Simulating Free Surface Flows with SPH

Citation Report

#	ARTICLE	IF	CITATIONS
1	Volcanoes, Tsunamis and the demise of the Minoans. Physica D: Nonlinear Phenomena, 1994, 77, 217-228.	1.3	9
2	SPH simulation of multi-phase flow. Computer Physics Communications, 1995, 87, 225-235.	3.0	366
3	A Study of the Stability Properties of Smooth Particle Hydrodynamics. Publications of the Astronomical Society of Australia, 1996, 13, 97-102.	1.3	137
4	An Analysis of 1-D Smoothed Particle Hydrodynamics Kernels. Journal of Computational Physics, 1996, 126, 165-180.	1.9	84
5	Smoothed Particle Hydrodynamics for the Simulation of Broken-Ice Fields: Mohrâ€"Coulomb-Type Rheology and Frictional Boundary Conditions. Journal of Computational Physics, 1997, 134, 203-215.	1.9	42
6	Modeling Low Reynolds Number Incompressible Flows Using SPH. Journal of Computational Physics, 1997, 136, 214-226.	1.9	1,535
7	Modelling confined multi-material heat and mass flows using SPH. Applied Mathematical Modelling, 1998, 22, 981-993.	2.2	278
8	Smooth particle hydrodynamics simulation of surface coating. Applied Mathematical Modelling, 1998, 22, 1037-1046.	2.2	3
9	Perspective on Eulerian Finite Volume Methods for Incompressible Interfacial Flows. , 1998, , 267-331.		28
10	Development of a Spray Model for Low Weber Gasoline Jets in S.I. Engines. , 1998, , .		0
11	NUMERICAL METHODS FOR NONLINEAR WAVES. Series on Quality, Reliability and Engineering Statistics, 1999, , 241-324.	0.2	38
12	Parallel simulations of pore-scale flow through porous media. Computers and Geotechnics, 1999, 25, 227-246.	2.3	31
13	Variational and momentum preservation aspects of Smooth Particle Hydrodynamic formulations. Computer Methods in Applied Mechanics and Engineering, 1999, 180, 97-115.	3.4	622
14	Conduction Modelling Using Smoothed Particle Hydrodynamics. Journal of Computational Physics, 1999, 148, 227-264.	1.9	490
15	An SPH Projection Method. Journal of Computational Physics, 1999, 152, 584-607.	1.9	738
16	A pore-scale numerical model for flow through porous media. International Journal for Numerical and Analytical Methods in Geomechanics, 1999, 23, 881-904.	1.7	134
17	Solitary Waves on a Cretan Beach. Journal of Waterway, Port, Coastal and Ocean Engineering, 1999, 125, 145-155.	0.5	453
18	Solid friction at high sliding velocities: An explicit three-dimensional dynamical smoothed particle hydrodynamics approach. Journal of Geophysical Research, 1999, 104, 28769-28788.	3.3	20

#	Article	IF	Citations
19	DIRECT NUMERICAL SIMULATION OF FREE-SURFACE AND INTERFACIAL FLOW. Annual Review of Fluid Mechanics, 1999, 31, 567-603.	10.8	1,615
20	Comparison of SPH simulations of high pressure die casting with the experiments and VOF simulations of Schmid and Klein. International Journal of Cast Metals Research, 2000, 12, 409-418.	0.5	37
21	High pressure die casting simulation using smoothed particle hydrodynamics. International Journal of Cast Metals Research, 2000, 12, 335-355.	0.5	42
22	Three dimensional modelling of high pressure die casting. International Journal of Cast Metals Research, 2000, 12, 357-365.	0.5	18
23	A unified stability analysis of meshless particle methods. International Journal for Numerical Methods in Engineering, 2000, 48, 1359-1400.	1.5	377
24	Simulating surface tension with smoothed particle hydrodynamics. International Journal for Numerical Methods in Fluids, 2000, 33, 333-353.	0.9	383
25	SPH without a Tensile Instability. Journal of Computational Physics, 2000, 159, 290-311.	1.9	676
26	SPH Simulation of River Ice Dynamics. Journal of Computational Physics, 2000, 165, 752-770.	1.9	96
27	Scott Russellâ€™s wave generator. Physics of Fluids, 2000, 12, 622-630.	1.6	131
28	SPH Modelling of Water Waves. , 2001, , 779.		65
29	Liquidâ€"solid flows using smoothed particle hydrodynamics and the discrete element method. Powder Technology, 2001, 116, 204-213.	2.1	116
30	TWO ATTEMPTS OF TURBULENCE MODELLING IN SMOOTHED PARTICLE HYDRODYNAMICS. , 2002, , .		10
31	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
32	A Meshfree Method For Incompressible Fluid Flows with Incorporated Surface Tension. Revue Europeenne Des Elements, 2002, 11, 965-987.	0.1	21
33	Simulation of the effect of defence structures on granular flows using SPH. Natural Hazards and Earth System Sciences, 2002, 2, 203-209.	1.5	5
34	Remeshed Smoothed Particle Hydrodynamics for the Simulation of Viscous and Heat Conducting Flows. Journal of Computational Physics, 2002, 182, 67-90.	1.9	152
35	Investigations into water mitigation using a meshless particle method. Shock Waves, 2002, 12, 181-195.	1.0	88
36	SPH compressible turbulence. Monthly Notices of the Royal Astronomical Society, 2002, 335, 843-852.	1.6	156

#	ARTICLE	IF	CITATIONS
37	Viscoelastic flows studied by smoothed particle dynamics. Journal of Non-Newtonian Fluid Mechanics, 2002, 105, 35-51.	1.0	116
38	Flow modelling in casting processes. Applied Mathematical Modelling, 2002, 26, 171-190.	2.2	119
39	Numerical analysis of fine powder flow using smoothed particle method and experimental verification. Chemical Engineering Science, 2002, 57, 227-237.	1.9	16
40	Particle-Based Simulation of Fluids. Computer Graphics Forum, 2003, 22, 401-410.	1.8	200
41	High pressure die casting simulation using a Lagrangian particle method. Communications in Numerical Methods in Engineering, 2003, 19, 679-687.	1.3	41
42	Lattice Boltzmann model for free-surface flow and its application to filling process in casting. Journal of Computational Physics, 2003, 185, 61-99.	1.9	110
43	Numerical simulation of interfacial flows by smoothed particle hydrodynamics. Journal of Computational Physics, 2003, 191, 448-475.	1.9	1,192
44	SPH simulations of time-dependent Poiseuille flow at low Reynolds numbers. Journal of Computational Physics, 2003, 191, 622-638.	1.9	102
45	Smooth particle hydrodynamics: importance of correction terms in adaptive resolution algorithms. Journal of Computational Physics, 2003, 192, 157-174.	1.9	17
46	Constructing smoothing functions in smoothed particle hydrodynamics with applications. Journal of Computational and Applied Mathematics, 2003, 155, 263-284.	1.1	216
47	Finite Pointset Method Based on the Projection Method for Simulations of the Incompressible Navier-Stokes Equations. Lecture Notes in Computational Science and Engineering, 2003, , 373-387.	0.1	41
48	Caldera collapse and the generation of waves. Geochemistry, Geophysics, Geosystems, 2003, 4, .	1.0	4
49	Fluid Motion Generated by Impact. Journal of Waterway, Port, Coastal and Ocean Engineering, 2003, 129, 250-259.	0.5	180
50	Particle Method for Simulation of Free Surface Flows. , 2003, , 889-898.		9
51	Can a single bubble sink a ship?. American Journal of Physics, 2003, 71, 842-849.	0.3	24
52	La méthode numérique SPH appliquée à l'hydraulique. Revue Europeenne Des Elements, 2003, 12, 171-190.	0.1	0
53	Extended Galilean invariance for adaptive fluid simulation. Computer Animation and Simulation, 2004, , .	0.0	25
54	Modeling and editing flows using advected radial basis functions. Computer Animation and Simulation, 2004, , .	0.0	48

#	ARTICLE	IF	CITATIONS
55	SPH Simulations of Floating Bodies in Waves. , 2004, , 741.		5
57	Numerical simulation of extreme motions of a floating body by mps method. , 0, , .		3
58	Discreteâ€"element modelling and smoothed particle hydrodynamics: potential in the environmental sciences. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2004, 362, 2003-2030.	1.6	142
59	A variational formulation based contact algorithm for rigid boundaries in two-dimensional SPH applications. Computational Mechanics, 2004, 33, 316-325.	2.2	127
60	Modified smoothed particle hydrodynamics method and its application to transient problems. Computational Mechanics, 2004, 34, 137.	2.2	157
61	Modeling of cast systems using smoothed-particle hydrodynamics. Jom, 2004, 56, 67-70.	0.9	10
62	Discrete simulation of gas-liquid bubble columns and gas-liquid-solid fluidized beds. AICHE Journal, 2004, 50, 288-301.	1.8	70
63	On the Galerkin formulation of the smoothed particle hydrodynamics method. International Journal for Numerical Methods in Engineering, 2004, 60, 1475-1512.	1.5	33
64	A corrected smooth particle hydrodynamics method for the simulation of debris flows. Numerical Methods for Partial Differential Equations, 2004, 20, 140-163.	2.0	38
65	Simulation of anti-roll tanks and sloshing type problems with smoothed particle hydrodynamics. Ocean Engineering, 2004, 31, 1169-1192.	1.9	96
66	Wave overtopping over a sea dike. Journal of Computational Physics, 2004, 198, 686-726.	1.9	64
67	Variational formulation for the smooth particle hydrodynamics (SPH) simulation of fluid and solid problems. Computer Methods in Applied Mechanics and Engineering, 2004, 193, 1245-1256.	3.4	78
68	Agent-based model of flow in the urethra. , 0, , .		0
69	Improved MPS method for simulating water flow with irregular free surface. Developments in Water Science, 2004, , 1743-1753.	0.1	0
70	Using a Three-Dimensional Smoothed Particle Hydrodynamics Method for Wave Impact on a Tall Structure. Journal of Waterway, Port, Coastal and Ocean Engineering, 2004, 130, 63-69.	0.5	231
71	Development of seepage failure analysis procedure of granular ground with Smoothed Particle Hydrodynamics (SPH) method. Journal of Applied Mechanics, 2004, 7, 775-786.	0.1	29
72	Application of smoothed particle hydrodynamics to the simulation of multiphase flow in complex fracture apertures. Developments in Water Science, 2004, 55, 621-630.	0.1	0
73	Micro-simulation of Blood Flow. 880-02 Nihon Kikai Gakkai RonbunshÅ« Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2004, 70, 2705-2711.	0.2	6

#	Article	IF	Citations
74	Simulation of liquid composite molding processes using a generic mixed FE-SPH method. Revue Europeenne Des Elements, 2005, 14, 867-883.	0.1	8
75	A 2D Smoothed Particle Hydrodynamics method for liquefaction induced lateral spreading analysis. Journal of Applied Mechanics, 2005, 8, 591-599.	0.1	28
76	Energy Dissipation with Sloshing for Absorber Design. , 2005, , 1807.		5
77	SPH simulations of transient viscoelastic flows at low Reynolds number. Journal of Non-Newtonian Fluid Mechanics, 2005, 132, 61-72.	1.0	104
78	Green water overtopping analyzed with a SPH model. Ocean Engineering, 2005, 32, 223-238.	1.9	162
79	Meshless local Petrovâ€"Galerkin method for two-dimensional nonlinear water wave problems. Journal of Computational Physics, 2005, 205, 611-625.	1.9	71
80	A smoothed particle hydrodynamics model for miscible flow in three-dimensional fractures and the two-dimensional Rayleighâ€"Taylor instability. Journal of Computational Physics, 2005, 207, 610-624.	1.9	154
81	Regularized smoothed particle hydrodynamics with improved multi-resolution handling. Journal of Computational Physics, 2005, 208, 345-367.	1.9	39
82	Hamiltonian formulation of the variable-h SPH equations. Journal of Computational Physics, 2005, 209, 541-558.	1.9	24
83	Fluidâ€"structure interaction of water filled tanks during the impact with the ground. International Journal of Impact Engineering, 2005, 31, 235-254.	2.4	72
84	Simulating nonlinear waves on the free surface in surf zones with two-dimensional sloping beach. Ocean Engineering, 2005, 32, 57-84.	1.9	4
85	Modeling incompressible flows using a finite particle method. Applied Mathematical Modelling, 2005, 29, 1252-1270.	2.2	190
86	A stabilized SPH method for inviscid shallow water flows. International Journal for Numerical Methods in Fluids, 2005, 47, 139-159.	0.9	93
87	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.	0.9	50
88	Dynamics of drop impact on solid surface: Experiments and VOF simulations. AICHE Journal, 2005, 51, 59-78.	1.8	153
89	SPH Simulation of Low Reynolds Number Planar Shear Flow and Heat Convection. Materialwissenschaft Und Werkstofftechnik, 2005, 36, 613-619.	0.5	8
90	Controllable motion synthesis in a gaseous medium. Visual Computer, 2005, 21, 474-487.	2.5	7
91	A corrected smooth particle hydrodynamics formulation of the shallow-water equations. Computers and Structures, 2005, 83, 1396-1410.	2.4	103

#	Article	IF	Citations
92	Coalescence of colliding van der Waals liquid drops. International Journal of Heat and Mass Transfer, 2005, 48, 4041-4061.	2.5	58
93	Meshfree particle simulation of micro channel flows with surface tension. Computational Mechanics, 2005, 35, 332-341.	2.2	41
94	Simulation of Unsaturated Flow in Complex Fractures Using Smoothed Particle Hydrodynamics. Vadose Zone Journal, 2005, 4, 848-855.	1.3	55
95	Simulation of high pressure die filling of a moderately complex industrial object using smoothed particle hydrodynamics. International Journal of Cast Metals Research, 2005, 18, 81-92.	0.5	9
96	A Numerical Scheme for Solving Incompressible and Low Mach Number Flows by the Finite Pointset Method. , 2005, , 191-206.		9
97	Particle-based simulation of granular materials. , 2005, , .		120
98	MICROSCOPIC-SCALE SIMULATION OF BLOOD FLOW USING SPH METHOD. International Journal of Computational Methods, 2005, 02, 555-568.	0.8	29
99	Smoothed particle hydrodynamics. Reports on Progress in Physics, 2005, 68, 1703-1759.	8.1	2,099
100	Modeling of surface tension and contact angles with smoothed particle hydrodynamics. Physical Review E, 2005, 72, 026301.	0.8	234
101	Theoretical and Numerical Approach to â€œMagic Angleâ€•of Stone Skipping. Physical Review Letters, 2005, 94, 174501.	2.9	27
102	A generic mixed FE-SPH method to address hydro-mechanical coupling in liquid composite moulding processes. Composites Part A: Applied Science and Manufacturing, 2005, 36, 1004-1010.	3.8	25
103	Three-Dimensional Internal Ballistic Analysis by Fast Marching Method Applied to Propellant Grain Burn-Back. , 2005, , .		2
104	Particle-based non-Newtonian fluid animation for melting objects. , 2006, , .		24
105	Mesoscopic Modeling of Bacterial Flagellar Microhydrodynamics. Biophysical Journal, 2006, 91, 3640-3652.	0.2	19
106	Smoothed particle hydrodynamics modeling of free surface flow. Journal of Hydrodynamics, 2006, 18, 433-435.	1.3	1
107	DEVELOPMENT OF SEEPAGE FAILURE ANALYSIS METHOD OF GROUND WITH SMOOTHED PARTICLE HYDRODYNAMICS. Structural Engineering/Earthquake Engineering, 2006, 23, 307s-319s.	0.3	48
108	Smoothed Particles Hydrodynamics Method for Interaction Between Multi-Droplets and Substrate. , 2006, , 457.		1
109	Smoothed particle hydrodynamics modeling of free surface flow. Journal of Hydrodynamics, 2006, 18, 443-445.	1.3	7

#	ARTICLE	IF	CITATIONS
110	Physically Based Deformable Models in Computer Graphics. Computer Graphics Forum, 2006, 25, 809-836.	1.8	518
111	Smoothed particle hydrodynamic simulations of shear flow. Monthly Notices of the Royal Astronomical Society, 2006, 365, 199-213.	1.6	55
112	A stable moving-particle semi-implicit method for free surface flows. Fluid Dynamics Research, 2006, 38, 241-256.	0.6	96
113	Smoothed Particle ElectroMagnetics: A mesh-free solver for transients. Journal of Computational and Applied Mathematics, 2006, 191, 194-205.	1.1	53
114	A discussion of artificial compressibility. Coastal Engineering, 2006, 53, 93-98.	1.7	45
115	Numerical modeling of water waves with the SPH method. Coastal Engineering, 2006, 53, 141-147.	1.7	557
116	The SPH technique applied to free surface flows. Computers and Fluids, 2006, 35, 1359-1371.	1.3	41
117	Axisymmetric SPH simulation of elasto-plastic contact in the low velocity impact. Computer Physics Communications, 2006, 175, 583-603.	3.0	28
118	A numerical study of the SPH method for simulating transient viscoelastic free surface flows. Journal of Non-Newtonian Fluid Mechanics, 2006, 139, 68-84.	1.0	130
119	A shock-capturing SPH scheme based on adaptive kernel estimation. Journal of Computational Physics, 2006, 212, 124-149.	1.9	46
120	A multi-phase SPH method for macroscopic and mesoscopic flows. Journal of Computational Physics, 2006, 213, 844-861.	1.9	537
121	Effect of lobe pumping on human albumin: development of a lobe pump simulator using smoothed particle hydrodynamics1. Biotechnology and Applied Biochemistry, 2006, 43, 113.	1.4	13
122	Liquid moment amplitude assessment in sloshing type problems with smooth particle hydrodynamics. Ocean Engineering, 2006, 33, 1462-1484.	1.9	99
123	Pore scale modeling of immiscible and miscible fluid flows using smoothed particle hydrodynamics. Advances in Water Resources, 2006, 29, 1464-1478.	1.7	174
124	3D SPH flow predictions and validation for high pressure die casting of automotive components. Applied Mathematical Modelling, 2006, 30, 1406-1427.	2.2	113
125	Restoring particle consistency in smoothed particle hydrodynamics. Applied Numerical Mathematics, 2006, 56, 19-36.	1.2	308
126	Two-dimensional SPH simulations of wedge water entries. Journal of Computational Physics, 2006, 213, 803-822.	1.9	317
127	SPH simulation of transition to turbulence for planar shear flow subjected to a streamwise magnetic field. Journal of Computational Physics, 2006, 217, 485-501.	1.9	17

#	Article	IF	Citations
128	Prediction of slurry transport in SAG mills using SPH fluid flow in a dynamic DEM based porous media. Minerals Engineering, 2006, 19, 1517-1527.	1.8	90
129	Truncation error in mesh-free particle methods. International Journal for Numerical Methods in Engineering, 2006, 66, 2064-2085.	1.5	210
130	3-D Direct Numerical Simulation of Gasâ€"Liquid and Gasâ€"Liquidâ€"Solid Flow Systems Using the Level-Set and Immersed-Boundary Methods. Advances in Chemical Engineering, 2006, , 1-63.	0.5	19
131	Angular-momentum conservative smoothed particle dynamics for incompressible viscous flows. Physics of Fluids, 2006, 18, 101702.	1.6	65
132	Smooth particle hydrodynamics: status and future potential. Progress in Computational Fluid Dynamics, 2007, 7, 70.	0.1	150
133	Smoothed Particle Hydrodynamics for Water Waves. , 2007, , 321.		4
134	Bubbling and frothing liquids. ACM Transactions on Graphics, 2007, 26, 97.	4.9	60
135	Bubbling and frothing liquids. , 2007, , .		27
136	Numerical Simulation of Circular Disk Entering Water by an Axisymmetrical SPH Model in Cylindrical Coordinates. , 2007, , 372-375.		1
137	Large Deformation Analysis of Hyperelastic Materials Using SPH Method. E-Journal of Soft Materials, 2007, 3, 21-28.	2.0	3
138	Development of CISPH Method for Accurate Water-Surface Tracking in Plunging Breaker. Proceedings of Coastal Engineering Jsce, 2007, 54, 16-20.	0.1	2
139	EVALUATION OF SLOSHING LOAD ACTING ON FIXED ROOF OF LIQUID STORAGE TANK BASED ON SPH SIMULATION. Journal of Applied Mechanics, 2007, 10, 623-630.	0.1	1
140	3D SPH Simulation of large waves mitigation with a dike. Journal of Hydraulic Research/De Recherches Hydrauliques, 2007, 45, 631-642.	0.7	82
141	Comparison of sea state statistics between a phenomenological model and field data. , 2007, , .		1
142	A smoothed particle hydrodynamics model for reactive transport and mineral precipitation in porous and fractured porous media. Water Resources Research, 2007, 43, .	1.7	128
143	Lagrangian hydrocode simulations of the 1958 Lituya Bay tsunamigenic rockslide. Geochemistry, Geophysics, Geosystems, 2007, 8, .	1.0	25
144	Gridless simulations of splashing processes and near-shore bore propagation. Journal of Fluid Mechanics, 2007, 591, 183-213.	1.4	53
145	Estimate of Impact Force at Landing on Lunar Surface by SPH Method. Space Technology Japan the Japan Society for Aeronautical and Space Sciences, 2007, 6, 9-16.	0.2	0

#	Article	IF	Citations
146	Modélisation numérique lagrangienne de barrages flottants et de nappes d'hydrocarbures. Houille Blanche, 2007, 93, 80-84.	0.3	0
147	SPH-based Flow Simulation of Polishing Slurry Including Polished Debris in CMP. Journal of the Japan Society for Precision Engineering, 2007, 73, 90-95.	0.0	3
148	Computational modelling of free surface flows for offshore application. Marine Systems and Ocean Technology, 2007, 3, 113-122.	0.5	2
149	A fast high-resolution algorithm for linear convection problems: particle transport method. International Journal for Numerical Methods in Engineering, 2007, 70, 655-684.	1.5	14
150	Dynamic refinement and boundary contact forces in SPH with applications in fluid flow problems. International Journal for Numerical Methods in Engineering, 2007, 72, 295-324.	1.5	192
151	Numerical modelling of complex turbulent free-surface flows with the SPH method: an overview. International Journal for Numerical Methods in Fluids, 2007, 53, 277-304.	0.9	207
152	Modeling of two-phase flows with surface tension by finite pointset method (FPM). Journal of Computational and Applied Mathematics, 2007, 203, 376-386.	1.1	77
153	Bubble formation and dynamics in gas–liquid–solid fluidization—A review. Chemical Engineering Science, 2007, 62, 2-27.	1.9	207
154	Numerical modelling of boom and oil spill with SPH. Coastal Engineering, 2007, 54, 895-913.	1.7	61
155	An incompressible SPH method for simulation of unsteady viscoelastic free-surface flows. International Journal of Non-Linear Mechanics, 2007, 42, 1210-1223.	1.4	88
156	Numerical simulation of soil–water interaction using smoothed particle hydrodynamics (SPH) method. Journal of Terramechanics, 2007, 44, 339-346.	1.4	174
157	Smoothed particle hydrodynamics and finite volume modelling of incompressible fluid flow. Mathematics and Computers in Simulation, 2007, 76, 124-131.	2.4	9
158	Simulations of reactive transport and precipitation with smoothed particle hydrodynamics. Journal of Computational Physics, 2007, 222, 654-672.	1.9	200
159	The numerical simulation of liquid sloshing on board spacecraft. Journal of Computational Physics, 2007, 224, 82-99.	1.9	134
160	An improved SPH method: Towards higher order convergence. Journal of Computational Physics, 2007, 225, 1472-1492.	1.9	220
161	Incompressible smoothed particle hydrodynamics. Journal of Computational Physics, 2007, 226, 1731-1752.	1.9	100
162	Fluids in Electrostatic Fields: An Analogy for Multirobot Control. IEEE Transactions on Magnetics, 2007, 43, 1765-1768.	1.2	34
163	Application of Smoothed Particle Hydrodynamics Method to Free Surface and Solidification Problems. Numerical Heat Transfer; Part A: Applications, 2007, 52, 299-314.	1.2	35

#	Article	IF	Citations
164	A fully explicit three‐step SPH algorithm for simulation of non‐Newtonian fluid flow. International Journal of Numerical Methods for Heat and Fluid Flow, 2007, 17, 715-735.	1.6	126
165	Experimental and numerical analyses of sloshing flows. Journal of Engineering Mathematics, 2007, 58, 191-210.	0.6	34
166	SPH-based numerical investigation of mudflow and other complex fluid flow interactions with structures. Computational Geosciences, 2007, 11, 297-306.	1.2	56
167	Mesoscale SPH modeling of fluid flow in isotropic porous media. Computer Physics Communications, 2007, 176, 471-480.	3.0	55
168	An incompressible multi-phase SPH method. Journal of Computational Physics, 2007, 227, 264-278.	1.9	388
169	Numerical simulation of fluid–structure interaction by SPH. Computers and Structures, 2007, 85, 879-890.	2.4	386
170	Corrected Incompressible SPH method for accurate water-surface tracking in breaking waves. Coastal Engineering, 2008, 55, 236-250.	1.7	241
171	Waterjet penetration simulation by hybrid code of SPH and FEA. International Journal of Impact Engineering, 2008, 35, 1035-1042.	2.4	59
172	A regularized Lagrangian finite point method for the simulation of incompressible viscous flows. Journal of Computational Physics, 2008, 227, 8894-8908.	1.9	42
173	Numerical simulation on solitary wave propagation and run-up by SPH method. KSCE Journal of Civil Engineering, 2008, 12, 221-226.	0.9	9
174	A method to improve first order approximation of smoothed particle hydrodynamics. Journal of Shanghai Jiaotong University (Science), 2008, 13, 136-138.	0.5	1
175	Numerical simulation of wave-induced nonlinear motions of a two-dimensional floating body by the moving particle semi-implicit method. Journal of Marine Science and Technology, 2008, 13, 85-94.	1.3	52
176	Artificial viscosity in simulation of shock waves by smoothed particle hydrodynamics. Astrophysics and Space Science, 2008, 313, 425-430.	0.5	6
177	Fluid-Structure Interaction of Hydrodynamic Damper During the Rush Into the Water Channel. Journal of Hydrodynamics, 2008, 20, 583-590.	1.3	5
178	Lagrangian meshfree particles method (SPH) for large deformation and failure flows of geomaterial using elastic–plastic soil constitutive model. International Journal for Numerical and Analytical Methods in Geomechanics, 2008, 32, 1537-1570.	1.7	539
179	An implicit corrected SPH formulation for thermal diffusion with linear free surface boundary conditions. International Journal for Numerical Methods in Engineering, 2008, 75, 647-671.	1.5	89
180	ODDLS: A new unstructured mesh finite element method for the analysis of free surface flow problems. International Journal for Numerical Methods in Engineering, 2008, 76, 1297-1327.	1.5	14
181	Numerical simulation of landslide impulsive waves by incompressible smoothed particle hydrodynamics. International Journal for Numerical Methods in Fluids, 2008, 56, 209-232.	0.9	162

#	ARTICLE	IF	CITATIONS
182	Completeness, conservation and error in SPH for fluids. International Journal for Numerical Methods in Fluids, 2008, 56, 37-62.	0.9	56
183	Defining and optimizing algorithms for neighbouring particle identification in SPH fluid simulations. International Journal for Numerical Methods in Fluids, 2008, 58, 625-638.	0.9	56
184	Modified Smoothed Particle Hydrodynamics (MSPH) basis functions for meshless methods, and their application to axisymmetric Taylor impact test. Journal of Computational Physics, 2008, 227, 1962-1981.	1.9	40
185	SPH simulations of swimming linked bodies. Journal of Computational Physics, 2008, 227, 8568-8587.	1.9	60
186	Comparisons of weakly compressible and truly incompressible algorithms for the SPH mesh free particle method. Journal of Computational Physics, 2008, 227, 8417-8436.	1.9	473
187	Front tracking with moving-least-squares surfaces. Journal of Computational Physics, 2008, 227, 9643-9669.	1.9	24
188	Finite pointset method for simulation of the liquid–liquid flow field in an extractor. Computers and Chemical Engineering, 2008, 32, 2946-2957.	2.0	54
189	Is standard symmetric formulation always better for smoothed particle hydrodynamics?. Computers and Mathematics With Applications, 2008, 55, 1503-1513.	1.4	5
190	Modified incompressible SPH method for simulating free surface problems. Fluid Dynamics Research, 2008, 40, 637-661.	0.6	56
191	Constitutive Relations Based on Distinct Element Method Results for Granular Materials and Simulation of Granular Collapse and Heap by Smoothed Particle Hydrodynamics, and Experimental Verification. Advanced Powder Technology, 2008, 19, 153-182.	2.0	8
192	Numerical Simulations of Wave Generation by a Vertical Plunger Using RANS and SPH Models. Journal of Waterway, Port, Coastal and Ocean Engineering, 2008, 134, 143-159.	0.5	33
193	Modeling Dam Break Behavior over a Wet Bed by a SPH Technique. Journal of Waterway, Port, Coastal and Ocean Engineering, 2008, 134, 313-320.	0.5	136
194	Smoothed Particle Hydrodynamics for Numerical Simulation of Duct Conveying. , 2008, , .		2
195	Development of CMPS Method for Accurate Water-Surface Tracking in Breaking Waves. Coastal Engineering Journal, 2008, 50, 179-207.	0.7	117
196	Comparative Analysis of the SPH and ISPH Methods. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, 2008, , 206-223.	0.2	0
197	Two-Dimensional SPH Simulations of Landslide-Generated Water Waves. Journal of Hydraulic Engineering, 2008, 134, 668-671.	0.7	31
198	AN OVERVIEW ON SMOOTHED PARTICLE HYDRODYNAMICS. International Journal of Computational Methods, 2008, 05, 135-188.	0.8	90
199	Comparison of experimental and numerical loads on an impacting bow section. Ships and Offshore Structures, 2008, 3, 305-324.	0.9	21

#	Article	IF	Citations
200	SPH MODELING OF TSUNAMI WAVES. Series on Quality, Reliability and Engineering Statistics, 2008, , 75-100.	0.2	37
201	Simulation of Two-phase Flow Using Smoothed Particle Hydrodynamics. , 2008, , .		2
202	Control of swarms based on Hydrodynamic models. , 2008, , .		43
203	Phase behavior of a simple dipolar fluid under shear flow in an electric field. Journal of Chemical Physics, 2008, 128, 034502.	1.2	3
204	Estimate of Impact Force at Landing on Lunar Surface by SPH Method. , 2008, , .		9
205	MODELLING OF GENERALIZED NEWTONIAN LID-DRIVEN CAVITY FLOW USING AN SPH METHOD. ANZIAM Journal, 2008, 49, 411.	0.3	19
206	Accuracy Improvement of Smoothed Particle Hydrodynamics. Engineering Applications of Computational Fluid Mechanics, 2008, 2, 244-251.	1.5	5
207	A Coupled FE-SPH pproach for Simulation of Structural Response to Extreme Wave and Green Water Loading. , 2008, , .		3
208	Foundamental Period of Liquid Sloshing in Sloping Wall Reservoir. Journal of Applied Mechanics, 2008, 11, 557-563.	0.1	0
209	Development of CMPS-HS method for attenuation of pressure fluctuation in particle method. Proceedings of Coastal Engineering Jsce, 2008, 55, 16-20.	0.1	5
210	Development of a real-time fluid simulator for an interactive virtual environment: Improvement of density feedback in SPH. , 2009, , .		3
211	Dynamic simulations of geological materials using combined FEM/DEM/SPH analysis. Geomechanics and Geoengineering, 2009, 4, 91-101.	0.9	15
212	SPH-based visual simulation of fluid. , 2009, , .		5
213	Multiscale Simulation of Nanoparticle Transport and Deposition in Fiber Matrix During a Nanofluid Filtration Process. , 2009, , .		0
214	An Elementary Study of SPH-Based Simulations for Free Surface Flows With Gravity and Compressibility Effects in Cylindrical Confinement. , 2009, , .		0
215	CORRECTED SPH FOR INCOMPRESSIBLE FLUID FOR ACCURATE WATER-SURFACE-TRACKING IN PLUNGING BREAKER. , 2009, , .		0
216	Alternative ways of coupling particle behaviour with fluid dynamics in mineral processing. International Journal of Computational Fluid Dynamics, 2009, 23, 109-118.	0.5	23
217	The natural volume method (NVM): Presentation and application to shallow water inviscid flows. International Journal for Numerical Methods in Fluids, 2009, 59, 19-45.	0.9	7

