optimization method for maximizing total potential energy of thermal problems. International Journal of Heat and Mass Transfer, 2022, 182, 121921.	4.8	4
A numerical framework for modelling the dynamics of open ocean aquaculture structures in viscous fluids. Applied Ocean Research, 2021, 106, 102410.	4.1	39
A Deep Learning Approach for the Computation of Curvature in the Level-Set Method. SIAM Journal of Scientific Computing, 2021, 43, A1754-A1779.	2.8	13
Level Set Extentions, Flows and Crack Propagation. , 2002, , 31-95.		1
On the Representation of Shapes Using Implicit Functions. Modeling and Simulation in Science, Engineering and Technology, 2006, , 167-199.	0.6	6

3045 From Nano to Micro to Macro Scales in Boiling. , 2005, , 197-216.

3046 The Effect of Surfactant on Rising Bubbles. , 2006, , 311-321.

3047 Wave Processes at Interfaces., 2005, , 1-25.

#

#	Article	IF	CITATIONS
3048	A Local Level-Set Method under Involvement of Topological Aspects. , 2005, , 233-256.		1
3049	A Second-Order Adaptive Sharp-Interface Method for Incompressible Multiphase Flow. , 2006, , 643-648.		3
3050	A Multiphase Level Set Framework for Motion Segmentation. Lecture Notes in Computer Science, 2003, , 599-614.	1.3	36
3051	Fast Implicit Active Contour Models. Lecture Notes in Computer Science, 2002, , 133-140.	1.3	29
3052	Skeletons via Shocks of Boundary Evolution. Computational Imaging and Vision, 2008, , 127-154.	0.6	1
3053	Agent-Based Modeling of Ductal Carcinoma In Situ: Application to Patient-Specific Breast Cancer Modeling. , 2009, , 77-111.		9
3054	A New Image-Based Framework for Analyzing Cine Images. , 2011, , 69-98.		7
3055	Process Modeling and Optimization: Issues and Challenges. , 1998, , 249-263.		5
3056	Particle Simulations of Growth: Application to Tumorigenesis. , 2012, , 261-303.		1
3057	Image Segmentation with Shape Priors: Explicit Versus Implicit Representations. , 2015, , 1909-1944.		3
3058	Numerical Approaches to Complex Fluids. Soft and Biological Matter, 2019, , 1-34.	0.3	2
3059	Knowledge-Based Multi-sequence MR Segmentation via Deep Learning withÂaÂHybrid U-Net++ Model. Lecture Notes in Computer Science, 2020, , 280-289.	1.3	2
3060	A Volume-of-fluid Type Algorithm for Compressible Two-phase Flows. , 1999, , 895-904.		4
3061	SPARK $\hat{a} \in A$ Bushfire Spread Prediction Tool. IFIP Advances in Information and Communication Technology, 2015, , 262-271.	0.7	21
3062	Modelling Strategies and Two-Phase Flow Models. , 2018, , 39-77.		3
3063	Implicit Active Shape Models for 3D Segmentation in MR Imaging. Lecture Notes in Computer Science, 2004, , 209-216.	1.3	64
3064	Modeling partially premixed turbulent combustion. , 2001, , 161-180.		1
3065	Bayesian Approaches to Motion-Based Image and Video Segmentation. , 2004, , 104-123.		3

# 3066	ARTICLE Recent Studies on Inverse Medium Scattering Problems. , 2008, , 165-186.	IF	Citations
3067	Anisotropic Level Set Adaptation for Accurate Interface Capturing. , 2008, , 159-176.		4
3068	Numerical Modeling of Wave Propagation, Breaking and Run-Up on a Beach. Lecture Notes in Computational Science and Engineering, 2009, , 373-401.	0.3	6
3069	Modeling of Multi-Phase Flows with a Level-Set Method. , 2004, , 698-707.		1
3070	A New Prior Shape Model for Level Set Segmentation. Lecture Notes in Computer Science, 2011, , 125-132.	1.3	4
3071	Curvature Calculations for the Level-Set Method. , 2013, , 209-217.		1
3072	Analysis of Transport Processes for Layered Porous Materials Used in Industrial Applications. , 2003, , 243-251.		2
3073	Simulation and Numerical Analysis of Dendritic Growth. , 2001, , 225-252.		2
3075	A Phase-Conditioned Filtering of Incompressible Interfacial Multiphase Flow Equations: A Priori Study for the Modeling of LES Subgrid Scale Terms. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, 2014, , 165-172.	0.3	1
3076	Finite Difference and Finite Volume Techniques for the Solution of Navier-Stokes Equations in Cardiovascular Fluid Mechanics. , 2003, , 137-186.		3
3077	Navier-Stokes Numerical Algorithms for Free-Surface Flow Computations: An Overview. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2002, , 237-257.	0.6	31
3079	An Extended Finite Element Method for the Analysis of Submicron Heat Transfer Phenomena. Lecture Notes in Applied and Computational Mechanics, 2011, , 195-212.	2.2	5
3080	A Variational Approach to Deriving Smeared-Interface Surface Tension Models. ICASE/LaRC Interdisciplinary Series in Science and Engineering, 1998, , 231-240.	0.1	2
3081	Automatic Kidney Cysts Segmentation in Digital Ultrasound Images. , 2019, , 97-117.		1
3082	Gravity-Driven Bubble Rise Simulation. , 2019, , 1-37.		1
3083	Level-set methods for structural topology optimization: a review. , 2013, 48, 437.		1
3084	A review of level set methods to model interfaces moving under complex physics: Recent challenges and advances. Handbook of Numerical Analysis, 2020, 21, 509-554.	1.8	10
3085	A novel highly efficient Lagrangian model for massively multidomain simulation applied to microstructural evolutions. Computer Methods in Applied Mechanics and Engineering, 2020, 367, 113107.	6.6	15

#	Article	IF	CITATIONS
3086	The localized radial basis functions for parameterized level set based structural optimization. Engineering Analysis With Boundary Elements, 2020, 113, 296-305.	3.7	13
3087	Simulation of flow boiling in micro-channels: Effects of inlet flow rate and hot-spots. International Journal of Heat and Fluid Flow, 2020, 85, 108616.	2.4	6
3088	Direct numerical simulation of phase change in the presence of non-condensable gases. International Journal of Heat and Mass Transfer, 2020, 151, 119400.	4.8	7
3089	A control volume method based interface movement equation for one-dimensional Stefan problem achieving mass conservation. Journal of Materials Research and Technology, 2020, 9, 16107-16115.	5.8	5
3090	Numerical simulation of nonlinear sloshing in a prismatic tank by a Cartesian grid based three-dimensional multiphase flow model. Ocean Engineering, 2020, 213, 107629.	4.3	8
3091	A high order spectral difference-based phase field lattice Boltzmann method for incompressible two-phase flows. Physics of Fluids, 2020, 32, .	4.0	18
3092	Impact of capillary trapping on CSG recovery: an overlooked phenomenon. APPEA Journal, 2019, 59, 343.	0.2	4
3093	Towards model-driven reconstruction in atom probe tomography. Journal Physics D: Applied Physics, 2020, 53, 475303.	2.8	15
3094	Semi-analytical validation of a dynamic large-eddy simulation procedure for turbulent premixed flames via the G-equation. Combustion Theory and Modelling, 2000, 4, 363-389.	1.9	6
3095	Thermo-mechanical simulation of track development in the Laser Beam Melting process - Effect of laser-metal interaction. IOP Conference Series: Materials Science and Engineering, 0, 529, 012005.	0.6	3
3096	Malaysia Airlines Flight MH370: Water Entry of an Airliner. Notices of the American Mathematical Society, 2015, 62, 330-344.	0.2	8
3097	Convergence of a non-stiff boundary integral method for interfacial flows with surface tension. Mathematics of Computation, 1998, 67, 137-182.	2.1	30
3099	Shearing flow from transient bubble oscillations in narrow gaps. Physical Review Fluids, 2017, 2, .	2.5	12
3100	Interaction between a large buoyant bubble and turbulence. Physical Review Fluids, 2017, 2, .	2.5	23
3101	Numerical simulations of a rising drop with shape oscillations in the presence of surfactants. Physical Review Fluids, 2018, 3, .	2.5	14
3102	Phenomenology of bubble-collapse-driven penetration of biomaterial-surrogate liquid-liquid interfaces. Physical Review Fluids, 2018, 3, .	2.5	10
3103	Analysis of the early stages of liquid-water-drop explosion by numerical simulation. Physical Review Fluids, 2019, 4, .	2.5	11
3104	Dependence of the drag over superhydrophobic and liquid infused surfaces on the asperities of the substrate. Physical Review Fluids, 2019, 4, .	2.5	8

#	Δρτιςι ε	IF	CITATIONS
π 3105	Large axisymmetric surface deformation and dewetting in the flow above a rotating disk in a cylindrical tank: Spin-up and permanent regimes. Physical Review Fluids, 2020, 5, .	2.5	7
3106	Lattice Boltzmann simulation of water droplet impacting a hydrophobic plate with a cylindrical pore. Physical Review Fluids, 2020, 5, .	2.5	12
3107	Numerical simulation of the crossing of a liquid-liquid interface by a droplet. Physical Review Fluids, 2020, 5, .	2.5	4
3108	Dynamics of an elastoviscoplastic droplet in a Newtonian medium under shear flow. Physical Review Fluids, 2020, 5, .	2.5	11
3109	An adaptive fully discontinuous Galerkin level set method for incompressible multiphase flows. International Journal of Numerical Methods for Heat and Fluid Flow, 2018, 28, 1256-1278.	2.8	11
3110	Data Assimilation and Optimal Calibration in Nonlinear Models of Flame Dynamics. Journal of Engineering for Gas Turbines and Power, 2019, 141, .	1.1	9
3111	Gradient-Augmented Level Set Two-Phase Flow Method With Pretreated Reinitialization for Three-Dimensional Violent Sloshing. Journal of Fluids Engineering, Transactions of the ASME, 2020, 142	1.5	6
3112	Numerical Study of an Evaporating Meniscus on a Moving Heated Surface. , 2004, , .		3
3113	Effect of Dynamic Contact Angle on Single Bubbles During Nucleate Pool Boiling. , 2004, , .		2
3114	A Numerical Analysis of Growing Water Droplet inside an Air Supply Channel of a PEM Fuel Cell. , 2006, , .		2
3115	FINITE ELEMENT LEVEL SET FORMULATIONS FOR MODELLING MULTIPHASE FLOWS. , 2003, , .		1
3116	A Numerical Method for Solving 3D Elasticity Equations with Sharp-Edged Interfaces. International Journal of Partial Differential Equations, 2013, 2013, 1-13.	0.4	9
3117	A PLIC-VOF-Based Simulation of Water-Organic Slug Flow Characteristics in a T-Shaped Microchannel. Advances in Mechanical Engineering, 2013, 5, 987428.	1.6	2
3118	Simulation and multi-objective optimization to improve the final shape and process efficiency of a laser-based material accumulation process. Journal of Mathematics in Industry, 2020, 10, .	1.2	4
3119	Three-Dimensional Simulations of Vortex Ring Formation from Falling Drops in an Immiscible Viscous Liquid. Journal of Chemical Engineering of Japan, 2009, 42, 648-655.	0.6	4
3120	Three-Dimensional Numerical Simulations of the Effect of Initial Bubble Conditions on the Motion of a Bubble Rising in Viscous Liquids. Journal of Chemical Engineering of Japan, 2005, 38, 878-882.	0.6	6
3121	Three-Dimensional Computations of the Motion of a Newtonian Drop Rising through Immiscible Quiescent Shear-Thinning Liquids. Journal of Chemical Engineering of Japan, 2006, 39, 394-400.	0.6	10
3122	Direct Numerical Simulations of Interaction of Strong Shock Waves with Nonspherical Gas Bubbles near Glass Boundaries in Mercury. International Journal of Emerging Multidisciplinary Fluid Sciences, 2009, 1, 85-99.	0.5	5

#	Article	IF	CITATIONS
3123	The Computation of Lee-Tarver Detonation Based on Lattice Boltzmann Model. Advances in Applied Mathematics, 2017, 06, 1126-1134.	0.1	1
3124	A multiple level set method for modeling grain boundary evolution of polycrystalline materials. Interaction and Multiscale Mechanics, 2008, 1, 191-209.	0.4	35
3125	Simulation of free falling rigid body into water by a stabilized incompressible SPH method. Ocean Systems Engineering, 2011, 1, 207-222.	0.5	32
3126	Review on some Stefan Problems for Particle Dissolution in Solid Metallic Alloys. Nonlinear Analysis: Modelling and Control, 2019, 10, 257-292.	1.6	6
3127	Multiphase Fluid Simulations on a Multiple GPGPU PC Using Unsplit Time Integration VSIAM3. Progress in Nuclear Science and Technology, 2011, 2, 491-497.	0.3	3
3128	Direct Numerical Simulation of Turbulent Channel Flow with Deformed Bubbles. Progress in Nuclear Science and Technology, 2011, 2, 543-549.	0.3	3
3129	PROPERTIES OF NONTURBULENT ROUND LIQUID JETS IN UNIFORM GASEOUS CROSS FLOWS. , 2005, 15, 271-294.		33
3130	ASSESSMENT OF ATOMIZATION MODELS FOR DIESEL ENGINE SIMULATIONS. Small Group Research, 2009, 19, 885-903.	2.7	26
3131	A PARAMETRIC NUMERICAL STUDYOFTHE HEAD-ON COLLISION BEHAVIOR OF DROPLETS. Atomization and Sprays, 2010, 20, 191-209.	0.8	10
3132	VALIDATION OF A MULTIFIELD APPROACH FOR THE SIMULATIONS OF TWO-PHASE FLOWS. Computational Thermal Sciences, 2015, 7, 441-457.	0.9	8
3133	COMBUSTION ISSUES AND APPROACHES FOR CHEMICAL MICROTHRUSTERS. International Journal of Energetic Materials and Chemical Propulsion, 2007, 6, 393-424.	0.3	17
3134	Numerical Modeling of Dielectric Breakdown in Solid Propellant Microstructures. International Journal for Multiscale Computational Engineering, 2010, 8, 523-533.	1.2	6
3135	Numerical Investigation of Water-Entry Problems Using IBM Method. International Journal of Offshore and Polar Engineering, 2017, 27, 152-159.	0.8	11
3139	Numerical Simulation of Droplet-Based Microfluidics - A Review. Micro and Nanosystems, 2010, 2, 193-201.	0.6	22
3140	Parasitic current generation in Combined Level Set and Volume of Fluid immiscible fluid simulations. ANZIAM Journal, 0, 48, 868.	0.0	3
3141	Direct simulations of MHD instabilities in aluminum reduction cells. Magnetohydrodynamics, 2006, 42, 417-425.	0.3	4
3142	Coupled Numerical Analysis of Three-Dimensional Unsteady Flow with Pitching Motion of Reentry Capsule—Investigation of the Third Harmonics of the Aerodynamic Force—. Transactions of the Japan Society for Aeronautical and Space Sciences, 2020, 63, 249-256.	0.7	2
3143	Numerical modeling of laser repair process and stress analysis. , 2003, , .		2