#	ARTICLE	IF	CITATIONS
218	Numerical simulation of a single bubble by compressible two‐phase fluids. International Journal for Numerical Methods in Fluids, 2010, 62, 591-631.	0.9	15
219	A weakly compressible MPS method for modeling of open‐boundary free‐surface flow. International Journal for Numerical Methods in Fluids, 2010, 63, 1208-1232.	0.9	87
220	Large‐scale SPH simulations of droplet impact onto a liquid surface up to the consequent formation of Worthington jet. International Journal for Numerical Methods in Fluids, 2010, 63, 1435-1447.	0.9	8
221	Impulse‐based rigid body interaction in SPH. Computer Animation and Virtual Worlds, 2009, 20, 215-224.	0.7	18
222	Pressure corrected SPH for fluid animation. Computer Animation and Virtual Worlds, 2009, 20, 311-320.	0.7	13
223	A depth‐integrated, coupled SPH model for flow‐like landslides and related phenomena. International Journal for Numerical and Analytical Methods in Geomechanics, 2009, 33, 143-172.	1.7	340
224	The SPH equations for fluids. International Journal for Numerical Methods in Engineering, 2009, 79, 1392-1418.	1.5	8
225	Suppressing local particle oscillations in the Hamiltonian particle method for elasticity. International Journal for Numerical Methods in Engineering, 2010, 81, 1514-1528.	1.5	15
226	Accelerating astrophysical particle simulations with programmable hardware (FPGA and GPU). Computer Science - Research and Development, 2009, 23, 231-239.	2.7	18
227	A comparative numerical study between dissipative particle dynamics and smoothed particle hydrodynamics when applied to simple unsteady flows in microfluidics. Microfluidics and Nanofluidics, 2009, 7, 227-235.	1.0	10
228	Enhanced predictions of wave impact pressure by improved incompressible SPH methods. Applied Ocean Research, 2009, 31, 111-131.	1.8	140
229	SPH particle boundary forces for arbitrary boundaries. Computer Physics Communications, 2009, 180, 1811-1820.	3.0	247
230	The reflection of nonlinear irregular surface water waves. Engineering Analysis With Boundary Elements, 2009, 33, 644-653.	2.0	9
231	Flux-blending schemes for interface capture in two-fluid flows. International Journal of Heat and Mass Transfer, 2009, 52, 5547-5556.	2.5	41
232	Comparison study of MPM and SPH in modeling hypervelocity impact problems. International Journal of Impact Engineering, 2009, 36, 272-282.	2.4	163
233	HyPAM: A hybrid continuum-particle model for incompressible free-surface flows. Journal of Computational Physics, 2009, 228, 1312-1342.	1.9	13
234	An adaptive SPH method for strong shocks. Journal of Computational Physics, 2009, 228, 5888-5907.	1.9	24
235	Numerical Investigation of Substrate Melting and Deformation During Thermal Spray Coating by SPH Method. Plasma Chemistry and Plasma Processing, 2009, 29, 55-68.	1.1	26

#	ARTICLE	IF	CITATIONS
236	Smoothed Particle Hydrodynamics Model of Non-Aqueous Phase Liquid Flow and Dissolution. Transport in Porous Media, 2009, 76, 11-34.	1.2	22
237	A 3D Motile Rod-Shaped Monotrichous Bacterial Model. Bulletin of Mathematical Biology, 2009, 71, 1228-1263.	0.9	22
238	Water Entry of a Wedge Based on Sph Model with an Improved Boundary Treatment. Journal of Hydrodynamics, 2009, 21, 750-757.	1.3	92
239	Numerical investigations of wave overtopping at coastal structures. Coastal Engineering, 2009, 56, 190-202.	1.7	27
240	Contribution to the modeling of the interaction between a plasma flow and a liquid jet. Surface and Coatings Technology, 2009, 203, 2162-2171.	2.2	28
241	A set of canonical problems in sloshing, Part I: Pressure field in forced roll–comparison between experimental results and SPH. Ocean Engineering, 2009, 36, 168-178.	1.9	160
242	Extension of the finite volume particle method to viscous flow. Journal of Computational Physics, 2009, 228, 1733-1749.	1.9	51
243	Bubble evolution through submerged orifice using smoothed particle hydrodynamics: Basic formulation and model validation. Chemical Engineering Science, 2009, 64, 2281-2290.	1.9	57
244	An SPH projection method for simulating fluid-hypoelastic structure interaction. Computer Methods in Applied Mechanics and Engineering, 2009, 198, 2785-2795.	3.4	168
245	A consistent reflected image particle approach to the treatment of boundary conditions in smoothed particle hydrodynamics. Computer Methods in Applied Mechanics and Engineering, 2009, 198, 3400-3410.	3.4	24
246	Modified Moving Particle Semi-implicit methods for the prediction of 2D wave impact pressure. Coastal Engineering, 2009, 56, 419-440.	1.7	272
247	A new 3D parallel SPH scheme for free surface flows. Computers and Fluids, 2009, 38, 1203-1217.	1.3	272
248	Galerkin based smoothed particle hydrodynamics. Computers and Structures, 2009, 87, 1111-1118.	2.4	7
249	Improved SPH methods for simulating free surface flows of viscous fluids. Applied Numerical Mathematics, 2009, 59, 251-271.	1.2	124
250	Particle-based viscoplastic fluid/solid simulation. CAD Computer Aided Design, 2009, 41, 306-314.	1.4	47
251	Non-smooth kernels for meshfree methods in fluid dynamics. Computers and Mathematics With Applications, 2009, 58, 1253-1272.	1.4	3
252	A lattice Boltzmann method for a two-phase flow containing solid bodies with viscoelastic membranes. European Physical Journal: Special Topics, 2009, 171, 151-157.	1.2	4
253	Simulation of Drop Movement over an Inclined Surface Using Smoothed Particle Hydrodynamics. Langmuir, 2009, 25, 11459-11466.	1.6	35

#	Article	IF	Citations
254	Bubble Evolution through a Submerged Orifice Using Smoothed Particle Hydrodynamics: Effect of Different Thermophysical Properties. Industrial & Engineering Chemistry Research, 2009, 48, 8726-8735.	1.8	8
255	Particle methods for modelling in mineral processing. International Journal of Computational Fluid Dynamics, 2009, 23, 137-146.	0.5	16
256	Dissipative forces for Lagrangian models in computational fluid dynamics and application to smoothed-particle hydrodynamics. Physical Review E, 2009, 80, 036705.	0.8	24
257	Inner and Outer Particles Searching Method With Its Applying in SPH Method. , 2009, , 1305-1310.		0
258	Modeling Nonlinear Wave Based on SPH Method. , 2009, , 1157-1162.		0
259	Diffuse-interface model for smoothed particle hydrodynamics. Physical Review E, 2009, 79, 036702.	0.8	27
260	Particle Importance Based Fluid Simulation. , 2009, , .		1
261	Direct Forcing for Lagrangian Rigid-Fluid Coupling. IEEE Transactions on Visualization and Computer Graphics, 2009, 15, 493-503.	2.9	88
262	Evaluation of slamming loads using smoothed particle hydrodynamics and Reynolds-averaged Navierâ€"Stokes methods. Proceedings of the Institution of Mechanical Engineers Part M: Journal of Engineering for the Maritime Environment, 2009, 223, 17-32.	0.3	1
263	Modification of Weakly Compressible Smoothed Particle Hydrodynamics for Preservation of Angular Momentum in Simulation of Impulsive Wave Problems. Coastal Engineering Journal, 2009, 51, 363-386.	0.7	11
264	Validation of an SPH Sloshing Simulation by Experiments. , 2009, , .		1
265	Numerical Analysis of Droplet Impingement on Pipe Inner Surface Using a Particle Method. Journal of Power and Energy Systems, 2009, 3, 228-236.	0.5	21
266	Numerical Simulations of Tsunami Wave Generation by Submarine and Aerial Landslides Using RANS and SPH Models. , 2009, , .		11
267	Numerical simulation of viscous, nonlinear and progressive water waves. Journal of Fluid Mechanics, 2009, 637, 443-473.	1.4	9
268	Meshfree Methods for Fluid Dynamics Problems. , 2009, , 385-449.		0
269	Incompressible SPH Simulation of Double-Diffusive Convection Phenomena. International Journal of Emerging Multidisciplinary Fluid Sciences, 2009, 1, 1-18.	0.5	23
270	Extreme wave interaction with a floating oil rig: prediction using SPH. Progress in Computational Fluid Dynamics, 2009, 9, 332.	0.1	16
271	Droplet Hardness for Living Tissues(Mechanical Systems). Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C, 2009, 75, 1739-1746.	0.2	0

#	Article	IF	Citations
272	SPH ANALYSIS ON TSUNAMI FLOW AROUND BRIDGE GIRDER. Journal of Japan Society of Civil Engineers Ser A1 (Structural Engineering & Earthquake Engineering (SE/EE)), 2009, 65, 914-920.	0.1	2
273	Accurate Particle Methods for Refined Simulation of Complicated Breaking Waves. Journal of Japan Society of Civil Engineers Ser B2 (Coastal Engineering), 2009, 65, 31-35.	0.0	1
274	Numerical simulation of duct conveying using smoothed particles hydrodynamics. , 2010, , .		0
275	Three-dimensional flow evolution after a dam break. Journal of Fluid Mechanics, 2010, 663, 456-477.	1.4	61
276	Mould wall friction effects on micro injection moulding based on simulation of MIS. IOP Conference Series: Materials Science and Engineering, 2010, 10, 012141.	0.3	2
277	Numerical Simulation of 2D Sloshing in Liquid Tanks Based on SPH Method. , 2010, , .		1
278	Analysis of Central Sloshing Experiment Using Smoothed Particle Hydrodynamics (SPH) Method. , 2010, , .		2
279	Validation of SPH predictions of oxide generated during Al melt transfer. Progress in Computational Fluid Dynamics, 2010, 10, 319.	0.1	4
280	A unified haptic representation for fluid and deformable objects. IEICE Electronics Express, 2010, 7, 170-176.	0.3	2
281	A CONSIDERATION ON ACCURACY OF THE APPROXIMATE DIFFERENTIATION IN THE PARTICLE METHOD AND MULTIDIMENSIONAL MOVING LEAST SQUARES METHOD WITH CONSTRAINT. Doboku Gakkai Ronbunshuu A, 2010, 66, 723-736.	0.3	0
282	Efficient design sensitivity analysis of incompressible fluids using SPH projection method. Structural and Multidisciplinary Optimization, 2010, 40, 307-318.	1.7	4
283	Free-surface flows solved by means of SPH schemes with numerical diffusive terms. Computer Physics Communications, 2010, 181, 532-549.	3.0	424
284	SPH simulation of free surface flow over a sharp-crested weir. Advances in Water Resources, 2010, 33, 270-276.	1.7	69
285	Short shots and industrial case studies: Understanding fluid flow and solidification in high pressure die casting. Applied Mathematical Modelling, 2010, 34, 2018-2033.	2.2	52
286	SPH simulation of oil displacement in cavity-fracture structures. Chemical Engineering Science, 2010, 65, 3363-3371.	1.9	17
287	Equilibrium shape and contact angle of sessile drops of different volumes—Computation by SPH and its further improvement by DI. Chemical Engineering Science, 2010, 65, 4027-4037.	1.9	29
288	The SPH method for simulating a viscoelastic drop impact and spreading on an inclined plate. Computational Mechanics, 2010, 45, 573-583.	2.2	28
289	Lagrangian simulations of unstable gravity-driven flow of fluids with variable density in randomly heterogeneous porous media. Stochastic Environmental Research and Risk Assessment, 2010, 24, 993-1002.	1.9	10

#	Article	IF	Citations
291	Particle-based simulation and visualization of fluid flows through porous media. Journal of Visualization, 2010, 13, 327-336.	1.1	5
292	The zone-particle model for building fire simulation. Science Bulletin, 2010, 55, 3060-3065.	1.7	4
293	Comparison of improved meshless interpolation schemes for SPH method and accuracy analysis. Journal of Marine Science and Application, 2010, 9, 223-230.	0.7	17
294	Numerical simulation of dam breaking using smoothed particle hydrodynamics and viscosity behavior. Journal of Marine Science and Application, 2010, 9, 34-41.	0.7	11
295	Smoothed Particle Hydrodynamics (SPH): an Overview andÂRecent Developments. Archives of Computational Methods in Engineering, 2010, 17, 25-76.	6.0	1,335
296	Two-phase SPH modelling of advective diffusion processes. Environmental Fluid Mechanics, 2010, 10, 451-470.	0.7	50
297	Learning Blood Management in Orthopedic Surgery through Gameplay. IEEE Computer Graphics and Applications, 2010, 30, 45-57.	1.0	53
298	A numerical investigation of energy dissipation with a shallow depth sloshing absorber. Applied Mathematical Modelling, 2010, 34, 2941-2957.	2.2	14
299	Extension of SPH to predict feeding, freezing and defect creation in low pressure die casting. Applied Mathematical Modelling, 2010, 34, 3189-3201.	2.2	65
300	A self-adaptive oriented particles Level-Set method for tracking interfaces. Journal of Computational Physics, 2010, 229, 1353-1380.	1.9	27
301	A numerical study of the flow of Bingham-like fluids in two-dimensional vane and cylinder rheometers using a smoothed particle hydrodynamics (SPH) based method. Journal of Non-Newtonian Fluid Mechanics, 2010, 165, 362-375.	1.0	55
302	Modeling brittleâ€"ductile failure transition with meshfree method. International Journal of Impact Engineering, 2010, 37, 783-791.	2.4	6
303	SPH simulation of liquid metal target dynamics. Nuclear Engineering and Design, 2010, 240, 940-946.	0.8	4
304	Improvement of conservative property and interface resolution of mesh-based two-phase flow simulation algorithms for splashing fluid behaviors. Nuclear Engineering and Design, 2010, 240, 3984-3990.	0.8	0
305	Applications of the modified Trefftz method to the simulation of sloshing behaviours. Engineering Analysis With Boundary Elements, 2010, 34, 581-598.	2.0	14
306	Effect of rock shapes on brittle fracture using Smoothed Particle Hydrodynamics. Theoretical and Applied Fracture Mechanics, 2010, 53, 47-60.	2.1	94
307	Partitioned simulation of the interaction between an elastic structure and free surface flow. Computer Methods in Applied Mechanics and Engineering, 2010, 199, 2085-2098.	3.4	49
308	Heat transfer in counterflow heat exchangers with helical turbulators. Communications in Nonlinear Science and Numerical Simulation, 2010, 15, 2894-2907.	1.7	17

#	ARTICLE	IF	CITATIONS
309	Simulating free surface problems using Discrete Least Squares Meshless method. Computers and Fluids, 2010, 39, 461-470.	1.3	30
310	Performance of partitioned procedures in fluidâ€"structure interaction. Computers and Structures, 2010, 88, 446-457.	2.4	130
311	Application of SPH method on free surface flows on GPU. Journal of Hydrodynamics, 2010, 22, 869-871.	1.3	4
312	An approach to solving the boundary free edge difficulties in SPH modelling: application to a viscous accretion disc in close binaries. Monthly Notices of the Royal Astronomical Society, 2010, 408, 1551-1567.	1.6	4
313	Violent Fluid-Structure Interaction simulations using a coupled SPH/FEM method. IOP Conference Series: Materials Science and Engineering, 2010, 10, 012041.	0.3	28
314	The Potential of Meshless Methods to Address Physical and Mechanical Phenomena Involved during Drying at the Pore Level. Drying Technology, 2010, 28, 932-943.	1.7	22
315	State-of-the-art of classical SPH for free-surface flows. Journal of Hydraulic Research/De Recherches Hydrauliques, 2010, 48, 6-27.	0.7	281
316	Efficient simulation of free surface flows with discrete least-squares meshless method usinga priorierror estimator. International Journal of Computational Fluid Dynamics, 2010, 24, 349-367.	0.5	16
317	Research on Boundary Treatment of Simulation on the Free Surface by SPH Method. , 2010, , .		1
318	SPH on GPU with CUDA. Journal of Hydraulic Research/De Recherches Hydrauliques, 2010, 48, 74-79.	0.7	200
319	Particle-based model to simulate the micromechanics of biological cells. Physical Review E, 2010, 81, 061906.	0.8	49
320	Study of soil-blade interaction based on finite element method and classical theory. , 2010, , .		1
321	SMOOTHED PARTICLE HYDRODYNAMICS FOR WATER WAVES. Series on Quality, Reliability and Engineering Statistics, 2010, , 465-495.	0.2	5
322	Reduction of Communication in Parallel Computing of Particle Method for Flow Simulation of Seaside Areas. Coastal Engineering Journal, 2010, 52, 287-304.	0.7	18
323	Evaluating shallow water assumptions in dam-break flows. Water Management, 2010, 163, 227-237.	0.4	22
324	Characterizing Flow in Oil Reservoir Rock Using Smooth Particle Hydrodynamics. , 2010, , .		3
325	APPLICATION OF THE FINITE VOLUME METHOD TO THE SIMULATION OF NONLINEAR WATER WAVES. Series on Quality, Reliability and Engineering Statistics, 2010, , 357-396.	0.2	9
326	Comparison Investigations of Numerical Simulations of Incompressible Viscous Flows by SPH and MPS. , 2010, , .		0

#	ARTICLE	IF	CITATIONS
327	A Particle-Based Unified Model for Non-Newtonian Fluid Simulation. , 2010, , .		1
328	Validation of a Smoothed Particle Hydrodynamics Code for Internal Flow Simulations: Application to Hemodynamics in a Realistic Left Heart Cavity Model. , 2010, , .		0
329	SPH modelling of water waves generated by submarine landslides. Journal of Hydraulic Research/De Recherches Hydrauliques, 2010, 48, 80-84.	0.7	101
330	Combining digital terrain and surface textures with large-scale particle-based computational models to predict dam collapse and landslide events. International Journal of Image and Data Fusion, 2010, 1, 337-357.	0.8	18
331	Foreword: SPH for free-surface flows. Journal of Hydraulic Research/De Recherches Hydrauliques, 2010, 48, 3-5.	0.7	39
332	Mesh-free modeling of liquid crystals using modified smoothed particle hydrodynamics. Physical Review E, 2010, 82, 041703.	0.8	6
333	Dynamic simulation of sloshing fluid and granular cargo in transport vehicles. Vehicle System Dynamics, 2010, 48, 3-15.	2.2	28
334	Free surface flows simulations in Pelton turbines using an hybrid SPH-ALE method. Journal of Hydraulic Research/De Recherches Hydrauliques, 2010, 48, 40-49.	0.7	96
335	A particle-based model to simulate the micromechanics of single-plant parenchyma cells and aggregates. Physical Biology, 2010, 7, 026006.	0.8	49
336	SOIL EROSION AND DEGRADATION BASED ON SAND PARTICLES TRANSPORT CAUSED BY WIND BLOWING. Natural Resource Modelling, 0, 23, 121-137.	0.8	0
337	Smoothed particle hydrodynamics (SPH) simulation of a tuned liquid damper. Journal of Hydraulic Research/De Recherches Hydrauliques, 2010, 48, 28-39.	0.7	38
338	Application of weakly compressible and truly incompressible SPH to 3-D water collapse in waterworks. Journal of Hydraulic Research/De Recherches Hydrauliques, 2010, 48, 50-60.	0.7	90
340	High Performance Computing on Vector Systems 2009. , 2010, , .		2
341	Multiscale approach optimization on surface wettability change on rough surface. , 2010, , .		0
342	Multimode Dynamics of a Liquid Drop over an Inclined Surface with a Wettability Gradient. Langmuir, 2010, 26, 9547-9555.	1.6	18
343	Smoothed particle hydrodynamics model applied to hydraulic structures: a hydraulic jump test case. Journal of Hydraulic Research/De Recherches Hydrauliques, 2010, 48, 142-158.	0.7	56
344	On particle-based simulation of a dam break over a wet bed. Journal of Hydraulic Research/De Recherches Hydrauliques, 2010, 48, 238-249.	0.7	69
345	Notice of Retraction: Particle-based immiscible liquid-liquid interaction. , 2010, , .		0

#	Article	IF	Citations
346	A New Boundary Treatment Method for SPH and Application in Fluid Simulation. , 2010, , .		2
347	SPHysics-FUNWAVE hybrid model for coastal wave propagation. Journal of Hydraulic Research/De Recherches Hydrauliques, 2010, 48, 85-93.	0.7	43
348	Mechanisms of soft cellular tissue bruising. A particle based simulation approach. Soft Matter, 2011, 7, 3580.	1.2	39
349	Particle-Based Methods. Computational Methods in Applied Sciences (Springer), 2011, , .	0.1	25
350	The optimization of SPH method and its application in simulation of water wave. , 2011, , .		2
351	High viscosity fluid simulation using particle-based method. , 2011, , .		3
352	Large Scale Simulation of Industrial, Engineering and Geophysical Flows Using Particle Methods. Computational Methods in Applied Sciences (Springer), 2011, , 89-111.	0.1	7
353	Comparison of experimental and numerical sloshing loads in partially filled tanks. Ships and Offshore Structures, 2011, 6, 15-43.	0.9	34
354	Particle-based interaction simulation of fluids and deformable bodies. Procedia Engineering, 2011, 15, 2907-2911.	1.2	0
355	Simulation of container filling process with two inlets by improved smoothed particle hydrodynamics (SPH) method. International Journal of Computational Fluid Dynamics, 2011, 25, 365-386.	0.5	12
356	Injection Molding. , 2011, , .		90
357	A Comparative Study of Meshfree Methods for Fracture. International Journal of Damage Mechanics, 2011, 20, 729-751.	2.4	10
358	Numerical Simulations of Granular Materials Using Smoothed Particle Hydrodynamics Method. , 2011, , .		3
359	Simulation of Fluid Flow through Porous Media Using Smoothed Particle Hydrodynamics Method. , 2011, , .		1
360	Chondrule formation during planetesimal accretion. Earth and Planetary Science Letters, 2011, 308, 369-379.	1.8	125
361	A Moving Particle Method with Embedded Pressure Mesh (MPPM) for Incompressible Flow Calculations. Numerical Heat Transfer, Part B: Fundamentals, 2011, 60, 370-398.	0.6	22
362	Modeling Floating Object Entry and Exit Using Smoothed Particle Hydrodynamics. Journal of Waterway, Port, Coastal and Ocean Engineering, 2011, 137, 213-224.	0.5	40
363	Simulation of mould filling process using smoothed particle hydrodynamics. Transactions of Nonferrous Metals Society of China, 2011, 21, 2684-2692.	1.7	20

#	ARTICLE	IF	CITATIONS
364	MPS-Based Mesh-Free Particle Method for Modeling Open-Channel Flows. Journal of Hydraulic Engineering, 2011, 137, 1375-1384.	0.7	41
365	Development of a Particle Interaction Kernel for Convection-Diffusion Scalar Transport Equation. Numerical Heat Transfer, Part B: Fundamentals, 2011, 60, 96-115.	0.6	8
366	Towards SPH modelling of failure problems in geomechanics. European Journal of Environmental and Civil Engineering, 2011, 15, 31-49.	1.0	5
367	Current Achievements and Future Perspectives on Particle Simulation Technologies for Fluid Dynamics and Heat Transfer. Journal of Nuclear Science and Technology, 2011, 48, 155-168.	0.7	56
368	3D Coalescence Collision of Liquid Drops Using Smoothed Particle Hydrodynamics. , 2011, , .		5
369	Smoothed Particle Methods and Their Applicability to Tribology. , 2011, , .		0
370	Simulation of Granular Flows and Pile Formation in a Flat-Bottomed Hopper and Bin, and Experimental Verification. Materials, 2011, 4, 1440-1468.	1.3	7
371	Using DEM in Particulate Flow Simulations. , 2011, , .		4
372	Meshless Multi-Point Flux Approximation of Fluid Flow in Porous Media. , 2011, , .		1
373	Smoothed particle hydrodynamics simulation of shear-induced powder migration in injection moulding. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 2320-2328.	1.6	9
374	MASS TRANSFER IN BINARY STARS USING SMOOTHED PARTICLE HYDRODYNAMICS. I. NUMERICAL METHOD. Astrophysical Journal, 2011, 726, 66.	1.6	12
375	Smoothed Particle Hydrodynamics Simulation of Flow Through a Bileaflet Mechanical Heart Valve: Advantages and Prospects. , 2011, , .		0
376	Constrained simulations of flow in haemodynamic devices: towards a computational assistance of magnetic resonance imaging measurements. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 2494-2501.	1.6	3
377	A New Solid Boundary Treatment Algorithm For Smoothed Particle Hydrodynamics. , 2011, , .		0
378	Multiphysics SPH Simulations With Local Particle Coarsening. , 2011, , .		1
379	A Parallel SPH Implementation on Multiâ€Core CPUs. Computer Graphics Forum, 2011, 30, 99-112.	1.8	135
380	rpSPH: a novel smoothed particle hydrodynamics algorithm. Monthly Notices of the Royal Astronomical Society, 2011, 413, 271-285.	1.6	55
381	Predicting fracture and fragmentation in ceramic using a thermo-mechanical basis. Theoretical and Applied Fracture Mechanics, 2011, 56, 68-78.	2.1	2

#	ARTICLE	IF	CITATIONS
382	Slurry flow in a tower mill. Minerals Engineering, 2011, 24, 152-159.	1.8	24
383	Using SPH one-way coupled to DEM to model wet industrial banana screens. Minerals Engineering, 2011, 24, 741-753.	1.8	105
384	Simulation of central sloshing experiments with smoothed particle hydrodynamics (SPH) method. Nuclear Engineering and Design, 2011, 241, 3086-3096.	0.8	21
385	Simulation of micro powder injection moulding: Powder segregation and yield stress effects during form filling. Journal of the European Ceramic Society, 2011, 31, 2525-2534.	2.8	26
386	A 2D+t SPH model to study the breaking wave pattern generated by fast ships. Journal of Fluids and Structures, 2011, 27, 1199-1215.	1.5	58
387	Numerical simulation of shallow-water dam break flows in open channels using smoothed particle hydrodynamics. Journal of Hydrology, 2011, 408, 78-90.	2.3	104
388	SPH simulation of interacting solid bodies suspended in a shear flow of an Oldroyd-B fluid. Journal of Non-Newtonian Fluid Mechanics, 2011, 166, 1239-1252.	1.0	44
389	Robust numerical analysis of the dynamic bubble formation process in a viscous liquid. International Journal of Multiphase Flow, 2011, 37, 1059-1071.	1.6	40
390	GPU-acceleration for Moving Particle Semi-Implicit method. Computers and Fluids, 2011, 51, 174-183.	1.3	64
391	Analysis of non-Fourier heat conduction using smoothed particle hydrodynamics. Applied Thermal Engineering, 2011, 31, 2963-2970.	3.0	19
392	K2_SPH method and its application for 2-D water wave simulation. Journal of Marine Science and Application, 2011, 10, 399-412.	0.7	2
393	A framework for parallel computational physics algorithms on multi-core: SPH in parallel. Advances in Engineering Software, 2011, 42, 999-1008.	1.8	13
394	Meshless study of dynamic failure in shells. Journal of Engineering Mathematics, 2011, 71, 205-222.	0.6	4
395	A large-deformation Galerkin SPH method for fracture. Journal of Engineering Mathematics, 2011, 71, 305-318.	0.6	5
396	Study of liquid sloshing: numerical and experimental approach. Computational Mechanics, 2011, 47, 65-75.	2.2	56
397	Frequency response analyses in vibroacoustics using the method of fundamental solutions. Computational Mechanics, 2011, 47, 519-533.	2.2	4
398	A simple two-phase method for the simulation of complex free surface flows. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 1204-1219.	3.4	32
399	A two-steps time discretization scheme using the SPH method for shock wave propagation. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 1833-1845.	3.4	23

#	ARTICLE	IF	CITATIONS
400	Numerical simulation of droplet impacting liquid surface by SPH. Science China Technological Sciences, 2011, 54, 1873-1880.	2.0	11
401	Implementation of the moving particle semi-implicit method on GPU. Science China: Physics, Mechanics and Astronomy, 2011, 54, 523-532.	2.0	16
402	Smooth particle hydrodynamics simulations of low Reynolds number flows through porous media. International Journal for Numerical and Analytical Methods in Geomechanics, 2011, 35, 419-437.	1.7	64
403	Modelling the flow of self‐compacting concrete. International Journal for Numerical and Analytical Methods in Geomechanics, 2011, 35, 713-723.	1.7	34
404	Numerical modeling of Kelvin–Helmholtz instability using smoothed particle hydrodynamics. International Journal for Numerical Methods in Engineering, 2011, 87, 988-1006.	1.5	53
405	Improvement of stability in moving particle semi‐implicit method. International Journal for Numerical Methods in Fluids, 2011, 65, 638-654.	0.9	166
406	Development of a multi‐scale ocean model by using particle Laplacian method for anisotropic mass transfer. International Journal for Numerical Methods in Fluids, 2011, 66, 49-63.	0.9	4
407	Novel finite particle formulations based on projection methodologies. International Journal for Numerical Methods in Fluids, 2011, 65, 1376-1388.	0.9	18
408	Incorporation of diffuse interface in smoothed particle hydrodynamics: Implementation of the scheme and case studies. International Journal for Numerical Methods in Fluids, 2011, 67, 671-699.	0.9	19
409	A remedy for numerical oscillations in weakly compressible smoothed particle hydrodynamics. International Journal for Numerical Methods in Fluids, 2011, 67, 1100-1114.	0.9	22
410	Neighbour lists in smoothed particle hydrodynamics. International Journal for Numerical Methods in Fluids, 2011, 67, 2026-2042.	0.9	115
411	A turbulence model for Smoothed Particle Hydrodynamics. European Journal of Mechanics, B/Fluids, 2011, 30, 360-370.	1.2	44
412	δ-SPH model for simulating violent impact flows. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 1526-1542.	3.4	524
413	A mesh-free particle model for simulation of mobile-bed dam break. Advances in Water Resources, 2011, 34, 794-807.	1.7	98
414	SPH modelling of fluid at the grain level in a porous medium. Applied Mathematical Modelling, 2011, 35, 1666-1675.	2.2	30
415	Three dimensional modelling of lava flow using Smoothed Particle Hydrodynamics. Applied Mathematical Modelling, 2011, 35, 3021-3035.	2.2	11
416	A new model to solve fluid‐hypo-elastic solid interaction using the smoothed particle hydrodynamics (SPH) method. European Journal of Mechanics, B/Fluids, 2011, 30, 184-194.	1.2	38
417	Steady state conduction through 2D irregular bodies by smoothed particle hydrodynamics. International Journal of Heat and Mass Transfer, 2011, 54, 314-325.	2.5	22

#	ARTICLE	IF	CITATIONS
418	A corrected smoothed particle hydrodynamics method for solving transient viscoelastic fluid flows. Applied Mathematical Modelling, 2011, 35, 3833-3853.	2.2	16
419	Numerical simulations of granular free-surface flows using smoothed particle hydrodynamics. Journal of Non-Newtonian Fluid Mechanics, 2011, 166, 698-712.	1.0	45
420	Slope stability analysis and discontinuous slope failure simulation by elasto-plastic smoothed particle hydrodynamics (SPH). Geotechnique, 2011, 61, 565-574.	2.2	156
421	A Review of Modern Computational and Experimental Tools Relevant to the Field of Drying. Drying Technology, 2011, 29, 1529-1541.	1.7	32
422	Porous Media Precise Reconstruction and Porosity Fluid Animated Simulation. , 2011, , .		0
423	Numerical investigation of floating breakwater movement using SPH method. International Journal of Naval Architecture and Ocean Engineering, 2011, 3, 122-125.	1.0	8
424	GPUs, a New Tool of Acceleration in CFD: Efficiency and Reliability on Smoothed Particle Hydrodynamics Methods. PLoS ONE, 2011, 6, e20685.	1.1	175
425	SPH Simulation of Hydrodynamic Forces on Subsea Pipelines. , 2011, , .		0
426	Numerical Simulations of Non-Newtonian Geophysical Flows Using Smoothed Particle Hydrodynamics (SPH) Method: A Rheological Analysis. , 2011, , .		1
427	The Effect of Pressure Solution in SPH Simulations of Sloshing Flow. , 2011, , .		0
428	Hull Slamming. Applied Mechanics Reviews, 2011, 64, .	4.5	120
429	Improved SPH Approach to Branched Polymer Free Surface Flows Based on the XPP Model. Polymer-Plastics Technology and Engineering, 2011, 50, 203-215.	1.9	6
430	FRACTURE OF THIN PIPES WITH SPH SHELL FORMULATION. International Journal of Computational Methods, 2011, 08, 369-395.	0.8	13
431	A Combined Experimental and SPH Approach to Sloshing and Ship Roll Motions. Fluid Mechanics and Its Applications, 2011, , 735-749.	0.1	2
432	Development of a Particle Interaction Kernel Function in MPS Method for Simulating Incompressible Free Surface Flow. Journal of Applied Mathematics, 2011, 2011, 1-16.	0.4	7
433	A Method Approaching Mirror Boundary Condition in SPH Simulation. Advanced Materials Research, 0, 516-517, 1043-1047.	0.3	0
434	A Stabilized Incompressible SPH Method by Relaxing the Density Invariance Condition. Journal of Applied Mathematics, 2012, 2012, 1-24.	0.4	128
435	Numerical Simulations for Large Deformation of Granular Materials Using Smoothed Particle Hydrodynamics Method. International Journal of Geomechanics, 2012, 12, 127-135.	1.3	101

#	Article	IF	Citations
436	Staggered meshless solid-fluid coupling. ACM Transactions on Graphics, 2012, 31, 1-12.	4.9	24
437	A STABLE LARGE DEFORMATION CORRECTED SPH METHOD BASED ON STABILIZED CONFORMING NODAL INTEGRATION AND LAGRANGIAN KERNELS. International Journal of Computational Methods, 2012, 09, 1250057.	0.8	0
438	Astrophysics with GRAPE. Progress of Theoretical and Experimental Physics, 2012, 2012, .	1.8	2
439	A Study on Application of Smoothed Particle Hydrodynamics to Multi-Phase Flows. International Journal of Nonlinear Sciences and Numerical Simulation, 2012, 13, .	0.4	21
440	Modelling of bubble rising by smoothed particle hydrodynamics method. , 2012, , .		0
441	Maximum Principal Strain Correlates with Spinal Cord Tissue Damage in Contusion and Dislocation Injuries in the Rat Cervical Spine. Journal of Neurotrauma, 2012, 29, 1574-1585.	1.7	68
442	Numerical simulation of solitary wave/breakwater interaction using SPH. , 2012, , .		0
443	Ghost SPH for animating water. ACM Transactions on Graphics, 2012, 31, 1-8.	4.9	141
444	RKPM MESHLESS ANALYSIS OF BRITTLE-TO-DUCTILE FAILURE. International Journal of Computational Methods, 2012, 09, 1250044.	0.8	0
445	Droplet hardness for tissue engineering. , 2012, , .		0
446	Future Control and Automation. Lecture Notes in Electrical Engineering, 2012, , .	0.3	6
447	A fluid/cloth coupling method for high velocity collision simulation. , 2012, , .		2
448	Spring-Damping Model of Moving Boundary in SPH. Advanced Materials Research, 2012, 557-559, 2288-2293.	0.3	0
449	Dynamic simulation of dam-break scenarios for risk analysis and disaster management. International Journal of Image and Data Fusion, 2012, 3, 333-363.	0.8	11
450	Using a Simplified Smoothed Particle Hydrodynamics Model to Simulate Green Water on the Deck. , 2012, , .		1
451	Numerical Solution of 3-D Water Entry Problems With a Constrained Interpolation Profile Method. Journal of Offshore Mechanics and Arctic Engineering, 2012, 134, .	0.6	12
452	SPH Simulations of Ship Propeller Induced Harbour Bed Erosion. , 2012, , .		1
453	Modeling Spray Formation in Gas Turbines: A New Meshless Approach. , 2012, , .		0

#	Article	IF	Citations
454	Modeling the Interaction of a Molten Seal and Solid Particles Using DEM and SPH Simulations: Application for a Passive New Scram System for LMR. Journal of Computational Multiphase Flows, 2012, 4, 341-350.	0.8	0
455	CONVERSION OF GIS DATA TO CITY MODEL FOR PARTICLE BASED HIGH RESOLUTION TSUNAMI SIMULATION. Journal of Japan Society of Civil Engineers Ser A1 (Structural Engineering & Earthquake Engineering) Tj ETQq1 1 0.784314 rgBT /Overloc		
456	A PROPOSAL FOR SIMPLIFIED MODELIZATION OF BREAKWATERS COVERED WITH WAVE-DISSIPATING BLOCKS IN SPH METHOD. Journal of Japan Society of Civil Engineers Ser B3 (Ocean Engineering), 2012, 68, I_282-I_287.	0.0	0
457	A NUMERICAL ANALYSIS OF GENERATED FLOW IN GRAB DREDGING. Journal of Japan Society of Civil Engineers Ser B3 (Ocean Engineering), 2012, 68, I_390-I_395.	0.0	3
458	Study of various numerical aspects of 3D-SPH for simulation of the dam break problem. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2012, 34, 486-491.	0.8	5
459	An energy-preserving Discrete Element Method for elastodynamics. ESAIM: Mathematical Modelling and Numerical Analysis, 2012, 46, 1527-1553.	0.8	9
460	Comparison of permeability of model porous media between SPH and LB. Progress in Computational Fluid Dynamics, 2012, 12, 176.	0.1	14
461	IMPROVED SMOOTHED PARTICLE HYDRODYNAMICS WITH RANS FOR FREE-SURFACE FLOW PROBLEMS. International Journal of Computational Methods, 2012, 09, 1240001.	0.8	14
462	SPHysics â€" development of a free-surface fluid solver â€" Part 1: Theory and formulations. Computers and Geosciences, 2012, 48, 289-299.	2.0	270
463	A generalized wall boundary condition for smoothed particle hydrodynamics. Journal of Computational Physics, 2012, 231, 7057-7075.	1.9	532
464	Free-surface flow interactions with deformable structures using an SPHâ€"FEM model. Ocean Engineering, 2012, 55, 136-147.	1.9	134
465	Multiscale modeling of particle in suspension with smoothed dissipative particle dynamics. Physics of Fluids, 2012, 24, .	1.6	92
466	Threeâ€dimensional wave impact on a rigid structure using smoothed particle hydrodynamics. International Journal for Numerical Methods in Fluids, 2012, 68, 1471-1496.	0.9	67
467	Prediction of 3D slurry flow within the grinding chamber and discharge from a pilot scale SAG mill. Minerals Engineering, 2012, 39, 184-195.	1.8	46
468	Comparative study on the accuracy and stability of SPH schemes in simulating energetic free-surface flows. European Journal of Mechanics, B/Fluids, 2012, 36, 1-16.	1.2	43
469	Smoothed Particle Hydrodynamics Modeling of Combined Wave and Surge Overtopping and Hydraulic Erosion of an Articulated Concrete Block-Strengthened Levee System. Journal of Coastal Research, 2012, 285, 1500-1511.	0.1	11
470	Development of a Moving and Stationary Mixed Particle Method for Solving the Incompressible Navier-Stokes Equations at High Reynolds Numbers. Numerical Heat Transfer, Part B: Fundamentals, 2012, 62, 71-85.	0.6	4
471	Numerical study of combined wave and surge overtopping over RCC strengthened levee systems using the smoothed particle hydrodynamics method. Ocean Engineering, 2012, 54, 101-109.	1.9	6

#	ARTICLE	IF	CITATIONS
472	Parameters optimization of controlled anti-rolling tank based on multi-objective optimal method. , 2012, , .		2
473	Simulating structural response to water impact. International Journal of Impact Engineering, 2012, 49, 1-10.	2.4	18
474	Evaluation of shear stress accumulation on blood components in normal and dysfunctional bileaflet mechanical heart valves using smoothed particle hydrodynamics. Journal of Biomechanics, 2012, 45, 2637-2644.	0.9	44
475	Incompressible SPH for free surface flows. Computers and Fluids, 2012, 67, 138-151.	1.3	51
476	Novel particle method for modelling the episodic collapse of soft coastal bluffs. Geomorphology, 2012, 138, 295-305.	1.1	10
478	Smoothed Particle Hydrodynamics and Its Diverse Applications. Annual Review of Fluid Mechanics, 2012, 44, 323-346.	10.8	592
479	Smoothed Particle Hydrodynamics Simulations on Multi-GPU Systems. , 2012, , .		10
480	Improved MLPG_R method for simulating 2D interaction between violent waves and elastic structures. Journal of Computational Physics, 2012, 231, 7650-7670.	1.9	42
481	Numerical diffusive terms in weakly-compressible SPH schemes. Computer Physics Communications, 2012, 183, 2570-2580.	3.0	318
482	Large-scale SPH simulation for three-dimensional flow. Geosystem Engineering, 2012, 15, 195-202.	0.7	1
483	SPH Simulation of Sediment Flushing Induced by a Rapid Water Flow. Journal of Hydraulic Engineering, 2012, 138, 272-284.	0.7	101
484	Adaptive Parameter Adjustment of a Real-Time SPH Simulation for Interactive Virtual Environments: Application to Parallel Processing. , 2012, , .		1
485	A smoothed-particle hydrodynamics model for ice-sheet and ice-shelf dynamics. Journal of Glaciology, 2012, 58, 216-222.	1.1	11
486	SPH Based Fluid Animation Using CUDA Enabled GPU. International Journal of Computer Graphics & Animation, 2012, 2, 45-53.	0.3	1
487	MODELLING OF HYDRODYNAMICS AROUND AN IMPERMEABLE BREAKWATER: COMPARISON BETWEEN PHYSICAL AND SPH NUMERICAL MODELING. Revista De Engenharia TÃ©rmica, 2012, 11, 68.	0.0	1
488	APPLICATION OF GPU SMOOTH PARTICLE HYDRODYNAMICS: WAVE RUNUP AND OVERTOPPING ON COMPOSITE SLOPES. Coastal Engineering Proceedings, 2012, 1, 74.	0.1	1
489	Numerical Simulation of Solitary Waves by SPH Method and Parametric Studies on the Effect of Wave Height to Water Depth Ratio. International Journal of Engineering and Technology(UAE), 2012, 1, 453.	0.2	3
490	A stabilized Rungeâ€"Kutta, Taylor smoothed particle hydrodynamics algorithm for large deformation problems inâ€‰dynamics. International Journal for Numerical Methods in Engineering, 2012, 91, 1427-1458.	1.5	22

#	ARTICLE	IF	CITATIONS
491	Analysis of the incompressibility constraint in the smoothed particle hydrodynamics method. International Journal for Numerical Methods in Engineering, 2012, 92, 343-369.	1.5	78
492	Development of an upwinding particle interaction kernel for simulating incompressible Navier–Stokes equations. Numerical Methods for Partial Differential Equations, 2012, 28, 1574-1597.	2.0	5
493	Smoothed Particle Hydrodynamics: Approximate zero–consistent 2–D boundary conditions and still shallow–water tests. International Journal for Numerical Methods in Fluids, 2012, 69, 226-253.	0.9	51
494	WCSPH viscosity diffusion processes in vortex flows. International Journal for Numerical Methods in Fluids, 2012, 69, 509-533.	0.9	12
495	A corrected symmetric SPH method to simulate viscoelastic free surface flows based on the PTT model. International Journal for Numerical Methods in Fluids, 2012, 70, 1494-1517.	0.9	5
496	Practical simulation of hierarchical brittle fracture. Computer Animation and Virtual Worlds, 2012, 23, 291-300.	0.7	6
497	Smoothed particle hydrodynamics method applied to pulsatile flow inside a rigid two–dimensional model of left heart cavity. International Journal for Numerical Methods in Biomedical Engineering, 2012, 28, 1121-1143.	1.0	24
498	Simulation of complex filling process based on the generalized Newtonian fluid model using a corrected SPH scheme. Computational Mechanics, 2012, 49, 643-665.	2.2	24
499	A new scheme for identifying free surface particles in improved SPH. Science China: Physics, Mechanics and Astronomy, 2012, 55, 1454-1463.	2.0	18
500	Impact simulation of different mode failure. KSCE Journal of Civil Engineering, 2012, 16, 610-617.	0.9	0
501	An efficient diffusion model for viscous fingering. Visual Computer, 2012, 28, 563-571.	2.5	2
502	The SPH approach to the process of container filling based on non-linear constitutive models. Acta Mechanica Sinica/Lixue Xuebao, 2012, 28, 407-418.	1.5	9
503	Simulations of dolphin kick swimming using smoothed particle hydrodynamics. Human Movement Science, 2012, 31, 604-619.	0.6	80
504	Study of dynamic behavior of ceramic–metal FGM under high velocity impact conditions using CSPM method. Applied Mathematical Modelling, 2012, 36, 2724-2738.	2.2	13
505	Numerical simulation of underwater contact explosion. Applied Ocean Research, 2012, 34, 10-20.	1.8	88
506	Numerical modelling of regular wave slamming on subface of open-piled structures with the corrected SPH method. Applied Ocean Research, 2012, 34, 173-186.	1.8	48
507	A stabilized Fractional Step, Runge–Kutta Taylor SPH algorithm for coupled problems in geomechanics. Computer Methods in Applied Mechanics and Engineering, 2012, 221-222, 41-53.	3.4	35
508	MPS mesh-free particle method for multiphase flows. Computer Methods in Applied Mechanics and Engineering, 2012, 229-232, 13-26.	3.4	119

#	Article	IF	Citations
509	SPH modeling of solitary wave fissions over uneven bottoms. Coastal Engineering, 2012, 60, 261-275.	1.7	34
510	An improved SPH method for modeling liquid sloshing dynamics. Computers and Structures, 2012, 100-101, 18-26.	2.4	199
511	A mixed corrected symmetric SPH (MC-SSPH) method for computational dynamic problems. Computer Physics Communications, 2012, 183, 50-62.	3.0	27
512	JOSEPHINE: A parallel SPH code for free-surface flows. Computer Physics Communications, 2012, 183, 1468-1480.	3.0	42
513	Particle packing algorithm for SPH schemes. Computer Physics Communications, 2012, 183, 1641-1653.	3.0	152
514	A modified SPH method for simulating motion of rigid bodies in Newtonian fluid flows. International Journal of Non-Linear Mechanics, 2012, 47, 626-638.	1.4	72
515	Numerical simulation of the two-dimensional sloshing problem using a multi-scaling Trefftz method. Engineering Analysis With Boundary Elements, 2012, 36, 9-29.	2.0	12
516	Simulating 2D open-channel flows through an SPH model. European Journal of Mechanics, B/Fluids, 2012, 34, 35-46.	1.2	136
517	Numerical simulation of 3D-unsteady viscoelastic free surface flows by improved smoothed particle hydrodynamics method. Journal of Non-Newtonian Fluid Mechanics, 2012, 177-178, 109-120.	1.0	38
518	A combined strip theory and Smoothed Particle Hydrodynamics approach for estimating slamming loads on a ship in head seas. Ocean Engineering, 2012, 43, 64-71.	1.9	48
519	A new particle method for simulating breakup of liquid jets. Journal of Computational Physics, 2012, 231, 1650-1674.	1.9	27
520	Incompressible smoothed particle hydrodynamics for free-surface flows: A generalised diffusion-based algorithm for stability and validations for impulsive flows and propagating waves. Journal of Computational Physics, 2012, 231, 1499-1523.	1.9	496
521	A new fluidâ€"solid interface algorithm for simulating fluid structure problems in FGM plates. Journal of Fluids and Structures, 2012, 30, 141-158.	1.5	15
522	Thermal simulation of pulsed direct laser interference patterning of metallic substrates using the smoothed particle hydrodynamics approach. Journal of Materials Processing Technology, 2012, 212, 689-699.	3.1	17
523	Local Poisson SPH For Viscous Incompressible Fluids. Computer Graphics Forum, 2012, 31, 1948-1958.	1.8	49
524	A consistent and fast weakly compressible smoothed particle hydrodynamics with a new wall boundary condition. International Journal for Numerical Methods in Fluids, 2012, 68, 905-921.	0.9	48
525	Modeling low Reynolds number incompressible flows with curved boundaries using SPH. International Journal for Numerical Methods in Fluids, 2012, 68, 1173-1188.	0.9	9
526	A new particle method for simulation of incompressible free surface flow problems. International Journal for Numerical Methods in Engineering, 2012, 89, 1582-1604.	1.5	83

#	ARTICLE	IF	CITATIONS
527	On the treatment of solid boundary in smoothed particle hydrodynamics. Science China Technological Sciences, 2012, 55, 244-254.	2.0	114
528	A corrected 3-D SPH method for breaking tsunami wave modelling. Natural Hazards, 2012, 60, 81-100.	1.6	14
529	Phenomenological method for fracture. Meccanica, 2012, 47, 163-173.	1.2	2
530	Unified semiâ€anexalytical wall boundary conditions for inviscid, laminar or turbulent flows in the meshless SPH method. International Journal for Numerical Methods in Fluids, 2013, 71, 446-472.	0.9	182
531	A simple SPH algorithm for multiâ€fluid flow with high densityâ€‰ratios. International Journal for Numerical Methods in Fluids, 2013, 71, 537-561.	0.9	179
532	A stabilized Smoothed Particle Hydrodynamics, Taylorâ€"Galerkin algorithm for soil dynamics problems. International Journal for Numerical and Analytical Methods in Geomechanics, 2013, 37, 1-30.	1.7	40
533	An improved SPH method for saturated soils and its application to investigate the mechanisms of embankment failure: Case of hydrostatic poreâ€water pressure. International Journal for Numerical and Analytical Methods in Geomechanics, 2013, 37, 31-50.	1.7	147
534	A two-fluid smoothed particle hydrodynamics (TF-SPH) method for gasâ€"solid fluidization. Chemical Engineering Science, 2013, 99, 89-101.	1.9	24
535	Solving microscopic flow problems using Stokes equations in SPH. Computer Physics Communications, 2013, 184, 1686-1696.	3.0	26
536	3D SPH modelling of hydraulic jump in a very large channel. Journal of Hydraulic Research/De Recherches Hydrauliques, 2013, 51, 158-173.	0.7	60
537	A mesh-free method boundary condition technique in open channel flow simulation. Journal of Hydraulic Research/De Recherches Hydrauliques, 2013, 51, 174-185.	0.7	25
538	Balancing the source terms in a SPH model for solving the shallow water equations. Advances in Water Resources, 2013, 59, 25-38.	1.7	38
539	Numerical simulation of column charge underwater explosion based on SPH and BEM combination. Computers and Fluids, 2013, 71, 169-178.	1.3	88
540	An improved incompressible SPH model for simulation of waveâ€"structure interaction. Computers and Fluids, 2013, 71, 113-123.	1.3	85
541	Application of Smoothed Particle Hydrodynamics to Full-Film Lubrication. Journal of Tribology, 2013, 135, .	1.0	4
542	Rogue wave impact on a tension leg platform: The effect of wave incidence angle and mooring line tension. Ocean Engineering, 2013, 61, 123-138.	1.9	43
543	Modeling Spray Formation in Gas Turbinesâ€"A New Meshless Approach. Journal of Engineering for Gas Turbines and Power, 2013, 135, .	0.5	17
544	A Two-Dimensional Computational Model of Fuel Sloshing Effects on Aeroelastic Behaviour. , 2013, , .		3

#	Article	IF	Citations
545	Numerical simulation of single droplet dynamics in three-phase flows using ISPH. Computers and Mathematics With Applications, 2013, 66, 525-536.	1.4	44
546	Interaction of flexible multibody systems with fluids analyzed by means of smoothed particle hydrodynamics. Multibody System Dynamics, 2013, 30, 53-76.	1.7	21
547	On the consistency of MPS. Computer Physics Communications, 2013, 184, 732-745.	3.0	60
548	GPU-accelerated adaptive particle splitting and merging in SPH. Computer Physics Communications, 2013, 184, 1701-1707.	3.0	47
549	Investigation of wall bounded flows using SPH and the unified semi-analytical wall boundary conditions. Computer Physics Communications, 2013, 184, 2515-2527.	3.0	58
550	Smoothed Particle Hydrodynamics for coastal engineering problems. Computers and Structures, 2013, 120, 96-106.	2.4	77
551	Smoothed particle hydrodynamics non-Newtonian model for ice-sheet and ice-shelf dynamics. Journal of Computational Physics, 2013, 242, 828-842.	1.9	19
552	Modelling of surface tension force for free surface flows in ISPH method. International Journal of Numerical Methods for Heat and Fluid Flow, 2013, 23, 479-498.	1.6	47
553	A three-dimensional SPH model for detailed study of free surface deformation, just behind a rectangular planing hull. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2013, 35, 369-380.	0.8	18
554	Reconstructing surfaces of particle-based fluids using anisotropic kernels. ACM Transactions on Graphics, 2013, 32, 1-12.	4.9	94
555	Coastal hydrodynamics â€" present and future. Journal of Hydraulic Research/De Recherches Hydrauliques, 2013, 51, 341-350.	0.7	20
556	Position based fluids. ACM Transactions on Graphics, 2013, 32, 1-12.	4.9	292
557	Numerical modeling of oil spill containment by boom using SPH. Science China: Physics, Mechanics and Astronomy, 2013, 56, 315-321.	2.0	37
558	Theoretical analysis on the applicability of traditional SPH method. Science Bulletin, 2013, 58, 2970-2978.	1.7	3
559	A diffuse interface method for complex three-dimensional free surface flows. Computer Methods in Applied Mechanics and Engineering, 2013, 257, 47-64.	3.4	32
560	High-order unstructured Lagrangian one-step WENO finite volume schemes for non-conservative hyperbolic systems: Applications to compressible multi-phase flows. Computers and Fluids, 2013, 86, 405-432.	1.3	58
561	Partitioned Simulation of Fluid-Structure Interaction. Archives of Computational Methods in Engineering, 2013, 20, 185-238.	6.0	98
562	A SPH simulation on large-amplitude sloshing for fluids in a two-dimensional tank. Earthquake Engineering and Engineering Vibration, 2013, 12, 135-142.	1.1	17

#	ARTICLE	IF	CITATIONS
563	SPH-based numerical simulations of flow slides in municipal solid waste landfills. Waste Management and Research, 2013, 31, 256-264.	2.2	34
564	Numerical evaluation of the gasâ€"liquid interfacial heat transfer in the trickle flow regime of packed beds at the micro and meso-scale. Chemical Engineering Science, 2013, 104, 674-689.	1.9	14
565	A SPH-based particle method for simulating 3D transient free surface flows of branched polymer melts. Journal of Non-Newtonian Fluid Mechanics, 2013, 202, 54-71.	1.0	28
566	The contribution of DEM to the science of comminution. Powder Technology, 2013, 248, 3-24.	2.1	261
567	Investigation of free surface flow generated by a planing flat plate using smoothed particle hydrodynamics method and FLOW3D simulations. Proceedings of the Institution of Mechanical Engineers Part M: Journal of Engineering for the Maritime Environment, 2013, 227, 125-135.	0.3	8
568	Surface tension and wetting effects with smoothed particle hydrodynamics. Journal of Computational Physics, 2013, 243, 14-27.	1.9	84
569	SPH for incompressible free-surface flows. Part II: Performance of a modified SPH method. Computers and Fluids, 2013, 86, 510-536.	1.3	13
570	Smooth particle hydrodynamics method for modeling cavitation-induced fracture of a fluid under shock-wave loading. Journal of Applied Mechanics and Technical Physics, 2013, 54, 877-884.	0.1	6
571	Improved Implicit SPH Method for simulating free surface flows of power law fluids. Science China Technological Sciences, 2013, 56, 2480-2490.	2.0	8
572	SPH simulation of selective withdrawal from microcavity. Microfluidics and Nanofluidics, 2013, 15, 481-490.	1.0	11
573	Numerical study of a single drop impact onto a liquid film up to the consequent formation of a crown. Journal of Applied Mechanics and Technical Physics, 2013, 54, 720-728.	0.1	10
574	A particle-based simulation tool for ultrasound blood flow imaging: Validation of high-speed Echo-PIV. , 2013, , .		1
575	Swarm Coordination Based on Smoothed Particle Hydrodynamics Technique. IEEE Transactions on Robotics, 2013, 29, 383-399.	7.3	76
576	Wetting of Porous Solids. IEEE Transactions on Visualization and Computer Graphics, 2013, 19, 1592-1604.	2.9	20
577	Failure Process of Brittle Rock Using Smoothed Particle Hydrodynamics. Journal of Engineering Mechanics - ASCE, 2013, 139, 1551-1565.	1.6	35
578	2D numerical simulation of density currents using the SPH projection method. European Journal of Mechanics, B/Fluids, 2013, 38, 38-46.	1.2	28
579	Investigation on a damaged ship model sinking into water based on three dimensional SPH method. Applied Ocean Research, 2013, 42, 24-31.	1.8	50
580	Application of the meshless finite volume particle method to flow-induced motion of a rigid body. Computers and Fluids, 2013, 88, 386-399.	1.3	5

#	ARTICLE	IF	CITATIONS
581	Numerical investigation of Newtonian and non-Newtonian multiphase flows using ISPH method. Computer Methods in Applied Mechanics and Engineering, 2013, 254, 99-113.	3.4	114
582	Modelling of liquid sloshing with constrained floating baffle. Computers and Structures, 2013, 122, 270-279.	2.4	87
583	Runge–Kutta vs Taylor-SPH: Two time integration schemes for SPH with application to Soil Dynamics. Applied Mathematical Modelling, 2013, 37, 3541-3563.	2.2	21
584	Simulating runoff along soil slope using smoothed particle hydrodynamics method and comparison with standard empirical formula. , 2013, , .		0
585	Multiscale Modeling of Blood Flow: Coupling Finite Elements with Smoothed Dissipative Particle Dynamics. Procedia Computer Science, 2013, 18, 2565-2574.	1.2	26
586	Numerical simulation of the flow around a planing body by MPS method. Ocean Engineering, 2013, 64, 72-79.	1.9	21
587	On enhanced non-linear free surface flow simulations with a hybrid LBM–VOF model. Computers and Mathematics With Applications, 2013, 65, 211-229.	1.4	39
588	SPH simulations of three-dimensional non-Newtonian free surface flows. Computer Methods in Applied Mechanics and Engineering, 2013, 256, 101-116.	3.4	65
589	An investigation into the pressure on solid walls in 2D sloshing using SPH method. Ocean Engineering, 2013, 59, 129-141.	1.9	73
590	Simulation of polymer flow using smoothed particle hydrodynamics method. Polymer Engineering and Science, 2013, 53, 2509-2518.	1.5	8
591	Numerical Modeling of Liquid-Particle Flows by Combining SPH and DEM. Industrial & Engineering Chemistry Research, 2013, 52, 11313-11318.	1.8	10
592	ISPH modelling of transient natural convection. International Journal of Computational Fluid Dynamics, 2013, 27, 15-31.	0.5	40
593	Numerical simulation of large deformation in shear panel dampers using smoothed particle hydrodynamics. Engineering Structures, 2013, 48, 245-254.	2.6	22
594	Multi-physics SPH simulation of complex marine-engineering hydrodynamic problems. Ocean Engineering, 2013, 64, 109-121.	1.9	81
595	A VOF-Based Conservative Interpolation Scheme for Interface Tracking (CISIT) of Two-Fluid Flows. Numerical Heat Transfer, Part B: Fundamentals, 2013, 63, 263-283.	0.6	13
596	Lagrangian–Lagrangian simulations of solid–liquid flows in a bead mill. Powder Technology, 2013, 239, 105-114.	2.1	43
597	Two-Dimensional Rosenthal Moving Heat Source Analysis Using the Meshless Element Free Galerkin Method. Numerical Heat Transfer, Part A: Applications, 2013, 63, 807-823.	1.2	25
598	An accurate SPH modeling of viscous flows around bodies at low and moderate Reynolds numbers. Journal of Computational Physics, 2013, 245, 456-475.	1.9	150

#	ARTICLE	IF	CITATIONS
599	Three-dimensional simulation of a solidâ€"liquid flow by the DEMâ€"SPH method. Journal of Computational Physics, 2013, 248, 147-176.	1.9	154
600	Conservation of circulation in SPH for 2D freeâ€surface flows. International Journal for Numerical Methods in Fluids, 2013, 72, 583-606.	0.9	14
601	Variable resolution for SPH: A dynamic particle coalescing and splitting scheme. Computer Methods in Applied Mechanics and Engineering, 2013, 256, 132-148.	3.4	184
602	Physically Based Nonrigid Registration Using Smoothed Particle Hydrodynamics: Application to Hepatic Metastasis Volume-Preserving Registration. IEEE Transactions on Biomedical Engineering, 2013, 60, 2530-2540.	2.5	2
603	Numerical Simulation of Flow and Heat Transfer during Filling Process Based on SPH Method. Advanced Materials Research, 2013, 658, 276-280.	0.3	4
604	Dynamic particle refinement in SPH: application to free surface flow and non-cohesive soil simulations. Computational Mechanics, 2013, 51, 731-741.	2.2	71
605	A 3D fully Lagrangian Smoothed Particle Hydrodynamics model with both volume and surface discrete elements. International Journal for Numerical Methods in Engineering, 2013, 95, 419-450.	1.5	20
606	A comparative study of truly incompressible and weakly compressible SPH methods for free surface incompressible flows. International Journal for Numerical Methods in Fluids, 2013, 73, 813-829.	0.9	26
607	From aerospace to offshore: Bridging the numerical simulation gapsâ€"Simulation advancements for fluid structure interaction problems. International Journal of Impact Engineering, 2013, 61, 48-63.	2.4	75
608	Modeling unsteady flow characteristics using smoothed particle hydrodynamics. Applied Mathematical Modelling, 2013, 37, 1431-1450.	2.2	24
609	Modeling ductile fracture using a simplified meshfree method. Computational Materials Science, 2013, 67, 296-302.	1.4	3
610	Meshless numerical modeling of brittleâ€"viscous deformation: first results on boudinage and hydrofracturing using a coupling of discrete element method (DEM) andÂsmoothed particle hydrodynamics (SPH). Computational Geosciences, 2013, 17, 373-390.	1.2	38
611	A characteristic particle method for the Saint Venant equations. Computers and Fluids, 2013, 76, 58-72.	1.3	3
612	Prediction of industrial, biophysical and extreme geophysical flows using particle methods. Engineering Computations, 2013, 30, 157-196.	0.7	30
613	A critical investigation of smoothed particle hydrodynamics applied to problems with freeâ€surfaces. International Journal for Numerical Methods in Fluids, 2013, 73, 660-691.	0.9	35
614	Numerical Simulation of Wave Interaction With an Oscillating Wave Surge Converter. , 2013, , .		19
615	Modeling Fuel Injection in Gas Turbines Using the Meshless Smoothed Particle Hydrodynamics Method. , 2013, , .		1
616	A Meshless Method for the Helmholtz Eigenvalue Problem Based on the Taylor Series of the 3-D Green's Function. Acta Acustica United With Acustica, 2013, 99, 770-776.	0.8	1