~	_	
		ЭΤ
CILAD	<b>NLFU</b>	<u> </u>

#	Article	IF	CITATIONS
3144	Evaluation of Coke Degradation Effect on Flow Characteristics in Packed Bed Using 3D Scanning for Rotational Mechanical Strength Test and Solid-liquid-gas Three-phase Dynamic Model Analysis. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2018, 104, 347-357.	0.4	7
3145	Transition of Gas-Liquid Stratified Flow in Oil Transport Pipes. Journal of Engineering Research, 2017, 8, 49.	0.2	3
3146	Modelling of stratified two phase flows using an interfacial area density model. , 2009, , .		10
3147	LBM simulation of interfacial behaviour of bubbles flow at low Reynolds number in a square microchannel. , 2009, , .		2
3148	Numerical Simulation of a Bubble Flow by Modified Density Function Method. Journal of the Society of Naval Architects of Japan, 1996, 1996, 41-48.	0.2	5
3149	An Interface Capturing Method for Free Surface Flow Computations on Unstructured Grids. Journal of the Society of Naval Architects of Japan, 1999, 1999, 177-183.	0.2	14
3150	A Marker-Density-Function approach for the direct numerical simulations of bubbly flows. Journal of the Society of Naval Architects of Japan, 1999, 1999, 21-30.	0.2	1
3151	Numerical Investigation of Hot Embossing Filling Characteristics. International Polymer Processing, 2007, 22, 266-275.	0.5	10
3153	Automatic Image Segmentation Method Using Sequential Level Set. Ruan Jian Xue Bao/Journal of Software, 2010, 20, 1185-1193.	0.3	2
3154	Numerical Simulation for Fluid Impact Loads by Flat Plate with Incident Angles. Journal of the Society of Naval Architects of Korea, 2008, 45, 1-9.	0.5	6
3155	A New Variational Level Set Evolving Algorithm for Image Segmentation. Journal of Information Processing Systems, 2009, 5, 1-4.	0.9	4
3156	Application of Chahn-Hilliard Equation to the Evaluation of Surface Tension Force. Japanese Journal of Multiphase Flow, 2006, 20, 244-251.	0.3	4
3157	自動車用ã, <b>ë</b> f³ã,,ã,§ã,¯ã,¿ã®ç‡fæ−™å™′霧ãf»æႌå•̂æ°—ä,€è²«è§£æž• Japanese Journal of Multiphase Flow, 2	01 <b>0</b> 323,4	97-505.
3158	Propellant Management in Liquid Rockets and Space Vehicles. Japanese Journal of Multiphase Flow, 2013, 27, 385-392.	0.3	2
3159	Numerical Simulation of Cavitation in a Nozzle and Liquid Jet Using Moving Particle Semi-implicit Method. Japanese Journal of Multiphase Flow, 2017, 31, 427-436.	0.3	2
3160	Gas-Liquid Two-Phase Flow Analysis Using Bubble Function Element Stabilization Method. Progress in Multiphase Flow Research, 2006, 1, 181-188.	0.2	1
3161	Spray Simulations of Fuel Injector for Automobile Engines. Progress in Multiphase Flow Research, 2006, 1, 71-78.	0.2	4
3162	SOME NUMERICAL ASPECTS OF THE LEVEL SET METHOD. Mathematical Modelling and Analysis, 1998, 3, 140-151.	1.5	5

#	Article	IF	CITATIONS
3163	New Type Ia Supernova Yields and the Manganese and Nickel Problems in the Milky Way and Dwarf Spheroidal Galaxies. Astrophysical Journal, 2020, 895, 138.	4.5	75
3164	Jet schemes for advection problems. Discrete and Continuous Dynamical Systems - Series B, 2012, 17, 1229-1259.	0.9	18
3165	Krylov implicit integration factor method for a class of stiff reaction-diffusion systems with moving boundaries. Discrete and Continuous Dynamical Systems - Series B, 2020, 25, 141-159.	0.9	2
3166	A local information based variational model for selective image segmentation. Inverse Problems and Imaging, 2014, 8, 293-320.	1.1	12
3169	Simulation of Permeation of Colloidal Particle Dispersion through Membrane Pores in Microfiltration. Journal of the Society of Powder Technology, Japan, 2017, 54, 362-369.	0.1	3
3170	Modified Ghost Fluid Method as Applied to Fluid-Plate Interaction. Advances in Applied Mathematics and Mechanics, 2014, 6, 24-48.	1.2	9
3171	A Robust, Fully Adaptive Hybrid Level-set/front-tracking Method for Two-phase Flows with an Accurate Surface Tension Computation. Communications in Computational Physics, 2010, 8, 51-94.	1.7	28
3172	A Level Set Immersed Boundary Method for Water Entry and Exit. Communications in Computational Physics, 2010, 8, 265-288.	1.7	63
3173	Numerical Simulation for a Droplet Fission Process of Electrowetting on Dielectric Device. Communications in Computational Physics, 2010, 7, 1076-1094.	1.7	5
3174	A Two-Dimensional Second Order Conservative Front-Tracking Method with an Original Marker Advection Approach Based on Jump Relations. Communications in Computational Physics, 2020, 27, 1550-1589.	1.7	2
3175	Simulating Three-Dimensional Free Surface Viscoelastic Flows using Moving Finite Difference Schemes. Numerical Mathematics, 2011, 4, 92-112.	1.3	8
3176	New Algorithm for Level Set Evolution without Re-initialization and Its Application to Variational Image Segmentation. Journal of Software, 2013, 8, .	0.6	4
3177	Diffuse Interface Energies Capturing the Euler Number: Relaxation and Renomalization. Communications in Mathematical Sciences, 2007, 5, 233-242.	1.0	19
3178	Diffuse interface surface tension models in an expanding flow. Communications in Mathematical Sciences, 2012, 10, 387-418.	1.0	23
3179	Locomotion, wrinkling, and budding of a multicomponent vesicle in viscous fluids. Communications in Mathematical Sciences, 2012, 10, 645-670.	1.0	15
3180	Level Set Method for Shape Optimization of Plate Piezoelectric Patches. Methods and Applications of Analysis, 2003, 10, 329-346.	0.5	2
3182	MULTI-SCALE MODELING AND ANALYSIS OF CONVECTIVE BOILING: TOWARDS THE PREDICTION OF CHF IN ROD BUNDLES. Nuclear Engineering and Technology, 2010, 42, 620-635.	2.3	12
3185	Numerical Investigation of Anti-Diffusion Source Term for Free-Surface Wave Flow. Journal of Advanced Research in Ocean Engineering, 2016, 2, 48-60.	0.0	3

#	Article	IF	CITATIONS
3186	Two-Dimensional Particle Simulation for Behaviors of Floating Body near Quaywall during Tsunami. Journal of Ocean Engineering and Technology, 2014, 28, 12-19.	1.2	3
3187	Analytical method of softness abrasive two-phase flow field based on 2D model of LSM. Wuli Xuebao/Acta Physica Sinica, 2012, 61, 010205.	0.5	21
3188	Numerical simulation of droplet impact onto liquid films with smoothed particle hydrodynamics. Wuli Xuebao/Acta Physica Sinica, 2012, 61, 244701.	0.5	7
3189	Lattice Boltzmann simulations of rising bubble driven by buoyancy in a complex microchannel. Wuli Xuebao/Acta Physica Sinica, 2018, 67, 234701.	0.5	5
3190	MULTIPHASE MODELING OF WAVE PROPAGATION OVER SEMICIRCULAR OBSTACLES USING WENO AND LEVEL SET METHODS. Coastal Engineering Proceedings, 2011, 1, 57.	0.1	3
3191	An Unfitted Finite Element Method for Two-Phase Stokes Problems with Slip Between Phases. Journal of Scientific Computing, 2021, 89, 1.	2.3	2
3192	Global POD-Galerkin ROMs for Fluid Flows with Moving Solid Structures. AIAA Journal, 2022, 60, 1400-1414.	2.6	3
3193	On a marching levelâ€set method for extended discontinuous Galerkin methods for incompressible twoâ€phase flows: Application to twoâ€dimensional settings. International Journal for Numerical Methods in Engineering, 2022, 123, 197-225.	2.8	5
3194	A consistent and conservative Phase-Field model for thermo-gas-liquid-solid flows including liquid-solid phase change. Journal of Computational Physics, 2022, 449, 110795.	3.8	17
3195	A resolved CFD-DEM-IBM algorithm for water entry problems. Ocean Engineering, 2021, 240, 110014.	4.3	3
3196	A large-eddy-simulation-based numerical wave tank for three-dimensional wave-structure interaction. Computers and Fluids, 2021, 231, 105179.	2.5	8
3197	Island Dynamics and Level Set Methods for Continuum Modeling of Epitaxial Growth. , 2000, , 145-171.		1
3198	Single Crystal Growing Problem in the FZ Method under Microgravity : Three-dimensional Numerical Simulation with FEM-BEM applying LSM on the Free Surface. The Proceedings of the Fluids Engineering Conference, 2000, 2000, 50.	0.0	0
3199	原åç,‰ç†±æµå«ã®å¾®è¦–çš"ã, ãfŸãf¥ãf¬ãf¼ã, ãf§ãf³. Nippon Genshiryoku Gakkaishi/Journal of the Atomi	cotorergy S	ociety of Ja
3200	Towards free surface hydroplaning over a loaded tire. , 2001, , 1250-1253.		0
3201	Numerical Simulation of Droplet and Bubble Flows Using Fast Level Set Method. , 2001, , 731-736.		0
3202	Two Variational Models for Multispectral Image Classification. Lecture Notes in Computer Science, 2001, , 344-356.	1.3	6
3203	Single crystal growing problem in the FZ method under microgravity (three-dimensional numerical) Tj ETQq1 1 0.7	784314 rg	BT /Overlock

#	Article	IF	CITATIONS
3204	Spline Volume Tracking for Interfacial Flows. , 2001, , 98-115.		0
3205	Title is missing!. Japanese Journal of Multiphase Flow, 2001, 15, 31-38.	0.3	1
3206	A finite volume—level set method for free surface viscous flows around ships. , 2001, , 810-813.		0
3207	気液二ç›,æµæ•°å€ë§£æžã«ãŠãʿã,<ã,ªã,≋f©ãf¼çš,,·ãf©ã,°ãf©ãf³ã,,ãf¥çš,,æ‰<法. Japanese Journal of	Mol <b>t</b> iphas	e Elow, 2001
3208	Numerical Methods for weakly compressible reactive Flows. , 2001, , 199-216.		0
3209	Comparison between Volume of Fluid Method and Lattice Boltzmann Method for Numerical Simulation of Droplet. , 2001, , 505-510.		0
3210	A Numerical Model of Gas-Liquid-Solid Contact Line. Fluid Mechanics and Its Applications, 2001, , 89-98.	0.2	0
3211	Numerical Simulation on the Propagation of an Internal Wave in Multifluid. , 2001, , 639-644.		0
3212	A Front Tracking Concept on Arbitrary Grids. , 2001, , 737-742.		0
3213	Numerical Modelling of High Speed and Low Speed Combustion. , 2002, , 189-226.		1
3214	Level Set Based Integration of Segmentation and Computational Fluid Dynamics for Flow Correction in Phase Contrast Angiography. Lecture Notes in Computer Science, 2002, , 405-412.	1.3	1
3215	Numerical Modeling of Initiation and Propagation Phases of Landslides. Modeling and Simulation in Science, Engineering and Technology, 2002, , 341-369.	0.6	0
3216	Numerical Simulation of 3D Multi-fluid Flows. TeMa, 2002, 3, .	0.1	1
3218	Using Prior Shape and Points in Medical Image Segmentation. Lecture Notes in Computer Science, 2003, , 291-305.	1.3	9
3219	Robust Treatment of Interfaces for Fluid Flows and Computer Graphics. , 2003, , 153-164.		4
3220	A Local Level-Set Concept for Front Tracking on Arbitrary Grids. , 2003, , 909-918.		0
3221	Development of Navier-Stokes Solvers on Hybrid Grids. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, 2003, , 30-46.	0.3	0
3222	Numerical Analysis of Premixed Turbulent Combustion Using the G-equation Model. Journal of the Japan Institute of Marine Engineering, 2003, 38, 759-769.	0.0	0

#	Article	IF	CITATIONS
3223	Surface ripples generated by spilling breakers. , 2003, , 934-937.		0
3224	Computational simulation of a single boiling bubble in water. , 2003, , 1592-1596.		0
3226	Adaptive Multigrid Computations of Multiphase Flows. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, 2003, , 77-96.	0.3	0
3227	Methodologies for theoretical studies. , 2003, , 127-146.		0
3228	二ç›,æµë¼2"ã«ãŠãiã,‹æµåŠ›å¼¾æ€§é€£æ^解枕 Proceedings of Coastal Engineering Jsce, 2003, 50, 31-35.	0.1	0
3229	Conjugate Analysis of Bubble Growth Involving Conduction in Solid. Transactions of the Korean Society of Mechanical Engineers, B, 2003, 27, 265-273.	0.1	0
3230	Numerical Study of Droplet Impact on Solid Surfaces Using a Coupled Level Set and Volume-of-Fluid Method. Transactions of the Korean Society of Mechanical Engineers, B, 2003, 27, 744-752.	0.1	0
3231	EXPERIMENTAL AND NUMERICAL STUDY OF WAVES IN POROUS STRUCTURE. , 2004, , .		0
3232	Numerical Study of Bubble Growth in a Microchannel. Transactions of the Korean Society of Mechanical Engineers, B, 2004, 28, 996-1003.	0.1	1
3233	Numerical Study of Heat Transfer Associated with Droplet Impact. Transactions of the Korean Society of Mechanical Engineers, B, 2004, 28, 1093-1100.	0.1	0
3234	Air entrainment induced by vorticity–free-surface interaction. , 2004, , 569-574.		0
3235	Study on numerical simulation for rupture of bubble at water surface by Level Set method. , 2004, , 215-221.		0
3236	Level Set Dislocation Dynamics Method. , 2005, , 2307-2323.		0
3237	Combined Geometric-Texture Image Classification. Lecture Notes in Computer Science, 2005, , 161-172.	1.3	1
3238	Numerical Study on Drop Formation Through a Micro Nozzle. Transactions of the Korean Society of Mechanical Engineers, B, 2005, 29, 205-213.	0.1	1
3239	Modified SIMPLE Algorithm for the Numerical Analysis of Incompressible Flows with Free Surface. Transactions of the Korean Society of Mechanical Engineers, B, 2005, 29, 609-616.	0.1	0
3240	Study on the Finite Element Discretization of the Level Set Redistancing Algorithm. Transactions of the Korean Society of Mechanical Engineers, B, 2005, 29, 703-710.	0.1	0
3241	AN ADVANCED VOF ALGORITHM FOR OIL BOOM DESIGN. International Journal of Modelling and Simulation, 2006, 26, .	3.3	0

#	Article	IF	Citations
3242	A Unified Framework for Segmentation-Assisted Image Registration. Lecture Notes in Computer Science, 2006, , 405-414.	1.3	1
3243	Approximations of Shape Metrics and Application to Shape Warping and Empirical Shape Statistics. Modeling and Simulation in Science, Engineering and Technology, 2006, , 363-395.	0.6	10
3245	Numerical Study on Bubble Growth and Droplet Ejection in a Bubble Inkjet Printer. Transactions of the Korean Society of Mechanical Engineers, B, 2006, 30, 1107-1116.	0.1	1
3246	Deformable Model-Based Image Registration. , 2007, , 517-541.		0
3247	Numerical Analysis of Penetration Flow through Viscoelastic Fluids. Journal of Textile Engineering, 2007, 53, 9-15.	0.2	0
3248	Numerical Study on Flow Induced Vibration of LOX Post in Liquid Rocket Engine Preburner. International Journal of Gas Turbine, Propulsion and Power Systems, 2007, 1, 22-29.	0.4	1
3249	Numerical methods for multi-phase flow in curvilinear coordinate systems. , 2007, , 587-714.		0
3250	Volumetric Segmentation Using Shape Models In The Level Set Framework. , 2007, , 161-207.		1
3251	Segmentation Of Brain Mr Images Using J-Divergence Based Active Contour Models. , 2007, , 371-391.		1
3252	Modelling Gravitational Instabilities: Slab Break-off and Rayleigh-Taylor Diapirism. , 2008, , 1491-1510.		0
3253	Implementation of the level set method for modeling the dynamics of systems with fluid interfaces. Computational Continuum Mechanics, 2008, 1, 53-62.	0.5	2
3254	Numerical Study of Bubble Growth and Reversible Flow in Parallel Microchannels. Transactions of the Korean Society of Mechanical Engineers, B, 2008, 32, 125-132.	0.1	0
3255	A Numerical Study on the Sloshing Characteristics in a Two-dimensional Rectangular Tank Using the Level Set Method. Journal of the Society of Naval Architects of Korea, 2008, 45, 132-143.	0.5	6
3256	Validation of a CFD model for flow in meandering rivers using an experimental test-setup: first results. WIT Transactions on Engineering Sciences, 2008, , .	0.0	1
3257	STUDY OF THERMOCAPILLARY EFFECTS IN TWO FLUID SYSTEMS USING A SINGLE PHASE MODEL. The International Conference on Applied Mechanics and Mechanical Engineering, 2008, 13, 67-91.	0.1	0
3258	Levelsets and anisotropic mesh adaptation. Discrete and Continuous Dynamical Systems, 2008, 23, 165-183.	0.9	4
3259	Study on the Solution of Reinitialization Equation for Level Set Method in the Simulation of Incompressible Two-Phase Flows. Transactions of the Korean Society of Mechanical Engineers, B, 2008, 32, 754-760.	0.1	1
3260	Level Set based Finite Element Method of Bubble-in-Liquid Simulation. , 2009, , 589-594.		0