#	ARTICLE	IF	CITATIONS
617	Efficient fluids simulation and rendering on GPU. , 2013, , .		1
618	Factors Influencing Quasistatic Modeling of Deformation and Failure in Rock-Like Solids by the Smoothed Particle Hydrodynamics Method. Mathematical Problems in Engineering, 2013, 2013, 1-13.	0.6	6
619	Reducing the Computational Time of the Smoothed Particle Hydrodynamics Method with a Coupled 2-D/3-D Approach. Strojniski Vestnik/Journal of Mechanical Engineering, 2013, 10, 575-584.	0.6	2
620	SPH Simulation of Free Overfall in Open Channels with Even and Uneven Bottom. Applied Mechanics and Materials, 0, 444-445, 889-893.	0.2	1
621	Level Set Methods for Modelling Field Evaporation in Atom Probe. Microscopy and Microanalysis, 2013, 19, 1709-1717.	0.2	23
622	Fibre-reinforced, self-compacting concrete flow modelled by smooth particle hydrodynamics. Proceedings of the Institution of Civil Engineers: Engineering and Computational Mechanics, 2013, 166, 22-31.	0.4	12
623	Evaluations of SWEs and SPH Numerical Modelling Techniques for Dam Break Flows. Engineering Applications of Computational Fluid Mechanics, 2013, 7, 544-563.	1.5	37
624	OpenCL-Based GPU Acceleration of ISPH Simulation for Incompressible Flows. Applied Mechanics and Materials, 2013, 444-445, 380-384.	0.2	3
626	Fluid flow in a spiral device used for irradiation of biological fluids. Biotechnology Progress, 2013, 29, 359-367.	1.3	2
628	A Contact SPH Method with High-Order Limiters for Simulation of Inviscid Compressible Flows. Communications in Computational Physics, 2013, 14, 425-442.	0.7	11
629	SPH SIMULATION OF SLOPE FAILURE INDUCED BY EARTHQUAKE GROUND MOTION. Journal of Japan Society of Civil Engineers Ser A1 (Structural Engineering & Earthquake Engineering (SE/EE)), 2013, 69, I_650-I_660.	0.1	0
630	Simulation of Dynamic Coupling Between Waves and a Free-Floating Rectangular Box by Smoothed Particle Hydrodynamics. , 2013, , .		0
631	SPH modeling of fast muddy debris flow: numerical and experimental comparison of certain commonly utilized approaches. Italian Journal of Geosciences, 2013, 132, 350-365.	0.4	31
632	Relevance of solutions to the Navier-Stokes equations for explaining groundwater flow in fractured karst aquifers. Water Resources Research, 2013, 49, 3148-3164.	1.7	15
633	Two numerical approaches: 2D and 3D SPH model to simulate extreme waves over a barrier island. Journal of Coastal Research, 2013, 65, 362-367.	0.1	2
634	SPH modeling of sway-sloshing notion in a partially filled rectangular tank. , 2013, , .		0
635	Arbitrary-Lagrangian-Eulerian One-Step WENO Finite Volume Schemes on Unstructured Triangular Meshes. Communications in Computational Physics, 2013, 14, 1174-1206.	0.7	69
636	On Arbitrary-Lagrangian-Eulerian One-Step WENO Schemes for Stiff Hyperbolic Balance Laws. Communications in Computational Physics, 2013, 14, 301-327.	0.7	34

#	ARTICLE	IF	CITATIONS
637	Considering Artificial Viscosity in a SPH Model for Simulation of Transom Waves. International Journal of Physical Research, 2013, 1, .	0.5	0
638	Modelling sediment resuspension in industrial tanks using SPH. Houille Blanche, 2013, 99, 39-45.	0.3	24
639	Simulation of Wedge Water Entry using Smoothed Particle Hydrodynamics Method. International Journal of Scientific World, 2013, 1, .	3.0	1
640	Integration of UAV Photogrammetry and SPH Modelling of Fluids to Study Runoff on Real Terrains. PLoS ONE, 2014, 9, e111031.	1.1	24
641	Comparison between SPH and MPS Methods for Numerical Simulations of Free Surface Flow Problems. Journal of Japan Society of Civil Engineers Ser B1 (Hydraulic Engineering), 2014, 70, I_67-I_72.	0.0	9
642	Particles for fluids: SPH versus vortex methods. Mathematics and Mechanics of Complex Systems, 2014, 2, 45-70.	0.5	17
643	Numerical Simulation of Bird Impact on Fibre Metal Laminates. Polymers and Polymer Composites, 2014, 22, 147-156.	1.0	5
644	Simulating the interaction of solitary wave and submerged horizontal plate using SPH method. International Journal of Physical Research, 2014, 2, .	0.5	1
645	Development of a PISO-SPH method for computing incompressible flows. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2014, 228, 481-490.	1.1	6
646	Numerical Analysis of Wave Overtopping Failure of Booms with SPH. Advanced Materials Research, 0, 926-930, 3109-3114.	0.3	0
647	Numerical simulation of crash impact test for fuel cell group of rotorcraft. International Journal of Crashworthiness, 2014, 19, 639-652.	1.1	14
648	Modelling rock fracturing caused by magma intrusion using the smoothed particle hydrodynamics method. Computational Geosciences, 2014, 18, 927-947.	1.2	16
649	Robust Simulation of Sparsely Sampled Thin Features in SPH-Based Free Surface Flows. ACM Transactions on Graphics, 2014, 34, 1-9.	4.9	51
650	Numerical investigation of flow in pool-and-weir fishways using a meshless particle method. Journal of Hydraulic Research/De Recherches Hydrauliques, 2014, 52, 849-861.	0.7	18
651	Numerical Simulation of Water-Entry and Sedimentation of an Elliptic Cylinder Using Smoothed-Particle Hydrodynamics Method. Journal of Offshore Mechanics and Arctic Engineering, 2014, 136, .	0.6	22
652	A Computational Model for the Flow of Resin in Self-Healing Composites. , 2014, , .		0
653	An Improved Moving Particle Semi-Implicit Method for Free Surface Flows. Applied Mechanics and Materials, 0, 571-572, 682-687.	0.2	0
654	Finding the best combination of numerical schemes for 2-D SPH simulation of wedge water entry for a wide range of deadrise angles. International Journal of Naval Architecture and Ocean Engineering, 2014, 6, 638-651.	1.0	27

#	ARTICLE	IF	CITATIONS
655	Dynamic Force on an Elbow Caused by a Traveling Liquid Slug. Journal of Pressure Vessel Technology, Transactions of the ASME, 2014, 136, .	0.4	17
656	3D Numerical Wave Basin Based on Parallelized SPH Method. , 2014, , .		1
657	An Experimental and Computational Development of a Benchmark Solution for the Validation of Numerical Wave Tanks. , 2014, , .		12
658	A Case Study on Typhoon Wave-induced Hydrodynamic Behaviors Leading to Seawall Damages with the SPH Method. Procedia Engineering, 2014, 79, 119-124.	1.2	2
659	Water pipe flow simulation using improved virtual particles on smoothed particle hydrodynamics. , 2014, , .		1
660	Splashing liquids with ambient gas pressure. , 2014, , .		0
661	Study of the free surface flow of water–kaolinite mixture by moving particle semi–implicit (MPS) method. International Journal for Numerical and Analytical Methods in Geomechanics, 2014, 38, 811-827.	1.7	13
663	High–order ADER–WENO ALE schemes on unstructured triangular meshes–application of several node solvers to hydrodynamics and magnetohydrodynamics. International Journal for Numerical Methods in Fluids, 2014, 76, 737-778.	0.9	60
664	Three-Dimensional SPH Modeling of a Bar/Rip Channel System. Journal of Waterway, Port, Coastal and Ocean Engineering, 2014, 140, 82-99.	0.5	20
665	Simulation of earthquake–induced slope deformation using SPH method. International Journal for Numerical and Analytical Methods in Geomechanics, 2014, 38, 297-330.	1.7	33
666	Recent advances in the simulation of particle-laden flows. European Physical Journal: Special Topics, 2014, 223, 2253-2267.	1.2	24
667	Incompressible SPH using the Divergence–Free Condition. Computer Graphics Forum, 2014, 33, 219-228.	1.8	13
668	A 3D swallowing simulation using smoothed particle hydrodynamics. Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization, 2014, 2, 237-244.	1.3	28
669	Computational Modeling of Food Oral Breakdown Using Smoothed Particle Hydrodynamics. Journal of Texture Studies, 2014, 45, 97-109.	1.1	40
670	Comparative study of different SPH schemes on simulating violent water wave impact flows. China Ocean Engineering, 2014, 28, 791-806.	0.6	9
671	Numerical Simulation of Tank Discharge Using Smoothed Particle Hydrodynamics. Applied Mechanics and Materials, 0, 553, 168-173.	0.2	6
672	SPH-DEM Modeling of the Hydraulic Stability of 2D Blocks on a Slope. Journal of Waterway, Port, Coastal and Ocean Engineering, 2014, 140, .	0.5	52
673	New Bird Model for Simulation of Bird Strike on Various Layups Used in Transparent Components of Rotorcrafts. Journal of Aerospace Engineering, 2014, 27, 76-85.	0.8	14

#	ARTICLE	IF	CITATIONS
674	Comparison and Development of Equation of State Laws in Smoothed Particle Hydrodynamics. Applied Mechanics and Materials, 0, 553, 144-149.	0.2	0
675	A Survey on Position‐Based Simulation Methods in Computer Graphics. Computer Graphics Forum, 2014, 33, 228-251.	1.8	135
676	DEM–SPH simulation of rock blasting. Computers and Geotechnics, 2014, 55, 158-164.	2.3	97
677	Smoothed-Particle Hydrodynamics Numerical Modeling of Structures Impacted by Tsunami Bores. Journal of Waterway, Port, Coastal and Ocean Engineering, 2014, 140, 66-81.	0.5	91
678	A Lagrangian–Lagrangian coupled method for three-dimensional solid–liquid flows involving free surfaces in a rotating cylindrical tank. Chemical Engineering Journal, 2014, 246, 122-141.	6.6	61
679	SPH simulations of 2D transient viscoelastic flows using Brownian configuration fields. Journal of Non-Newtonian Fluid Mechanics, 2014, 208-209, 59-71.	1.0	26
680	Implicit Incompressible SPH. IEEE Transactions on Visualization and Computer Graphics, 2014, 20, 426-435.	2.9	239
681	A splitting integration scheme for the SPH simulation of concentrated particle suspensions. Computer Physics Communications, 2014, 185, 53-62.	3.0	56
682	MODIFIED FINITE PARTICLE METHOD: APPLICATIONS TO ELASTICITY AND PLASTICITY PROBLEMS. International Journal of Computational Methods, 2014, 11, 1350050.	0.8	5
683	A multiscale SPH particle model of the near‐wall dynamics of leukocytes in flow. International Journal for Numerical Methods in Biomedical Engineering, 2014, 30, 83-102.	1.0	12
684	Green water loading on a floating structure with degree of freedom effects. Journal of Marine Science and Technology, 2014, 19, 302-313.	1.3	20
685	3D numerical modeling using smoothed particle hydrodynamics of flow-like landslide propagation triggered by the 2008 Wenchuan earthquake. Engineering Geology, 2014, 180, 21-33.	2.9	121
686	A new class of Moving-Least-Squares WENO–SPH schemes. Journal of Computational Physics, 2014, 270, 278-299.	1.9	63
687	Dynamic simulation of liquid-filled flexible multibody systems via absolute nodal coordinate formulation and SPH method. Nonlinear Dynamics, 2014, 75, 653-671.	2.7	69
688	An enhanced treatment of boundary conditions in implicit smoothed particle hydrodynamics. Acta Mechanica Sinica/Lixue Xuebao, 2014, 30, 37-49.	1.5	8
689	Computation of transmission coefficients in the plain and corrugated electro-magnetic waveguides using finite point set method. Applied Mathematical Modelling, 2014, 38, 1838-1845.	2.2	0
690	Fluid–particle flow simulations using two-way-coupled mesoscale SPH–DEM and validation. International Journal of Multiphase Flow, 2014, 59, 121-134.	1.6	142
691	An ISPH simulation of coupled structure interaction with free surface flows. Journal of Fluids and Structures, 2014, 48, 46-61.	1.5	80

#	ARTICLE	IF	CITATIONS
692	Investigation of pressure variations over stepped spillways using smooth particle hydrodynamics. Advances in Water Resources, 2014, 66, 52-69.	1.7	31
693	A new kernel function for SPH with applications to free surface flows. Applied Mathematical Modelling, 2014, 38, 3822-3833.	2.2	53
694	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.	1.3	0
695	An incompressible multi-phase smoothed particle hydrodynamics (SPH) method for modelling thermocapillary flow. International Journal of Heat and Mass Transfer, 2014, 73, 284-292.	2.5	36
696	Numerical simulation of wave interaction with porous structures using an improved smoothed particle hydrodynamic method. Coastal Engineering, 2014, 88, 88-100.	1.7	66
697	Fluidâ€"structure interaction analysis by coupled FEâ€"SPH model based on a novel searching algorithm. Computer Methods in Applied Mechanics and Engineering, 2014, 276, 266-286.	3.4	69
698	Frictional contact algorithms in SPH for the simulation of soilâ€"structure interaction. International Journal for Numerical and Analytical Methods in Geomechanics, 2014, 38, 747-770.	1.7	71
699	Wave Impact Simulations by an Improved ISPH Model. Journal of Waterway, Port, Coastal and Ocean Engineering, 2014, 140, .	0.5	24
700	A smooth dissipative particle dynamics method for domains with arbitrary-geometry solid boundaries. Journal of Computational Physics, 2014, 256, 441-464.	1.9	14
701	A numerical investigation into the correction algorithms for SPH method in modeling violent free surface flows. International Journal of Mechanical Sciences, 2014, 79, 56-65.	3.6	57
702	On the maximum time step in weakly compressible SPH. Journal of Computational Physics, 2014, 256, 388-415.	1.9	61
703	Smoothed particle hydrodynamics simulations of flow separation at bends. Computers and Fluids, 2014, 90, 138-146.	1.3	19
705	Challenges in computational modelling of food breakdown and flavour release. Food and Function, 2014, 5, 2792-2805.	2.1	40
706	Modeling of Heat Transfer Across the Interface in Two-Fluid Flows. Numerical Heat Transfer, Part B: Fundamentals, 2014, 66, 162-180.	0.6	4
707	Two-dimensional nanostructured Y_2O_3 particles for viscosity modification. Applied Physics Letters, 2014, 104, 163107.	1.5	25
708	Different ways of defining wall shear in smoothed particle hydrodynamics simulations of a dam-break wave. Journal of Hydraulic Research/De Recherches Hydrauliques, 2014, 52, 453-464.	0.7	6
709	A pore-scale smoothed particle hydrodynamics model for lithium-ion batteries. Science Bulletin, 2014, 59, 2793-2810.	1.7	0
710	Sloshing impact simulation with material point method and its experimental validations. Computers and Fluids, 2014, 103, 86-99.	1.3	55

#	Article	IF	Citations
711	Development of mesh-free particle technique for simulation of non-hydrostatic free surface flow. Computers and Fluids, 2014, 105, 8-15.	1.3	4
712	Wave interaction with a vertical wall: SPH numerical and experimental modeling. Ocean Engineering, 2014, 88, 330-341.	1.9	37
713	An improved free surface modeling for incompressible SPH. Computers and Fluids, 2014, 102, 304-314.	1.3	31
714	Hydrodynamic shear thickening of particulate suspension under confinement. Journal of Non-Newtonian Fluid Mechanics, 2014, 213, 39-49.	1.0	46
715	Geo-disaster Modeling and Analysis: An SPH-based Approach. , 2014, , .		6
716	Numerical simulations of wave interactions with vertical wave barriers using the SPH method. International Journal for Numerical Methods in Fluids, 2014, 76, 223-245.	0.9	26
717	On the Reynolds number sensitivity of smoothed particle hydrodynamics. Journal of Hydraulic Research/De Recherches Hydrauliques, 2014, 52, 824-835.	0.7	20
718	Three-dimensional reversed horseshoe vortex structures under broken solitary waves. Coastal Engineering, 2014, 91, 261-279.	1.7	46
719	An incompressible smoothed particle hydrodynamics method for natural/mixed convection in a non-Darcy anisotropic porous medium. International Journal of Heat and Mass Transfer, 2014, 77, 1155-1168.	2.5	39
720	Sloshing in a rectangular tank based on SPH simulation. Applied Ocean Research, 2014, 47, 241-254.	1.8	96
721	A direct Arbitrary-Lagrangianâ€"Eulerian ADER-WENO finite volume scheme on unstructured tetrahedral meshes for conservative and non-conservative hyperbolic systems in 3D. Journal of Computational Physics, 2014, 275, 484-523.	1.9	102
722	Incompressible SPH method based on Rankine source solution for violent water wave simulation. Journal of Computational Physics, 2014, 276, 291-314.	1.9	51
723	Coupling of SPH-ALE method and finite element method for transient fluidâ€"structure interaction. Computers and Fluids, 2014, 103, 6-17.	1.3	24
724	Analysis of the artificial viscosity in the smoothed particle hydrodynamics modelling of regular waves. Journal of Hydraulic Research/De Recherches Hydrauliques, 2014, 52, 836-848.	0.7	44
725	Development of a fully Lagrangian MPS-based coupled method for simulation of fluidâ€"structure interaction problems. Journal of Fluids and Structures, 2014, 50, 497-511.	1.5	86
726	Towards modelling of fluid flow and food breakage by the teeth in the oral cavity using smoothed particle hydrodynamics (SPH). European Food Research and Technology, 2014, 238, 185-215.	1.6	41
727	Modelling and animation of impact and damage with Smoothed Particle Hydrodynamics. Visual Computer, 2014, 30, 909-917.	2.5	5
728	Fluidâ€"structure interaction analysis of full scale vehicle-barrier impact using coupled SPHâ€"FEA. Engineering Analysis With Boundary Elements, 2014, 42, 26-36.	2.0	14

#	ARTICLE	IF	CITATIONS
729	Stable mesh-free moving particle semi-implicit method for direct analysis of gas–liquid two-phase flow. Chemical Engineering Science, 2014, 111, 286-298.	1.9	25
730	A local adaptive discretization algorithm for Smoothed Particle Hydrodynamics. Computational Particle Mechanics, 2014, 1, 131-145.	1.5	25
731	Flow analysis and validation of numerical modelling for a thin walled high pressure die casting using SPH. Computational Particle Mechanics, 2014, 1, 229-243.	1.5	35
733	SYMPLER: SYMbolic ParticLE simulatoR with grid-computing interface. Computer Physics Communications, 2014, 185, 1085-1099.	3.0	4
734	Fuel Tank Geometry Optimisation For Mechanical Damping. , 2014, , .		0
735	Simulation of droplet spreading on porous substrates using smoothed particle hydrodynamics. International Journal of Heat and Mass Transfer, 2014, 77, 828-833.	2.5	19
736	Two-phase SPH modelling of waves caused by dam break over a movable bed. International Journal of Sediment Research, 2014, 29, 344-356.	1.8	26
737	Particles-bridging the Gap between Solids and Fluids. Procedia IUTAM, 2014, 10, 161-179.	1.2	4
738	Modelling the impact of dam failure scenarios on flood inundation using SPH. Applied Mathematical Modelling, 2014, 38, 5515-5534.	2.2	39
739	Moving least squares simulation of free surface flows. Computers and Fluids, 2014, 91, 47-56.	1.3	9
740	A hybrid method for modelling two dimensional non-breaking and breaking waves. Journal of Computational Physics, 2014, 272, 429-454.	1.9	34
741	The numerical investigation of spreading process of two viscoelastic droplets impact problem by using an improved SPH scheme. Computational Mechanics, 2014, 53, 977-999.	2.2	19
742	An SPH model for free surface flows with moving rigid objects. International Journal for Numerical Methods in Fluids, 2014, 74, 684-697.	0.9	43
743	Application of Smoothed Particle Hydrodynamics for modelling gated spillway flows. Applied Mathematical Modelling, 2014, 38, 4308-4322.	2.2	19
744	A low diffusive Lagrange-remap scheme for the simulation of violent air–water free-surface flows. Journal of Computational Physics, 2014, 274, 19-49.	1.9	18
745	A novel method for modeling of complex wall geometries in smoothed particle hydrodynamics. Computer Physics Communications, 2014, 185, 2436-2448.	3.0	27
746	Smoothed particle hydrodynamics continuous boundary force method for Navier–Stokes equations subject to a Robin boundary condition. Journal of Computational Physics, 2014, 259, 242-259.	1.9	20
747	Numerical analysis of the impact of two droplets with a liquid film using an incompressible SPH method. Journal of Engineering Mathematics, 2014, 85, 35-53.	0.6	51

#	ARTICLE	IF	CITATIONS
748	Stable Moving Particle Semi Implicit Method for Modeling Waves Generated by Submarine Landslides. , 2014, , .		1
749	Feature-Scale Simulations of Particulate Slurry Flows in Chemical Mechanical Polishing by Smoothed Particle Hydrodynamics. Communications in Computational Physics, 2014, 16, 1389-1418.	0.7	1
750	Numerical simulation of a small-scale snow avalanche tests using non-Newtonian SPH model. Journal of Japan Society of Civil Engineers Ser A2 (Applied Mechanics (AM)), 2014, 70, I_681-I_690.	0.1	6
751	Numerical Simulations of Slope and Levee Failure under Heavy Rainfall Using the Three-phase SPH Model. Journal of Japan Society of Civil Engineers Ser A2 (Applied Mechanics (AM)), 2014, 70, I_483-I_494.	0.1	2
752	MODELLING OF BREAKING WAVES IN TSUNAMI AND SLOSHING WAVES BY A NEW PARTICLE METHOD. International Journal of Modern Physics Conference Series, 2014, 34, 1460375.	0.7	2
753	SPH Based Approach toward the Simulation of Non-cohesive Sediment Removal by an Innovative Technique Using a Controlled Sequence of Underwater Micro-explosions. Procedia IUTAM, 2015, 18, 28-39.	1.2	8
754	Modelling of Solitary Wave Run-up on an Onshore Coastal Cliff by Smoothed Particle Hydrodynamics Method. Procedia Engineering, 2015, 116, 88-96.	1.2	4
755	Analysis of unsteady mixed convection in lid-driven cavity included circular cylinders motion using an incompressible smoothed particle hydrodynamics method. International Journal of Numerical Methods for Heat and Fluid Flow, 2015, 25, 2000-2021.	1.6	32
756	Coupled SPH-FVM Simulation within the OpenFOAM Framework. Procedia IUTAM, 2015, 18, 76-84.	1.2	19
757	Fluctuating hydrodynamics in periodic domains and heterogeneous adjacent multidomains: Thermal equilibrium. Physical Review E, 2015, 92, 053302.	0.8	21
758	How arterial pressures affect the consideration of internal carotid artery angle as a risk factor for carotid artherosclerotic disease. Progress in Computational Fluid Dynamics, 2015, 15, 87.	0.1	3
759	- Model-Based Computational Approach to Analyze Interfacial Problems. , 2015, , 124-135.		0
760	Applications of Particle Methods to Fluid-flow Phenomena. Materia Japan, 2015, 54, 449-453.	0.1	0
761	Analysis of Metal Refining Processes by Using a Particle Method. Materia Japan, 2015, 54, 436-439.	0.1	1
762	Numerical analysis of the coupling phenomena between fluid and elastic solid by the SPH method. Transactions of the JSME (in Japanese), 2015, 81, 15-00416-15-00416.	0.1	0
763	Boulder dislodgement and transport by solitary waves: Insights from threeâ€dimensional numerical simulations. Geophysical Research Letters, 2015, 42, 4490-4497.	1.5	21
764	Modelling aerated flows with smoothed particle hydrodynamics. Journal of Hydroinformatics, 2015, 17, 493-504.	1.1	8
765	Numerical Simulation of Breaking Waves in a Wave Group by SPH. Applied Mechanics and Materials, 2015, 776, 151-156.	0.2	0

#	ARTICLE	IF	CITATIONS
766	Incompressible SPH Based on Rankine Source Solution for Water Wave Impact Simulation. Procedia Engineering, 2015, 126, 650-654.	1.2	6
767	A Corrected Incompressible SPH Method for Fixed Body Wave Impact Simulation. Procedia Engineering, 2015, 126, 670-674.	1.2	3
768	A New Boundary Treatment Method for Smoothed Particle Hydrodynamics. Procedia Engineering, 2015, 126, 655-659.	1.2	0
769	SPH-based Fluid Simulation with a New Surface Tension Formulation. , 2015, , .		0
770	A SPH Model for Incompressible Turbulence. Procedia IUTAM, 2015, 18, 66-75.	1.2	12
771	NUMERICAL SIMULATION OF GRANULAR FLOW PAST SIMPLE OBSTACLES USING THE SPH METHOD. Journal of Japan Society of Civil Engineers Ser B1 (Hydraulic Engineering), 2015, 71, I_199-I_204.	0.0	4
772	A comparative study of different baffles on mitigating liquid sloshing in a rectangular tank due to a horizontal excitation. Engineering Computations, 2015, 32, 1172-1190.	0.7	32
773	Parallelâ€optimizing SPH fluid simulation for realistic VR environments. Computer Animation and Virtual Worlds, 2015, 26, 43-54.	0.7	6
774	A particle method for twoâ€phase flows with large density difference. International Journal for Numerical Methods in Engineering, 2015, 103, 235-255.	1.5	30
775	Simulation of Droplet Impacting on Elastic Solid with the SPH Method. Mathematical Problems in Engineering, 2015, 2015, 1-15.	0.6	2
776	A model of mudflow propagation downstream from the Grohovo landslide near the city of Rijeka (Croatia). Natural Hazards and Earth System Sciences, 2015, 15, 293-313.	1.5	6
777	NUMERICAL MODELING OF DEBRIS IMPACTS USING THE SPH METHOD. Coastal Engineering Proceedings, 2015, 1, 19.	0.1	2
778	NUMERICAL MODELING OF COASTAL DIKE OVERTOPPING USING SPH AND NON-HYDROSTATIC NLSW EQUATIONS. Coastal Engineering Proceedings, 2015, 1, 10.	0.1	1
779	An Insight to High Humidity-Caused Friction Modulation of Brake by Numerical Modeling of Dynamic Meniscus under Shearing. Lubricants, 2015, 3, 437-446.	1.2	5
780	SPH Simulation of Rivulet Dynamics on Surfaces with Various Wettabilities. SAE International Journal of Aerospace, 0, 8, 160-173.	4.0	18
781	Numerical Simulation on Interface Evolution and Impact of Flooding Flow. Shock and Vibration, 2015, 2015, 1-12.	0.3	4
782	Assessment of Dynamic Pressures at Vertical and Perforated Breakwaters through Diffusive SPH Schemes. Mathematical Problems in Engineering, 2015, 2015, 1-10.	0.6	19
783	Numerical Modeling for Discrete Multibody Interaction and Multifeild Coupling Dynamics Using the SPH Method. Mathematical Problems in Engineering, 2015, 2015, 1-12.	0.6	0

#	ARTICLE	IF	CITATIONS
784	Real-Time Incompressible Fluid Simulation on the GPU. International Journal of Computer Games Technology, 2015, 2015, 1-12.	1.6	18
785	Numerical Simulation of the Generalized Newtonian Free Surface Flows by a Density Reinitialization SPH Method. Mathematical Problems in Engineering, 2015, 2015, 1-17.	0.6	4
786	On the Use of SPH Method for Simulating Gas Bubbles Rising in Viscoelastic Liquids. Nihon Reoroji Gakkaishi, 2015, 42, 309-319.	0.2	9
787	Double-Diffusive Natural Convection with Cross-Diffusion Effects in an Anisotropic Porous Enclosure Using ISPH Method. , 0, , .		4
788	ON THE ROLE OF FLUID INFILTRATION ON BEDFORM EVOLUTION. Coastal Engineering Proceedings, 2015, 1, 29.	0.1	0
789	Explicitly represented polygon wall boundary model for the explicit MPS method. Computational Particle Mechanics, 2015, 2, 73-89.	1.5	38
790	Development of Moving Particle Explicit (MPE) method for incompressible flows. Computers and Fluids, 2015, 117, 1-10.	1.3	17
791	Response of segmented bored transit tunnels to surface blast. Advances in Engineering Software, 2015, 89, 77-89.	1.8	18
792	Numerical simulation of 2D-vorticity dynamics using particle methods. Computers and Mathematics With Applications, 2015, 69, 1484-1503.	1.4	24
793	Numerical simulation of solitary wave breaking and impact on seawall using a modified turbulence SPH method with Riemann solvers. Journal of Marine Science and Technology, 2015, 20, 344-356.	1.3	7
794	Co-rotating twin-screw extruders: Detailed analysis of conveying elements based on smoothed particle hydrodynamics. Part 1: Hydrodynamics. Chemical Engineering Science, 2015, 134, 861-879.	1.9	55
795	Smoothed Particle Hydrodynamics for Free-Surface Flows. Environmental Science and Engineering, 2015, , 119-136.	0.1	0
796	Some numerical aspects of modelling flow around hydraulic structures using incompressible SPH. Computers and Mathematics With Applications, 2015, 69, 1470-1483.	1.4	11
797	Efficient urban flood simulation using a GPU-accelerated SPH model. Environmental Earth Sciences, 2015, 74, 7285-7294.	1.3	27
798	Fast multiple-fluid simulation using Helmholtz free energy. ACM Transactions on Graphics, 2015, 34, 1-11.	4.9	35
799	The simulation of a landslide-induced surge wave and its overtopping of a dam using a coupled ISPH model. Engineering Applications of Computational Fluid Mechanics, 2015, 9, 432-444.	1.5	19
800	A Modified Smoothed Particle Hydrodynamics Scheme to Model the Stationary and Moving Boundary Problems for Newtonian Fluid Flows. Journal of Fluids Engineering, Transactions of the ASME, 2015, 137, .	0.8	19
801	Numerical Modeling of an Aero-Engine Bearing Chamber Using the Meshless Smoothed Particle Hydrodynamics Method. , 2015, , .		9

#	ARTICLE	IF	CITATIONS
802	On the Fluidic Response of Structures in Hypervelocity Impacts. Journal of Fluids Engineering, Transactions of the ASME, 2015, 137, .	0.8	5
803	The Role of the Hand During Freestyle Swimming. Journal of Biomechanical Engineering, 2015, 137, 111007.	0.6	27
804	Hybridization of the Wave Propagation Model SWASH and the Meshfree Particle Method SPH for Real Coastal Applications. Coastal Engineering Journal, 2015, 57, 1550024-1-1550024-34.	0.7	50
805	Modelling of Non-Darcy Flows through Porous Media Using Extended Incompressible Smoothed Particle Hydrodynamics. Numerical Heat Transfer, Part B: Fundamentals, 2015, 67, 255-279.	0.6	25
806	SPH-based numerical simulation of catastrophic debris flows after the 2008 Wenchuan earthquake. Bulletin of Engineering Geology and the Environment, 2015, 74, 1137-1151.	1.6	48
807	Numerical predictions of water–air wave slam using incompressible–compressible smoothed particle hydrodynamics. Applied Ocean Research, 2015, 49, 57-71.	1.8	74
808	Blast Response of Segmented Bored Tunnel using Coupled SPH–FE Method. Structures, 2015, 2, 58-71.	1.7	56
809	Evaluation of Accuracy and Stability of the Classical SPH Method Under Uniaxial Compression. Journal of Scientific Computing, 2015, 64, 858-897.	1.1	20
810	Nonlinear simulations of wave-induced motions of a freely floating body using WCSPH method. Applied Ocean Research, 2015, 50, 1-12.	1.8	121
811	Stable and Fast Fluid–Solid Coupling for Incompressible SPH. Computer Graphics Forum, 2015, 34, 191-204.	1.8	15
812	SPH procedures for modeling multiple intersecting discontinuities in geomaterial. International Journal for Numerical and Analytical Methods in Geomechanics, 2015, 39, 343-367.	1.7	29
813	Smoothed Particle Hydrodynamics for water wave propagation in a channel. International Journal of Modern Physics C, 2015, 26, 1550085.	0.8	24
814	Automotive fuel cell sloshing under temporally and spatially varying high acceleration using GPU-based Smoothed Particle Hydrodynamics (SPH). Advances in Engineering Software, 2015, 83, 31-44.	1.8	21
815	Modelling highly deformable metal extrusion using SPH. Computational Particle Mechanics, 2015, 2, 19-38.	1.5	22
816	An incompressible SPH scheme with improved pressure predictions for free-surface generalised Newtonian flows. Journal of Non-Newtonian Fluid Mechanics, 2015, 218, 1-15.	1.0	38
817	A conservative sharp interface method for incompressible multiphase flows. Journal of Computational Physics, 2015, 284, 547-565.	1.9	41
818	Simulation of 2D symmetry and asymmetry wedge water entry by smoothed particle hydrodynamics method. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2015, 37, 821-835.	0.8	31
819	Numerical simulation of plunging wave breaker impact by a modified Turbulent WCSPH method. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2015, 37, 507-523.	0.8	2