#	Article	IF	CITATIONS
3261	A Numerical Study on Patterning Process Including a Self-Alignment Technique of a Microdroplet. Transactions of the Korean Society of Mechanical Engineers, B, 2009, 33, 28-38.	0.1	1
3263	Wavelet-Based Adaptive Solvers on Multi-core Architectures for the Simulation of Complex Systems. Lecture Notes in Computer Science, 2009, , 721-734.	1.3	0
3264	Numerical Simulations of Three Dimensional Micro Flows. , 2009, , 523-528.		0
3265	Level Set method for Curvature-driven Flows in Microfluidics. , 2009, , 595-600.		Ο
3266	Numerical Simulation of Underfill Flow in Flip-Chip Packaging. , 2009, , 573-578.		0
3267	Numerical analysis of bubble migration in thermocapillary flows of an open cylindrical container. , 2009, , 662-668.		0
3268	A New Splitting Active Contour Framework Based on Chan-Vese Piecewise Smooth Model. Zidonghua Xuebao/Acta Automatica Sinica, 2009, 34, 659-664.	0.3	0
3269	HIGHLY ACCURATE FREE SURFACE CAPTURING TECHNIQUE FOR WAVE BREAKING. , 2009, , .		0
3270	A Numerical Study on Droplet Deposition in a Micro-Groove. Transactions of the Korean Society of Mechanical Engineers, B, 2009, 33, 789-796.	0.1	0
3271	Computation of Two-phase Flow in Flip-chip Packaging Using Level Set Method. Lecture Notes in Computational Science and Engineering, 2010, , 145-152.	0.3	Ο
3272	An a Priori Study for the Modeling of Subgrid Terms in Multiphase Flows. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, 2010, , 377-384.	0.3	0
3273	Mathematical Modelling of Glass Forming Processes. Lecture Notes in Mathematics, 2011, , 1-56.	0.2	3
3274	Segmentation-Assisted Registration for Brain MR Images. , 2011, , 335-353.		1
3275	Development of laser welding simulation code with advanced numerical models. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2011, 29, 48s-52s.	0.5	2
3276	Numerical Analysis of Galvanic Corrosion under a Thin Electrolyte Film. Zairyo To Kankyo/ Corrosion Engineering, 2011, 60, 333-341.	0.2	7
3277	Scalar Mixing in Droplet Arrays in Stagnant and Convective Environments. , 2011, , 191-202.		0
3278	æ¿jã,Œæ€§ã,'è€fæ…®ã⊷ãŸå¤å"質構é€å†…ã®æ°—液二ç›,æµã,·ãfŸãf¥ãf¬ãf¼ã,·ãf§ãf³. Japanese Journa	l oɓ <b>M</b> ultip	ha <b>s</b> e Flow, 20

3279	Numerical	Simulation	of Particle	-Fluid Sys	stems. , 2011,	,249-256.
------	-----------	------------	-------------	------------	----------------	-----------

0

#	Article	IF	CITATIONS
3280	New Trends in Multiscale and Multiphysics Simulation of Transport Phenomena in Novel Engineering Systems. Journal of Applied Fluid Mechanics, 2011, 4, .	0.2	1
3282	Direct forcing/fictitious domain-Level set method for two-phase flow-structure interaction. Journal of Ocean Engineering and Technology, 2011, 25, 36-41.	1.2	1
3283	Algebraic Flux Correction III. Scientific Computation, 2012, , 239-297.	0.2	0
3284	Numerical Analysis of Galvanic Corrosion under a Thin Electrolyte Film. Zairyo To Kankyo/ Corrosion Engineering, 2012, 61, 376-383.	0.2	4
3285	Numerical Analysis of Gas-Liquid Bubble Flow in a Horizontal Rectangular Channel. Journal of Chemical Engineering of Japan, 2012, 45, 102-106.	0.6	1
3286	Magnetic Fluid Oscillation Analysis using Finite Element Method. IEEJ Transactions on Industry Applications, 2012, 132, 78-83.	0.2	Ο
3287	Industrial Sprays: Experimental Characterization and Numerical Modeling. , 0, , .		0
3288	A HEAVISIDE-FUNCTION APPROACH FOR THE INTERACTION OF TWO-PHASE FLUID AND NON-DEFORMABLE SOLID. The Pure and Applied Mathematics, 2012, 19, 147-169.	0.0	Ο
3289	Numerical Study of Impact of Microdroplet Containing Nanoparticles. Transactions of the Korean Society of Mechanical Engineers, B, 2012, 36, 609-617.	0.1	0
3290	AN EFFICIENT INCOMPRESSIBLE FREE SURFACE FLOW SIMULATION USING GPU. Journal of Computational Fluids Engineering, 2012, 17, 35-41.	0.0	2
3292	Laminar Flow Structures Near a Circular Cylinder in between a Free-Surface and a Moving Wall. Journal of the Society of Naval Architects of Korea, 2012, 49, 213-221.	0.5	1
3293	Accuracy based Comparison of Three Brain Extraction Algorithms. International Journal of Computer Applications, 2012, 49, 45-57.	0.2	0
3294	Application of a fixed Eulerian mesh-based scheme based on the level set function generated by virtual nodes to large-deformation fluid-structure interaction. Interaction and Multiscale Mechanics, 2012, 5, 287-318.	0.4	0
3295	Active Contour without Edges vs GVF Active Contour for Accurate Pupil Segmentation. International Journal of Computer Applications, 2012, 54, 25-36.	0.2	4
3296	TURBULENT FREE SURFACE FLOW OVER SEMI-CIRCULAR AND CIRCULAR OBSTACLE IN A DUCT. Mechanika, 2012, 18, .	0.5	0
3297	Feasibility Study on the Two-dimensional Free Surface Simulation Using the Lattice-Boltzmann Method. Journal of Korean Society for Marine Environmental Engineering, 2012, 15, 273-280.	0.5	1
3298	A Simple Scheme for Interface Tracking. Kagaku Kogaku Ronbunshu, 2013, 39, 86-93.	0.3	3
3299	Enabling Computational Methods for Offshore Wind Turbines. Computational Methods in Applied Sciences (Springer), 2013, , 105-126.	0.3	0
#	Article	IF	CITATIONS
------	---	-----	-----------
3301	Numerical Study on Characteristics of Separated Flows around an Extremely Blunt Ship with and without a Stern Tunnel. Journal of the Japan Society of Naval Architects and Ocean Engineers, 2013, 18, 9-15.	0.2	0
3302	Applications of Three-Dimensional Multiphase Flow Simulations for Prediction of Wave Impact Pressure. Journal of Ocean Engineering and Technology, 2013, 27, 39-46.	1.2	1
3303	A Diffusion-Augmented Level Set Method with Efficient Two Step Implementation. International Journal of Computer Applications, 2013, 70, 29-34.	0.2	0
3304	Numerical simulation of droplet coalescence in turbulent stream using level set method. International Journal of Engineering and Manufacturing, 2013, 3, 13-27.	0.7	0
3305	ADVANCED PDE-BASED METHODS FOR AUTOMATIC QUANTIFICATION OF CARDIAC FUNCTION AND SCAR FROM MAGNETIC RESONANCE IMAGING. Series in Computer Vision, 2014, , 345-369.	0.1	0
3306	Visualization Technique for Quantitative Evaluation in Laser Welding Processes. , 2014, , 201-215.		0
3307	A Combined Finite Volume Discontinuous Galerkin Approach for the Sharp-Interface Tracking in Multi-Phase Flow. Springer Proceedings in Mathematics and Statistics, 2014, , 911-918.	0.2	0
3308	An Interface-Capturing Method for Free-Surface Flows in a Flow Channel Consisting of Solid Obstacles. Journal of Chemical Engineering of Japan, 2014, 47, 230-240.	0.6	2
3309	A Robust Segmentation Framework for Spine Trauma Diagnosis. Lecture Notes in Computational Vision and Biomechanics, 2014, , 25-33.	0.5	4
3310	On the Application of Two-Fluid Flows Solver to the Casting Problem. Computational Methods in Applied Sciences (Springer), 2014, , 245-266.	0.3	0
3311	A modification of level set re-initialized method for the shock waves through the air bubble. Thermal Science, 2014, 18, 1525-1530.	1.1	0
3312	Optimal Control for Two-Phase Flows. International Series of Numerical Mathematics, 2014, , 347-363.	1.1	1
3315	Coordinated Numerical Simulation of Porous Membrane Formation by the Phase Field Method and Particulate-Laden Flow. Kagaku Kogaku Ronbunshu, 2014, 40, 230-233.	0.3	2
3316	Modélisation de la couche limite de fond générée par un écoulement de houle. , 1998, , .		0
3317	Numerical modeling of droplets in a composite grid system. , 1999, , .		0
3318	Direct Numerical Simulation of Expanding Compressible Flows. Fluid Mechanics and Its Applications, 1999, , 419-430.	0.2	0
3319	Development of WMLS-based Particle Simulation Method for Solving Free-Surface Flow. Journal of Ocean Engineering and Technology, 2014, 28, 93-101.	1.2	0
3320	IMAGE SEGMENTATION BASED ON THE STATISTICAL VARIATIONAL FORMULATION USING THE LOCAL REGION INFORMATION. Journal of the Korean Society for Industrial and Applied Mathematics, 2014, 18, 129-142.	0.0	1

#	Article	IF	CITATIONS
3321	Computer Analysis of Brain Perfusion and Neck Angiography Images. Advances in Computer Vision and Pattern Recognition, 2015, , 93-151.	1.3	0
3322	Canny based DRLSE Algorithm for Segmentation. International Journal of Computer Applications, 2014, 102, 1-5.	0.2	0
3323	An Enhanced Mesh Refinement Strategy to Capture yield Surfaces around a Spherical Gas Bubble. GSTF Journal of Mathematics Statistics and Operations Research, 2014, 2, .	0.1	0
3324	Numerical Analysis on the Development of Shut off Damper for a Tsunami at a Nuclear Plant. Journal of the Korean Society of Manufacturing Technology Engineers, 2014, 23, 471-477.	0.1	7
3325	HYDRODYNAMICS OF A CONFINED MENISCUS IN A SQUARE CAPILLARY TUBE AT LOW CAPILLARY NUMBERS. Frontiers in Heat Pipes, 0, 5, .	0.9	0
3326	Comparison of Two Iris Localization Algorithms. International Journal of Computer Applications, 2015, 109, 1-8.	0.2	0
3327	EFFECTS OF PARTICLE SIZE AND PARTICLE SHAPE IN FLOW SIMULATIONS OF DRY SAND USING DEM. Journal of Japan Society of Civil Engineers Ser A2 (Applied Mechanics (AM)), 2015, 71, I_587-I_594.	0.1	0
3328	Study of the Interaction between Two Bubbles Based on OpenFOAM. Applied Physics, 2015, 05, 61-70.	0.0	0
3329	Simulation on surface morphology evolution of metal targets irradiated by intense pulsed electron beam. Wuli Xuebao/Acta Physica Sinica, 2015, 64, 216102.	0.5	1
3330	Effect of Intersection Angle of the Flow-focusing Type Droplet Generation Device Channel on Droplet Diameter by using Numerical Simulation Modeling. Journal of Biomedical Engineering Research, 2015, 36, 61-68.	0.1	0
3331	Simulação numérica de escoamentos multifásicos 3D em malhas hierárquicas adaptativas. , 0, , .		1
3332	NUMERICAL SIMULATION OF FLOW PAST A SQUARE CYLINDER SUBMERGED UNDER THE FREE SURFACE. Journal of Computational Fluids Engineering, 2015, 20, 51-57.	0.0	1
3333	LEVEL SET METHOD FOR SIMULATING THE INTERFACE KINEMATICS: APPLICATION OF A DISCONTINUOUS GALERKIN METHOD. , 2016, , .		1
3334	Influence of The Smoothing Parameter in The Re-initialization Equation on The Level Set Interface-capturing. , 2016, , .		0
3335	Computational Simulations of Microbubbles. , 2016, , 1-29.		0
3336	An Efficient Object Tracking Method on Quad-/Oc-Trees. PLoS ONE, 2016, 11, e0150889.	2.5	0
3337	COMPARISON OF NUMERICAL METHODS FOR TERNARY FLUID FLOWS: IMMERSED BOUNDARY, LEVEL-SET, AND PHASE-FIELD METHODS. Journal of the Korean Society for Industrial and Applied Mathematics, 2016, 20, 83-106.	0.0	0
3338	Contrast-enhanced Bias-corrected Distance-regularized Level Set Method Applied to Hippocampus Segmentation. Journal of Korea Multimedia Society, 2016, 19, 1236-1247.	0.2	2

#	Article	IF	CITATIONS
3340	Multiphase Simulation of Rubber and Air in the Cavity of Mold. Elastomers and Composites, 2016, 51, 263-268.	0.1	0
3341	Advances in Interface Modeling. , 2017, , 1-28.		0
3343	Information-Theoretic Active Contour Model for Microscopy Image Segmentation Using Texture. Lecture Notes in Computer Science, 2017, , 12-26.	1.3	0
3344	A Lattice Boltzmann Model for Binary Components Detonation. International Journal of Fluid Dynamics, 2017, 05, 161-168.	0.0	0
3345	Three Dimensional Analysis for Self-Propelled Fish Models with Various Shapes near Water Surface. Japanese Journal of Multiphase Flow, 2017, 31, 139-151.	0.3	0
3346	From a Single Bubble to Large-Scale Structures in Bubbly Flows. Japanese Journal of Multiphase Flow, 2017, 31, 235-244.	0.3	0
3347	AN ALE-FEM METHOD FOR AXISYMMETRIC TWO-PHASE FLOWS. , 2017, , .		0
3348	Numerical Study on Rayleigh-Taylor Instability Using a Multiphase Moving Particle Simulation Method. Journal of the Korean Society for Marine Environment & Energy, 2017, 20, 37-44.	0.2	0
3349	Hydrodynamic Effects on Surface Morphology Evolution of Titanium Alloy under Intense Pulsed Ion Beam Irradiation. Chinese Physics Letters, 2017, 34, 056101.	3.3	0
3350	A Numerical Validation for Incompressible Two-phase Flow using CLSVOF and Artificial Compressibility Methods. Journal of the Korean Society of Propulsion Engineers, 2017, 21, 71-79.	0.2	0
3351	A Method of Numerical Viscosity Measurement for Solid-Liquid Mixture. Lecture Notes in Applied and Computational Mechanics, 2018, , 347-363.	2.2	0
3353	Investigation of Higher-Harmonic Wave Forces and Ringing Using CFD Simulations. , 2018, , .		0
3354	Level Set Method-Based Identification of Locations and Shapes of Fuel Cell Defects. SICE Journal of Control Measurement and System Integration, 2018, 11, 470-476.	0.7	1
3355	Explicit Solver for Large-Scale Incompressible Gas-Liquid Two-Phase Flow Simulations. Japanese Journal of Multiphase Flow, 2018, 32, 416-423.	0.3	0
3356	Numerical Simulation of a Water Column Deformation and Breakup by Shock Wave. , 2019, , 483-490.		0
3357	Accurate calculation of the surface tension force and the droplet simulation using a particle method with moving surface mesh. Transactions of the JSME (in Japanese), 2019, 85, 19-00186-19-00186.	0.2	1
3359	MACHINE LEARNING FOR CLOSURE MODELS IN MULTIPHASE FLOW APPLICATIONS. , 2019, , .		4
3360	Automated Parasite's Detection in Microscopic Images of Stools Using Distance Regularized Level Set Evolution Initialized with Hough Transform. International Journal of Biomedical Engineering and Clinical Science, 2019, 5, 45.	0.4	0

#	ARTICLE	IF	CITATIONS
3361	Automated Extraction of Parasite in the Microscopic Images by Distance Regularized Level Set Evolution initialized with Hough Transform. International Journal of Multimedia and Image Processing, 2019, 9, 474-488.	0.1	0
3362	Data Assimilation and Optimal Calibration in Nonlinear Models of Flame Dynamics. , 2019, , .		0
3363	Comparison of Surface Tension Models in Smoothed Particles Hydrodynamics Method. , 2019, , .		2
3364	High EGR Rate, Lean TRF-air Turbulent Combustion with Tumble Flow in a Constant Volume Vessel. , 0, ,		0
3365	Study of Pool Boiling Through Numerical Approach. , 2020, , 607-644.		0
3366	The effect of uniform magnetic field on spatial-temporal evolution of thermocapillary convection with the silicon oil based ferrofluid. Thermal Science, 2020, 24, 4159-4171.	1.1	3
3368	Application of a Level-Set Method for Deposition of Fine Particles on a Filter. Kagaku Kogaku Ronbunshu, 2020, 46, 49-56.	0.3	0
3369	Transient shape variation and inner flow field of a rotating two-lobed liquid droplet. Physical Review Fluids, 2020, 5, .	2.5	0
3370	Numerical Reproducibility of Wave Response for an Oscillating Wave Surge Converter Using Inverted Triangle Flap. Journal of Korean Society of Coastal and Ocean Engineers, 2021, 33, 203-216.	0.4	1
3371	An explicit characteristic-based immersed boundary method for compressible flows. Journal of Computational Physics, 2022, 449, 110804.	3.8	4
3372	Numerical Simulation of Bubble Dynamics in the Presence of Boron in the Liquid. , 2001, , .		2
3373	Solving a Bernoulli type free boundary problem with random diffusion. ESAIM - Control, Optimisation and Calculus of Variations, 2020, 26, 56.	1.3	0
3374	An efficient 3D iterative interface-correction reinitialization for the level set method. Computers and Fluids, 2020, 213, 104724.	2.5	8
3375	A numerical modelingâ€based predictive methodology for the assessment of the impacts of ship waves on YOY fish. River Research and Applications, 2021, 37, 373-386.	1.7	5
3376	Numerical study of boiling of liquid nitrogen at solid and liquid contact planes. International Journal of Heat and Mass Transfer, 2022, 183, 122075.	4.8	8
3378	A Levelset-Based Sharp-Interface Modified Ghost Fluid Method for High-Speed Multiphase Flows and Multi-Material Hypervelocity Impact. Computational Methods in Engineering & the Sciences, 2020, , 187-226.	0.3	3
3379	Some Observations on Thermodynamic Basis of Pressure Continuum Condition and Consequences of Its Violation in Discretised CFD. , 2020, , 41-74.		0
3380	Spezielle Themen. , 2020, , 575-652.		0

#	Article	IF	CITATIONS
3381	Prediction of oil behavior in piston ring groove based on gas-liquid two-phase flow analysis. Journal of Advanced Mechanical Design, Systems and Manufacturing, 2020, 14, JAMDSM0081-JAMDSM0081.	0.7	2
3382	Numerical Flux Functions Extended to Real Fluids. , 2020, , 69-116.		0
3383	Velocity distribution in the boundary layer of a bubble rising with a rectilinear motion. Transactions of the JSME (in Japanese), 2020, 86, 19-00453-19-00453.	0.2	1
3384	Incompressible Viscous Fluid Model for Simulating Water Waves. Springer Tracts in Civil Engineering, 2020, , 367-403.	0.5	0
3385	Microtubules (MT) a key target in oncology: mathematical modeling of anti-MT agents on cell migration. Mathematical Modelling of Natural Phenomena, 2020, 15, 63.	2.4	1
3386	Shear Layer Interactions With Fluid–Fluid Interface in the Wake of an Elliptical Cylinder. Journal of Fluids Engineering, Transactions of the ASME, 2020, 142, .	1.5	0
3387	Evaluation of Level Set reinitialization algorithms for phase change simulation on unstructured grids. Houille Blanche, 2020, 106, 43-48.	0.3	2
3388	A Cartesian Method with Second-Order Pressure Resolution for Incompressible Flows with Large Density Ratios. Fluids, 2021, 6, 402.	1.7	1
3389	Assessment of Kidney Function Using Dynamic Contrast Enhanced MRI Techniques. Advances in Bioinformatics and Biomedical Engineering Book Series, 0, , 214-233.	0.4	0
3391	A Novel Definition of the Local and Instantaneous Liquid-Vapor Interface. , 2006, , 131-140.		1
3392	Hin zur vollstÄ <b>¤</b> digen Manövrier- und Seegangssimulation mittels Berechnung der viskosen Schiffsumströmung. , 0, , 427-440.		0
3395	Numerical Prediction of Impact Force of Geomaterial Flow against Retaining Structure using CIP Method. , 2007, , 381-402.		0
3396	On Implementing the Hybrid Particle-Level-Set Method on Supercomputers for Two-Phase Flow Simulations. , 2008, , 445-456.		0
3397	Protein Surface Modeling Using Active Contour Model. , 2008, , 534-540.		0
3398	Model for deformation of cells from external electric fields at or near resonant frequencies. Biomedical Physics and Engineering Express, 2020, 6, 065022.	1.2	2
3399	Numerical Study of Pool Boiling Heat Transfer From Surface With Protrusions Using Lattice Boltzmann Method. Journal of Heat Transfer, 2021, 143, .	2.1	2
3400	Automatic Segmentation and Analysis of Renal Calculi in Medical Ultrasound Images. Pattern Recognition and Image Analysis, 2020, 30, 748-756.	1.0	4
3401	Surface Reconstruction Via Contour Metamorphosis: An Eulerian Approach With Lagrangian Particle Tracking. , 0, , .		9

#	Article	IF	CITATIONS
3402	Simulations of 3D Dynamics of Microdroplets: A Comparison of Rectangular and Cylindrical Channels. , 0, , 449-456.		2
3403	An ICLS-based method for solving two-phase seepage free surface considering compressible gas in porous media. Computers and Geotechnics, 2022, 141, 104528.	4.7	5
3404	Simulating multi-phase sloshing flows with the SPH method. Applied Ocean Research, 2022, 118, 102989.	4.1	12
3405	3D simulation of micro droplet impact on the structured superhydrophobic surface. International Journal of Multiphase Flow, 2022, 147, 103887.	3.4	15
3406	Finite volume method with the Soner boundary condition for computing the signed distance function on polyhedral meshes. International Journal for Numerical Methods in Engineering, 2022, 123, 1057-1077.	2.8	3
3407	Effects of isotropic and anisotropic turbulent structures over spray atomization in the near field. International Journal of Multiphase Flow, 2022, 150, 103891.	3.4	4
3408	Dissolution of the Primary γ′ Precipitates and Grain Growth during Solution Treatment of Three Nickel Base Superalloys. Metals, 2021, 11, 1921.	2.3	14
3409	Effect of inertia on capillary-driven breakup of drops surrounded by another fluid. Physics of Fluids, 2021, 33, .	4.0	2
3410	Sustaining nucleate boiling in zero gravity using asymmetric sinusoidal base-plate oscillation. International Journal of Heat and Mass Transfer, 2021, , 122262.	4.8	2
3411	Bubble Dynamics and Enhancement of Pool Boiling in Presence of an Idealized Porous Medium: A Numerical Study Using Lattice Boltzmann Method. Journal of Thermal Science and Engineering Applications, 2022, 14, .	1.5	4
3412	Instability of a liquid sheet with viscosity contrast in inertial microfluidics. European Physical Journal E, 2021, 44, 144.	1.6	3
3413	Viscosity Interpolation in Volume of Fluid Method under Single Droplet Impact Condition. Journal of Chemical Engineering of Japan, 2021, 54, 577-585.	0.6	0
3414	A comprehensive review on computational studies of falling film hydrodynamics and heat transfer on the horizontal tube and tube bundle. Applied Thermal Engineering, 2022, 202, 117869.	6.0	35
3415	Experimental and numerical investigations of dam break flow over dry and wet beds. International Journal of Mechanical Sciences, 2022, 215, 106946.	6.7	14
3416	Spin-Up from Rest of a Liquid Metal with Deformable Free Surface in a Cylinder under the Influence of a Uniform Axial Magnetic Field. Fluids, 2021, 6, 438.	1.7	0
3417	Multiphase flow simulation with three-dimensional weighted-orthogonal multiple-relaxation-time pseudopotential lattice Boltzmann model. Physics of Fluids, 2021, 33, .	4.0	7
3418	ALPACA - a level-set based sharp-interface multiresolution solver for conservation laws. Computer Physics Communications, 2022, 272, 108246.	7.5	15
3419	Numerical study of droplet impingement on surfaces with hierarchical structures. International Journal of Multiphase Flow, 2021, 147, 103908.	3.4	3

#	Article	IF	Citations
3420	Parabolic Interface Reconstruction for 2D Volume of Fluid Methods. SSRN Electronic Journal, 0, , .	0.4	0
3421	Error-Correcting Neural Networks for Semi-Lagrangian Advection in the Level-Set Method. SSRN Electronic Journal, 0, , .	0.4	1
3422	A stable SPH model with large CFL numbers for multi-phase flows with large density ratios. Journal of Computational Physics, 2022, 453, 110944.	3.8	33
3423	A review of methods, applications and limitations for incorporating fluid flow in the discrete element method. Journal of Rock Mechanics and Geotechnical Engineering, 2022, 14, 1005-1024.	8.1	29
3424	Immersed Boundary Methodology for Multistep Ice Accretion Using a Level Set. Journal of Aircraft, 2022, 59, 912-926.	2.4	5
3425	Numerical Modeling of Underwater Explosion with Fluid-Structure Interaction. , 2022, , .		3
3426	The collision of immiscible droplets in three-phase liquid systems: A numerical study using phase-field lattice Boltzmann method. Chemical Engineering Research and Design, 2022, 178, 289-314.	5.6	7
3427	Moving least-squares aided finite element method (MLS-FEM): A powerful means to consider simultaneously velocity and pressure discontinuities of multi-phase flow fields. Computers and Fluids, 2022, 234, 105255.	2.5	1
3428	Mesoscopic characterization of bubble dynamics in subcooled flow boiling following a pseudopotential-based approach. International Journal of Multiphase Flow, 2022, 148, 103923.	3.4	17
3429	A front-tracking method for two-phase flow simulation with no spurious currents. Journal of Computational Physics, 2022, 456, 111006.	3.8	3
3430	Volumeâ€ofâ€fluid based twoâ€phase flow methods on structured multiblock and overset grids. International Journal for Numerical Methods in Fluids, 2022, 94, 557-582.	1.6	7
3431	An adaptive mesh refinementâ€multiphase lattice Boltzmann flux solver for threeâ€dimensional simulation of droplet collision. International Journal for Numerical Methods in Fluids, 2022, 94, 443-460.	1.6	1
3432	Modeling of the Saltwater Intrusion Using the Level Set Method. Application to Henry's Problem. Computational Water Energy and Environmental Engineering, 2022, 11, 11-33.	0.7	0
3433	An Explicit Level-Set Formula to Approximate Geometries. , 2022, , .		1
3434	An unconditionally stable fast high order method for thermal phase change models. Computers and Fluids, 2022, 237, 105306.	2.5	2
3435	On estimating the interface normal and curvature in piecewise linear interface calculation <scp>â€</scp> volume of fluid approach for <scp>threeâ€dimensional</scp> arbitrary meshes. AICHE Journal, 2022, 68, .	3.6	2
3436	Improved phase-field-based lattice Boltzmann method for thermocapillary flow. Physical Review E, 2022, 105, 015314.	2.1	11
3437	A novel hr-adaptive mesh refinement scheme for stress-constrained shape and topology optimization using level-set-based trimmed meshes. Structural and Multidisciplinary Optimization, 2022, 65, 1.	3.5	12

#	Article	IF	CITATIONS
3438	Robust graphene/poly(vinyl alcohol) aerogel for highâ€flux and highâ€purity separation of waterâ€inâ€oil emulsion and its computational fluid dynamic simulation. AICHE Journal, 2022, 68, .	3.6	10
3439	Crater Depth after the Impact of Multiple Drops into Deep Pools. Fluids, 2022, 7, 50.	1.7	2
3440	A semi implicit compressible solver for two-phase flows of real fluids. Journal of Computational Physics, 2022, 456, 111034.	3.8	8
3441	Numerical modelling of acoustic cavitation threshold in water with non-condensable bubble nuclei. Ultrasonics Sonochemistry, 2022, 83, 105932.	8.2	11
3442	Numerical simulation of merging of two rising bubbles with different densities and diameters using an enhanced Volume-Of-Fluid (VOF) model. Ocean Engineering, 2022, 247, 110711.	4.3	17
3443	Bubble's rise characteristics in shear-thinning xanthan gum solution: a numerical analysis. Journal of the Taiwan Institute of Chemical Engineers, 2022, 132, 104219.	5.3	7
3444	A parallel modular computing environment for three-dimensional multiresolution simulations of compressible flows. Computer Methods in Applied Mechanics and Engineering, 2022, 391, 114486.	6.6	10
3445	Estimating bubble interfacial heat transfer coefficient in pool boiling. Journal of Molecular Liquids, 2022, 350, 118541.	4.9	4
3446	Comparison of interface capturing methods for the simulation of two-phase flow in a unified low-Mach framework. International Journal of Multiphase Flow, 2022, 149, 103957.	3.4	11
3447	A fractional-step lattice Boltzmann method for multiphase flows with complex interfacial behavior and large density contrast. International Journal of Multiphase Flow, 2022, 149, 103982.	3.4	19
3448	A PLIC-based method for species mass transfer at free fluid interfaces. Chemical Engineering Science, 2022, 251, 117357.	3.8	1
3449	An Eulerian Finite-Volume Approach of Fluid-Structure Interaction Problems on Quadtree Meshes. SSRN Electronic Journal, 0, , .	0.4	0
3450	Hydrodynamic Coupling of Viscous and Nonviscous Numerical Wave Solutions Within the Open-Source Hydrodynamics Framework <scp>reef3d</scp> . Journal of Offshore Mechanics and Arctic Engineering, 2022, 144, .	1.2	3
3451	Consistent and symmetry preserving data-driven interface reconstruction for the level-set method. Journal of Computational Physics, 2022, 457, 111049.	3.8	7
3452	High-order methods for diffuse-interface models in compressible multi-medium flows: A review. Physics of Fluids, 2022, 34, .	4.0	27
3453	Regularity estimates for singular parabolic measure data problems with sharp growth. Journal of Differential Equations, 2022, 316, 726-761.	2.2	2
3454	Droplet formation – a numerical investigation of liquid-liquid systems with consideration of Marangoni convection. International Journal of Heat and Mass Transfer, 2022, 188, 122465.	4.8	2
3455	A consistent and conservative Phase-Field method for multiphase incompressible flows. Journal of Computational and Applied Mathematics, 2022, 408, 114116.	2.0	7

		CITATION R	EPORT	
#	Article		IF	CITATIONS
3457	SOME ADVANCES IN NUMERICAL SIMULATIONS OF MULTISCALE HEAT TRANSFER PROB PARTICULARLY FOR BOILING HEAT TRANSFER. Annual Review of Heat Transfer, 2022, 24	3LEMS AND 4, 217-269.	1.0	2
3458	A Vaporization Model for Continuous Surface Force Approaches and Subcooled Configu Electronic Journal, 0, , .	rations. SSRN	0.4	0
3459	Theoretical and numerical methods. , 2022, , 297-388.			0
3460	Thermodynamically Consistent Diffuse Interface Model for the Numerical Simulation of I between Solid Explosive Detonation and Inert Materials. Combustion, Explosion and Sho 2022, 58, 77-92.	nteraction ock Waves,	0.8	0
3461	Modelling Open Ocean Aquaculture Structures Using CFD and a Simulation-Based Scree Model. Journal of Marine Science and Engineering, 2022, 10, 332.	en Force	2.6	1
3462	A Local Curvature Based Adaptive Particle Level Set Method. Journal of Scientific Compu 1.	iting, 2022, 91,	2.3	5
3463	Reynolds and dispersive shear stress in free-surface turbulent channel flow over square b Physical Review E, 2022, 105, 035102.	oars.	2.1	2
3465	Analysis and application of the modified smoothed particle hydrodynamics method to si cavitating flow. Journal of the Brazilian Society of Mechanical Sciences and Engineering,	mulate 2022, 44, 1.	1.6	0
3466	Effect of secondary currents on the flow and turbulence in partially filled pipes. Journal c Mechanics, 2022, 938, .	of Fluid	3.4	13
3467	Deformation and acceleration of water droplet in continuous airflow. Physics of Fluids, 2	2022, 34, .	4.0	8
3468	Numerical Analysis of the Atmospheric Boundary-Layer Turbulence Influence on Microsc of Pollutant in an Idealized Urban Environment. Boundary-Layer Meteorology, 2022, 184	ale Transport 4, 113-141.	2.3	3
3469	An incompressible Eulerian method for fluid–structure interaction with mixed soft and Physics of Fluids, 2022, 34, .	l rigid solids.	4.0	5
3470	Impact of turbulence and secondary flow on the water surface in partially filled pipes. Ph Fluids, 2022, 34, .	iysics of	4.0	9
3471	Shape optimization of a linearly elastic rolling structure under unilateral contact using N method and cut finite elements. Computational Mechanics, 2022, 70, 205-224.	litsche's	4.0	2
3472	Study of the secondary droplet breakup mechanism and regime map of Newtonian and fluids at high liquid–gas density ratio. Physics of Fluids, 2022, 34, .	power law	4.0	7
3473	Coupling level-set with volume-of-fluid for interface computation of incompressible gas- flows. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechan Engineering Science, 0, , 095440622210814.	liquid ical	2.1	0
3474	Numerical investigation on influences of injection flow rate on bubbling flow at submerg European Journal of Mechanics, B/Fluids, 2022, 95, 23-37.	ged orifices.	2.5	2
3475	Reducing volume and shape errors in front tracking by divergence-preserving velocity in and parabolic fit vertex positioning. Journal of Computational Physics, 2022, 457, 1110.	terpolation 72.	3.8	1