#	Article	IF	Citations
820	Numerical modelling of three-fluid flow using the level-set method. Chemical Engineering Science, 2015, 126, 224-236.	1.9	24
821	Challenges in modeling unstable twoâ€phase flow experiments in porous micromodels. Water Resources Research, 2015, 51, 1381-1400.	1.7	112
822	Numerical simulation of interactions between free surface and rigid body using a robust SPH method. Ocean Engineering, 2015, 98, 32-49.	1.9	126
823	An improved particle method for simulation of the non-isothermal viscoelastic fluid mold filling process. International Journal of Heat and Mass Transfer, 2015, 85, 543-560.	2.5	18
824	Optimal time step for incompressible SPH. Journal of Computational Physics, 2015, 288, 119-130.	1.9	28
825	Numerical simulation of twoâ€dimensional Kelvinâ€"Helmholtz instability using weakly compressible smoothed particleâ€‰hydrodynamics. International Journal for Numerical Methods in Fluids, 2015, 78, 283-303.	0.9	6
826	Virtual prototyping in the design process of optimized mould gating system for high pressure die casting. Engineering Computations, 2015, 32, 102-128.	0.7	6
827	Modelling surface tension with smoothed particle hydrodynamics in reactive rotational moulding. Computers and Fluids, 2015, 118, 191-203.	1.3	4
828	Computational performance of a smoothed particle hydrodynamics simulation for shared-memory parallel computing. Computer Physics Communications, 2015, 194, 18-32.	3.0	34
829	SPH modeling of plane jets into water bodies through an inflow/outflow algorithm. Ocean Engineering, 2015, 105, 160-175.	1.9	29
830	Numerical simulation of hydrodynamic wave loading by a compressible two-phase flow method. Computers and Fluids, 2015, 114, 218-231.	1.3	22
831	An algorithm to improve consistency in Smoothed Particle Hydrodynamics. Computers and Fluids, 2015, 118, 148-158.	1.3	39
832	Moving Particle Level-Set (MPLS) method for incompressible multiphase flow computation. Computer Physics Communications, 2015, 196, 317-334.	3.0	26
833	Numerical and experimental investigation of a three dimensional spherical-nose projectile water entry problem. Ocean Engineering, 2015, 104, 397-404.	1.9	41
834	An SPH modeling of bubble rising and coalescing in three dimensions. Computer Methods in Applied Mechanics and Engineering, 2015, 294, 189-209.	3.4	167
835	Numerical Simulation of Crater Creating Process in Dynamic Replacement Method by Smooth Particle Hydrodynamics. Studia Geotechnica Et Mechanica, 2015, 36, 3-8.	0.2	7
836	Analysis of wall boundary in moving particle semi-implicit method and a novel model of fluidâ€"wall interaction. International Journal of Computational Fluid Dynamics, 2015, 29, 199-214.	0.5	13
837	Prediction of energy losses in water impacts using incompressible and weakly compressible models. Journal of Fluids and Structures, 2015, 54, 802-822.	1.5	82

#	Article	IF	Citations
838	Smooth Particle Hydrodynamics with nonlinear Moving-Least-Squares WENO reconstruction to model anisotropic dispersion in porous media. Advances in Water Resources, 2015, 80, 43-59.	1.7	19
839	A novel meshless numerical method for modeling progressive failure processes of slopes. Engineering Geology, 2015, 192, 139-153.	2.9	55
840	SPH simulations of WBC adhesion to the endothelium: the role of haemodynamics and endothelial binding kinetics. Biomechanics and Modeling in Mechanobiology, 2015, 14, 1317-1333.	1.4	9
841	AQUAgpusph, a new free 3D SPH solver accelerated with OpenCL. Computer Physics Communications, 2015, 192, 295-312.	3.0	69
842	Spurious interface fragmentation in multiphase SPH. International Journal for Numerical Methods in Engineering, 2015, 103, 625-649.	1.5	28
843	Smoothed particle hydrodynamics in a generalized coordinate system with a finite€deformation constitutive model. International Journal for Numerical Methods in Engineering, 2015, 103, 781-797.	1.5	5
844	SPH study of the evolution of water€"water interfaces in dam break flows. Natural Hazards, 2015, 78, 531-553.	1.6	15
845	Predicting abrasive wear with coupled Lagrangian methods. Computational Particle Mechanics, 2015, 2, 51-62.	1.5	8
846	DNS and LES of 3-D wall-bounded turbulence using Smoothed Particle Hydrodynamics. Computers and Fluids, 2015, 115, 86-97.	1.3	46
847	Modeling of multi-phase flows and natural convection in a square cavity using an incompressible smoothed particle hydrodynamics. International Journal of Numerical Methods for Heat and Fluid Flow, 2015, 25, 513-533.	1.6	37
848	Modelling food digestion. , 2015, , 255-305.		11
849	A computational model for the flow of resin in self-healing composites. Smart Materials and Structures, 2015, 24, 037002.	1.8	14
850	SPH numerical modeling of wave€"perforated breakwater interaction. Coastal Engineering, 2015, 101, 48-68.	1.7	83
851	Incompressible smoothed particle hydrodynamics-moving IRBFN method for viscous flow problems. Engineering Analysis With Boundary Elements, 2015, 59, 172-186.	2.0	6
852	Effect of home reliner on occlusal relationships and oral mucosa: viscoelastic analyses by smoothed particle hydrodynamics simulation. Computers in Biology and Medicine, 2015, 66, 20-28.	3.9	4
853	A Modified SPH Model for Simulating Water Surface Waves. Procedia Engineering, 2015, 116, 254-261.	1.2	1
854	Smoothed particle hydrodynamics modeling and simulation of foundry filling process. Transactions of Nonferrous Metals Society of China, 2015, 25, 2321-2330.	1.7	8
855	Comparative investigation of different numerical features of SPH method for simulation of free surface flow. AIP Conference Proceedings, 2015, , .	0.3	0

#	Article	IF	Citations
856	A multi-physics computational model of fuel sloshing effects on aeroelastic behaviour. Journal of Fluids and Structures, 2015, 56, 11-32.	1.5	30
857	NGrid. , 2015, , .		0
858	Three-Dimensional Incompressible Smoothed Particle Hydrodynamics for Simulating Fluid Flows Through Porous Structures. Transport in Porous Media, 2015, 110, 483-502.	1.2	37
859	SPH modeling of dynamic impact of tsunami bore on bridge piers. Coastal Engineering, 2015, 104, 26-42.	1.7	95
860	Divergence-free smoothed particle hydrodynamics. , 2015, , .		85
861	Computational prediction of performance for a full scale Isamill: Part 2 â€" Wet models of charge and slurry transport. Minerals Engineering, 2015, 79, 239-260.	1.8	15
862	Third order derivative free SPH iterative method for solving nonlinear systems. Applied Mathematics and Computation, 2015, 270, 557-566.	1.4	1
863	A SPH approach for large deformation analysis with hypoplastic constitutive model. Acta Geotechnica, 2015, 10, 703-717.	2.9	105
864	Co-rotating twin-screw extruders: Detailed analysis of conveying elements based on smoothed particle hydrodynamics. Part 2: Mixing. Chemical Engineering Science, 2015, 134, 880-886.	1.9	43
865	Turbulent fluid-structure interaction of water-entry/exit of a rotating circular cylinder using SPH method. International Journal of Modern Physics C, 2015, 26, 1550088.	0.8	18
866	An SPH model for multiphase flows with complex interfaces and large density differences. Journal of Computational Physics, 2015, 283, 169-188.	1.9	154
867	A peridynamicsâ€"SPH coupling approach to simulate soil fragmentation induced by shock waves. Computational Mechanics, 2015, 55, 287-302.	2.2	64
868	Non-linear hydrodynamics of thin laminae undergoing large harmonic oscillations in a viscous fluid. Journal of Fluids and Structures, 2015, 52, 101-117.	1.5	34
869	Applicability of Smoothed Particle Hydrodynamics for estimation of sea wave impact on coastal structures. Coastal Engineering, 2015, 96, 1-12.	1.7	189
870	The influence of time scale in free surface flow simulation using Smoothed Particle Hydrodynamics (SPH). KSCE Journal of Civil Engineering, 2015, 19, 765-770.	0.9	3
871	Prediction of coupled particle and fluid flows using DEM and SPH. Minerals Engineering, 2015, 73, 85-99.	1.8	75
872	Multi-scale identification of concrete material parameters. Theoretical and Applied Fracture Mechanics, 2015, 75, 8-15.	2.1	13
873	A viscoplastic approach to the behaviour of fluidized geomaterials with application to fast landslides. Continuum Mechanics and Thermodynamics, 2015, 27, 21-47.	1.4	31

#	Article	IF	Citations
874	Unified semi-analytical wall boundary conditions in SPH: analytical extension to 3-D. Numerical Algorithms, 2015, 68, 15-34.	1.1	51
875	A SPH model for the simulation of free surface granular flows in a dense regime. Applied Mathematical Modelling, 2015, 39, 363-382.	2.2	44
876	DualSPHysics: Open-source parallel CFD solver based on Smoothed Particle Hydrodynamics (SPH). Computer Physics Communications, 2015, 187, 204-216.	3.0	549
877	Coupling of soil deformation and pore fluid flow using material point method. Computers and Geotechnics, 2015, 63, 199-214.	2.3	262
878	PANORMUS-SPH. A new Smoothed Particle Hydrodynamics solver for incompressible flows. Computers and Fluids, 2015, 106, 185-195.	1.3	19
879	A scenario-based risk framework for determining consequences of different failure modes of earth dams. Natural Hazards, 2015, 75, 1489-1530.	1.6	21
880	ISPH wave simulation by using an internal wave maker. Coastal Engineering, 2015, 95, 160-170.	1.7	48
881	Neighborhood grid: A novel data structure for fluids animation with GPU computing. Journal of Parallel and Distributed Computing, 2015, 75, 20-28.	2.7	10
882	Novel application of the mesh-free SPH method for modelling thermo-mechanical responses in arc welding. International Journal of Mechanics and Materials in Design, 2015, 11, 337-355.	1.7	7
883	A two-fluid model with a tensor closure model approach for free surface flow simulations. Chemical Engineering Science, 2015, 122, 596-613.	1.9	12
884	SPH modeling of tidal bore scenarios. Natural Hazards, 2015, 75, 1247-1270.	1.6	6
885	Depth Averaged Models for Fast Landslide Propagation: Mathematical, Rheological and Numerical Aspects. Archives of Computational Methods in Engineering, 2015, 22, 67-104.	6.0	67
887	A MODIFIED WAVEMAKER BOUNDARY CONDITION FOR A NUMERICAL WAVE TANK BASED ON THE WCSPH METHOD. Jurnal Teknologi (Sciences and Engineering), 2016, 78, .	0.3	0
888	Mathematical Modeling and Algorithm Development. , 2016, , 77-92.		0
889	Simulation on the Self-Compacting Concrete by an Enhanced Lagrangian Particle Method. Advances in Materials Science and Engineering, 2016, 2016, 1-11.	1.0	4
890	Modeling Food Digestion in the Oral Cavity. , 2016, , .		2
891	Numerical Investigations of Waves Interacting with Free Rolling Body by Modified MPS Method. International Journal of Computational Methods, 2016, 13, 1641013.	0.8	15
892	On the stabilization of unphysical pressure oscillations in MPS method simulations. International Journal for Numerical Methods in Fluids, 2016, 82, 471-492.	0.9	17

#	Article	IF	Citations
893	Parallel CPU/GPU Computing for Smoothed Particle Hydrodynamics Models. Environmental Science and Engineering, 2016, , 477-491.	0.1	1
894	An improved KGFâ€SPH with a novel discrete scheme of Laplacian operator for viscous incompressible fluid flows. International Journal for Numerical Methods in Fluids, 2016, 81, 377-396.	0.9	39
895	An SPH pressure correction algorithm for multiphase flows with large density ratio. International Journal for Numerical Methods in Fluids, 2016, 81, 765-788.	0.9	12
896	Investigation of free surface flow in wedge water entry problem using Smoothed Particle Hydrodynamics method. , 2016, , .		0
897	Simulation of anisotropic diffusion processes in fluids with smoothed particle hydrodynamics. International Journal for Numerical Methods in Fluids, 2016, 82, 730-747.	0.9	17
898	Simulation of three-dimensional rapid free-surface granular flow past different types of obstructions using the SPH method. Journal of Glaciology, 2016, 62, 335-347.	1.1	31
899	Sediment transport over seabed with Smoothed Particle Hydrodynamics. , 2016, , .		0
900	A review on approaches to solving Poissonâ€™s equation in projection-based meshless methods for modelling strongly nonlinear water waves. Journal of Ocean Engineering and Marine Energy, 2016, 2, 279-299.	0.9	32
901	Field testing and numerical investigation of streetscape vehicular anti-ram barriers under vehicular impact using FEM-only and coupled FEM-SPH simulations. International Journal of Protective Structures, 2016, 7, 213-231.	1.4	3
902	Numerical Simulation of Jamming Transition in Granular System Under Cyclic Compression Using Smooth Particle Hydrodynamics. , 2016, , .		0
903	Simulation about the factor of droplet move inward parallel plates with Smoothed Particle Hydrodynamics. , 2016, , .		0
904	Effective Dynamic Load Balance using Space-Filling Curves for Large-Scale SPH Simulations on GPU-rich Supercomputers. , 2016, , .		7
905	Smoothed particle hydrodynamics simulations of flow in air diffuser. AIP Conference Proceedings, 2016, , .	0.3	0
906	Efficient Implementation of Smoothed Particle Hydrodynamics (SPH) with Plane Sweep Algorithm. Communications in Computational Physics, 2016, 19, 770-800.	0.7	4
907	Nonlinear interaction and wave breaking with a submerged porous structure. Physics of Fluids, 2016, 28, .	1.6	6
908	Quasi-static mooring solver implemented in SPH. Journal of Ocean Engineering and Marine Energy, 2016, 2, 381-396.	0.9	22
909	Modeling of the Deformation Dynamics of Single and Twin Fluid Droplets Exposed to Aerodynamic Loads. , 2016, , 301-320.		0
910	The analysis of laminated plates using distinct advanced discretization meshless techniques. Composite Structures, 2016, 143, 165-179.	3.1	57

#	Article	IF	Citations
911	A three-dimensional particle method for violent sloshing under regular and irregular excitations. Ocean Engineering, 2016, 120, 52-63.	1.9	50
912	Diffusive terms for the conservation of mass equation in SPH. Applied Mathematical Modelling, 2016, 40, 8722-8736.	2.2	27
913	SPH accuracy improvement through the combination of a quasi-Lagrangian shifting transport velocity and consistent ALE formalisms. Journal of Computational Physics, 2016, 313, 76-98.	1.9	155
914	Smoothed Particle Hydrodynamic simulation of hydraulic jump using periodic open boundaries. Applied Mathematical Modelling, 2016, 40, 8391-8405.	2.2	20
915	Mesh-Free Numerical Simulation of Pressure-Driven Fractures in Brittle Rocks. , 2016, , .		4
916	Free surface flow impact on a vertical wall: a numerical assessment. Theoretical and Computational Fluid Dynamics, 2016, 30, 403-414.	0.9	22
917	SPH simulation of ship behaviour in severe water-shipping situations. Ocean Engineering, 2016, 120, 220-229.	1.9	24
918	Smoothed Particle Hydrodynamics Simulation of Water-Soil Mixture Flows. Journal of Hydraulic Engineering, 2016, 142, .	0.7	38
919	Development and elaboration of numerical method for simulating gasâ€"liquidâ€"solid three-phase flows based on particle method. International Journal of Computational Fluid Dynamics, 2016, 30, 120-128.	0.5	4
920	Curvature boundary condition for a moving contact line. Journal of Computational Physics, 2016, 310, 329-341.	1.9	19
921	Smoothed Particle Hydrodynamics â€" Methodology. , 2016, , 191-260.		0
922	The influence of mooring system in rogue wave impact on an offshore platform. Ocean Engineering, 2016, 115, 168-181.	1.9	32
923	ISPH method for double-diffusive natural convection under cross-diffusion effects in an anisotropic porous cavity/annulus. International Journal of Numerical Methods for Heat and Fluid Flow, 2016, 26, 235-268.	1.6	27
924	Modeling free-surface flow in porous media with modified incompressible SPH. Engineering Analysis With Boundary Elements, 2016, 68, 75-85.	2.0	38
925	Modelling multi-phase liquid-sediment scour and resuspension induced by rapid flows using Smoothed Particle Hydrodynamics (SPH) accelerated with a Graphics Processing Unit (GPU). Advances in Water Resources, 2016, 92, 186-199.	1.7	125
926	Flow above and within granular media composed of spherical and non-spherical particles â€" using a 3D numerical model. Continental Shelf Research, 2016, 117, 67-80.	0.9	3
927	CFD-Simulations in the Early Product Development. Procedia CIRP, 2016, 40, 443-448.	1.0	7
928	Simulation of wave mitigation by coastal vegetation using smoothed particle hydrodynamics method. Journal of Physics: Conference Series, 2016, 693, 012013.	0.3	3

#	ARTICLE	IF	CITATIONS
929	Incompressible SPH simulation of landslide impulse-generated water waves. Natural Hazards, 2016, 82, 1779-1802.	1.6	15
930	The giant impact simulations with density independent smoothed particle hydrodynamics. Icarus, 2016, 271, 131-157.	1.1	27
931	Cost reduction of particle simulations by an ellipsoidal particle model. Computer Methods in Applied Mechanics and Engineering, 2016, 307, 411-450.	3.4	12
932	Double-diffusive natural convection in an enclosure including/excluding sloshing rod using a stabilized ISPH method. International Communications in Heat and Mass Transfer, 2016, 73, 84-99.	2.9	34
933	Coupled Tsunami Simulations Based on a 2D Shallow-Water Equation-Based Finite Difference Method and 3D Incompressible Smoothed Particle Hydrodynamics. Journal of Earthquake and Tsunami, 2016, 10, 1640019.	0.7	8
934	Double-diffusive natural convection in an enclosure filled with nanofluid using ISPH method. AEJ - Alexandria Engineering Journal, 2016, 55, 3037-3052.	3.4	46
935	Cooperative Design, Visualization, and Engineering. Lecture Notes in Computer Science, 2016, , .	1.0	1
936	A Robust volume conservative divergence-free ISPH framework for free-surface flow problems. Advances in Water Resources, 2016, 96, 423-437.	1.7	15
937	An improved SPH approach for simulating 3D dam-break flows with breaking waves. Computer Methods in Applied Mechanics and Engineering, 2016, 311, 723-742.	3.4	35
938	Simulation of Free-Surface Flow Using the Smoothed Particle Hydrodynamics (SPH) Method with Radiation Open Boundary Conditions. Journal of Atmospheric and Oceanic Technology, 2016, 33, 2435-2460.	0.5	10
939	A coupled SPH-DEM model for fluid-structure interaction problems with free-surface flow and structural failure. Computers and Structures, 2016, 177, 141-161.	2.4	109
940	Explicit incompressible SPH algorithm for free-surface flow modelling: A comparison with weakly compressible schemes. Advances in Water Resources, 2016, 97, 156-167.	1.7	54
941	Numerical modeling of free surface flow in hydraulic structures using Smoothed Particle Hydrodynamics. Applied Mathematical Modelling, 2016, 40, 9821-9834.	2.2	11
942	A coupled Finite Volume–Smoothed Particle Hydrodynamics method for incompressible flows. Computer Methods in Applied Mechanics and Engineering, 2016, 310, 674-693.	3.4	43
943	Smoothed Particle Hydrodynamics into the Fluid Dynamics of Classical Problems. Applied Mechanics and Materials, 0, 846, 73-78.	0.2	9
944	Modeling the Interaction of Water Waves with Porous Coastal Structures. Journal of Waterway, Port, Coastal and Ocean Engineering, 2016, 142, .	0.5	62
945	Structure Formation within Spray-Dried Droplets; Mathematical Modelling of Spray Polymerisation. , 2016, , 89-125.		3
946	Simulation of self-compacting concrete flow in the J-ring test using smoothed particle hydrodynamics (SPH). Cement and Concrete Research, 2016, 89, 27-34.	4.6	25

#	Article	IF	Citations
947	Time domain simulation of coupled sloshingâ€"seakeeping problems by SPHâ€"FEM coupling. Ocean Engineering, 2016, 123, 383-396.	1.9	41
948	Smoothed particle hydrodynamics numerical model for modeling an oscillating water chamber. Ocean Engineering, 2016, 123, 397-410.	1.9	16
949	SPH simulation of turbulent flow past a high-frequency in-line oscillating cylinder near free-surface. International Journal of Modern Physics C, 2016, 27, 1650152.	0.8	12
950	Improvements for accuracy and stability in a weakly-compressible particle method. Computers and Fluids, 2016, 137, 1-14.	1.3	40
951	Numerical Modelling of Braided River Morphodynamics: Review and Future Challenges. Geography Compass, 2016, 10, 102-127.	1.5	84
952	Fluidâ€"structure interaction analysis of the drop impact test for helicopter fuel tank. SpringerPlus, 2016, 5, 1573.	1.2	14
953	Mixed miscible-immiscible fluid flow modelling with incompressible SPH framework. Engineering Analysis With Boundary Elements, 2016, 73, 50-60.	2.0	14
954	A particle-element contact algorithm incorporated into the coupling methods of FEM-ISPH and FEM-WCSPH for FSI problems. Ocean Engineering, 2016, 123, 154-163.	1.9	23
955	Deposition and slagging in an entrained-flow gasifier with focus on heat transfer, reactor design and flow dynamics with SPH. Fuel Processing Technology, 2016, 152, 147-155.	3.7	14
956	Understanding spray cloud formation by wave impact on marine objects. Cold Regions Science and Technology, 2016, 129, 114-136.	1.6	35
957	A SPH numerical wave basin for modeling wave-structure interactions. Applied Ocean Research, 2016, 59, 366-377.	1.8	47
958	An overview of smoothed particle hydrodynamics for simulating multiphase flow. Applied Mathematical Modelling, 2016, 40, 9625-9655.	2.2	138
959	Novel method of boundary condition of dam-break phenomena using ghost-particle SPH. Natural Hazards, 2016, 84, 897-910.	1.6	6
960	Size consistency in smoothed dissipative particle dynamics. Physical Review E, 2016, 94, 043305.	0.8	5
961	Numerical simulation of the electrohydrodynamic effects on bubble rising using the SPH method. International Journal of Heat and Fluid Flow, 2016, 62, 313-323.	1.1	21
962	On the modeling of viscous incompressible flows with smoothed particle hydro-dynamics. Journal of Hydrodynamics, 2016, 28, 731-745.	1.3	71
963	Experimental and numerical simulation of interphase mass transfer of gas bubble in granular backfill and gel. Theoretical Foundations of Chemical Engineering, 2016, 50, 690-696.	0.2	1
964	A Multilevel SPH Solver with Unified Solid Boundary Handling. Computer Graphics Forum, 2016, 35, 517-526.	1.8	8

#	Article	IF	Citations
965	ISPH modelling of an oscillating wave surge converter using an OpenMP-based parallel approach. Journal of Ocean Engineering and Marine Energy, 2016, 2, 301-312.	0.9	21
966	Rigid Body Sampling and Boundary Handling for Rigid-Fluid Coupling of Particle Based Fluids. Lecture Notes in Computer Science, 2016, , 210-218.	1.0	0
968	SIMULATION OF TURBULENT FREE SURFACE FLOW WITH TWO-PHASE SPH METHOD. Journal of Japan Society of Civil Engineers Ser B1 (Hydraulic Engineering), 2016, 72, I_523-I_528.	0.0	2
969	Simulation of the erosion and seepage failure around sheet pile using two-phase WC-SPH method. Journal of Japan Society of Civil Engineers Ser A2 (Applied Mechanics (AM)), 2016, 72, I_495-I_504.	0.1	5
970	Design Interface for Flow Channel Design Integrated with Highly Efficient Fluid Flow Analysis Method. Journal of the Japan Society for Precision Engineering, 2016, 82, 100-105.	0.0	2
971	Particle Methods for Viscous Flows: Analogies and Differences Between the SPH and DVH Methods. Communications in Computational Physics, 2016, 20, 660-688.	0.7	28
972	Extensible, Reusable, and Reproducible Computing: A Case Study of PySPH. Journal of Physics: Conference Series, 2016, 759, 012094.	0.3	0
973	Large-scale solitary wave simulation with implicit incompressible SPH. Journal of Ocean Engineering and Marine Energy, 2016, 2, 313-329.	0.9	21
974	The Non-Newtonian Fluid Simulation Based on Predictive-Corrective Incompressible SPH. , 2016, , .		0
975	SPH-based numerical modeling for the post-failure behavior of the landslides triggered by the 2016 Kumamoto earthquake. Geoenvironmental Disasters, 2016, 3, .	1.8	21
976	Individual Time-Stepping for Rigid-Fluid Coupling of Particle Based Fluids. , 2016, , .		0
977	Risk evaluation, detection and simulation during effusive eruption disasters. Geological Society Special Publication, 2016, 426, 1-22.	0.8	9
978	Current achievements and future perspectives for projection-based particle methods with applications in ocean engineering. Journal of Ocean Engineering and Marine Energy, 2016, 2, 251-278.	0.9	136
979	Fixed and moored bodies in steep and breaking waves using SPH with the Froude–Krylov approximation. Journal of Ocean Engineering and Marine Energy, 2016, 2, 331-354.	0.9	23
980	Sensitivity of Smoothed-Particle Hydrodynamic Parameters on Slamming Simulations. , 2016, , .		0
981	Numerical study on mitigating tsunami force on bridges by an SPH model. Journal of Ocean Engineering and Marine Energy, 2016, 2, 365-380.	0.9	59
982	Investigation of Helicopter Ditching Angle on Fuselage Pressure Load using a SPH Method. , 2016, , .		1
983	An improved particle smoothing procedure for Laplacian operator in a randomly scattered cloud. Numerical Heat Transfer, Part B: Fundamentals, 2016, 70, 111-135.	0.6	3

#	Article	IF	Citations
984	Numerical simulation and experimental validation of biofilm in a multi-physics framework using an SPH based method. Computational Mechanics, 2016, 58, 619-633.	2.2	12
985	Smoothed particle hydrodynamics simulation of viscoelastic flows with the slip-link model. Molecular Systems Design and Engineering, 2016, 1, 99-108.	1.7	16
986	An improved parallel SPH approach to solve 3D transient generalized Newtonian free surface flows. Computer Physics Communications, 2016, 205, 87-105.	3.0	35
987	Online Simulation of Fluids in Early Design. Procedia CIRP, 2016, 41, 387-392.	1.0	1
988	Large scale water entry simulation with smoothed particle hydrodynamics on single- and multi-GPU systems. Computer Physics Communications, 2016, 209, 1-12.	3.0	26
989	On the role of fluid infiltration into gravel dunes â€" Using a 3D numerical model. Marine Geology, 2016, 380, 231-244.	0.9	3
990	Numerical investigation of wave elevation and bottom pressure generated by a planing hull in finite-depth water. Applied Ocean Research, 2016, 58, 281-291.	1.8	19
991	Flow past a plate in the vicinity of a free surface. Ocean Engineering, 2016, 111, 323-334.	1.9	26
992	Smoothed particle hydrodynamics method for fluid flows, towards industrial applications: Motivations, current state, and challenges. Computers and Fluids, 2016, 136, 11-34.	1.3	304
993	Aplicación del método SPH al estudio hidráulico de estructuras. Análisis hidrodinámico del aliviadero en pozo de la presa de Nagore (Navarra). Ribagua, 2016, 3, 1-7.	0.3	3
994	Improvement of boundary conditions for non-planar boundaries represented by polygons with an initial particle arrangement technique. International Journal of Computational Fluid Dynamics, 2016, 30, 155-175.	0.5	9
995	GPUSPH: a Smoothed Particle Hydrodynamics model for the thermal and rheological evolution of lava flows. Geological Society Special Publication, 2016, 426, 387-408.	0.8	18
996	Deposition and slag flow modeling with SPH for a generic gasifier with different coal ashes using fusibility data. Fuel, 2016, 172, 218-227.	3.4	8
997	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.	1.3	9
998	Mixed-mode fracture modeling with smoothed particle hydrodynamics. Computers and Geotechnics, 2016, 79, 73-85.	2.3	28
999	Numerical modeling of wave interactions with coastal structures by a constrained interpolation profile/immersed boundary method. International Journal for Numerical Methods in Fluids, 2016, 81, 265-283.	0.9	18
1000	A consistent incompressible SPH method for internal flows with fixed and moving boundaries. International Journal for Numerical Methods in Fluids, 2016, 81, 589-610.	0.9	6
1001	Stable axisymmetric SPH formulation with no axis singularity. International Journal for Numerical and Analytical Methods in Geomechanics, 2016, 40, 987-1006.	1.7	10

#	ARTICLE	IF	CITATIONS
1002	Two-phase SPH simulation of fluid–structure interactions. Journal of Fluids and Structures, 2016, 65, 155-179.	1.5	90
1003	SPH numerical investigation of the velocity field and vorticity generation within a hydrofoil-induced spilling breaker. Environmental Fluid Mechanics, 2016, 16, 267-287.	0.7	20
1004	Composite modelling of subaerial landslide–tsunamis in different water body geometries and novel insight into slide and wave kinematics. Coastal Engineering, 2016, 109, 20-41.	1.7	114
1005	Comparative study on the accuracy of solitary wave generations in an ISPH-based numerical wave flume. Applied Ocean Research, 2016, 54, 115-136.	1.8	23
1006	Coupling of Smoothed Particle Hydrodynamics with Finite Volume method for free-surface flows. Journal of Computational Physics, 2016, 310, 161-180.	1.9	69
1007	A GPU-accelerated smoothed particle hydrodynamics (SPH) model for the shallow water equations. Environmental Modelling and Software, 2016, 75, 28-43.	1.9	49
1008	Modified variable mass incompressible SPH method for simulating internal fluid flows. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2016, 38, 2009-2027.	0.8	4
1009	A comparison between Smoothed-Particle Hydrodynamics and RANS Volume of Fluid method in modelling slamming. Journal of Ocean Engineering and Science, 2016, 1, 119-128.	1.7	21
1010	Coupled MPS-modal superposition method for 2D nonlinear fluid-structure interaction problems with free surface. Journal of Fluids and Structures, 2016, 61, 295-323.	1.5	37
1011	A Runge–Kutta–Chebyshev SPH algorithm for elastodynamics. Acta Mechanica, 2016, 227, 1813-1835.	1.1	12
1012	A new adaptive mesh refinement to model water flow around fishing nets. Ocean Engineering, 2016, 113, 34-43.	1.9	8
1013	Rheology and microstructure of non-colloidal suspensions under shear studied with Smoothed Particle Hydrodynamics. Journal of Non-Newtonian Fluid Mechanics, 2016, 233, 37-47.	1.0	45
1014	A smoothed particle hydrodynamics (SPH) model for simulating surface erosion by impacts of foreign particles. Tribology International, 2016, 95, 267-278.	3.0	67
1015	Dynamic fracture simulation of flexible multibody systems via coupled finite elements of ANCF and particles of SPH. Nonlinear Dynamics, 2016, 84, 2447-2465.	2.7	12
1016	Smoothed particle hydrodynamics: Applications to migration of radionuclides in confined aqueous systems. Journal of Contaminant Hydrology, 2016, 187, 65-78.	1.6	15
1017	Application of a New Rheological Model to Rock Avalanches: An SPH Approach. Rock Mechanics and Rock Engineering, 2016, 49, 2353-2372.	2.6	26
1018	SPH-DEM model for free-surface flows containing solids applied to river ice jams. Journal of Hydraulic Research/De Recherches Hydrauliques, 2016, 54, 27-40.	0.7	24
1019	Smoothed Particle Hydrodynamics (SPH) simulation of a high-pressure homogenization process. Microfluidics and Nanofluidics, 2016, 20, 1.	1.0	12