#	Article	IF	CITATIONS
3476	A flexible fully nonlinear potential flow model for wave propagation over the complex topography of the Norwegian coast. Applied Ocean Research, 2022, 122, 103103.	4.1	10
3477	Simulating compressible two-phase flows with sharp-interface discontinuous Galerkin methods based on ghost fluid method and cut cell scheme. Journal of Computational Physics, 2022, 459, 111107.	3.8	1
3478	Distance regularization energy terms in level set image segment model: A survey. Neurocomputing, 2022, 491, 244-260.	5.9	0
3479	A massively parallel accurate conservative level set algorithm for simulating turbulent atomization on adaptive unstructured grids. Journal of Computational Physics, 2022, 458, 111075.	3.8	10
3480	A consistent multiphase flow model with a generalized particle shifting scheme resolved via incompressible SPH. Journal of Computational Physics, 2022, 458, 111079.	3.8	8
3481	Numerical simulation of bi-component fuel droplet evaporation using Level Set method. Fuel, 2022, 318, 123331.	6.4	7
3482	Morphology of contorted fluid structures. International Journal of Multiphase Flow, 2022, 152, 104055.	3.4	4
3483	Characteristics and mechanisms of air-core vortex meandering in a free-surface intake flow. International Journal of Multiphase Flow, 2022, 152, 104070.	3.4	8
3484	A combined enthalpy-level-set approach for melting/solidification within two immiscible fluids. International Journal of Thermal Sciences, 2022, 177, 107551.	4.9	2
3485	Active contour model based on local absolute difference energy and fractional-order penalty term. Applied Mathematical Modelling, 2022, 107, 207-232.	4.2	6
3486	Lagrangian vs. Eulerian: An Analysis of Two Solution Methods for Free-Surface Flows and Fluid Solid Interaction Problems. Fluids, 2021, 6, 460.	1.7	19
3487	Toward droplet dynamics simulation in polymer electrolyte membrane fuel cells: Three-dimensional numerical modeling of confined water droplets with dynamic contact angle and hysteresis. Physics of Fluids, 2021, 33, .	4.0	5
3488	A mass conserving arbitrary Lagrangian–Eulerian formulation for threeâ€dimensional multiphase fluid flows. International Journal for Numerical Methods in Fluids, 2022, 94, 346-376.	1.6	0
3489	Eulerian simulation of complex suspensions and biolocomotion in three dimensions. Proceedings of the United States of America, 2022, 119, .	7.1	3
3490	Reduced model for capillary breakup with thermal gradients: Predictions and computational validation. Physics of Fluids, 2021, 33, 122003.	4.0	2
3491	Numerical simulation of gas-liquid two-phase flow impacting fixed structure by CLSVOF/IB method based on OpenFOAM. Journal of Hydrodynamics, 2021, 33, 1176-1189.	3.2	4
3492	Numerical modeling of adjacent bubble interactions under the influence of induced vibrations in liquid pool using lattice Boltzmann method (LBM). Journal of Applied Physics, 2021, 130, .	2.5	3
3493	Correlation of drag coefficient between rising bubbles in chain. Physics of Fluids, 2022, 34, 043314.	4.0	4

#	Article	IF	CITATIONS
3494	An energy diminishing arbitrary Lagrangian–Eulerian finite element method for two-phase Navier–Stokes flow. Journal of Computational Physics, 2022, 461, 111215.	3.8	5
3495	Non-isothermal non-Newtonian three-dimensional flow simulation of fused filament fabrication. Additive Manufacturing, 2022, , 102833.	3.0	0
3496	A finite element level-set method for stress-based topology optimization of plate structures. Computers and Mathematics With Applications, 2022, 115, 26-40.	2.7	12
3497	Level Set Dislocation Dynamics Method. , 2005, , 2307-2323.		0
3498	Direct Numerical Simulation of Droplet Impact on a Liquid-Liquid Interface Using a Level-Set/Volume-Of-Fluid Method with multiple Interface Marker Functions. , 0, , 329-338.		1
3500	Application of a Level-Set Method in Gas-Liquid Interfacial Flows. Springer Proceedings in Physics, 0, , 33-43.	0.2	Ο
3505	Image segmentation based on Mumford-Shah functional. Journal of Zhejiang University Science B, 2004, 5, 123-8.	0.4	1
3506	An Interface-Driven Adaptive Variational Procedure for Fully Eulerian Fluid-Structure Interaction Via Phase-Field Modeling. SSRN Electronic Journal, 0, , .	0.4	0
3507	Conservative multilevel discrete unified gas kinetic scheme for modeling multiphase flows with large density ratios. Physics of Fluids, 2022, 34, .	4.0	11
3508	Discrete unified gas-kinetic scheme for the conservative Allen-Cahn equation. Physical Review E, 2022, 105, 045317.	2.1	5
3509	Numerical Modelling of Mixing in a Microfluidic Droplet Using a Two-Phase Moving Frame of Reference Approach. Micromachines, 2022, 13, 708.	2.9	7
3510	Comparative performance of jet and spray impingement cooling in steel strip run-out table: experimental results. Australian Journal of Mechanical Engineering, 2024, 22, 109-122.	2.1	2
3511	A dual resolution phaseâ€field solver for wetting of viscoelastic droplets. International Journal for Numerical Methods in Fluids, 2022, 94, 1517-1541.	1.6	4
3512	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.	2.5	10
3513	Physics-informed neural networks for phase-field method in two-phase flow. Physics of Fluids, 2022, 34, .	4.0	35
3514	Computational multifluid-structure interaction study on nucleate boiling under the effect of stationary or oscillating torus. International Journal of Heat and Mass Transfer, 2022, 193, 122995.	4.8	2
3515	A finite difference method on irregular grids with local second order ghost point extension for solving Maxwell's equations around curved PEC objects. Journal of Computational Physics, 2022, 463, 111273.	3.8	1
3516	A parameterized level set method for structural topology optimization based on reaction diffusion equation and fuzzy PID control algorithm. Electronic Research Archive, 2022, 30, 2568-2599.	0.9	11

ARTICLE IF CITATIONS Axisymmetric free-surface flow simulation using the moving surface mesh particle method and 3517 3.8 1 application to drop formation. Journal of Computational Physics, 2022, , 111298. Simple and practical method for the simulations of two-component PFC models for binary colloidal 6.7 crystals on curved surfaces. International Journal of Mechanical Sciences, 2022, 225, 107342. A hybrid inference system for improved curvature estimation in the level-set method using machine 3519 3.8 5 learning. Journal of Computational Physics, 2022, , 111291. Simulation Opportunities by a Three-dimensional Calculation of Injection Moulding based on the 0.5 Finite Element Method. International Polymer Processing, 2022, 16, 398-403. Numerical Simulation of Granular and Multiphase Flows through Porous Media Obtained by Image 3521 0.1 0 Analysis. Journal of the Society of Powder Technology, Japan, 2022, 59, 167-177. A hybrid volume of fluid and level set interface capturing scheme with quartic surface 1.6 representation for unstructured meshes. International Journal for Numerical Methods in Fluids, 0, , . Structure of iso-scalar sets. Journal of Fluid Mechanics, 2022, 942, . 3523 3.4 4 Numerical simulations of air-water flow and rigid-body motion based on two-liquid CLSVOF/IB method 3524 4.3 and overset mesh. Ocean Engineering, 2022, 256, 111455. Geometry and Adaptive Mesh Update Procedures for Ballistics Simulations. SEMA SIMAI Springer 3525 0.7 1 Series, 2022, , 209-231. Highâ€order modeling of interface interactions using level sets. GAMM Mitteilungen, 0, , . 5.5 Deformation behavior of liquid droplet in shock-induced atomization. International Journal of 3527 4 3.4 Multiphase Flow, 2022, 155, 104141. Residual-based adaptivity for two-phase flow simulation in porous media using Physics-informed 3528 6.6 Neural Networks. Computer Methods in Applied Mechanics and Engineering, 2022, 396, 115100. Direct numerical simulation of taylor bubble with phase change. International Journal of Heat and 3529 4.8 3 Mass Transfer, 2022, 194, 123039. A volume-of-fluid method for variable-density, two-phase flows at supercritical pressure. Physics of 4.0 14 Fluids, 2022, 34, . Numerical Investigation of Breaking Focused Waves and Forces on Coastal Deck Structure with 3531 2.6 1 Girders. Journal of Marine Science and Engineering, 2022, 10, 768. An enhanced CLSVOF method with an algebraic second-reconstruction step for simulating incompressible two-phase flows. International Journal of Multiphase Flow, 2022, 154, 104151. The Effect of Junction Gutters for the Upscaling of Droplet Generation in a Microfluidic T-Junction. 3533 1.4 2 Microgravity Science and Technology, 2022, 34, . New benchmark problems for validation and verification of incompressible multi-fluid flows based on 3534 the improved Volume-Of-Fluid (VOF) method. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 648, 129313.

#	Article	IF	Citations
3536	Numerical modeling of erosion using an improvement of the extended finite element method. European Journal of Environmental and Civil Engineering, 2011, 15, 1187-1206.	2.1	0
3538	Microfluidic Simulations of Droplet Motion on Structured Solid Surface Using Phase-field Lattice Boltzmann Method. Multiphase Science and Technology, 2022, , .	0.5	0
3539	High–order discontinuous Galerkin approximation for a three–phase incompressible Navier–Stokes/Cahn–Hilliard model. Computers and Fluids, 2022, , 105545.	2.5	0
3540	A simplified and efficient weakly-compressible FV-WENO scheme for immiscible two-phase flows. Computers and Fluids, 2022, , 105555.	2.5	1
3541	Numerical investigations of hydraulic transient and thermodynamic characteristics of water flow impacting air pocket inside pipe based on CLSVOF. Journal of Hydroinformatics, 2022, 24, 856-874.	2.4	2
3542	Automated calibration of model-driven reconstructions in atom probe tomography. Journal Physics D: Applied Physics, 2022, 55, 375301.	2.8	3
3543	Numerical Investigation of Two In-Line Two-Dimensional Bubbles Rising in a Two-Dimensional Quiescent Ambient Liquid by a Conservative Phase-Field Lattice Boltzmann Method. Discrete Dynamics in Nature and Society, 2022, 2022, 1-12.	0.9	0
3544	Assessment of simplified momentum equations for free surface flows through rigid porous media. Experimental and Computational Multiphase Flow, 2023, 5, 159-177.	3.9	1
3545	A Study of The Motion of Bubbles from Underwater Explosions With Efficient Numerical Solvers. , 2022, , .		1
3546	A phase-change model for diffusion-driven mass transfer problems in incompressible two-phase flows. Chemical Engineering Science, 2022, 259, 117791.	3.8	2
3547	A novel isogeometric boundary element approach for solving phase change problems with the level set method. International Journal of Thermal Sciences, 2022, 181, 107763.	4.9	0
3548	Asphaltene Precipitation Under Controlled Mixing Conditions in a Microchamber. SSRN Electronic Journal, 0, , .	0.4	0
3549	Individual Tooth Segmentation in Human Teeth Images Using Pseudo Edge-Region Obtained by Deep Neural Networks. SSRN Electronic Journal, 0, , .	0.4	0
3550	A Consistent Volume-of-Fluid Approach for Direct Numerical Simulation of the Aerodynamic Breakup of a Vaporizing Drop. SSRN Electronic Journal, 0, , .	0.4	0
3551	Computerized Framework Used to Detect Glaucoma: A Review. , 2022, , .		0
3552	A transient and spatially confined phenomenological combustion model for direct-injection, compression-ignition engines in fuel-rich applications: N-Stage Lagrangian (NSL). International Journal of Engine Research, 2023, 24, 1916-1937.	2.3	1
3553	Computational approaches for simulating luminogenesis. Seminars in Cell and Developmental Biology, 2022, 131, 173-185.	5.0	4
3554	Experimental and computational evaluation of the degree of micro-collapse formations in freeze-dried cakes. Drying Technology, 2023, 41, 406-418.	3.1	1

#	Article	IF	CITATIONS
3555	Jetting mechanisms in bubble-pair interactions. Physics of Fluids, 2022, 34, .	4.0	2
3556	A level-set-based sharp-interface method for moving contact lines. Journal of Computational Physics, 2022, 467, 111445.	3.8	1
3557	Numerical analysis of ligament instability and breakup in shear flow. Physics of Fluids, 0, , .	4.0	2
3558	A finite element level set method based on adaptive octree meshes for thermal freeâ€surface flows. International Journal for Numerical Methods in Engineering, 2022, 123, 5500-5516.	2.8	2
3559	High-order level set reinitialization for multiphase flow simulations based on unstructured grids. Computers and Mathematics With Applications, 2022, 120, 60-77.	2.7	0
3560	A GPU-accelerated domain decomposition method for numerical analysis of nonlinear waves-current-structure interactions. Ocean Engineering, 2022, 259, 111901.	4.3	4
3561	Numerical simulation of three-fluid Rayleigh-Taylor instability using an enhanced Volume-Of-Fluid (VOF) model: New benchmark solutions. Computers and Fluids, 2022, 245, 105591.	2.5	10
3562	Efficient and practical phase-field method for the incompressible multi-component fluids on 3D surfaces with arbitrary shapes. Journal of Computational Physics, 2022, 467, 111444.	3.8	3
3563	Parabolic interface reconstruction for 2D volume of fluid methods. Journal of Computational Physics, 2022, 469, 111473.	3.8	10
3564	Numerical Study of Satellite Droplet Formation in Dripping Faucet. International Journal of Multiphase Flow, 2022, , 104204.	3.4	0
3565	A model predictive control (MPC)-integrated multiphase immersed boundary (IB) framework for simulating wave energy converters (WECs). Ocean Engineering, 2022, 260, 111908.	4.3	5
3566	A numerical study of the natural transition in a gas–liquid two-phase boundary layer over a flat plate taking account of interphase slip. AIP Advances, 2022, 12, 085218.	1.3	1
3567	A robust scheme for numerical simulation of heat transfer in two-fluid flows with high volumetric heat capacity contrasts. International Journal of Numerical Methods for Heat and Fluid Flow, 2022, 33, 570.	2.8	1
3568	Single-step deep reinforcement learning for two- and three-dimensional optimal shape design. AIP Advances, 2022, 12, .	1.3	8
3569	Error-Correcting Neural Networks for Two-Dimensional Curvature Computation in the Level-set Method. Journal of Scientific Computing, 2022, 93, .	2.3	1
3570	A Second-order Modified Ghost Fluid Method (2nd-MGFM) with Discontinuous Galerkin Method for 1-D compressible Multi-medium Problem with Cylindrical and Spherical Symmetry. Journal of Scientific Computing, 2022, 93, .	2.3	1
3571	Accurate image segmentation based on adaptive distance regularization level set method. International Journal of Wavelets, Multiresolution and Information Processing, 2022, 20, .	1.3	3
3572	An ALEâ€based finite element strategy for modeling compressible twoâ€phase flows. International Journal for Numerical Methods in Fluids, 2022, 94, 2040-2086.	1.6	1