#	Article	IF	Citations
1020	Explicit numerical simulation-based study of the hydrodynamics of micro-packed beds. Chemical Engineering Science, 2016, 145, 71-79.	1.9	9
1021	Smoothed Particle Hydrodynamics â€" Applications. , 2016, , 261-352.		0
1022	Development of a coupled discrete element (DEM)â€"smoothed particle hydrodynamics (SPH) simulation method for polyhedral particles. Computational Particle Mechanics, 2016, 3, 95-106.	1.5	9
1023	Neumann and Robin boundary conditions for heat conduction modeling using smoothed particle hydrodynamics. Computer Physics Communications, 2016, 198, 1-11.	3.0	16
1024	A three-dimensional model for flow slides in municipal solid waste landfills using smoothed particle hydrodynamics. Environmental Earth Sciences, 2016, 75, 1.	1.3	18
1025	Simulation of Nearshore Tsunami Breaking by Smoothed Particle Hydrodynamics Method. Journal of Waterway, Port, Coastal and Ocean Engineering, 2016, 142, .	0.5	33
1026	Improved Multiphase Lagrangian Method for Simulating Sediment Transport in Dam-Break Flows. Journal of Hydraulic Engineering, 2016, 142, .	0.7	18
1027	Modeling of landslide generated impulsive waves considering complex topography in reservoir area. Environmental Earth Sciences, 2016, 75, 1.	1.3	13
1028	Mesh-free SPH modeling of sediment scouring and flushing. Computers and Fluids, 2016, 129, 67-78.	1.3	42
1029	Three-dimensional simulations of dilute and concentrated suspensions using smoothed particle hydrodynamics. Computational Particle Mechanics, 2016, 3, 167-178.	1.5	26
1030	An improved weakly compressible SPH method for simulating free surface flows of viscous and viscoelastic fluids. Computer Physics Communications, 2016, 201, 43-62.	3.0	64
1031	Three-dimensional modelling of coupled flow dynamics, heat transfer and residual stress generation in arc welding processes using the mesh-free SPH method. Journal of Computational Science, 2016, 16, 200-216.	1.5	24
1032	A meshless method based on moving least squares for the simulation of free surface flows. Journal of Zhejiang University: Science A, 2016, 17, 130-143.	1.3	6
1033	SPH simulations of the behavior of the interface between two immiscible liquid stirred by the movement of a gas bubble. Chemical Engineering Science, 2016, 141, 342-355.	1.9	25
1034	Incompressibleâ€"compressible flows with a transient discontinuous interface using smoothed particle hydrodynamics (SPH). Journal of Computational Physics, 2016, 309, 129-147.	1.9	71
1035	Numerical modeling of surf zone dynamics under weakly plunging breakers with SPH method. Ocean Modelling, 2016, 98, 12-35.	1.0	29
1036	Modeling free-surface flows of granular column collapses using a mesh-free method. Powder Technology, 2016, 291, 20-34.	2.1	29
1037	Validation and Test Cases for a Free Surface SPH Model. Springer Water, 2016, , 175-187.	0.2	1

#	ARTICLE	IF	CITATIONS
1038	Smoothed particle hydrodynamics (SPH) for free-surface flows: past, present and future. Journal of Hydraulic Research/De Recherches Hydrauliques, 2016, 54, 1-26.	0.7	358
1039	Dynamic Analysis of AP1000 Shield Building Considering Fluid and Structure Interaction Effects. Nuclear Engineering and Technology, 2016, 48, 246-258.	1.1	24
1040	Using Smooth Particle Hydrodynamics (SPH) to model multiphase mineral processing systems. Minerals Engineering, 2016, 90, 17-28.	1.8	9
1041	Vajont Disaster: Smoothed Particle Hydrodynamics Modeling of the Postevent 2D Experiments. Journal of Hydraulic Engineering, 2016, 142, .	0.7	38
1042	A free surface interpolation approach for rapid simulation of short waves in meshless numerical wave tank based on the radial basis function. Journal of Computational Physics, 2016, 307, 203-224.	1.9	15
1043	Variable resolution for SPH in three dimensions: Towards optimal splitting and coalescing for dynamic adaptivity. Computer Methods in Applied Mechanics and Engineering, 2016, 300, 442-460.	3.4	73
1044	Numerical Simulation of Violent Impinging Jet Flows with Improved SPH Method. International Journal of Computational Methods, 2016, 13, 1641001.	0.8	16
1045	Development of a Finite Volume Particle Method for 3-D fluid flow simulations. Computer Methods in Applied Mechanics and Engineering, 2016, 298, 80-107.	3.4	30
1046	Ceres water regime: surface temperature, water sublimation and transient exo(atmo)sphere. Monthly Notices of the Royal Astronomical Society, 2016, 455, 1892-1904.	1.6	35
1047	Improved SPH simulation of wave motions and turbulent flows through porous media. Coastal Engineering, 2016, 107, 14-27.	1.7	62
1048	A coupled biomechanical-Smoothed Particle Hydrodynamics model for predicting the loading on the body during elite platform diving. Applied Mathematical Modelling, 2016, 40, 3812-3831.	2.2	17
1049	Investigation of three-dimensionality effects of aspect ratio on water impact of 3D objects using smoothed particle hydrodynamics method. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2016, 38, 1987-1998.	0.8	14
1050	Application of the SPH method to solitary wave impact on an offshore platform. Computational Particle Mechanics, 2016, 3, 155-166.	1.5	29
1051	Application of the Lagrangian meshfree approach to modelling of batch crystallisation: Part Iâ€"Modelling of stirred tank hydrodynamics. Chemical Engineering Science, 2016, 145, 317-328.	1.9	6
1052	Inundation Simulation Coupling Free Surface Flow and Structures. Springer Tracts in Mechanical Engineering, 2016, , 179-199.	0.1	1
1053	Fast SPH simulation for gaseous fluids. Visual Computer, 2016, 32, 523-534.	2.5	12
1055	Characterizing flow in oil reservoir rock using SPH: absolute permeability. Computational Particle Mechanics, 2016, 3, 141-154.	1.5	20
1056	Suspension modeling using smoothed particle hydrodynamics: Accuracy of the viscosity formulation and the suspended body dynamics. Applied Mathematical Modelling, 2016, 40, 2606-2618.	2.2	12

#	Article	IF	Citations
1057	On distributed memory MPI-based parallelization of SPH codes in massive HPC context. Computer Physics Communications, 2016, 200, 1-14.	3.0	75
1058	Modeling of Free Surface Flows Using Improved Material Point Method and Dynamic Adaptive Mesh Refinement. Journal of Engineering Mechanics - ASCE, 2016, 142, .	1.6	11
1059	Effect of flat deck on catamaran water entry through smoothed particle hydrodynamics. Proceedings of the Institution of Mechanical Engineers Part M: Journal of Engineering for the Maritime Environment, 2016, 230, 267-280.	0.3	11
1060	Smoothed particle hydrodynamics and its applications for multiphase flow and reactive transport in porous media. Computational Geosciences, 2016, 20, 807-834.	1.2	79
1061	A new SPH-based approach to simulation of granular flows using viscous damping and stress regularisation. Landslides, 2017, 14, 69-81.	2.7	112
1062	A review on models for the prediction of the diameter of jet grouting columns. European Journal of Environmental and Civil Engineering, 2017, 21, 641-669.	1.0	19
1063	Divergence-Free SPH for Incompressible and Viscous Fluids. IEEE Transactions on Visualization and Computer Graphics, 2017, 23, 1193-1206.	2.9	92
1064	A novel surface tension formulation for SPH fluid simulation. Visual Computer, 2017, 33, 597-606.	2.5	6
1065	Curvilinear smoothed particle hydrodynamics. International Journal for Numerical Methods in Fluids, 2017, 83, 115-131.	0.9	9
1066	A coupled SDPHâ€"FVM method for gasâ€particle multiphase flow: Methodology. International Journal for Numerical Methods in Engineering, 2017, 109, 73-101.	1.5	13
1067	Flow behaviour over a 2D body using the moving particle semi-implicit method with free surface stabilisation. International Journal on Interactive Design and Manufacturing, 2017, 11, 633-640.	1.3	5
1068	A novel hybrid solid-like fluid-like (SLFL) method for the simulation of dry granular flows. Particuology, 2017, 31, 200-219.	2.0	2
1069	A Numerical Study on Hydrodynamics of Standing Waves in Front of Caisson Breakwaters with WCSPH Model. Coastal Engineering Journal, 2017, 59, 1750005-1-1750005-31.	0.7	18
1070	SPH numerical simulation of tsunami wave forces impinged on bridge superstructures. Coastal Engineering, 2017, 121, 145-157.	1.7	62
1071	Comparison of different iterative schemes for ISPH based on Rankine source solution. International Journal of Naval Architecture and Ocean Engineering, 2017, 9, 390-403.	1.0	2
1072	Modeling electrokinetic flows by consistent implicit incompressible smoothed particle hydrodynamics. Journal of Computational Physics, 2017, 334, 125-144.	1.9	12
1073	SPH energy conservation for fluidâ€"solid interactions. Computer Methods in Applied Mechanics and Engineering, 2017, 317, 771-791.	3.4	35
1074	Integrating hydrodynamics and biokinetics in wastewater treatment modelling by using smoothed particle hydrodynamics. Computers and Chemical Engineering, 2017, 99, 1-12.	2.0	17

#	ARTICLE	IF	CITATIONS
1075	A Simulation of Domain Decomposition Method for Smoothed Particle Hydrodynamics. Journal of Engineering Materials and Technology, Transactions of the ASME, 2017, 139, .	0.8	1
1076	Improvement of pressure distribution to arbitrary geometry with boundary condition represented by polygons in particle method. International Journal for Numerical Methods in Engineering, 2017, 112, 685-710.	1.5	12
1077	Numerical investigation of the water entry of cylinders without and with spin. Journal of Fluid Mechanics, 2017, 814, 131-164.	1.4	21
1078	Transient Analysis of Falling Cylinder in Non-Newtonian Fluids: Further Opportunity to Employ the Benefits of SPH Method in Fluid â€" Structure Problems. Chemical Product and Process Modeling, 2017, 12, .	0.5	0
1079	Peristaltic transport of a particulate suspension in the small intestine. Applied Mathematical Modelling, 2017, 44, 143-159.	2.2	62
1080	Analysis of flow and mixing in screw elements of corotating twinâ€screw extruders via SPH. AICHE Journal, 2017, 63, 2451-2463.	1.8	31
1081	A weakly compressible SPH method based on a low-dissipation Riemann solver. Journal of Computational Physics, 2017, 335, 605-620.	1.9	119
1082	Robust boundary treatment for open-channel flows in divergence-free incompressible SPH. Journal of Hydrology, 2017, 546, 464-475.	2.3	10
1083	The Comparison of Viscous Force Approximations of Smoothed Particle Hydrodynamics in Poiseuille Flow Simulation. Journal of Fluids Engineering, Transactions of the ASME, 2017, 139, .	0.8	2
1084	On enhancement of energy conservation properties of projection-based particle methods. European Journal of Mechanics, B/Fluids, 2017, 66, 20-37.	1.2	92
1085	On the filtering of acoustic components in weakly-compressible SPH simulations. Journal of Fluids and Structures, 2017, 70, 1-23.	1.5	73
1086	A generalized transport-velocity formulation for smoothed particle hydrodynamics. Journal of Computational Physics, 2017, 337, 216-232.	1.9	68
1087	A corrected particle method with high-order Taylor expansion for solving the viscoelastic fluid flow. Acta Mechanica Sinica/Lixue Xuebao, 2017, 33, 20-39.	1.5	3
1088	Numerical Study of Nonlinear Heat Transfer from a Wavy Surface to a High Permeability Medium with Pseudo-Spectral and Smoothed Particle Methods. International Journal of Applied and Computational Mathematics, 2017, 3, 3593-3613.	0.9	10
1089	Development of a smoothed particle hydrodynamics method and its application to aircraft ditching simulations. Aerospace Science and Technology, 2017, 66, 28-43.	2.5	34
1090	Flood inundation modelling: A review of methods, recent advances and uncertainty analysis. Environmental Modelling and Software, 2017, 90, 201-216.	1.9	736
1091	Characteristic of tsunami force acting on shelter with mooring. Applied Ocean Research, 2017, 64, 70-85.	1.8	5
1092	A volumetric geometry and topology parameterisation for fluids-based optimisation. Computers and Fluids, 2017, 148, 137-156.	1.3	4

#	Article	IF	Citations
1093	Wave runup on a surging vertical cylinder in regular waves. Applied Ocean Research, 2017, 63, 229-241.	1.8	16
1094	Numerical modelling of supercritical flow in circular conduit bends using SPH method. Journal of Hydrodynamics, 2017, 29, 344-352.	1.3	2
1095	A study of energy transfer during water entry of solids using incompressible SPH simulations. Sadhana - Academy Proceedings in Engineering Sciences, 2017, 42, 517-531.	0.8	6
1096	Dynamic simulation of landslide dam behavior considering kinematic characteristics using a coupled DDA-SPH method. Engineering Analysis With Boundary Elements, 2017, 80, 172-183.	2.0	60
1097	Particle Image Velocity Measurement and Mesh-Free Method Modeling Study of Forced Hydraulic Jumps. Journal of Hydraulic Engineering, 2017, 143, .	0.7	6
1098	On modification of pressure gradient operator in integrated ISPH for multifluid and porous media flow with free-surface. Engineering Analysis With Boundary Elements, 2017, 80, 38-48.	2.0	15
1099	Coupled fluid-structure computational methods for aircraft ditching simulations: Comparison of ALE-FE and SPH-FE approaches. Computers and Structures, 2017, 188, 95-108.	2.4	29
1100	A Meshfree Semi-implicit Smoothed Particle Hydrodynamics Method for Free Surface Flow. Lecture Notes in Computational Science and Engineering, 2017, , 35-52.	0.1	1
1101	Three-dimensional smoothed particle hydrodynamics simulation for injection molding flow of short fiber-reinforced polymer composites. Modelling and Simulation in Materials Science and Engineering, 2017, 25, 055007.	0.8	18
1102	A study of the stability properties in simulation of wave propagation with SPH method. China Ocean Engineering, 2017, 31, 173-182.	0.6	5
1103	A corrected solid boundary treatment method for Smoothed Particle Hydrodynamics. China Ocean Engineering, 2017, 31, 238-247.	0.6	6
1104	New modified gradient models for MPS method applied to free-surface flow simulations. Applied Ocean Research, 2017, 66, 95-116.	1.8	14
1105	Parametric study on smoothed particle hydrodynamics for accurate determination of drag coefficient for a circular cylinder. Water Science and Engineering, 2017, 10, 143-153.	1.4	22
1106	An SPH Study of Molten Matte–Slag Dispersion. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 1792-1806.	1.0	15
1107	Mathematical modelling of wave energy converters: A review of nonlinear approaches. Renewable and Sustainable Energy Reviews, 2017, 78, 1188-1207.	8.2	160
1108	A coupled WC-TL SPH method for simulation of hydroelastic problems. International Journal of Computational Fluid Dynamics, 2017, 31, 174-187.	0.5	22
1109	Modeling extracellular matrix viscoelasticity using smoothed particle hydrodynamics with improved boundary treatment. Computer Methods in Applied Mechanics and Engineering, 2017, 322, 515-540.	3.4	17
1110	A consistent multi-resolution smoothed particle hydrodynamics method. Computer Methods in Applied Mechanics and Engineering, 2017, 324, 278-299.	3.4	40

#	Article	IF	Citations
1111	A coupled fluid-solid SPH approach to modelling flow through deformable porous media. International Journal of Solids and Structures, 2017, 125, 244-264.	1.3	100
1112	Towards simulating floating offshore oscillating water column converters with Smoothed Particle Hydrodynamics. Coastal Engineering, 2017, 126, 11-26.	1.7	103
1113	Nonlinear wave interaction with curved front seawalls. Ocean Engineering, 2017, 140, 84-96.	1.9	9
1114	Temporal and Spatial Evolution of Potential Energy, Kinetic Energy, and Momentum Flux in Tsunami Waves during Breaking and Inundation. Journal of Waterway, Port, Coastal and Ocean Engineering, 2017, 143, 04017018.	0.5	2
1115	Development of a hybrid particle-mesh method for simulating free-surface flows. Journal of Hydrodynamics, 2017, 29, 413-422.	1.3	1
1116	Simulating Regular Wave Effects on a Pile-Moored Floating Breakwater Using a Modified WCSPH Method. Journal of Waterway, Port, Coastal and Ocean Engineering, 2017, 143, .	0.5	5
1117	A well-balanced path conservative SPH scheme for nonconservative hyperbolic systems with applications to shallow water and multi-phase flows. Computers and Fluids, 2017, 154, 102-122.	1.3	15
1118	Enhancement of the accuracy of the finite volume particle method for the simulation of incompressible flows. International Journal for Numerical Methods in Fluids, 2017, 85, 712-726.	0.9	12
1119	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.	1.5	5
1120	Simulation of wave overtopping using an improved SPH method. Coastal Engineering, 2017, 126, 51-68.	1.7	44
1121	ISPH modelling for hydrodynamic applications using a new MPI-based parallel approach. Journal of Ocean Engineering and Marine Energy, 2017, 3, 35-50.	0.9	12
1122	Smoothed particle hydrodynamics simulation of dual-scale flow during resin transfer molding. Journal of Reinforced Plastics and Composites, 2017, 36, 1431-1438.	1.6	7
1123	Smoothed particle hydrodynamics and its applications in fluid-structure interactions. Journal of Hydrodynamics, 2017, 29, 187-216.	1.3	158
1124	Theory and simulation of the dynamics, deformation, and breakup of a chain of superparamagnetic beads under a rotating magnetic field. Physics of Fluids, 2017, 29, .	1.6	27
1125	A Numerical Wave Tank Using a Hybrid Particle-mesh Approach. Procedia Engineering, 2017, 175, 21-28.	1.2	7
1126	Landslides and tsunamis predicted by incompressible smoothed particle hydrodynamics (SPH) with application to the 1958 Lituya Bay event and idealized experiment. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2017, 473, 20160674.	1.0	30
1127	Development of stress boundary conditions in smoothed particle hydrodynamics (SPH) for the modeling of solids deformation. Computational Particle Mechanics, 2017, 4, 451-471.	1.5	15
1128	Smoothed particle hydrodynamics method from a large eddy simulation perspective. Physics of Fluids, 2017, 29, .	1.6	58

#	Article	IF	Citations
1129	Dual-Support Smoothed Particle Hydrodynamics for Elastic Mechanics. International Journal of Computational Methods, 2017, 14, 1750039.	0.8	14
1130	Meshfree Methods for Partial Differential Equations VIII. Lecture Notes in Computational Science and Engineering, 2017, , .	0.1	5
1131	Modeling and simulation of injection molding process of polymer melt by a robust SPH method. Applied Mathematical Modelling, 2017, 48, 384-409.	2.2	28
1132	Particulate and water mixing in the feed box for a screen. Minerals Engineering, 2017, 109, 109-125.	1.8	9
1133	Two-phase smooth particle hydrodynamics modeling of air-water interface in aerated flows. Science China Technological Sciences, 2017, 60, 479-490.	2.0	9
1134	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.	3.4	71
1135	Corrected First-Order Derivative ISPH in Water Wave Simulations. Coastal Engineering Journal, 2017, 59, 1750010-1-1750010-29.	0.7	71
1136	Comparative study on accuracy and conservation properties of two particle regularization schemes and proposal of an optimized particle shifting scheme in ISPH context. Journal of Computational Physics, 2017, 332, 236-256.	1.9	260
1137	Incompressible SPH simulation of solitary wave interaction with movable seawalls. Journal of Fluids and Structures, 2017, 69, 72-88.	1.5	45
1138	A high-order SPH method by introducing inverse kernels. Chinese Journal of Aeronautics, 2017, 30, 1-14.	2.8	12
1139	Simulation of the Kelvinâ€"Helmholtz instability using a multi-liquid moving particle semi-implicit method. Ocean Engineering, 2017, 130, 531-541.	1.9	17
1140	Exact finite volume particle method with spherical-support kernels. Computer Methods in Applied Mechanics and Engineering, 2017, 317, 102-127.	3.4	20
1141	Two-fluid smoothed particle hydrodynamics simulation of submerged granular column collapse. Mechanics Research Communications, 2017, 79, 15-23.	1.0	33
1142	Simulation and validation of asphalt foaming process for virtual experiments and optimisation of WMA production. Road Materials and Pavement Design, 2017, 18, 144-164.	2.0	3
1143	Numerical Simulation of Wave Interaction With a Hinged Multi-Module Floating Structure. , 2017, , .		0
1144	Simulating deposition of high density tailings using smoothed particle hydrodynamics. Korea Australia Rheology Journal, 2017, 29, 229-237.	0.7	7
1145	SPH for impact force and ricochet behavior of water-entry bodies. International Journal of Modern Physics C, 2017, 28, 1750119.	0.8	12
1146	Application of SPH Method in Simulation of Failure of Soil and Rocks Exposed to Great Pressure. Soil Mechanics and Foundation Engineering, 2017, 54, 216-223.	0.2	4

#	Article	IF	Citations
1147	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.	1.3	25
1148	Study on coupled dynamics of ship and flooding water based on experimental and SPH methods. Physics of Fluids, 2017, 29, .	1.6	47
1149	Three Dimensional Numerical Study of Various Geometries of Breakwaters on Wave Energy Dissipation. , 2017, , .		0
1150	Validation of Open-Source SPH Code DualSPHysics for Numerical Simulations of Water Entry and Exit of a Rigid Body. , 2017, , .		3
1151	Smoothed particle hydrodynamics (SPH) modeling of shot peening process. Journal of Computational Methods in Sciences and Engineering, 2017, 17, 799-825.	0.1	1
1152	A smoothed particle hydrodynamics (SPH) study of sediment dispersion on the seafloor. Physics of Fluids, 2017, 29, .	1.6	28
1153	Smoothed Particle Hydrodynamics Simulation of Oil-Jet Gear Interaction. , 2017, , .		4
1154	Solitary wave-induced forces on horizontal circular cylinders: Laboratory experiments and SPH simulations. Coastal Engineering, 2017, 129, 17-35.	1.7	66
1155	Investigating the causes of shear-thinning in non-colloidal suspensions: Experiments and simulations. Journal of Non-Newtonian Fluid Mechanics, 2017, 248, 1-7.	1.0	34
1156	Simulation of Tailings Flow Resulting From a Dam Breach Using Smoothed Particle Hydrodynamics. Environmental and Engineering Geoscience, 2017, , 1078-7275.EEG-1891.	0.3	2
1157	Modelling of immiscible liquid-liquid systems by Smoothed Particle Hydrodynamics. Journal of Colloid and Interface Science, 2017, 508, 567-574.	5.0	6
1158	Density maps for improved SPH boundary handling. , 2017, , .		42
1159	An arbitrary boundary with ghost particles incorporated in coupled FEMâ€"SPH model for FSI problems. Journal of Computational Physics, 2017, 350, 166-183.	1.9	68
1161	A numerical simulation method for transient behavior of damaged ships associated with flooding. Ocean Engineering, 2017, 143, 282-294.	1.9	20
1162	Development of a two-phase SPH model for sediment laden flows. Computer Physics Communications, 2017, 221, 259-272.	3.0	52
1163	Application of Smoothed Particle Hydrodynamics in analysis of shaped-charge jet penetration caused by underwater explosion. Ocean Engineering, 2017, 145, 177-187.	1.9	28
1164	A new meshless approach in simulating free surface flows using continuous MLS shape functions and Voronoi diagram. Engineering Computations, 2017, 34, 2565-2581.	0.7	9
1165	SPH modelling of multi-fluid lock-exchange over and within porous media. Advances in Water Resources, 2017, 108, 15-28.	1.7	16

#	ARTICLE	IF	CITATIONS
1166	Contained fluid simulation based on game engine. , 2017, , .		0
1167	Simulation of velocity and shear stress distributions in granular column collapses by a mesh-free method. Journal of Non-Newtonian Fluid Mechanics, 2017, 247, 146-164.	1.0	24
1168	A numerical study of violent sloshing problems with modified MPS method. Journal of Hydrodynamics, 2017, 29, 659-667.	1.3	20
1169	Real-time and authentic blood simulation for surgical training. , 2017, , .		0
1170	Optimisation using smoothed particle hydrodynamics with volume-based geometry control. Structural and Multidisciplinary Optimization, 2017, 56, 1369-1386.	1.7	3
1171	A formulation of consistent particle hydrodynamics in strong form. Publication of the Astronomical Society of Japan, 2017, 69, .	1.0	1
1172	A multi-scale model for simulating liquid-hair interactions. ACM Transactions on Graphics, 2017, 36, 1-17.	4.9	39
1173	Multi-vehicle cooperation and nearly fuel-optimal flock guidance in strong background flows. Ocean Engineering, 2017, 141, 388-404.	1.9	26
1174	Improving Accuracy of SPH Method Using Voronoi Diagram. Iranian Journal of Science and Technology - Transactions of Civil Engineering, 2017, 41, 345-350.	1.0	17
1175	The overlapping particle technique for multi-resolution simulation of particle methods. Computer Methods in Applied Mechanics and Engineering, 2017, 325, 434-462.	3.4	48
1176	High-order particle method for solving incompressible Navierâ€"Stokes equations within a mixed Lagrangianâ€"Eulerian framework. Computer Methods in Applied Mechanics and Engineering, 2017, 325, 77-101.	3.4	21
1177	An updated Lagrangian particle hydrodynamics (ULPH) for Newtonian fluids. Journal of Computational Physics, 2017, 348, 493-513.	1.9	37
1178	Numerical flow simulation of fresh concrete with viscous granular material model and smoothed particle hydrodynamics. Cement and Concrete Research, 2017, 100, 263-274.	4.6	26
1179	Modelling and simulation of flow and agglomeration in deep veins valves using discrete multi physics. Computers in Biology and Medicine, 2017, 89, 96-103.	3.9	32
1180	A comprehensive study on the parameters setting in smoothed particle hydrodynamics (SPH) method applied to hydrodynamics problems. Computers and Geotechnics, 2017, 92, 77-95.	2.3	58
1181	Resilience: A New Paradigm of Nuclear Safety. , 2017, , .		5
1182	A hybrid DEM-SPH model for deformable landslide and its generated surge waves. Advances in Water Resources, 2017, 108, 256-276.	1.7	85
1183	Application of smoothed particle hydrodynamics for modeling the wave-moored floating breakwater interaction. Applied Ocean Research, 2017, 67, 277-290.	1.8	67

#	Article	IF	Citations
1184	Smoothed particle hydrodynamics with kernel gradient correction for modeling high velocity impact in two- and three-dimensional spaces. Engineering Analysis With Boundary Elements, 2017, 83, 141-157.	2.0	52
1185	SPH approach for simulating hydro-mechanical processes with large deformations and variable permeabilities. Acta Geotechnica, 2018, 13, 303.	2.9	10
1186	SPH Simulation of an Air-Assisted Atomizer Operating at High Pressure: Influence of Non-Newtonian Effects. , 2017, , .		0
1187	An algorithmic implementation of physical reflective boundary conditions in particle methods: Collision detection and response. Physics of Fluids, 2017, 29, .	1.6	9
1188	SPH Simulation of Strain Localisation in Geomaterials Using a Visco-Plastic Constitutive Model. , 2017, , .		8
1189	Proposition of stair climb of a drop using chemical wettability gradient. Physics of Fluids, 2017, 29, .	1.6	6
1190	A Mesh-Free Continuum Based Computational Approach to Modelling Rock Fracture. , 2017, , .		7
1191	A new two-step projection method in an ISPH model for free surface flow computations. Coastal Engineering, 2017, 127, 68-79.	1.7	12
1192	Numerical Study of the Flow over Broad-Crested Weirs by a Mesh-Free Method. Journal of Irrigation and Drainage Engineering - ASCE, 2017, 143, .	0.6	14
1194	Modelling of industrial particle and multiphase flows. Powder Technology, 2017, 314, 232-252.	2.1	60
1195	Numerical studies to propose a ghost particle removed SPH (GR-SPH) method. Applied Mathematical Modelling, 2017, 42, 71-99.	2.2	8
1196	Incompressible material point method for free surface flow. Journal of Computational Physics, 2017, 330, 92-110.	1.9	83
1197	The <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si86.gif" display="inline" overflow="scroll"><mml:mi>Î</mml:mi><mml:mi>p</mml:mi><mml:mi>l</mml:mi><mml:mi>u</mml:mi><mml:mi>s</mml:mi></mml:m model: Simple procedures for a further improvement of the SPH scheme. Computer Methods in Applied Mechanics and Engineering, 2017, 315, 25-49.	3.4	237
1198	Continuum modeling of rate-dependent granular flows in SPH. Computational Particle Mechanics, 2017, 4, 119-130.	1.5	16
1199	Simulation of violent water flows over a movable bed using smoothed particle hydrodynamics. Journal of Marine Science and Technology, 2017, 22, 270-287.	1.3	17
1200	A New Particle Generation Method for Arbitrary 2D Geometries in SPH Modeling. International Journal of Computational Methods, 2017, 14, 1750023.	0.8	5
1201	Application of particle simulation methods to composite materials: a review. Advanced Composite Materials, 2017, 26, 1-22.	1.0	16
1202	Multiphase SPH modeling of free surface flow in porous media with variable porosity. Computers and Geotechnics, 2017, 81, 239-248.	2.3	71

#	Article	IF	Citations
1203	DYVERSO: A Versatile Multiâ€Phase Positionâ€Based Fluids Solution for VFX. Computer Graphics Forum, 2017, 36, 32-44.	1.8	7
1204	High Order Direct Arbitrary-Lagrangianâ€"Eulerian (ALE) Finite Volume Schemes for Hyperbolic Systems on Unstructured Meshes. Archives of Computational Methods in Engineering, 2017, 24, 751-801.	6.0	14
1205	Novel trends in numerical modelling of plant food tissues and their morphological changes during drying â€" A review. Journal of Food Engineering, 2017, 194, 24-39.	2.7	27
1206	A truly incompressible smoothed particle hydrodynamics based on artificial compressibility method. Computer Physics Communications, 2017, 210, 10-28.	3.0	13
1207	SPH simulation of skipping stones. European Journal of Mechanics, B/Fluids, 2017, 61, 61-71.	1.2	15
1208	Numerical simulation of kinetic friction in the fracture process of rocks in the framework of General Particle Dynamics. Computers and Geotechnics, 2017, 83, 1-15.	2.3	23
1209	Numerical analysis of the hydrodynamic performance of perforated caissons using the revised smooth particle hydrodynamics method. Proceedings of the Institution of Mechanical Engineers Part M: Journal of Engineering for the Maritime Environment, 2017, 231, 768-781.	0.3	3
1210	SPH model for fluidâ€"structure interaction and its application to debris flow impact estimation. Landslides, 2017, 14, 917-928.	2.7	124
1211	A Coupled Model for Wave Run-up Simulation. East Asian Journal on Applied Mathematics, 2017, 7, 728-740.	0.4	3
1212	Secrets of Bermuda Triangle and Formation of Polymetallic Nodules. , 2017, , 81-138.		0
1213	Numerical simulation for the air entrainment of aerated flow with an improved multiphase SPH model. International Journal of Computational Fluid Dynamics, 2017, 31, 435-449.	0.5	14
1214	Virtual surgical bleeding simulation with navier-stokes equation and modified smooth particle hydrodynamics method. , 2017, , .		4
1215	APPLICATION OF SMOOTHED PARTICLE HYDRODYNAMICS (SPH) IN NEARSHORE MIXING: A COMPARISON TO LABORATORY DATA. Coastal Engineering Proceedings, 2017, , 16.	0.1	17
1216	DEVELOPMENT OF AN EXPLICIT SCHEME OF THE STABILIZED ISPH FOR LARGE SCALED TSUNAMI RUN-UP SIMULATION. Journal of Japan Society of Civil Engineers Ser A2 (Applied Mechanics (AM)), 2017, 73, I_397-I_404.	0.1	1
1217	Sensitivity analysis of truck tyre hydroplaning speed using FEA-SPH model. International Journal of Vehicle Systems Modelling and Testing, 2017, 12, 143.	0.1	7
1218	Developing a Hybrid Model and a Multiâ€Scale 3D Concept of Integrated Modelling Highâ€Temperature Processes. , 2017, , .		3
1220	Comparison of a Material Point Method and a Galerkin Meshfree Method for the Simulation of Cohesive-Frictional Materials. Materials, 2017, 10, 1150.	1.3	20
1221	Modelling of Violent Water Wave Propagation and Impact by Incompressible SPH with First-Order Consistent Kernel Interpolation Scheme. Water (Switzerland), 2017, 9, 400.	1.2	19