#	Article	IF	CITATIONS
3573	A simple and practical finite difference method for the phase-field crystal model with a strong nonlinear vacancy potential on 3D surfaces. Computers and Mathematics With Applications, 2022, 121, 131-144.	2.7	3
3574	A three-dimensional fluid-structure interaction model based on SPH and lattice-spring method for simulating complex hydroelastic problems. Ocean Engineering, 2022, 260, 112026.	4.3	13
3575	Three-dimensional simulation of silted-up dam-break flow striking a rigid structure. Ocean Engineering, 2022, 261, 112042.	4.3	5
3576	A free surface flow solver based on an efficient improvement to a coupling method for interface computations. Computers and Mathematics With Applications, 2022, 124, 21-41.	2.7	0
3577	Numerical study of gas bubble rising in liquid sodium using advanced MPS method. Nuclear Engineering and Design, 2022, 397, 111924.	1.7	2
3578	An interface-tracking space–time hybridizable/embedded discontinuous Galerkin method for nonlinear free-surface flows. Computers and Fluids, 2022, 246, 105625.	2.5	0
3579	On the mass-conserving Allen-Cahn approximation for incompressible binary fluids. Journal of Functional Analysis, 2022, 283, 109631.	1.4	4
3580	A coupled level set and volume of fluid method for three dimensional unstructured polyhedral meshes for boiling flows. International Journal of Multiphase Flow, 2022, 156, 104207.	3.4	8
3581	Phase, pressure and velocity evolution and atomization characteristics of multiple Faraday waves in ultrasonic atomization: experiments and simulations. International Journal of Multiphase Flow, 2022, 156, 104223.	3.4	4
3582	A local discontinuous Galerkin level set reinitialization with subcell stabilization on unstructured meshes. Computers and Mathematics With Applications, 2022, 123, 160-170.	2.7	1
3583	Hydrodynamics study of standing-and-hovering behavior of dolphins on the water surface. Ocean Engineering, 2022, 264, 112604.	4.3	4
3584	Direct numerical simulation of gas-liquid mass transfer around a spherical contaminated bubble in the stagnant-cap regime. International Journal of Heat and Mass Transfer, 2022, 198, 123325.	4.8	11
3585	Isogeometric analysis with level set method for large-amplitude liquid sloshing. Ocean Engineering, 2022, 265, 112613.	4.3	2
3586	Performance of a coupled level-set and volume-of-fluid method combined with free surface turbulence damping boundary condition for simulating wave breaking in OpenFOAM. Ocean Engineering, 2022, 265, 112572.	4.3	1
3587	Consistency and accuracy in the simulation of two-phase flows with phase change using sharp interface capturing methods. Journal of Computational Physics, 2022, 470, 111604.	3.8	2
3588	Error-correcting neural networks for semi-Lagrangian advection in the level-set method. Journal of Computational Physics, 2022, 471, 111623.	3.8	2
3589	Asphaltene precipitation under controlled mixing conditions in a microchamber. Chemical Engineering Journal, 2023, 451, 138873.	12.7	7
3590	A GRP-based high resolution ghost fluid method for compressible multi-medium fluid flows I: One-dimensional case. Applied Mathematics and Computation, 2023, 437, 127506.	2.2	0

#	Article	IF	Citations
3591	Development of Numerical Methods for the Simulation of Compressible Droplet Dynamics Under Extreme Ambient Conditions. Fluid Mechanics and Its Applications, 2022, , 47-65.	0.2	0
3592	PERFORMANCE OF SHARP-VERSUS-DIFFUSE INTERFACE-BASED LEVEL SET METHOD ON A STAGGERED-VERSUS-CO-LOCATED GRID FOR CMFD. Computational Thermal Sciences, 2022, , .	0.9	0
3593	Level Set Methods and Lagrangian Interfaces. Applied Mathematical Sciences (Switzerland), 2022, , 1-37.	0.8	0
3594	Simple bladeless mixer with liquid–gas interface. Flow, 2022, 2, .	2.6	4
3595	Numerical Investigation of Droplet Impact on the Surface by Multiphase Lattice Boltzmann Flux Solver. Lecture Notes in Electrical Engineering, 2023, , 671-684.	0.4	0
3596	Multiscale modeling of different cavitating flow patterns around NACA66 hydrofoil. Physics of Fluids, 2022, 34, .	4.0	15
3597	Numerical modeling for particulate flow through realistic microporous structure of microfiltration membrane: Direct numerical simulation coordinated with focused ion beam scanning electron microscopy. Powder Technology, 2022, 410, 117872.	4.2	5
3598	Role of surfactant-induced Marangoni stresses in retracting liquid sheets. Journal of Fluid Mechanics, 2022, 949, .	3.4	3
3599	Numerical modeling of a self-propelled dolphin jump out of water. Bioinspiration and Biomimetics, 2022, 17, 065010.	2.9	3
3600	An Interface-Corrected Diffuse Interface Model for Incompressible Multiphase Flows with Large Density Ratios. Applied Sciences (Switzerland), 2022, 12, 9337.	2.5	1
3602	Simulating laser-fluid coupling and laser-induced cavitation using embedded boundary and level set methods. Journal of Computational Physics, 2023, 472, 111656.	3.8	12
3603	An Eulerian finite-volume approach of fluid-structure interaction problems on quadtree meshes. Journal of Computational Physics, 2022, 471, 111647.	3.8	4
3604	Numerical simulation of two droplets impacting on the wall continuously. Journal of Physics: Conference Series, 2022, 2345, 012006.	0.4	0
3605	A Study on Stability Condition for an Inconsistent Formulation in High-Density Ratio Flow. Lecture Notes in Mechanical Engineering, 2023, , 113-119.	0.4	0
3606	Third-order less oscillatory and less diffusive compact stencil-based upwind schemes, and their applications to incompressible flows and free surface flows. Physics of Fluids, 2022, 34, .	4.0	1
3607	Assessment of a Point-Cloud Volume-of-Fluid method with sharp interface advection. Computers and Fluids, 2022, 248, 105664.	2.5	0
3608	Influence of bottom slope on gap resonance behavior between fixed body and back wall in close proximity. Ocean Engineering, 2022, 265, 112459.	4.3	2
3609	Numerical approximation of the square phase-field crystal dynamics on the three-dimensional objects. Journal of Computational Physics, 2022, 471, 111652.	3.8	7

#	Article	IF	CITATIONS
3610	Hydrodynamic interaction study during surface ship overtaking submarine. Ocean Engineering, 2022, 265, 112602.	4.3	3
3611	A sharp numerical method for the simulation of Stefan problems with convective effects. Journal of Computational Physics, 2022, 471, 111627.	3.8	4
3612	Modeling of unsteady flows of multiphase viscous fluid in a pore space. Interexpo GEO-Siberia, 2022, 2, 32-37.	0.0	0
3613	Computational Methods for Simulating Dynamics of Particles at Fluid–Fluid Interface. Journal of the Society of Powder Technology, Japan, 2022, 59, 446-454.	0.1	0
3614	LSPIV analysis of ship-induced wave wash. Experiments in Fluids, 2022, 63, .	2.4	0
3615	A Novel Least-Squares Level Set Method by Using Polygonal Elements. , 2022, , 45-53.		0
3616	Computational fluid dynamic investigating the reactive species transfer across the interface of a single rising bubble. International Journal of Modern Physics C, O, , .	1.7	0
3617	Numerical Simulations on the Flooding into a Damaged Cabin with a Flexible Bulkhead Based on the Mixed-Mode Function-Modified MPS Method. Journal of Marine Science and Engineering, 2022, 10, 1582.	2.6	2
3618	High-fidelity pool boiling simulations on multiple nucleation sites using interface capturing method. Nuclear Engineering and Design, 2022, , 112004.	1.7	2
3619	Surface Charge Density Gradient Printing To Drive Droplet Transport: A Numerical Study. Langmuir, 2022, 38, 13697-13706.	3.5	2
3620	A review of VOF methods for simulating bubble dynamics. Progress in Nuclear Energy, 2022, 154, 104478.	2.9	32
3621	Riemann solvers for phase transition in a compressible sharp-interface method. Applied Mathematics and Computation, 2023, 440, 127624.	2.2	5
3623	Influences of Liquid Viscosity and Relative Velocity on the Head-On Collisions of Immiscible Drops. Energies, 2022, 15, 8544.	3.1	1
3624	Numerical Study of the Coalescence and Mixing of Drops of Different Polymeric Materials. Langmuir, 2022, 38, 14084-14096.	3.5	6
3625	Pore-scale study of three-phase reactive transport processes in porous media. Physics of Fluids, 2022, 34, .	4.0	7
3626	an extended CFD-DEM model based on micropolar fluid and its application in geological engineering. Computers and Geotechnics, 2023, 154, 105133.	4.7	6
3627	The Potts Model with Different Piecewise Constant Representations and Fast Algorithms: A Survey. , 2023, , 1-41.		0
3628	An interface-resolved phase-change model based on velocity decomposition. Journal of Computational Physics, 2023, 475, 111827.	3.8	2

#	Article	IF	Citations
3629	An immersed finite element method for elliptic interface problems on surfaces. Computers and Mathematics With Applications, 2023, 131, 54-67.	2.7	2
3630	A hybrid level-set / embedded boundary method applied to solidification-melt problems. Journal of Computational Physics, 2023, 474, 111829.	3.8	2
3631	AMS-PAN: Breast ultrasound image segmentation model combining attention mechanism and multi-scale features. Biomedical Signal Processing and Control, 2023, 81, 104425.	5.7	14
3632	Fast Numerical Methods for Image Segmentation Models. , 2022, , 1-75.		0
3633	Analysis of high Reynolds free surface flows. Journal of Mechanics, 2022, 38, 454-472.	1.4	2
3634	Finite Difference and Reinitialization Methods with Level Set to Interfacial Area Transport Equations for Gas–Liquid Two-Phase Flows. International Journal of Computational Fluid Dynamics, 2022, 36, 361-383.	1.2	0
3635	Micron-size bubble defects in fused silica and its laser induced damage near 355Ânm. Ceramics International, 2023, 49, 11753-11767.	4.8	3
3636	Drop impact dynamics on solid surfaces. Applied Physics Letters, 2022, 121, .	3.3	27
3637	WENO schemes with adaptive order for Hamilton–Jacobi equations. International Journal of Modern Physics C, 0, , .	1.7	0
3638	Upscaling of Transport Properties in Complex Hydraulic Fracture Systems. SPE Journal, 2023, 28, 1026-1044.	3.1	4
3639	Role of Kidney Stones in Renal Pelvis Flow. Journal of Biomechanical Engineering, 2022, , 1-16.	1.3	2
3640	Modeling and LES of high-pressure liquid injection under evaporating and non-evaporating conditions by a real fluid model and surface density approach. International Journal of Multiphase Flow, 2023, 160, 104372.	3.4	6
3641	Primary atomization of liquid jets: Identification and investigation of droplets at the instant of their formation using direct numerical simulation. International Journal of Multiphase Flow, 2023, 160, 104360.	3.4	2
3642	Multiscale multiphase flow simulations using interface capturing and Lagrangian particle tracking. Physics of Fluids, 2022, 34, .	4.0	17
3643	A Novel Least-Squares Polygonal Finite Element Level Set Method. Lecture Notes in Networks and Systems, 2023, , 1-12.	0.7	0
3644	Regulation of droplet size and flow regime by geometrical confinement in a microfluidic flow-focusing device. Physics of Fluids, 2023, 35, .	4.0	7
3645	A density-based WCSPH numerical scheme for investigation of multiphase flows with intricate interfaces at high density ratios. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 0, , 095440622211388.	2.1	0
3646	Numerical simulation of aerosol permeation through microstructure of face masks coordinating with x-ray computed tomography images. AIP Advances, 2022, 12, 125119.	1.3	1

#	Article	IF	CITATIONS
3647	Resin infusion in porous preform in the presence of HPM considering complex geometry and gravity: Flow simulation and experimental validation. Journal of Reinforced Plastics and Composites, 0, , 073168442211435.	3.1	0
3648	A Diffuse-Domain Phase-Field Lattice Boltzmann Method for Two-Phase Flows in Complex Geometries. Multiscale Modeling and Simulation, 2022, 20, 1411-1436.	1.6	8
3649	Global modes of variable-viscosity two-phase swirling flows and their triadic resonance. Journal of Fluid Mechanics, 2023, 955, .	3.4	4
3650	Investigation of cavitation bubble dynamics near a solid wall by high-resolution numerical simulation. Physics of Fluids, 2023, 35, .	4.0	23
3651	Deep Learning Model for Two-Fluid Flows. Physics of Fluids, 0, , .	4.0	0
3652	Topology Optimization for Steady-State Navier-Stokes Flow Based on Parameterized Level Set Based Method. CMES - Computer Modeling in Engineering and Sciences, 2023, 136, 593-619.	1.1	0
3653	Drag Coefficient and Turbulence Mixing Length of Local Climate Zone-Based Urban Morphologies Derived Using Obstacle-Resolving Modelling. Boundary-Layer Meteorology, 2023, 186, 737-769.	2.3	3
3654	A numerical investigation of simulating moisture in motive steam in a thermal-vapor compressor with DPM method. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2023, 45, .	1.6	0
3655	An Energy Stable Immersed Boundary Method for Deformable Membrane Problem with Non-uniform Density and Viscosity. Journal of Scientific Computing, 2023, 94, .	2.3	0
3656	A stabilised finite element framework for viscoelastic multiphase flows using a conservative level-set method. Journal of Computational Physics, 2023, 477, 111936.	3.8	5
3657	A scalable compressible volume of fluid solver using a stratified flow model. International Journal for Numerical Methods in Fluids, 2023, 95, 777-795.	1.6	3
3658	Numerical study of instability mechanism in the air-core vortex formation process. Engineering Applications of Computational Fluid Mechanics, 2023, 17, .	3.1	6
3659	Modeling of two-phase flows at low Capillary number with VoF method. Computers and Fluids, 2023, 252, 105772.	2.5	1
3660	A multiscale Eulerian–Lagrangian cavitating flow solver in OpenFOAM. SoftwareX, 2023, 21, 101304.	2.6	4
3661	A finite-difference ghost-point multigrid method for multi-scale modelling of sorption kinetics of a surfactant past an oscillating bubble. Journal of Computational Physics, 2023, 476, 111880.	3.8	2
3662	Numerical simulation of the bubbling phenomenon ahead of the dam using a two-phase seepage free surface model. Computers and Geotechnics, 2023, 155, 105239.	4.7	1
3663	Effect of welding heat input conditions on the dynamic behavior of pulse laser beam welding molten pool for Ti6Al4V thin plate with clearance. International Journal of Advanced Manufacturing Technology, 2023, 125, 629-644.	3.0	2
3664	Immersogeometric formulation for free-surface flows. , 2023, , 169-202.		0

	CHATON	REPORT	
#	Article	IF	CITATIONS
3665	Supersonic turbulent flows over sinusoidal rough walls. Journal of Fluid Mechanics, 2023, 956, .	3.4	2
3666	A level-set immersed boundary method for reactive transport in complex topologies with moving interfaces. Journal of Computational Physics, 2023, 478, 111958.	3.8	2
3667	Dissipative particle dynamics for anti-icing on solid surfaces. Chemical Physics, 2023, 568, 111824.	1.9	2
3668	Numerical Simulation of Microscale Oblique Droplet Impact on Liquid Film. Aerospace, 2023, 10, 119.	2.2	1
3669	Numerical Modelling ofÂBoiling. , 2023, , 341-374.		0
3671	An improved multiphase SPH algorithm with kernel gradient correction for modelling fuel–coolant interaction. Frontiers in Energy Research, 0, 11, .	2.3	0
3672	A numerical study on breakup of a liquid jet in an axial electric field. Journal of Aerosol Science, 2023, 170, 106142.	3.8	1
3673	Numerical simulation of bubble hydrodynamics for pool scrubbing. Journal of Nuclear Science and Technology, 0, , 1-14.	1.3	0
3674	Mass transfer intensification of slug flow by interfacial deformation at low flow rate in the microchannels with periodic expansion units. Chemical Engineering Science, 2023, 275, 118743.	3.8	1
3675	Numerical simulation model of gas–liquid–solid flows with gas–liquid free surface and solid-particle flows. Chemical Engineering Science, 2023, 270, 118507.	3.8	4
3676	An Accurate Phase Interface Locating Algorithm for Pore-Scale Two-Phase Interfacial Flows. Geofluids, 2023, 2023, 1-10.	0.7	0
3677	High-Order Mesh Morphing for Boundary and Interface Fitting to Implicit Geometries. CAD Computer Aided Design, 2023, 158, 103499.	2.7	2
3678	Effect of Reynolds number on impact force and collision process of a low-velocity droplet colliding with a wall carrying an equal-mass deposited droplet. International Journal of Multiphase Flow, 2023, 163, 104432.	3.4	3
3679	Droplet solidification: Physics and modelling. Applied Thermal Engineering, 2023, 228, 120515.	6.0	6
3680	On ghost fluid method-based sharp interface level set method on a co-located grid and its comparison with balanced force-based diffuse interface method. Journal of Computational Physics, 2023, 485, 112109.	3.8	3
3681	Adaptive partition of unity interpolation method with moving patches. Mathematics and Computers in Simulation, 2023, 210, 49-65.	4.4	1
3682	Adjoint-based shape optimization for radiative transfer using level-set function and volume penalization method. International Journal of Heat and Mass Transfer, 2023, 210, 124158.	4.8	1
3683	A three-dimensional ISPH-FVM coupling method for simulation of bubble rising in viscous stagnant liquid. Ocean Engineering, 2023, 278, 114497.	4.3	3

#	Article	IF	CITATIONS
3684	A nodal position finite element model for fluid-structure interaction analysis of floating bodies with mooring. Ocean Engineering, 2023, 279, 114344.	4.3	0
3685	Direct numerical simulation of heat transfer on a deformable vapor bubble rising in superheated liquid. Physics of Fluids, 2023, 35, 023319.	4.0	2
3686	Numerical simulation of bubbly flows by the improved lattice Boltzmann method for incompressible two-phase flows. Computers and Fluids, 2023, 254, 105797.	2.5	7
3687	A consistent volume-of-fluid approach for direct numerical simulation of the aerodynamic breakup of a vaporizing drop. Computers and Fluids, 2023, 254, 105807.	2.5	5
3688	Numerical simulation method using a Cartesian grid for oxidation of core materials under steam-starved conditions. Journal of Nuclear Science and Technology, 2023, 60, 1029-1045.	1.3	0
3689	An AMR-Based Liquid Film Simulation with Surfactant Transport Using PLIC-HF Method. Applied Sciences (Switzerland), 2023, 13, 1955.	2.5	1
3691	Adaptive interface-Mesh un-Refinement (AiMuR) based sharp-interface level-set-method for two-phase flow. Sadhana - Academy Proceedings in Engineering Sciences, 2023, 48, .	1.3	0
3692	A New Rheological Model for Phosphate Slurry Flows. Fluids, 2023, 8, 57.	1.7	1
3693	Machine learning algorithms for three-dimensional mean-curvature computation in the level-set method. Journal of Computational Physics, 2023, 478, 111995.	3.8	0
3694	Solidification Simulation and Experimental Validation of Single-Phase Fe–Co–Cr–Ni–V–Al High-Entropy Alloy. Transactions of the Indian Institute of Metals, 2023, 76, 1719-1729.	1.5	3
3695	Study on Oscillatory Mechanism of Solutocapillary Convection and Influence of Aspect Ratio on Flow Characteristics during Crystal Growth. Crystals, 2023, 13, 298.	2.2	1
3696	Experimental and numerical study on operational characteristics of a single outlet siphonic drainage system in large public buildings. Physics of Fluids, 2023, 35, 022109.	4.0	1
3697	A generic balanced-force algorithm for finite volume method on polyhedral unstructured grids with non-orthogonality. Journal of Computational Physics, 2023, 479, 112010.	3.8	1
3698	Fast Numerical Methods for Image Segmentation Models. , 2023, , 427-501.		0
3699	The Potts Model with Different Piecewise Constant Representations and Fast Algorithms: A Survey. , 2023, , 1887-1927.		0
3700	Numerical Simulation of Air-core Surface Vortex At Critical Submergence for Dual Horizontal Intakes. Journal of Fluids Engineering, Transactions of the ASME, 2023, , 1-52.	1.5	0
3701	Dynamics of a bubble in oscillating viscous liquid. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2023, 381, .	3.4	6
3702	Effects of gas viscosity and liquid-to-gas density ratio on liquid jet atomization in crossflow. AIP Advances, 2023, 13, .	1.3	1

#	Article	IF	CITATIONS
3703	Enhanced Dirichlet boundary condition in MPS method for free-surface flow with negative pressure. Computers and Fluids, 2023, 256, 105820.	2.5	0
3704	Tiled Characteristic Maps for Tracking Detailed Liquid Surfaces. Computer Graphics Forum, 2022, 41, 231-242.	3.0	1
3706	Improved hybrid Allen-Cahn phase-field-based lattice Boltzmann method for incompressible two-phase flows. Physical Review E, 2023, 107, .	2.1	6
3707	Numerical Simulation of In-Flight Icing Supercooled Large Droplets Freezing via Smoothed Particle Hydrodynamics. , 2023, , 1-48.		0
3708	Improved Physics-Informed Neural Networks Combined with Small Sample Learning to Solve Two-Dimensional Stefan Problem. Entropy, 2023, 25, 675.	2.2	1
3709	Experimental and Numerical Investigation of the Added Resistance in Regular Head Waves for the DTC Hull. Journal of Marine Science and Engineering, 2023, 11, 852.	2.6	2
3710	Numerical Study on the Waterjet–Hull Interaction of a Free-Running Catamaran. Journal of Marine Science and Engineering, 2023, 11, 864.	2.6	0
3712	Study of single-component two-phase free energy lattice Boltzmann models using various equations of state. Physics of Fluids, 2023, 35, .	4.0	1
3713	Unsteady vortex shedding dynamics behind a circular cylinder in very shallow free-surface flows. Computers and Fluids, 2023, 260, 105918.	2.5	0
3714	Bayesian Physics Informed Neural Networks for data assimilation and spatio-temporal modelling of wildfires. Spatial Statistics, 2023, 55, 100746.	1.9	6
3715	Modeling of flow with simultaneous particle deposition and deposit erosion. AIP Conference Proceedings, 2023, , .	0.4	0
3716	Numerical Simulation of In-Flight Icing by a Multi-Step Level-Set Method. , 2023, , 1-32.		0
3717	MMC-based heat sink topology optimization design for natural convection problems. International Journal of Thermal Sciences, 2023, 192, 108376.	4.9	1
3718	An interface preserving and residual-based adaptivity for phase-field modeling of fully Eulerian fluid-structure interaction. Journal of Computational Physics, 2023, 488, 112188.	3.8	0
3719	ChatGPT FOR PROGRAMMING NUMERICAL METHODS. Journal of Machine Learning for Modeling and Computing, 2023, 4, 1-74.	1.5	23
3720	An Investigation of the Influence of Viscosity and Printing Parameters on the Extrudate Geometry in the Material Extrusion Process. Polymers, 2023, 15, 2202.	4.5	5
3721	A consistent and conservative Phase-Field method for compressible multiphase flows with shocks. Journal of Computational Physics, 2023, 488, 112195.	3.8	3
3722	Removing Numerical Pathologies in a Turbulence Parameterization Through Convergence Testing. Journal of Advances in Modeling Earth Systems, 2023, 15, .	3.8	0

#	Article	IF	CITATIONS
3723	Effects of discharge-to-submergence ratio on evolution of air-core vortex. Ocean Engineering, 2023, 281, 114830.	4.3	2
3724	An improved MPS method for simulating multiphase flows characterized by high-density ratios and violent deformation of interface. Computer Methods in Applied Mechanics and Engineering, 2023, 412, 116103.	6.6	3
3725	CFD Modeling of Two-Phase Flow in Mini and Microchannels. , 2023, , 1-27.		0
3726	A physics-driven Σ-Y atomization model for heavy-duty engine simulations. International Journal of Multiphase Flow, 2023, 167, 104523.	3.4	0
3727	Heat flux and forces acting on a vaporising droplet in a superheated vapor flow. International Journal of Multiphase Flow, 2023, 167, 104526.	3.4	1
3729	Compounding, Rheology and Numerical Simulation of Highly Filled Graphite Compounds for Potential Fuel Cell Applications. Polymers, 2023, 15, 2589.	4.5	1
3730	Conservation and accuracy studies of the LESCM for incompressible fluids. Journal of Computational Physics, 2023, 489, 112269.	3.8	4
3731	Structure-preserving discretizations of two-phase Navier–Stokes flow using fitted and unfitted approaches. Journal of Computational Physics, 2023, 489, 112276.	3.8	3
3732	A mass-preserving level set method for simulating 2D/3D fluid flows with deformed interface. Ocean Engineering, 2023, 283, 115063.	4.3	1
3733	A Three-Dimensional Level-Set Front Tracking Technique for Automatic Multi-Step Simulations of In-Flight Ice Accretion. , 0, , .		2
3734	Numerical study of an individual bubble rise in a shear-thinning viscoelastic liquid based on a combination of the Carreau and FENE-CR models. Chemical Engineering Science, 2023, 280, 119022.	3.8	0
3735	A new SPH-FEM coupling method for fluid–structure interaction using segment-based interface treatment. Engineering With Computers, 0, , .	6.1	1
3736	A ghost-point based second order accurate finite difference method on uniform orthogonal grids for electromagnetic scattering around curved perfect electric conductors with corners. Journal of Computational Physics, 2023, 490, 112314.	3.8	1
3737	Highly efficient variant of SAV approach for the incompressible multi-component phase-field fluid models. Computers and Mathematics With Applications, 2023, 145, 24-40.	2.7	0
3738	A filtering approach for the conservative Allen–Cahn equation solved by the lattice Boltzmann method and a numerical study of the interface thickness. International Journal of Multiphase Flow, 2023, 167, 104554.	3.4	2
3739	A phase-field Lattice Boltzmann method for liquid-vapor phase change problems based on conservative Allen-Cahn equation and adaptive treegrid. Computers and Fluids, 2023, 264, 105973.	2.5	1
3740	DNS ofÂThermocapillary Migration ofÂaÂBi-dispersed Suspension ofÂDroplets. Lecture Notes in Computer Science, 2023, , 303-317.	1.3	0
3741	Simulation-based study of low-Reynolds-number flow around a ventilated cavity. Journal of Fluid Mechanics, 2023, 966, .	3.4	1

#	Article	IF	CITATIONS
3742	Water surface response to turbulent flow over a backward-facing step. Journal of Fluid Mechanics, 2023, 966, .	3.4	4
3743	An effective preconditioning strategy for volume penalized incompressible/low Mach multiphase flow solvers. Journal of Computational Physics, 2023, 490, 112325.	3.8	3
3744	Exponential Time Differencing Method for a Reaction- Diffusion System with Free Boundary. Communications on Applied Mathematics and Computation, 2024, 6, 354-371.	1.7	0
3745	CFD analysis of porous flow blockage in a gas-lift enhanced LBE-cooled fuel assembly. Annals of Nuclear Energy, 2023, 190, 109899.	1.8	2
3746	Effects of Temperature Difference and Heat Loss on Oscillation Characteristics of Thermo-Solutocapillary Convection in Toluene/N-Hexane Mixed Solution. Applied Sciences (Switzerland), 2023, 13, 6292.	2.5	0
3747	Numerical simulation of Marangoni effect induced by species transfer across iron droplet–molten slag interface. Journal of Iron and Steel Research International, 2023, 30, 1109-1116.	2.8	0
3748	Numerical modeling of liquid spills from the damaged container and collision of two rising bubbles in partially filled enclosure using modified Volume-Of-Fluid (VOF) method. Engineering Analysis With Boundary Elements, 2023, 154, 83-121.	3.7	2
3749	Discrete exterior calculus discretization of two-phase incompressible Navier-Stokes equations with a conservative phase field method. Journal of Computational Physics, 2023, 488, 112245.	3.8	1
3750	2D Modelling and energy analysis of entrapped air-pocket propagation and spring-like geysering in the drainage pipeline system. Engineering Applications of Computational Fluid Mechanics, 2023, 17, .	3.1	1
3751	Unstructured Conservative Level-Set (UCLS) Simulations ofÂFilm Boiling Heat Transfer. Lecture Notes in Computer Science, 2023, , 318-331.	1.3	0
3752	Recent progress on high-order discontinuous schemes for simulations of multiphase and multicomponent flows. Progress in Aerospace Sciences, 2023, , 100929.	12.1	0
3753	Development of a single-phase free-surface flow model with the improved lattice kinetic scheme. Computers and Mathematics With Applications, 2023, 145, 275-288.	2.7	1
3754	A review of numerical investigation on pool boiling. Journal of Thermal Analysis and Calorimetry, 2023, 148, 8697-8745.	3.6	1
3757	Inkjet printing on hydrophobic surfaces: Controlled pattern formation using sequential drying. Journal of Chemical Physics, 2023, 159, .	3.0	1
3758	Numerical Simulation of Supercooled Droplets Deformation, Impingement and Freezing for In-Flight Icing. , 2023, , 1-66.		0
3759	Investigation of design parameters related to sloshing loads using smoothed particle hydrodynamics and rule-based estimations. Physics of Fluids, 2023, 35, .	4.0	2
3760	Gradient estimates of general nonlinear singular elliptic equations with measure data. Journal of Differential Equations, 2023, 372, 402-457.	2.2	0
3761	An extended model for the direct numerical simulation of droplet evaporation. Influence of the Marangoni convection on Leidenfrost droplet. Journal of Computational Physics, 2023, 491, 112366.	3.8	3

#	Article	IF	CITATIONS
3763	Coupling SPH with a mesh-based Eulerian approach for simulation of incompressible free-surface flows. Applied Ocean Research, 2023, 138, 103673.	4.1	0
3764	Numerical Investigation for Bubble Cloud Formation by High-Intensity Focused Ultrasound Using the Ghost Fluid Method Coupled with Bubble Dynamics. Multiphase Science and Technology, 2023, , .	0.5	0
3765	From Point Clouds to 3D Simulations of Marble Sulfation. Springer INdAM Series, 2023, , 153-174.	0.5	0
3766	The interfacial modes and modal causality in a dispersed bubbly turbulent flow. Physics of Fluids, 2023, 35, .	4.0	2
3767	An open-source pipeline for solving continuous reaction–diffusion models in image-based geometries of porous media. Journal of Computational Science, 2023, 72, 102118.	2.9	0
3768	The Influence of Numerical Method and Grid Parameters on the Simulation Accuracy of Damped Oscillations of Free Floating Cylinder. Fundamentalnaya I Prikladnaya Gidrofizika, 2022, 15, 33-46.	0.4	0
3769	HEAT TRANSFER ENHANCEMENT DUE TO COLD CAP MOTION FROM BUBBLING IN A WASTE GLASS MELTER. Journal of Energy Resources Technology, Transactions of the ASME, 0, , 1-21.	2.3	0
3770	Piecewise Acoustic Source Imaging with Unknown Speed of Sound Using a Level-Set Method. Communications on Applied Mathematics and Computation, 0, , .	1.7	0
3771	Impact of surfactants on the rise of deformable bubbles and interfacial gas–liquid mass transfer. Journal of Fluid Mechanics, 2023, 970, .	3.4	0
3772	Numerical investigation of horizontal flow film boiling of saturated liquid over two inline cylinders in the mixed convection regime. Physics of Fluids, 2023, 35, .	4.0	2
3773	Advances of Phase-Field Model in the Numerical Simulation of Multiphase Flows: A Review. Atmosphere, 2023, 14, 1311.	2.3	0
3774	A Vaporization Model for Continuous Surface Force Approaches and Subcooled Configurations. Fluids, 2023, 8, 233.	1.7	0
3775	An Improved Coupled Level Set and Continuous Moment-of-Fluid Method for Simulating Multiphase Flows with Phase Change. Communications on Applied Mathematics and Computation, 0, , .	1.7	0
3776	A moment-of-fluid method for resolving filamentary structures using a symmetric multi-material approach. Journal of Computational Physics, 2023, 491, 112401.	3.8	1
3777	Unfitted Finite Element Methods for Axisymmetric Two-Phase Flow. Journal of Scientific Computing, 2023, 97, .	2.3	1
3778	Binary Level Set Method for Variational Implicit Solvation Model. SIAM Journal of Scientific Computing, 2023, 45, B618-B645.	2.8	0
3779	Sensitivity of Burned Area and Fire Radiative Power Predictions to Containment Efforts, Fuel Density, and Fuel Moisture Using WRFâ€Fire. Journal of Geophysical Research D: Atmospheres, 2023, 128, .	3.3	2
3780	A low Mach enthalpy method to model non-isothermal gas–liquid–solid flows with melting and solidification. International Journal of Multiphase Flow, 2023, 169, 104605.	3.4	0