#	Article	IF	Citations
1222	SPH Modelling of Hydraulic Jump Oscillations at an Abrupt Drop. Water (Switzerland), 2017, 9, 790.	1.2	31
1223	SPHysics Simulation of Experimental Spillway Hydraulics. Water (Switzerland), 2017, 9, 973.	1.2	12
1224	Constitutive Models. , 2017, , 175-219.		3
1225	Rigid Body Sampling and Individual Time Stepping for Rigid-Fluid Coupling of Fluid Simulation. Scientific Programming, 2017, 2017, 1-11.	0.5	0
1226	A 3D Simulation of a Moving Solid in Viscous Free-Surface Flows by Coupling SPH and DEM. Mathematical Problems in Engineering, 2017, 2017, 1-7.	0.6	3
1227	Numerical Simulation of Hydrodynamics and Reaeration over a Stepped Spillway by the SPH Method. Water (Switzerland), 2017, 9, 565.	1.2	16
1228	Verification of a Total Lagrangian ANCF Solution Procedure for Fluidâ€"Structure Interaction Problems. Journal of Verification, Validation and Uncertainty Quantification, 2017, 2, .	0.3	7
1229	Visual Debugging of SPH Simulations. , 2017, , .		4
1230	The Material Point Method. , 2017, , 37-101.		39
1232	Modeling Sound Propagation Using the Corrective Smoothed Particle Method with an Acoustic Boundary Treatment Technique. Mathematical and Computational Applications, 2017, 22, 26.	0.7	3
1233	A Symmetry Particle Method towards Implicit Nonâ€‹Newtonian Fluids. Symmetry, 2017, 9, 26.	1.1	7
1234	SWE-SPHysics Simulation of Dam Break Flows at South-Gate Gorges Reservoir. Water (Switzerland), 2017, 9, 387.	1.2	27
1235	Modeling Free-surface Solitary Waves with Smoothed Particle Hydrodynamics. Periodica Polytechnica: Civil Engineering, 2017, , .	0.6	0
1236	Unconvergence of very-large-scale giant impact simulations. Publication of the Astronomical Society of Japan, 2017, 69, .	1.0	40
1238	A smoothed particle hydrodynamics model for electrostatic transport of charged lunar dust on the moon surface. Computational Particle Mechanics, 2018, 5, 539-551.	1.5	11
1239	SPH method with applications of oscillating wave surge converter. Ocean Engineering, 2018, 152, 273-285.	1.9	37
1240	A smoothed particle hydrodynamics (SPH) study on polydisperse sediment from technical activities on seabed. Physics of Fluids, 2018, 30, 023302.	1.6	12
1241	Pressure Boundaries for Implicit Incompressible SPH. ACM Transactions on Graphics, 2018, 37, 1-11.	4.9	46

#	Article	IF	Citations
1242	Modeling of Micromixers. Fluid Mechanics and Its Applications, 2018, , 127-184.	0.1	0
1243	Thin-Feature-Aware Transport-Velocity Formulation for SPH-Based Liquid Animation. IEEE Transactions on Multimedia, 2018, 20, 3033-3044.	5.2	1
1244	Micro- and Nanoflows. Fluid Mechanics and Its Applications, 2018, , .	0.1	5
1245	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.	3.4	24
1246	Smoothed Particle Hydrodynamics for the Rising Pattern of Oil Droplets. Journal of Fluids Engineering, Transactions of the ASME, 2018, 140, .	0.8	8
1247	A novel approach to surface tension modelling with the Finite Volume Particle Method. Computer Methods in Applied Mechanics and Engineering, 2018, 341, 409-428.	3.4	8
1248	Study of the Interaction of a Rigid Structure with a Free Surface. , 2018, , 119-134.		0
1249	Using Discrete Multi-Physics for studying the dynamics of emboli in flexible venous valves. Computers and Fluids, 2018, 166, 57-63.	1.3	34
1250	A novel numerical model to predict the morphological behavior of magnetic liquid marbles using coarse grained molecular dynamics concepts. Physics of Fluids, 2018, 30, .	1.6	5
1251	Incompressible SPH (ISPH) with fast Poisson solver on a GPU. Computer Physics Communications, 2018, 226, 81-103.	3.0	74
1252	Lagrangian particle method for compressible fluid dynamics. Journal of Computational Physics, 2018, 362, 1-19.	1.9	12
1253	A smoothed particle hydrodynamics framework for modelling multiphase interactions at meso-scale. Computational Mechanics, 2018, 62, 1071-1085.	2.2	16
1254	Smoothed Particle Hydrodynamics Simulation of an Air-Assisted Atomizer Operating at High Pressure: Influence of Non-Newtonian Effects. Journal of Fluids Engineering, Transactions of the ASME, 2018, 140, .	0.8	6
1255	Application of particle splitting method for both hydrostatic and hydrodynamic cases in SPH. Acta Mechanica Sinica/Lixue Xuebao, 2018, 34, 601-613.	1.5	12
1256	ISPH modeling of natural convection heat transfer with an analytical kernel renormalization factor. Meccanica, 2018, 53, 2299-2318.	1.2	41
1257	Finite Element and Smoothed Particle Hydrodynamics Modeling of Fluid–Structure Interaction Using a Unified Computational Methodology. Journal of Offshore Mechanics and Arctic Engineering, 2018, 140, .	0.6	3
1258	Three-Dimensional Modeling of Wave Interaction with Coastal Structures Using Navier–Stokes Equations. , 2018, , 919-943.		0
1259	Simulating coupled dynamics of a rigid-flexible multibody system and compressible fluid. Science China: Physics, Mechanics and Astronomy, 2018, 61, 1.	2.0	9

#	Article	IF	Citations
1260	SPH modeling of fluid-structure interaction. Journal of Hydrodynamics, 2018, 30, 62-69.	1.3	55
1261	An integrated numerical method for simulation of drifted objects trajectory under real-world tsunami waves. Applied Ocean Research, 2018, 73, 1-16.	1.8	9
1262	A new approach to fluidâ€"structure interaction within graphics hardware accelerated smooth particle hydrodynamics considering heterogeneous particle size distribution. Computational Particle Mechanics, 2018, 5, 387-409.	1.5	10
1263	Meshless Lagrangian SPH method applied to isothermal lid-driven cavity flow at low-Re numbers. Computational Particle Mechanics, 2018, 5, 467-475.	1.5	8
1264	Numerical Simulation of Thermal Cracking in Rocks Based on General Particle Dynamics. Journal of Engineering Mechanics - ASCE, 2018, 144, .	1.6	36
1265	Improved wall boundary conditions in the incompressible smoothed particle hydrodynamics method. International Journal of Numerical Methods for Heat and Fluid Flow, 2018, 28, 704-725.	1.6	35
1266	The weighted reconstruction of reproducing kernel particle method for one-dimensional shock wave problems. Ocean Engineering, 2018, 149, 325-340.	1.9	3
1267	Smoothed Particle Hydrodynamics: A consistent model for interfacial multiphase fluid flow simulations. Journal of Computational Physics, 2018, 358, 53-87.	1.9	56
1268	Neighbour lists for smoothed particle hydrodynamics on GPUs. Computer Physics Communications, 2018, 225, 140-148.	3.0	25
1269	Prediction of fluid flow through and jet formation from a high pressure nozzle using Smoothed Particle Hydrodynamics. Chemical Engineering Science, 2018, 178, 12-26.	1.9	13
1270	A numerical model of two-phase flow at the micro-scale using the volume-of-fluid method. Journal of Computational Physics, 2018, 357, 159-182.	1.9	77
1271	A technique to remove the tensile instability in weakly compressible SPH. Computational Mechanics, 2018, 62, 963-990.	2.2	24
1272	An improved SPH model for turbulent hydrodynamics of a 2D oscillating water chamber. Ocean Engineering, 2018, 150, 152-166.	1.9	51
1273	Improved Incompressible Material Point Method Based on Particle Density Correction. International Journal of Computational Methods, 2018, 15, 1850061.	0.8	11
1274	Multi-phase SPH model for simulation of erosion and scouring by means of the shields and Druckerâ€"Prager criteria.. Advances in Water Resources, 2018, 117, 98-114.	1.7	52
1275	3D SPH porous flow model for wave interaction with permeable structures. Applied Ocean Research, 2018, 75, 223-233.	1.8	24
1276	Prediction of air blast mitigation in an array of rigid obstacles using smoothed particle hydrodynamics. Physics of Fluids, 2018, 30, .	1.6	14
1277	A 1Dâ€"2D coupled SPH-SWE model applied to open channel flow simulations in complicated geometries. Advances in Water Resources, 2018, 115, 185-197.	1.7	10

#	Article	IF	Citations
1278	A non-reflective spectral wave maker for SPH modeling of nonlinear wave motion. Wave Motion, 2018, 79, 112-128.	1.0	30
1279	Prediction of Pressure Variation at an Elbow Subsequent to a Liquid Slug Impact by Using Smoothed Particle Hydrodynamics. Journal of Pressure Vessel Technology, Transactions of the ASME, 2018, 140, .	0.4	8
1280	Parametric design methodology for maximizing energy capture of a bottom-hinged flap-type WEC with medium wave resources. Renewable Energy, 2018, 126, 605-616.	4.3	13
1281	Wave interaction with a tethered buoy: SPH simulation and experimental validation. Ocean Engineering, 2018, 156, 306-317.	1.9	22
1282	SPH numerical investigation of the characteristics of an oscillating hydraulic jump at an abrupt drop. Journal of Hydrodynamics, 2018, 30, 106-113.	1.3	27
1283	Numerical modeling of density currents using an Incompressible Smoothed Particle Hydrodynamics method. Computers and Fluids, 2018, 167, 372-383.	1.3	13
1284	Snowflake Melting Simulation Using Smoothed Particle Hydrodynamics. Journal of Geophysical Research D: Atmospheres, 2018, 123, 1811-1825.	1.2	26
1285	Adaptively stepped SPH for fluid animation based on asynchronous time integration. Neural Computing and Applications, 2018, 29, 33-42.	3.2	4
1286	Flow Modeling in High-Pressure Die-Casting Processes Using SPH Model. International Journal of Metalcasting, 2018, 12, 97-105.	1.5	11
1287	An augmented incompressible material point method for modeling liquid sloshing problems. International Journal of Mechanics and Materials in Design, 2018, 14, 141-155.	1.7	13
1288	An improved <scp>SPH</scp> model for multiphase flows with large density ratios. International Journal for Numerical Methods in Fluids, 2018, 86, 167-184.	0.9	14
1289	Three-dimensional remeshed smoothed particle hydrodynamics for the simulation of isotropic turbulence. International Journal for Numerical Methods in Fluids, 2018, 86, 1-19.	0.9	10
1290	A partitioned fully explicit Lagrangian finite element method for highly nonlinear fluid–structure interaction problems. International Journal for Numerical Methods in Engineering, 2018, 113, 43-64.	1.5	25
1291	Coupled finite particle method with a modified particle shifting technology. International Journal for Numerical Methods in Engineering, 2018, 113, 179-207.	1.5	63
1292	Forces during front crawl swimming at different stroke rates. Sports Engineering, 2018, 21, 63-73.	0.5	21
1293	Simulations for soil explosion and its effects on structures using SPH method. International Journal of Impact Engineering, 2018, 112, 41-51.	2.4	27
1294	Modeling the motion of the cooling lubricant in drilling processes using the finite volume and the smoothed particle hydrodynamics methods. Computer Methods in Applied Mechanics and Engineering, 2018, 329, 369-395.	3.4	19
1295	Dynamic capillary phenomena using Incompressible SPH. Chemical Engineering Science, 2018, 176, 192-204.	1.9	23

#	ARTICLE	IF	CITATIONS
1296	Moving particle semi-implicit method with improved pressures stability properties. Journal of Hydroinformatics, 2018, 20, 1268-1285.	1.1	3
1297	A New Revised Scheme for SPH. International Journal of Computational Methods, 2018, 15, 1850035.	0.8	1
1298	Application of a weakly compressible smoothed particle hydrodynamics multi-phase model to non-cohesive embankment breaching due to flow overtopping. Frontiers of Structural and Civil Engineering, 2018, 12, 412-424.	1.2	3
1299	DEM-SPH study of molten slag trickle flow in coke bed. Chemical Engineering Science, 2018, 175, 25-39.	1.9	30
1300	Smoothed particle hydrodynamics simulation for injection molding flow of short fiber-reinforced polymer composites. Journal of Composite Materials, 2018, 52, 1531-1539.	1.2	6
1301	Modelling with a meshfree approach the cornea-aqueous humor interaction during the air puff test. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 77, 205-216.	1.5	25
1302	3D Simulation of Drop Impact on Dry Surface Using SPH Method. International Journal of Computational Methods, 2018, 15, 1850011.	0.8	20
1303	Smoothed Particle Hydrodynamics Method and Its Applications to Cardiovascular Flow Modeling. , 2018, , 203-219.		6
1304	An integrated particle model for fluid–particle–structure interaction problems with free-surface flow and structural failure. Journal of Fluids and Structures, 2018, 76, 166-184.	1.5	23
1305	Modeling of orthogonal cutting process of A2024-T351 with an improved SPH method. International Journal of Advanced Manufacturing Technology, 2018, 95, 905-919.	1.5	23
1306	A hybrid Lagrangian Voronoi–SPH scheme. Computational Particle Mechanics, 2018, 5, 345-354.	1.5	6
1307	Application of the SPH Method to Breaking and Undular Tidal Bores on a Movable Bed. Journal of Waterway, Port, Coastal and Ocean Engineering, 2018, 144, .	0.5	14
1308	GIS Enabled SPH-Soil Modeling for the Post-Failure Flow of Landslides Under Seismic Loadings. International Journal of Computational Methods, 2018, 15, 1850046.	0.8	8
1309	A thick shell model based on reproducing kernel particle method and its application in geometrically nonlinear analysis. Computational Mechanics, 2018, 62, 309-321.	2.2	26
1310	A hybrid stabilization technique for simulating water wave – Structure interaction by incompressible Smoothed Particle Hydrodynamics (ISPH) method. Journal of Hydro-Environment Research, 2018, 18, 77-94.	1.0	13
1311	Numerical analysis of wet plastic particle separation using a coupled DEM-SPH method. Powder Technology, 2018, 325, 218-227.	2.1	28
1312	Numerical simulation of reactive polymer flow during rotational molding using smoothed particle hydrodynamics method and experimental verification. International Journal of Material Forming, 2018, 11, 583-592.	0.9	4
1313	Advances in numerical ditching simulation of flexible aircraft models. International Journal of Crashworthiness, 2018, 23, 236-251.	1.1	14

#	Article	IF	Citations
1314	On survivability of asymmetric wave-energy converters in extreme waves. Renewable Energy, 2018, 119, 891-909.	4.3	32
1315	Unified particle method with application to the 2013 Huangping landslides and tsunamis event of China. E3S Web of Conferences, 2018, 53, 03018.	0.2	0
1316	Fluid-fluid Interaction Study of Different Density and Viscosity Using Smoothed Particle Hydrodynamics Method. IOP Conference Series: Materials Science and Engineering, 2018, 453, 012048.	0.3	0
1317	An Integrated Method of FVM and SPH for Treating Melting Process of Quartz Ingot. , 2018, , .		1
1318	Material point method and smoothed particle hydrodynamics simulations of fluid flow problems: a comparative study. Progress in Computational Fluid Dynamics, 2018, 18, 1.	0.1	8
1319	Transient Simulation of Cooling-Lubricant Flow for Deep-Hole Drilling-Processes. Procedia CIRP, 2018, 77, 78-81.	1.0	6
1320	A Hybrid Analytics Paradigm Combining Physics-Based Modeling and Data-Driven Modeling to Accelerate Incompressible Flow Solvers. Fluids, 2018, 3, 50.	0.8	10
1321	Validasi Gerakan Benda Terapung Menggunakan Metode Smoothed Particle Hydrodynamics. Kapal, 2018, 15, 38-43.	0.1	2
1322	Interaction of the blood components and plaque in a stenotic coronary artery. Artery Research, 2018, 24, 47.	0.3	7
1323	Water entry of decelerating spheres simulations using improved ISPH method. Journal of Hydrodynamics, 2018, 30, 1120-1133.	1.3	22
1324	Numerical simulation for fluid droplet impact on discrete particles with coupled SPH-DEM method. International Journal of Numerical Methods for Heat and Fluid Flow, 2018, 28, 2581-2605.	1.6	4
1325	SPH Simulation of Wave Scattering by a Heaving Submerged Horizontal Plate. International Journal of Ocean and Coastal Engineering, 2018, 01, .	0.3	9
1326	Evaluation of the Solid Boundary Treatment Methods in SPH. International Journal of Ocean and Coastal Engineering, 2018, 01, .	0.3	6
1327	Large deformation simulations of geomaterials using moving particle semi-implicit method. Journal of Rock Mechanics and Geotechnical Engineering, 2018, 10, 1122-1132.	3.7	9
1328	Standard WCSPH for Free-Surface Multi-Phase Flows with a Large Density Ratio. International Journal of Ocean and Coastal Engineering, 2018, 01, 1840001.	0.3	5
1329	Application of SPH-FE method for fluid-structure interaction using immersed boundary method. Engineering Computations, 2018, 35, 2802-2824.	0.7	7
1330	Smoothed particle hydrodynamics simulation of a laser pulse impact onto a liquid metal droplet. PLoS ONE, 2018, 13, e0204125.	1.1	9
1331	An Accurate SPH Scheme for Dynamic Fragmentation modelling. EPJ Web of Conferences, 2018, 183, 01030.	0.1	6

#	Article	IF	Citations
1332	A Numerical Landslide-Tsunami Hazard Assessment Technique Applied on Hypothetical Scenarios at Es VedrÃ, Offshore Ibiza. Journal of Marine Science and Engineering, 2018, 6, 111.	1.2	23
1333	The layout of submerged horizontal plate breakwater (SHPB) with respect to the tidal-level variation. Coastal Engineering Journal, 2018, 60, 280-298.	0.7	17
1334	Numerical modeling of sediment transport based on unsteady and steady flows by incompressible smoothed particle hydrodynamics method. Journal of Hydrodynamics, 2018, 30, 928-942.	1.3	10
1335	Research on the Suppression Effect Law of Different Baffle Positions on Liquid Sloshing in Spherical Tank. , 2018, , .		3
1336	A Mesh-Free Particle Method for Simulation of Mobile-Bed Behavior Induced by Dam Break. Applied Sciences (Switzerland), 2018, 8, 1070.	1.3	4
1337	Comparing the force due to the Lennard-Jones potential and the Coulomb force in the SPH Method. Journal of Ocean Engineering and Science, 2018, 3, 310-315.	1.7	3
1338	Ray Tracer based rendering solution for large scale fluid rendering. Computers and Graphics, 2018, 77, 65-79.	1.4	4
1339	A well balanced diffuse interface method for complex nonhydrostatic free surface flows. Computers and Fluids, 2018, 175, 180-198.	1.3	24
1340	Two-phase SPH simulation of vertical water entry of a two-dimensional structure. Journal of Hydrodynamics, 2018, 30, 841-850.	1.3	5
1341	Back-Spalling process of an Al2O3 ceramic plate subjected to an impact of steel ball. International Journal of Impact Engineering, 2018, 122, 451-471.	2.4	16
1342	Simulation of a laboratory-scale experiment for wave propagation and interaction with a structure of undersea topography near a nuclear power plant using a divergence-free SPH. Annals of Nuclear Energy, 2018, 122, 340-351.	0.9	4
1343	Generation of regular and focused waves by using an internal wave maker in a CIP-based model. Ocean Engineering, 2018, 167, 334-347.	1.9	19
1344	A Smoothed Particle Hydrodynamics approach for thermo-capillary flows. Computers and Fluids, 2018, 176, 1-19.	1.3	78
1345	Multi-phase smoothed particle hydrodynamics modeling of supercooled large droplet dynamics for in-flight icing conditions. Aerospace Science and Technology, 2018, 82-83, 252-261.	2.5	7
1346	Integration of DSM and SPH to Model Tailings Dam Failure Run-Out Slurry Routing Across 3D Real Terrain. Water (Switzerland), 2018, 10, 1087.	1.2	19
1347	Inclusion of incremental damage breakage of particles and slurry rheology into a particle scale multiphase model of a SAG mill. Minerals Engineering, 2018, 128, 92-105.	1.8	14
1348	Highlighting numerical insights of an efficient SPH method. Applied Mathematics and Computation, 2018, 339, 899-915.	1.4	11
1349	NUMERICAL SIMULATION BASED ON SPH-DEM ANALYSIS FOR PULL-OUT EXPERIMENT OF MASONRY RETAINING WALL. Journal of Japan Society of Civil Engineers Ser A1 (Structural Engineering &) Tj ETQq1 1 0.784314 rgBT /Overlock 10		

#	Article	IF	Citations
1350	Investigating mixing and emptying for aqueous liquid content from the stomach using a coupled biomechanical-SPH model. Food and Function, 2018, 9, 3202-3219.	2.1	32
1351	SPH numerical investigation of characteristics of hydraulic jumps. Environmental Fluid Mechanics, 2018, 18, 849-870.	0.7	26
1352	Coupling methodology for smoothed particle hydrodynamics modelling of non-linear wave-structure interactions. Coastal Engineering, 2018, 138, 184-198.	1.7	60
1353	Comparison of the μ(I) and HBP models for simulating granular media. International Journal of Modern Physics C, 2018, 29, 1850050.	0.8	5
1354	New massively parallel scheme for Incompressible Smoothed Particle Hydrodynamics (ISPH) for highly nonlinear and distorted flow. Computer Physics Communications, 2018, 233, 16-28.	3.0	45
1356	Modeling surface tension of a two‐dimensional droplet using smoothed particle hydrodynamics. International Journal for Numerical Methods in Fluids, 2018, 88, 334-346.	0.9	6
1357	Migration of Gas in Water Saturated Clays by Coupled Hydraulic-Mechanical Model. Geofluids, 2018, 2018, 1-25.	0.3	11
1358	Cracks and Potholes in Vertisols: Characteristics, Occurrence, and Management. Advances in Agronomy, 2018, , 93-159.	2.4	27
1359	A Lagrangian-based SPH-DEM model for fluid–solid interaction with free surface flow in two dimensions. Applied Mathematical Modelling, 2018, 62, 436-460.	2.2	49
1360	A SPH numerical wave flume with non-reflective open boundary conditions. Ocean Engineering, 2018, 163, 483-501.	1.9	29
1361	Pseudo-fluid Particles for Fluid-rigid Body Coupling in SPH. KSCE Journal of Civil Engineering, 2018, 22, 4194-4204.	0.9	1
1362	Small-scale surface details simulation using divergence-free SPH. Journal of Visual Languages and Computing, 2018, 48, 91-100.	1.8	2
1363	Meshfree modeling of a fluid‐particle two‐phase flow with an improved SPH method. International Journal for Numerical Methods in Engineering, 2018, 116, 530-569.	1.5	53
1364	Numerical simulation of a damaged ship cabin flooding in transversal waves with Smoothed Particle Hydrodynamics method. Ocean Engineering, 2018, 165, 336-352.	1.9	47
1365	Smoothed particle hydrodynamics and modal reduction for efficient fluid–structure interaction. Mathematical and Computer Modelling of Dynamical Systems, 2018, 24, 401-425.	1.4	2
1366	Energy balance during generation, propagation and absorption of gravity waves through the δ-LES-SPH model. Coastal Engineering, 2018, 140, 355-370.	1.7	27
1367	Computational modeling of nonlinear propellant sloshing for spacecraft AOCS applications. CEAS Space Journal, 2018, 10, 441-451.	1.1	1
1368	Study on SPH Viscosity Term Formulations. Applied Sciences (Switzerland), 2018, 8, 249.	1.3	16

#	ARTICLE	IF	CITATIONS
1369	Numerical simulation of Laser Fusion Additive Manufacturing processes using the SPH method. Computer Methods in Applied Mechanics and Engineering, 2018, 341, 163-187.	3.4	104
1370	A Symmetric Particle-Based Simulation Scheme towards Large Scale Diffuse Fluids. Symmetry, 2018, 10, 86.	1.1	3
1371	WCSPH with Limiting Viscosity for Modeling Landslide Hazard at the Slopes of Artificial Reservoir. Water (Switzerland), 2018, 10, 515.	1.2	30
1372	Simulation of Fluid and Complex Obstacle Coupling Based on Narrow Band FLIP Method. Water (Switzerland), 2018, 10, 811.	1.2	1
1373	Coupled finite particle method for simulations of wave and structure interaction. Coastal Engineering, 2018, 140, 147-160.	1.7	30
1374	ISPH numerical simulation of tsunami generation by submarine landslides. Arabian Journal of Geosciences, 2018, 11, 1.	0.6	5
1376	Extended Algorithms. , 2018, , 111-153.		1
1377	A GPU-based coupled SPH-DEM method for particle-fluid flow with free surfaces. Powder Technology, 2018, 338, 548-562.	2.1	70
1378	Accuracy analysis of SPH for flow in a model extruder with a kneading element. Chemical Engineering Science, 2018, 187, 256-268.	1.9	27
1379	Multidisciplinary topology optimization for reduction of sloshing in aircraft fuel tanks based on SPH simulation. Structural and Multidisciplinary Optimization, 2018, 58, 1719-1736.	1.7	12
1380	A Simplified SPH Method for Simulation of Free Surface Flows. Iranian Journal of Science and Technology - Transactions of Civil Engineering, 2018, 42, 245-258.	1.0	3
1381	Modeling of emerged semi-circular breakwater performance against solitary waves using SPH method. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2018, 40, 1.	0.8	5
1382	Accuracy and stability enhancements in the incompressible finite-volume-particle method for multiphase flow simulations. Computer Physics Communications, 2018, 230, 59-69.	3.0	17
1383	SPH Numerical Modeling for the Wave–Thin Structure Interaction. China Ocean Engineering, 2018, 32, 157-168.	0.6	7
1384	Detailed Modeling of Melt Dripping in Coke Bed by DEM – SPH. ISIJ International, 2018, 58, 282-291.	0.6	26
1385	MLS pressure boundaries for divergence-free and viscous SPH fluids. Computers and Graphics, 2018, 76, 37-46.	1.4	28
1386	Hydrodynamic analysis and optimization of the Titan submarine via the SPH and Finite–Volume methods. Computers and Fluids, 2018, 174, 271-282.	1.3	21
1387	Highly efficient computation of Finite-Time Lyapunov Exponents (FTLE) on GPUs based on three-dimensional SPH datasets. Computers and Fluids, 2018, 175, 129-141.	1.3	11

#	Article	IF	Citations
1388	A comparison of two ways of modelling free-slip boundary condition in the SPH method. AIP Conference Proceedings, 2018, , .	0.3	0
1389	A versatile algorithm for the treatment of open boundary conditions in Smoothed particle hydrodynamics GPU models. Computer Methods in Applied Mechanics and Engineering, 2018, 342, 604-624.	3.4	100
1390	Solving 2-D highly nonlinear free-surface problems with an improved smoothed particle hydrodynamics method. Marine Systems and Ocean Technology, 2018, 13, 74-86.	0.5	6
1391	Multiphase smoothed particle hydrodynamics approach for modeling soilâ€"water interactions. Advances in Water Resources, 2018, 121, 189-205.	1.7	16
1392	Chaos in breaking waves. Coastal Engineering, 2018, 140, 272-291.	1.7	25
1393	Investigation of explosive welding through whole process modeling using a density adaptive SPH method. Journal of Manufacturing Processes, 2018, 35, 169-189.	2.8	45
1394	A multi-scale model for simulating liquid-fabric interactions. ACM Transactions on Graphics, 2018, 37, 1-16.	4.9	52
1395	Long duration SPH simulations of sloshing in tanks with a low fill ratio and high stretching. Computers and Fluids, 2018, 174, 179-199.	1.3	52
1396	GPU-accelerated 3-D Finite Volume Particle Method. Computers and Fluids, 2018, 171, 79-93.	1.3	19
1397	An accurate and stable multiphase moving particle semiâ€"implicit method based on a corrective matrix for all particle interaction models. International Journal for Numerical Methods in Engineering, 2018, 115, 1287-1314.	1.5	77
1398	What can we learn from large bodies moving in a turbulent fluid?. European Journal of Mechanics, B/Fluids, 2018, 72, 519-530.	1.2	3
1399	Contact-angle implementation in multiphase smoothed particle hydrodynamics simulations. Journal of Adhesion Science and Technology, 2018, 32, 2128-2149.	1.4	1
1400	Preliminary effort in developing the smoothed material point method for impact. Computational Particle Mechanics, 2019, 6, 45-53.	1.5	6
1401	An optimal particle setup method with Centroidal Voronoi Particle dynamics. Computer Physics Communications, 2019, 234, 72-92.	3.0	15
1402	Fast and accurate SPH modelling of 3D complex wall boundaries in viscous and non viscous flows. Computer Physics Communications, 2019, 234, 93-111.	3.0	51
1403	Development of an SPH-based method to simulate the progressive failure of cohesive soil slope. Environmental Earth Sciences, 2019, 78, 1.	1.3	10
1404	Grid-Free Modelling Based on the Finite Particle Method for Incompressible Viscous Flow Problems. Shock and Vibration, 2019, 2019, 1-13.	0.3	0
1405	Incompressible Fluids Simulation by Relaxing the Density-Invariant Condition in a Marine Simulator. Mathematical Problems in Engineering, 2019, 2019, 1-11.	0.6	2

#	Article	IF	Citations
1406	A fully Lagrangian method for fluidâ€"structure interaction problems with deformable floating structure. Journal of Fluids and Structures, 2019, 90, 379-395.	1.5	21
1407	Dynamic hydraulic jump and retrograde sedimentation in an open channel induced by sediment supply: experimental study and SPH simulation. Journal of Mountain Science, 2019, 16, 1913-1927.	0.8	9
1408	Rapid Simulation of 3D Liquid Sloshing in the Lunar Soft-Landing Spacecraft. AIAA Journal, 2019, 57, 4504-4513.	1.5	6
1409	Lagrangian simulation of three-dimensional macro-scale melting based on enthalpy method. Computers and Fluids, 2019, 190, 168-177.	1.3	14
1410	Application Research of an Efficient and Stable Boundary Processing Method for the SPH Method. Water (Switzerland), 2019, 11, 1110.	1.2	3
1411	Smoothed Particle Hydrodynamics Simulation of Oil-Jet Gear Interaction1. Journal of Tribology, 2019, 141, .	1.0	18
1412	MR-WC-MPS: A Multi-Resolution WC-MPS Method for Simulation of Free-Surface Flows. Water (Switzerland), 2019, 11, 1349.	1.2	6
1413	Improvement of a projection-based particle method in free-surface flows by improved Laplacian model and stabilization techniques. Computers and Fluids, 2019, 191, 104235.	1.3	14
1414	A conservative and consistent Lagrangian gradient smoothing method for earthquake-induced landslide simulation. Engineering Geology, 2019, 260, 105226.	2.9	18
1415	A conservative and consistent Lagrangian gradient smoothing method for simulating free surface flows in hydrodynamics. Computational Particle Mechanics, 2019, 6, 781-801.	1.5	10
1416	The truncation and stabilization error in multiphase moving particle semi-implicit method based on corrective matrix: Which is dominant?. Computers and Fluids, 2019, 190, 254-273.	1.3	53
1417	Modified two-phase dilatancy SPH model for saturated sand column collapse simulations. Engineering Geology, 2019, 260, 105219.	2.9	16
1418	Temporal and Topographic Source Effects on Tsunami Generation. Journal of Geophysical Research: Oceans, 2019, 124, 5270-5288.	1.0	8
1419	Meshfree simulation of metal cutting: an updated Lagrangian approach with dynamic refinement. International Journal of Mechanical Sciences, 2019, 160, 451-466.	3.6	22
1420	A local Lagrangian gradient smoothing method for fluids and fluid-like solids: A novel particle-like method. Engineering Analysis With Boundary Elements, 2019, 107, 96-114.	2.0	18
1421	Pressure evaluation during dam break using weakly compressible SPH. EPJ Web of Conferences, 2019, 213, 02030.	0.1	3
1422	Meshfree moving least squares method for nonlinear variable-order time fractional 2D telegraph equation involving Mittagâ€"Leffler non-singular kernel. Chaos, Solitons and Fractals, 2019, 127, 389-399.	2.5	41
1423	Experimental Validation of Single- and Two-Phase Smoothed Particle Hydrodynamics on Sloshing in a Prismatic Tank. Journal of Marine Science and Engineering, 2019, 7, 247.	1.2	17