#	Article	IF	CITATIONS
3781	Meandering of instantaneous large-scale structures in open-channel flow over longitudinal ridges. Environmental Fluid Mechanics, 2023, 23, 829-846.	1.6	1
3782	Drag on a partially immersed sphere at the capillary scale. Physical Review Fluids, 2023, 8, .	2.5	1
3783	On modal decomposition as surrogate for charge-conservative EHD modelling of Taylor Cone jets. International Journal of Engineering Science, 2023, 193, 103947.	5.0	0
3784	An efficient multi-resolution SPH framework for multi-phase fluid-structure interactions. Science China: Physics, Mechanics and Astronomy, 2023, 66, .	5.1	0
3785	Laminar cross-flow convective heat transfer of a finned cylindrical tube in the presence of particle deposition and deposit erosion. Applied Thermal Engineering, 2024, 236, 121570.	6.0	0
3787	Phase-field modeling of complex interface dynamics in drop-laden turbulence. Physical Review Fluids, 2023, 8, .	2.5	5
3789	Hydrodynamics and turbulence of free-surface flow over a backward-facing step. Journal of Hydraulic Research/De Recherches Hydrauliques, 2023, 61, 611-630.	1.7	0
3790	A 3D conservative level set model to simulate drop impact with phase change onto solid surfaces. International Journal of Multiphase Flow, 2023, 169, 104615.	3.4	0
3791	Computational modelling and investigation of nucleate boiling with periodic exponential heat flux-based power-transients. International Journal of Heat and Mass Transfer, 2023, 217, 124673.	4.8	0
3792	Computational Fluid Dynamics of Swimming Microorganisms. Journal of the Physical Society of Japan, 2023, 92, .	1.6	0
3793	CFD Modeling of Two-Phase Flow in Mini and Microchannels. , 2023, , 1279-1304.		0
3794	Computational Simulations of Microbubbles. , 2023, , 267-295.		0
3795	Gravity-Driven Bubble Rise Simulation. , 2023, , 375-411.		0
3796	Shock induced energy transfer into a solid structure. AIP Conference Proceedings, 2023, , .	0.4	0
3797	Advances in Interface Modeling. , 2023, , 137-164.		0
3798	An accurate and efficient HOS-meshfree CFD coupling method for simulating strong nonlinear wave–body interactions. Ocean Engineering, 2023, 287, 115889.	4.3	0
3799	Numerical investigation on boiling heat transfer in a rectangular channel under sub-atmospheric environment. Thermal Science and Engineering Progress, 2023, 46, 102182.	2.7	0
3800	Numerical Methods for Complex Interface Evolutions. Oberwolfach Seminars, 2023, , 141-165.	0.5	0

ARTICLE IF CITATIONS Twin-Screw Extrusion and Applications., 2017, , 433-519. 0 3801 An Efficient hp-Adaptive Strategy for a Level-Set Ghost-Fluid Method. Journal of Scientific Computing, 3802 2.3 2023, 97, . A level-set method for ultrasound-driven bubble motion and tissue deformation. Communications in 3803 3.3 1 Nonlinear Science and Numerical Simulation, 2024, 128, 107619. A generalized variational level set method without frequent reinitialization for simulations of 3804 3.8 gas-liquid flows. Journal of Computational Physics, 2023, 495, 112558. A lattice Boltzmann model for the interface tracking of immiscible ternary fluids based on the 3805 2.5 0 conservative Allen-Cahn equation. Computers and Fluids, 2023, , 106093. Investigating mass transfer around spatially-decoupled electrolytic bubbles. Chemical Engineering Journal, 2023, 477, 147012. 3807 12.7 Nanoscale and microscale processingâ€"Modeling., 2023, , . 3808 0 A review of smoothed particle hydrodynamics. Computational Particle Mechanics, 0, , . 3809 3.0On the coupling between direct numerical simulation of nucleate boiling and a micro-region model at 3810 3.8 1 the contact line. Journal of Computational Physics, 2024, 497, 112602. A novel approach for wall-boundary immersed flow simulation (proposal of modified Navier-Stokes) Tj ETQq1 1 0.784214 rgBT /Overla 3811 Modeling Multiâ€Material Structural Patterns in Tectonic Flow With a Discontinuous Galerkin Level 3812 0 3.4 Set Method. Journal of Geophysical Research: Solid Earth, 2023, 128, . A coupled level-set and tangent of hyperbola interface capturing (THINC) scheme with a single-step 4.0 time integration for incompressible flows. Physics of Fluids, 2023, 35, . Analysis of two-phase flow in the porous medium through a rectangular curved duct. Experimental 3814 3.9 0 and Computational Multiphase Flow, 2024, 6, 67-83. Numerical modeling of highly nonlinear phenomena in heterogeneous materials and domains. 2.3 Advances in Applied Mechanics, 2023, , 111-239. äf"ãf¼ã,ºãfŸãf«æ'©è€—ã,ªfŸãf¥ãf¬ãf¼ã,ªf§ãf³ã®ãŸã,ã®ç•Œé¢æ•æ‰åž‹æ'©è€—ãf¢ãf‡ãf«. Journal of theoSociety of Powder T 3816 An efficient matrix factorization within the projection framework for ameliorating the surface 3.8 tension time step constraint in interfacial flows. Journal of Computational Physics, 2024, 498, 112678. Computational Thermal Multi-phase Flow for Metal Additive Manufacturing. Modeling and Simulation 3818 0.6 0 in Science, Engineering and Technology, 2023, , 533-580. Numerical simulation and experimental investigation of bubble behaviour during pool boiling in the 3819 3.2 coiled wire. Heliyon, 2023, 9, e22168.

#	Article	IF	CITATIONS
3821	A single-phase GPU-accelerated surface tension model using SPH. Computer Physics Communications, 2024, 295, 109012.	7.5	0
3822	Cell Polarity and Movement with Reaction-Diffusion and Moving Boundary: Rigorous Model Analysis and Robust Simulations. SIAM Journal on Applied Mathematics, 0, , S515-S537.	1.8	0
3823	Numerical investigation on rebound dynamics of supercooled water droplet on cold superhydrophobic surface. Applied Thermal Engineering, 2024, 239, 122007.	6.0	1
3824	Numerical simulation of incompressible interfacial flows by a level set re-distancing method with improved mass conservation. Ocean Engineering, 2023, 290, 116428.	4.3	0
3825	Free surface tension modelling using particle-grid hybrid method without considering gas particles. Journal of Computational Physics, 2024, 498, 112674.	3.8	0
3826	Fluctuation characteristics induced by energetic coherent structures in air-core vortex: The most complex vortex in the tidal power station intake system. Energy, 2024, 288, 129778.	8.8	0
3827	An efficient bilinear interface reconstruction algorithm and consistent multidimensional unsplit advection scheme for accurate capturing of highly-curved interfacial shapes on structured grids. Journal of Computational Physics, 2024, 498, 112656.	3.8	1
3828	A numerical model for simulation of two-phase flows interaction with flexible slender bodies. Physics of Fluids, 2023, 35, .	4.0	3
3829	GARM-LS: A Gradient-Augmented Reference-Map Method for Level-Set Fluid Simulation. ACM Transactions on Graphics, 2023, 42, 1-20.	7.2	0
3830	An improved Coupled Level Set and Volume of Fluid (i-CLSVoF) framework for sessile droplet evaporation. Journal of Computational Science, 2024, 75, 102195.	2.9	1
3831	Investigations of spray breakup Rayleigh–Taylor instability via multiphase lattice Boltzmann flux solver. Physics of Fluids, 2023, 35, .	4.0	1
3832	Kinetic equations and level-set approach for simulating solid-state microstructure evolutions at the mesoscopic scale: State of the art, limitations, and prospects. Progress in Materials Science, 2024, 142, 101224.	32.8	0
3833	Numerical Simulation of In-Flight Icing by a Multi-step Level-Set Method. , 2024, , 231-262.		0
3834	Numerical Simulation of Supercooled Droplets Deformation, Impingement and Freezing for In-Flight Icing. , 2024, , 61-126.		0
3835	Smoothed particle hydrodynamics modelling of multiphase flows: an overview. Acta Mechanica, 0, , .	2.1	0
3836	Individual tooth segmentation in human teeth images using pseudo edge-region obtained by deep neural networks. Signal Processing: Image Communication, 2024, 120, 117076.	3.2	0
3837	Numerical Simulation of In-Flight Icing Supercooled Large Droplets Freezing via Smoothed Particle Hydrodynamics. , 2024, , 127-174.		0
3838	Numerical Simulation of Oil-water Two-phase Flow Interface Tracking. Journal of Physics: Conference Series, 2023, 2661, 012023.	0.4	0

#	Article	IF	CITATIONS
3839	Direct Numerical Simulation of Atomization Characteristics of ECN Spray-G Injector: In-Nozzle Fluid Flow and Breakup Processes. Flow, Turbulence and Combustion, 2024, 112, 615-642.	2.6	1
3840	A new ghost-cell/level-set method for three-dimensional flows. Journal of Computational Physics, 2024, 499, 112710.	3.8	1
3841	A Nitscheâ€based cut finite element solver for twoâ€phase Stefan problems. International Journal for Numerical Methods in Engineering, 2024, 125, .	2.8	0
3842	Optimization-based level-set re-initialization: A robust interface preserving approach in multiphase problems. Computer Methods in Applied Mechanics and Engineering, 2024, 420, 116699.	6.6	0
3843	Moving iso-contour method for solving partial differential equations. Journal of Physics: Conference Series, 2023, 2675, 012031.	0.4	0
3844	Arbitrary Lagrangian-Eulerian finite element approximations for axisymmetric two-phase flow. Computers and Mathematics With Applications, 2024, 155, 209-223.	2.7	0
3845	Multi-objective topology optimization of heat transfer surface using level-set method and adaptive mesh refinement in OpenFOAM. International Journal of Heat and Mass Transfer, 2024, 221, 125099.	4.8	0
3846	An adaptive-correction algorithm for suppressing interface smearing in incompressible multiphase flows with complex interfacial behavior. Modern Physics Letters B, 0, , .	1.9	0
3847	Comparison of surface tension models for the simulation of two-phase flow in an ISPH-FVM coupling method. European Journal of Mechanics, B/Fluids, 2024, 105, 57-96.	2.5	1
3848	General vorticityâ€streamfunction formulation for incompressible binary flow with arbitrary density ratio. International Journal for Numerical Methods in Fluids, 2024, 96, 561-573.	1.6	0
3849	Implementation of a level-set-based volume penalization method for solving fluid flows around bluff bodies. Physics of Fluids, 2024, 36, .	4.0	1
3850	Towards vibration-based damage detection of civil engineering structures: overview, challenges, and future prospects. International Journal of Mechanics and Materials in Design, 0, , .	3.0	0
3851	The Implementation of Gas-liquid Two-phase Flow Simulations with Surfactant Transport Based on GPU Computing and Adaptive Mesh Refinement. , 2024, , .		0
3852	Image segmentation based on Mumford-Shah functional. Journal of Zhejiang University: Science A, 2004, 5, 123-128.	2.4	0
3853	Fingering Instability Accelerates Population Growth of a Proliferating Cell Collective. Physical Review Letters, 2024, 132, .	7.8	0
3854	Full-variable Cartesian grid method for incompressible and multiphase flows. Journal of Computational Physics, 2024, 500, 112749.	3.8	0
3855	A compressible solver for two phase-flows with phase change for bubble cavitation. Journal of Computational Physics, 2024, 500, 112750.	3.8	0
3856	Insights into unique in-situ self-adaptive sealing property of pressure-activated sealant in leaks: Experimental and numerical investigations on mechanism of liquid-to-solid transformation triggered by differential pressure. , 2024, 234, 212655.		0

#	Article	IF	CITATIONS
3857	Effect of Ta on the Evolution of Phases and Mechanical Properties of Novel Seven Components Fe–Co–Ni–Cr–V–Al–Ta Eutectic High Entropy Alloys: Experimental Study and Numerical Simulation. , 0, , .		0
3858	A coarse grid approach for single bubble boiling simulations with the volume of fluid method. Computers and Fluids, 2024, 271, 106182.	2.5	0
3860	ReSDF: Redistancing implicit surfaces using neural networks. Journal of Computational Physics, 2024, 502, 112803.	3.8	0
3861	Numerical Investigation of Gas Bubble Interaction in a Circular Cross-Section Channel in Shear Flow. Fluids, 2024, 9, 32.	1.7	0
3862	A consistent and conservative phase-field method for compressible N-phase flows: Consistent limiter and multiphase reduction-consistent formulation. Journal of Computational Physics, 2024, 501, 112801.	3.8	0
3864	A Diffuse Interface Approach to Modeling Acoustic Wave-Droplet Interactions. , 2024, , .		0
3865	Comparison of Flamelet and Transported Species-Based Modeling of Rotating Detonation Engines. , 2024, , .		0
3866	A coupled LSVOF-adaptive mesh refinement-moving mesh technique to study complex multiphase problems. , 2023, , .		0
3867	Controlling gas–liquid flow and enhancing heat transfer in a T-junction microchannel by wettability-engineered walls. Physics of Fluids, 2024, 36, .	4.0	0
3868	An all-Mach consistent numerical scheme for simulation of compressible multi-component fluids including surface tension, cavitation, turbulence modeling and interface sharpening on compact stencils. Computers and Fluids, 2024, 274, 106186.	2.5	Ο
3869	Coupled CFD-DEM simulation of interfacial fluid–particle interaction during binder jet 3D printing. Computer Methods in Applied Mechanics and Engineering, 2024, 421, 116747.	6.6	0
3870	An improved multiphase lattice Boltzmann flux solver with a modified Cahn–Hilliard equation for multiphase flow with super large density ratio. Physics of Fluids, 2024, 36, .	4.0	0
3871	A coupled LSVOF-adaptive mesh refinement-moving mesh technique to study complex multiphase problems. , 2023, , .		0
3872	An immersed boundary method for mass transport applications in multiphase systems with discontinuous species concentration fields. Journal of Engineering Mathematics, 2024, 145, .	1.2	Ο
3873	Two-Way Coupling Simulation of Fluid-Multibody Dynamics for Estimating Power Generation Performance of Point Absorber Wave Energy Converters. Energies, 2024, 17, 930.	3.1	0
3874	Simulation on mass removal by recoil pressure, thermal stress, and bubble growth of concrete irradiated by a millisecond Nd: YAG pulsed laser. Optik, 2024, 302, 171699.	2.9	Ο
3875	A Review of Numerical and Physical Methods for Analyzing the Coupled Hydro–Aero–Structural Dynamics of Floating Wind Turbine Systems. Journal of Marine Science and Engineering, 2024, 12, 392.	2.6	0
3876	Numerical study on the gas-liquid interface in the hydrogen reduction of copper slag process. Chemical Engineering Science, 2024, 290, 119916.	3.8	0

#	Article	IF	CITATIONS
3877	Comparative CmFD Study on Geometric and Algebraic Coupled Level Set and Volume of Fluid Methods. Lecture Notes in Mechanical Engineering, 2024, , 3-15.	0.4	0
3878	Enforcing accurate volume conservation in VOFâ€based longâ€ŧerm simulations of turbulent bubbleâ€laden flows on coarse grids. International Journal for Numerical Methods in Fluids, 0, , .	1.6	0
3879	Acoustic metasurface development for transmitted wavefront manipulation using a level set-based topology optimization approach. Journal of Sound and Vibration, 2024, 579, 118382.	3.9	0
3880	Fluid–rigid body coupling simulations with the passively moving solid model based on a physically consistent particle method. Physics of Fluids, 2024, 36, .	4.0	0
3881	Fully higher-order coupling of finite element and level set methods for two-phase flow with a new explicit projection method. Computers and Fluids, 2024, 275, 106245.	2.5	0
3883	Physics-constrained neural networks as multi-material Riemann solvers for compressible two-gas simulations. Journal of Computational Science, 2024, 78, 102261.	2.9	0
3884	Finite element implementation of a seepage-stress coupling method for solid-liquid-gas three phases in porous media considering compressible gas. Computers and Geotechnics, 2024, 169, 106189.	4.7	0
3885	Wake characteristics behind a tidal turbine with surface waves in turbulent flow analyzed with large-eddy simulation. Physical Review Fluids, 2024, 9, .	2.5	0
3886	Behavior of small water droplets in a highly viscous flow in a converging and diverging channel. Physics of Fluids, 2024, 36, .	4.0	0
3887	A novel surface-derivative-free of jumps AIIM with triangulated surfaces for 3D Helmholtz interface problems. Journal of Computational Physics, 2024, 506, 112947.	3.8	0