#	Article	IF	Citations
1424	Numerical study of wave run-up and overtopping considering bed roughness using SPH-GPU. Coastal Engineering Journal, 2019, 61, 502-519.	0.7	9
1425	Smoothed particle hydrodynamics modeling of industrial processes involving heat transfer. Applied Energy, 2019, 252, 113441.	5.1	14
1426	Rheometry of dense granular collapse on inclined planes. Granular Matter, 2019, 21, 1.	1.1	8
1427	Smoothed Particle Hydrodynamics modelling of fresh and salt water dynamics in porous media. Journal of Hydrology, 2019, 576, 370-380.	2.3	13
1428	A kernel gradient-free SPH method with iterative particle shifting technology for modeling low-Reynolds flows around airfoils. Engineering Analysis With Boundary Elements, 2019, 106, 571-587.	2.0	47
1429	A New Hybrid SPHâ€"FEM Model to Evaluate Seismic Response of TSD Equipped-Structures. Journal of Earthquake and Tsunami, 2019, 13, .	0.7	9
1430	SPH simulation of surge waves generated by aerial and submarine landslides. Journal of Physics: Conference Series, 2019, 1245, 012062.	0.3	1
1431	Numerical Simulation of the water-exit process of the missile based on Moving Particle Semi-Implicit method. Journal of Physics: Conference Series, 2019, 1300, 012064.	0.3	0
1432	A Numerical Study of Fluid Flow in a Vertical Slot Fishway with the Smoothed Particle Hydrodynamics Method. Water (Switzerland), 2019, 11, 1928.	1.2	11
1433	Implementation of the moving particle semi-implicit method for free-surface flows on GPU clusters. Computer Physics Communications, 2019, 244, 13-24.	3.0	9
1434	Large eddy simulations of multiphase flows past a finite plate near a free surface. Ocean Engineering, 2019, 188, 106342.	1.9	7
1435	Numerical simulations of sloshing flows with an elastic baffle using a SPH-SPIM coupled method. Applied Ocean Research, 2019, 93, 101950.	1.8	31
1436	Towards real-time simulation of physically realistic pressure applied to submerged bodies using explicit and semi-implicit SPH algorithms. , 2019, , .		1
1437	Numerical Analysis of Interfacial Morphology and Dispersion Behavior of High-Temperature Melts. Journal of MMIJ, 2019, 135, 71-82.	0.4	1
1438	Smoothed particle hydrodynamics (SPH) for complex fluid flows: Recent developments in methodology and applications. Physics of Fluids, 2019, 31, .	1.6	241
1439	Cylindrical Smoothed Particle Hydrodynamics Simulations of Water Entry. Journal of Fluids Engineering, Transactions of the ASME, 2019, 141, .	0.8	24
1440	A Lagrangian approach for computational acoustics with particle-based method. Engineering Analysis With Boundary Elements, 2019, 108, 459-471.	2.0	2
1441	Probabilistic analysis of post-failure behavior of soil slopes using random smoothed particle hydrodynamics. Engineering Geology, 2019, 261, 105266.	2.9	39

#	Article	IF	Citations
1442	Numerical Study on the Collapse Behaviors of Shallow Tunnel Faces under Open-Face Excavation Condition Using Mesh-Free Method. Journal of Engineering Mechanics - ASCE, 2019, 145, .	1.6	13
1443	Meshfree Particle Method Using Molecular Dynamics Techniques for Simulating Viscous Compressible Flows. Journal of Physics: Conference Series, 2019, 1250, 012008.	0.3	1
1444	Explicit incompressible SPH algorithm for modelling channel and lid-driven flows. SN Applied Sciences, 2019, 1, 1.	1.5	8
1445	Smooth particle hydrodynamics for the analysis of stresses in soil around Jack-in Pile. European Journal of Environmental and Civil Engineering, 2022, 26, 94-120.	1.0	6
1446	Hydro-meteorological risk assessment methods and management by nature-based solutions. Science of the Total Environment, 2019, 696, 133936.	3.9	76
1447	A Numerical study on the hydrodynamic performance of an immersed foil: Uncertainty quantification of RANS and SPH methods. Computers and Fluids, 2019, 191, 104248.	1.3	5
1448	Granular surface waves interaction across phases modeled by mesh-free method. Powder Technology, 2019, 355, 226-241.	2.1	5
1449	Cooperative Design, Visualization, and Engineering. Lecture Notes in Computer Science, 2019, , .	1.0	0
1450	Numerical simulations of surf zone wave dynamics using Smoothed Particle Hydrodynamics. Ocean Modelling, 2019, 144, 101481.	1.0	38
1451	Method for Predicting the Liquid-Sloshing Characteristics of a Microsatellite Propulsion System. International Journal of Aerospace Engineering, 2019, 2019, 1-17.	0.5	1
1452	Influence of surface tension on the molten pool morphology in laser melting. International Journal of Thermal Sciences, 2019, 146, 106075.	2.6	35
1453	Application of SPH-DEM coupled method to failure simulation of a caisson type composite breakwater during a tsunami. Soil Dynamics and Earthquake Engineering, 2019, 127, 105806.	1.9	10
1455	Particle Method Simulation for Formation and Flow of Cold Flakes in High-Pressure Die Casting. International Journal of Metalcasting, 2019, 13, 897-904.	1.5	4
1456	A Comparative Study of Two Different Density Estimation Techniques for Multi-Phase Flow Simulations Using SPH. International Journal for Computational Methods in Engineering Science and Mechanics, 2019, 20, 29-47.	1.4	6
1457	Interlinked SPH Pressure Solvers for Strong Fluid-Rigid Coupling. ACM Transactions on Graphics, 2019, 38, 1-13.	4.9	53
1458	A particle-based free surface detection method and its application to the surface tension effects simulation in smoothed particle hydrodynamics (SPH). Journal of Computational Physics, 2019, 383, 196-206.	1.9	23
1459	Viscous fingering phenomena in the early stage of polymer membrane formation. Journal of Fluid Mechanics, 2019, 864, 97-140.	1.4	65
1460	SPH-Based Analysis on the Lateral Response of Pipe Culverts in the Flowing Process of Liquefied Sand. Mathematical Problems in Engineering, 2019, 2019, 1-12.	0.6	3

#	Article	IF	Citations
1461	A multiphase smoothed particle hydrodynamics model with lower numerical diffusion. Journal of Computational Physics, 2019, 382, 177-201.	1.9	32
1462	A model for surface tension in the meshless finite volume particle method without spurious velocity. Computers and Fluids, 2019, 179, 521-532.	1.3	3
1463	Numerical Simulation of Hydraulic Jumps. Part 2: Recent Results and Future Outlook. Water (Switzerland), 2019, 11, 28.	1.2	46
1464	Predicting the damage on a target plate produced by hypervelocity impact using a decoupled finite particle method. Engineering Analysis With Boundary Elements, 2019, 98, 110-125.	2.0	21
1465	Wave-induced real-fluid effects in marine energy converters: Review and application to OWC devices. Renewable and Sustainable Energy Reviews, 2019, 111, 535-549.	8.2	29
1466	An Eulerianâ€"Lagrangian mixed discrete least squares meshfree method for incompressible multiphase flow problems. Applied Mathematical Modelling, 2019, 76, 193-224.	2.2	6
1467	LOQUAT: an open-source GPU-accelerated SPH solver for geotechnical modeling. Acta Geotechnica, 2019, 14, 1269-1287.	2.9	76
1468	A multiphase SPH framework for supercooled large droplets dynamics. International Journal of Numerical Methods for Heat and Fluid Flow, 2019, 29, 2434-2449.	1.6	7
1469	Local uniform stencil (LUST) boundary condition for arbitrary 3-D boundaries in parallel smoothed particle hydrodynamics (SPH) models. Computers and Fluids, 2019, 190, 346-361.	1.3	109
1470	Variable spaced particle in meshâ€free method to handle waveâ€floating body interactions. International Journal for Numerical Methods in Fluids, 2019, 91, 263-286.	0.9	9
1471	Potential application of submerged horizontal plate as a wave energy breakwater: A 2D study using the WCSPH method. Ocean Engineering, 2019, 185, 27-46.	1.9	39
1472	An efficient hyperbolic relaxation system for dispersive non-hydrostatic water waves and its solution with high order discontinuous Galerkin schemes. Journal of Computational Physics, 2019, 394, 385-416.	1.9	30
1473	Convergence study and optimal weight functions of an explicit particle method for the incompressible Navierâ€"Stokes equations. Computational Particle Mechanics, 2019, 6, 671-694.	1.5	6
1474	A robust sharp interface method for SPH. Engineering Analysis With Boundary Elements, 2019, 106, 275-285.	2.0	7
1475	Modeling heat transfer subject to inhomogeneous Neumann boundary conditions by smoothed particle hydrodynamics and peridynamics. International Journal of Heat and Mass Transfer, 2019, 139, 948-962.	2.5	19
1476	Experimental Validation of Smoothed Particle Hydrodynamics on Generation and Propagation of Water Waves. Journal of Marine Science and Engineering, 2019, 7, 17.	1.2	11
1477	SPH Simulation on the Coupled Failure of Slope-Building Adjacent to Water Triggered by the Rapid Drawdown of Water Level. Mathematical Problems in Engineering, 2019, 2019, 1-12.	0.6	2
1478	Dam spillways and the SPH method: two case studies in Portugal. Journal of Applied Water Engineering and Research, 2019, 7, 228-245.	1.0	8

#	Article	IF	Citations
1479	An improved particle shifting technique for incompressible smoothed particle hydrodynamics methods. International Journal for Numerical Methods in Fluids, 2019, 90, 603-631.	0.9	14
1480	Weakly compressible SPH simulation of cnoidal waves with strong plunging breakers. Ocean Dynamics, 2019, 69, 657-678.	0.9	3
1481	Addition of dynamic mooring line force based on lumped-mass method in SPH. Ocean Engineering, 2019, 182, 90-101.	1.9	12
1482	Deformation and rupture of compound cells under shear: A discrete multiphysics study. Physics of Fluids, 2019, 31, .	1.6	27
1483	Three-dimensional modeling of granular flow impact on rigid and deformable structures. Computers and Geotechnics, 2019, 112, 257-271.	2.3	39
1484	Updated Lagrangian Particle Hydrodynamics (ULPH) modeling and simulation of multiphase flows. Journal of Computational Physics, 2019, 393, 406-437.	1.9	31
1485	Smoothed particle hydrodynamics simulation of granular system under cyclic compressions. Powder Technology, 2019, 353, 84-97.	2.1	4
1486	DFIB-SPH study of submerged horizontal cylinder oscillated close to the free surface of a viscous liquid. Fluid Dynamics Research, 2019, 51, 035506.	0.6	0
1487	A combined Lagrangian and Eulerian method for simulating the melting process of quartz glass. Engineering Analysis With Boundary Elements, 2019, 105, 312-320.	2.0	1
1488	Study on one-dimensional softening with localization via integrated MPM and SPH. Computational Particle Mechanics, 2019, 6, 629-636.	1.5	3
1489	Modeling of wave energy converters by GPUSPH and Project Chrono. Ocean Engineering, 2019, 183, 332-349.	1.9	20
1490	Modeling 3D non-Newtonian solidâ€"liquid flows with a free-surface using DEM-MPS. Engineering Analysis With Boundary Elements, 2019, 105, 70-77.	2.0	16
1491	Numerical simulation of debris-flow behavior based on the SPH method incorporating the Herschel-Bulkley-Papanastasiou rheology model. Engineering Geology, 2019, 255, 26-36.	2.9	65
1492	Using two-way coupled DEM-SPH to model an industrial scale Stirred Media Detritor. Minerals Engineering, 2019, 137, 259-276.	1.8	19
1493	A weakly compressible SPH method with WENO reconstruction. Journal of Computational Physics, 2019, 392, 1-18.	1.9	43
1494	Numerical and experimental investigation of damping in a dam-break problem with fluid-structure interaction. Journal of Zhejiang University: Science A, 2019, 20, 258-271.	1.3	15
1495	Modeling of granular column collapses with μ(I) rheology using smoothed particle hydrodynamic method. Granular Matter, 2019, 21, 1.	1.1	10
1496	Numerical prediction of air-assisted primary atomization using Smoothed Particle Hydrodynamics. International Journal of Multiphase Flow, 2019, 114, 303-315.	1.6	27

#	ARTICLE	IF	CITATIONS
1497	Investigation of Submerged Soil Excavation by High-Velocity Water Jet Using Two-Fluid Smoothed Particle Hydrodynamics Method. Journal of Hydraulic Engineering, 2019, 145, .	0.7	11
1498	SPH-BEM simulation of underwater explosion and bubble dynamics near rigid wall. Science China Technological Sciences, 2019, 62, 1082-1093.	2.0	17
1499	Mixing process of two-phase non-Newtonian fluids in 2D using Smoothed Particle Hydrodynamics. Computers and Mathematics With Applications, 2019, 78, 110-122.	1.4	11
1500	A meshfree approach for solving 2D variable-order fractional nonlinear diffusion-wave equation. Computer Methods in Applied Mechanics and Engineering, 2019, 350, 154-168.	3.4	42
1501	Modified smoothed particle hydrodynamics approach for modelling dynamic contact angle hysteresis. Acta Mechanica Sinica/Lixue Xuebao, 2019, 35, 472-485.	1.5	17
1502	An implicit boundary approach for viscous compressible high Reynolds flows using a hybrid remeshed particle hydrodynamics method. Journal of Computational Physics, 2019, 391, 347-364.	1.9	9
1503	Coupling of SPH with smoothed point interpolation method for violent fluid-structure interaction problems. Engineering Analysis With Boundary Elements, 2019, 103, 1-10.	2.0	35
1504	Simulations for the explosion in a water-filled tube including cavitation using the SPH method. Computational Particle Mechanics, 2019, 6, 515-527.	1.5	9
1505	Comparisons of weakly-compressible and truly incompressible approaches for viscous flow into a high-order Cartesian-grid finite volume framework. Journal of Computational Physics: X, 2019, 1, 100015.	1.1	6
1506	Smoothed particle hydrodynamics for the interaction of Newtonian and non-Newtonian fluids using the $\mu(I)$ model. Powder Technology, 2019, 351, 325-337.	2.1	17
1507	Numerical studies and industrial applications of the hybrid SPH-FE method. Computers and Fluids, 2019, 184, 40-63.	1.3	5
1508	Numerical modelling of the flow of self-consolidating engineered cementitious composites using smoothed particle hydrodynamics. Construction and Building Materials, 2019, 211, 109-119.	3.2	11
1509	An accurate multi-regime SPH scheme for barotropic flows. Journal of Computational Physics, 2019, 388, 561-600.	1.9	4
1510	Nonlocal numerical simulation of low Reynolds number laminar fluid motion by using peridynamic differential operator. Ocean Engineering, 2019, 179, 135-158.	1.9	33
1511	Fully Coupled Smoothed Particle Hydrodynamics-Finite Element Method Approach for Fluidâ€"Structure Interaction Problems With Large Deflections. Journal of Fluids Engineering, Transactions of the ASME, 2019, 141, .	0.8	14
1512	A generic approach to modelling flexible confined boundary conditions in <scp>SPH</scp> and its application. International Journal for Numerical and Analytical Methods in Geomechanics, 2019, 43, 1005-1031.	1.7	31
1513	Simulation of breaking waves on slope beaches integrating the MPS method into Iwagaki wave theory. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2019, 41, 1.	0.8	4
1514	A hydraulic soil erosion model based on a weakly compressible smoothed particle hydrodynamics method. Bulletin of Engineering Geology and the Environment, 2019, 78, 5853-5864.	1.6	8

#	Article	IF	Citations
1515	SPH scheme for simulating the water entry of an elastomer. Ocean Engineering, 2019, 178, 233-245.	1.9	27
1516	Numerical study of natural convection in a horizontal concentric annulus using smoothed particle hydrodynamics. Engineering Analysis With Boundary Elements, 2019, 102, 11-20.	2.0	33
1517	A stabilized TL–WC SPH approach with GPU acceleration for three-dimensional fluid–structure interaction. Journal of Fluids and Structures, 2019, 86, 329-353.	1.5	81
1518	Smoothed particle hydrodynamics (SPH) for modeling fluid-structure interactions. Science China: Physics, Mechanics and Astronomy, 2019, 62, 1.	2.0	137
1519	Smoothed particle hydrodynamics (SPH) model for coupled analysis of a damaged ship with internal sloshing in beam seas. Physics of Fluids, 2019, 31, .	1.6	37
1520	Smoothed particle hydrodynamics simulation: a tool for accurate characterization of microfluidic devices. Journal of Engineering Mathematics, 2019, 115, 183-205.	0.6	6
1521	A comprehensive SPH model for three-dimensional multiphase interface simulation. Computers and Fluids, 2019, 187, 98-106.	1.3	21
1522	A three-dimensional smoothed particle hydrodynamics dispersion simulation of polydispersed sediment on the seafloor using a message passing interface algorithm. Physics of Fluids, 2019, 31, .	1.6	13
1523	Testing of smoothed particle hydrodynamics method for minor loss coefficient in three-dimensional water flow in circular vertical pipe contraction. MATEC Web of Conferences, 2019, 270, 04014.	0.1	0
1524	Consistent Particle Method simulation of solitary wave impinging on and overtopping a seawall. Engineering Analysis With Boundary Elements, 2019, 103, 160-171.	2.0	33
1525	Numerical analysis of violent hydroelastic problems based on a mixed MPS-mode superposition method. Ocean Engineering, 2019, 179, 285-297.	1.9	35
1526	Numerical Modeling of Thermo-Mechanically Induced Stress in Substrates for Droplet-Based Additive Manufacturing Processes. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2019, 141, .	1.3	7
1527	Smoothed particle hydrodynamics – A new approach for modeling flow in oscillatory baffled reactors. Computers and Chemical Engineering, 2019, 124, 14-27.	2.0	4
1528	A pairwise-relaxing incompressible smoothed particle hydrodynamics scheme. Computer Methods in Applied Mechanics and Engineering, 2019, 348, 297-312.	3.4	4
1529	Consistent Particle Method Simulation of Solitary Wave Interaction with a Submerged Breakwater. Water (Switzerland), 2019, 11, 261.	1.2	11
1530	Smoothed particle hydrodynamics (SPH) simulation of impinging jet flows containing abrasive rigid bodies. Computational Particle Mechanics, 2019, 6, 479-501.	1.5	15
1531	A hybrid computational approach for modeling thermal spray deposition. Surface and Coatings Technology, 2019, 362, 311-327.	2.2	10
1532	Implementation of Open Boundaries within a Two-Way Coupled SPH Model to Simulate Nonlinear Wave–Structure Interactions. Energies, 2019, 12, 697.	1.6	21

#	Article	IF	Citations
1533	Dynamic simulation of flat water kayaking using a coupled biomechanical-smoothed particle hydrodynamics model. Human Movement Science, 2019, 64, 252-273.	0.6	15
1534	Practical application of the coupled DDA-SPH method in dynamic modeling for the formation of landslide dam. Landslides, 2019, 16, 1021-1032.	2.7	33
1535	Non-linear wave generation and absorption using open boundaries within DualSPHysics. Computer Physics Communications, 2019, 240, 46-59.	3.0	33
1536	Modeling and simulation of droplet impact on elastic beams based on SPH. European Journal of Mechanics, A/Solids, 2019, 75, 237-257.	2.1	33
1537	Numerical investigation of anguilliform locomotion by the SPH method. International Journal of Numerical Methods for Heat and Fluid Flow, 2019, 30, 328-346.	1.6	10
1538	Numerical simulation of dissolution of solid particles in fluid flow using the SPH method. International Journal of Numerical Methods for Heat and Fluid Flow, 2019, 30, 290-307.	1.6	21
1539	A multiphase SPH framework for solving the evaporation and combustion process of droplets. International Journal of Numerical Methods for Heat and Fluid Flow, 2020, 30, 1547-1575.	1.6	8
1541	GPU Simulation of Sloshing in a Vibrating Water Tank with Smooth Particle Hydrodynamics (SPH) Method. , 2019, , .		0
1542	A Kinematic Controller for Liquid Pouring between Vessels Modelled with Smoothed Particle Hydrodynamics. Applied Sciences (Switzerland), 2019, 9, 5007.	1.3	2
1543	Simulasi numerik large-deformation surface wave dengan smoothed particle hydrodynamics. Kapal, 2019, 15, 102-106.	0.1	1
1544	Numerical Model of Oil Film Diffusion in Water Based on SPH Method. Mathematical Problems in Engineering, 2019, 2019, 1-14.	0.6	6
1545	Power law fluid model on wave mitigation, 2D simulation using smoothed particle hydrodynamics. Journal of Physics: Conference Series, 2019, 1397, 012070.	0.3	0
1546	A study on the oil transport in piston skirt-cylinder liner under fully flooded conditions using improved SPH simulations. Engineering Analysis With Boundary Elements, 2019, 109, 176-186.	2.0	3
1547	Meshless single grain cutting simulations on the GPU. International Journal of Mechatronics and Manufacturing Systems, 2019, 12, 272.	0.1	7
1549	Study of wave-induced mass transport and internal mixing based on a two-liquid VOF model. Ocean Engineering, 2019, 194, 106569.	1.9	7
1550	Smoothed particle hydrodynamics method for analysis of turbulent flows in hydropower facilities. AIP Conference Proceedings, 2019, , .	0.3	0
1551	Modeling of liquid sloshing with application in robotics and automation. IFAC-PapersOnLine, 2019, 52, 253-258.	0.5	4
1552	Blood Flow SPH Simulation with Elastic Deformation of Blood Vessels. , 2019, , .		1

#	Article	IF	Citations
1553	The suction effect during freak wave slamming on a fixed platform deck: Smoothed particle hydrodynamics simulation and experimental study. Physics of Fluids, 2019, 31, .	1.6	70
1555	A multi-scale model for coupling strands with shear-dependent liquid. ACM Transactions on Graphics, 2019, 38, 1-20.	4.9	17
1556	A Unified Multiple-Phase Fluids Framework Using Asymmetric Surface Extraction and the Modified Density Model. Symmetry, 2019, 11, 745.	1.1	1
1557	Particle sorting for the projection based particle method. Engineering Analysis With Boundary Elements, 2019, 109, 199-208.	2.0	2
1558	A new SPH-based continuum framework with an embedded fracture process zone for modelling rock fracture. International Journal of Solids and Structures, 2019, 159, 40-57.	1.3	50
1559	An alternative updated Lagrangian formulation for finite particle method. Computer Methods in Applied Mechanics and Engineering, 2019, 343, 490-505.	3.4	17
1560	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.	1.2	22
1561	Numerical study of wave interaction with a composite breakwater located on permeable bed. Coastal Engineering, 2019, 146, 1-13.	1.7	21
1562	Numerical simulation and visualization of motion and orientation of steel fibers in UHPC under controlling flow condition. Construction and Building Materials, 2019, 199, 624-636.	3.2	27
1563	Towards the modeling of the ditching of a ground-effect wing ship within the framework of the SPH method. Applied Ocean Research, 2019, 82, 370-384.	1.8	30
1564	Simulation of helicopter ditching using smoothed particle hydrodynamics. Aerospace Science and Technology, 2019, 85, 277-292.	2.5	18
1565	A coupled discrete droplet and SPH model for predicting spray impingement onto surfaces and into fluid pools. Applied Mathematical Modelling, 2019, 69, 301-329.	2.2	10
1566	Numerical simulation for swash morphodynamics by DEM–MPS coupling model. Coastal Engineering Journal, 2019, 61, 2-14.	0.7	36
1567	Fluid-solid conjugate heat transfer modelling using weakly compressible smoothed particle hydrodynamics. International Journal of Mechanical Sciences, 2019, 151, 772-784.	3.6	18
1568	A smoothed particle hydrodynamics numerical scheme with a consistent diffusion term for the continuity equation. Computers and Fluids, 2019, 179, 632-644.	1.3	30
1569	Investigating the dissipative effects of liquid-filled particle dampers using coupled DEM–SPH methods. Computational Particle Mechanics, 2019, 6, 257-269.	1.5	13
1570	A dynamic δ-SPH model: How to get rid of diffusive parameter tuning. Computers and Fluids, 2019, 179, 334-355.	1.3	59
1571	A Smoothed Particle Hydrodynamics Model for Laser Beam Melting of Ni-based Alloy 718. Computers and Mathematics With Applications, 2019, 78, 2377-2394.	1.4	46

#	Article	IF	Citations
1572	Mixture model for two-phase flows with high density ratios: A conservative and realizable SPH formulation. International Journal of Multiphase Flow, 2019, 111, 158-174.	1.6	23
1573	The successive node snapping scheme: A method to obtain conforming meshes for an evolving curve in 2D and 3D. Finite Elements in Analysis and Design, 2019, 153, 1-21.	1.7	4
1574	Extreme wave impacts on a wave energy converter: load prediction through a SPH model. Coastal Engineering Journal, 2019, 61, 63-77.	0.7	13
1575	3D GPU SPH Analysis of Coupled Sloshing and Roll Motion. Fluid Mechanics and Its Applications, 2019, , 257-272.	0.1	0
1576	A consistent spatially adaptive smoothed particle hydrodynamics method for fluidâ€"structure interactions. Computer Methods in Applied Mechanics and Engineering, 2019, 347, 402-424.	3.4	29
1577	Entropically damped artificial compressibility for SPH. Computers and Fluids, 2019, 179, 579-594.	1.3	25
1578	An integrated boundary approach for colloidal suspensions simulated using smoothed dissipative particle dynamics. Computers and Fluids, 2019, 179, 672-686.	1.3	1
1579	Numerical modelling of forced heaving of mono hull and twin hull in particle method. Ocean Engineering, 2019, 173, 197-214.	1.9	7
1580	Toward the development of a virtual spray test-rig using the Smoothed Particle Hydrodynamics method. Computers and Fluids, 2019, 180, 68-81.	1.3	13
1581	Effect of geometry and fill level on the transport and mixing behaviour of a co-rotating twin screw extruder. Computational Particle Mechanics, 2019, 6, 227-247.	1.5	14
1582	Red blood cell simulation using a coupled shellâ€"fluid analysis purely based on the SPH method. Biomechanics and Modeling in Mechanobiology, 2019, 18, 347-359.	1.4	7
1583	Numerical Simulation of Free Surface Fluid Flows Through Porous Media by Using the Explicit MPS Method. Transport in Porous Media, 2019, 127, 7-33.	1.2	10
1584	Smoothed Particle Hydrodynamics. , 2019, , 830-866.		1
1585	A smooth particle hydrodynamic model for two-dimensional numerical simulation of Tiâ€"6Alâ€"4V serrated chip deformation based on TANH constitutive law. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2019, 233, 3004-3017.	1.1	7
1586	A projection-based particle method with optimized particle shifting for multiphase flows with large density ratios and discontinuous density fields. Computers and Fluids, 2019, 179, 356-371.	1.3	94
1587	Simulations for three-dimensional landmine detonation using the SPH method. International Journal of Impact Engineering, 2019, 126, 40-49.	2.4	15
1588	A new high-order particle method for solving high Reynolds number incompressible flows. Computational Particle Mechanics, 2019, 6, 343-370.	1.5	2
1589	Smoothed Particle Hydrodynamics Method. , 2019, , 17-65.		0

#	Article	IF	Citations
1590	Applications in Continuum Fluid Mechanics and Transport Phenomena. , 2019, , 67-100.		0
1591	A novel non-reflecting boundary condition for fluid dynamics solved by smoothed particle hydrodynamics. Journal of Fluid Mechanics, 2019, 860, 81-114.	1.4	64
1592	Multiphase SPH modeling of water boiling on hydrophilic and hydrophobic surfaces. International Journal of Heat and Mass Transfer, 2019, 130, 680-692.	2.5	14
1594	Quasi-static simulation of droplet morphologies using a smoothed particle hydrodynamics multiphase model. Acta Mechanica Sinica/Lixue Xuebao, 2019, 35, 32-44.	1.5	12
1595	Position explicit and iterative implicit consistent incompressible SPH methods for free surface flow. Computers and Fluids, 2019, 179, 52-66.	1.3	16
1596	Enhancement of stabilization of MPS to arbitrary geometries with a generic wall boundary condition. Computers and Fluids, 2019, 178, 88-112.	1.3	15
1597	SOPHIA: Development of Lagrangian-based CFD code for nuclear thermal-hydraulics and safety applications. Annals of Nuclear Energy, 2019, 124, 132-149.	0.9	21
1598	SPH Modeling of Wave Transformation over a Coral Reef with Seawall. Journal of Waterway, Port, Coastal and Ocean Engineering, 2019, 145, .	0.5	20
1599	A GPU-Accelerated TLSPH Algorithm for 3D Geometrical Nonlinear Structural Analysis. International Journal of Computational Methods, 2019, 16, 1850114.	0.8	4
1600	A smoothed particle hydrodynamics approach for numerical simulation of nano-fluid flows. Journal of Thermal Analysis and Calorimetry, 2019, 135, 1733-1741.	2.0	111
1601	An optimized source term formulation for incompressible SPH. Visual Computer, 2019, 35, 579-590.	2.5	18
1602	SPH Method with Space-Based Variable Smoothing Length and Its Applications to Free Surface Flow. International Journal of Computational Methods, 2019, 16, 1846002.	0.8	3
1603	An Algorithm for Fluidâ€"Solid Coupling Based on SPH Method and Its Preliminary Verification. International Journal of Computational Methods, 2019, 16, 1846008.	0.8	2
1604	SPH modeling of high velocity impact into ballistic gelatin. Development of an axis-symmetrical formulation. Mechanics of Advanced Materials and Structures, 2019, 26, 1881-1888.	1.5	11
1605	Viscous Flow Past a NACA0012 Foil Below a Free Surface Through the Delta-Plus-SPH Method. International Journal of Computational Methods, 2019, 16, 1846007.	0.8	10
1606	Coupling Computation of Density-Invariant and Divergence-Free for Improving Incompressible SPH Efficiency. IEEE Access, 2020, 8, 135912-135919.	2.6	4
1607	Soilâ€"Water-Structure Interaction Algorithm in Smoothed Particle Hydrodynamics (SPH) with Application to Deep-Penetrating Problems. International Journal of Computational Methods, 2020, 17, 1850135.	0.8	4
1608	Lagrangianâ€"Eulerian enforcement of non-homogeneous boundary conditions in the Particle Finite Element Method. Computational Particle Mechanics, 2020, 7, 41-56.	1.5	9

#	Article	IF	Citations
1609	Smooth particle hydrodynamics studies of wet granular column collapses. Acta Geotechnica, 2020, 15, 1205-1217.	2.9	19
1610	Interaction analysis between waves and perforated caisson using the revised smoothed particle hydrodynamics method and finite element method. Proceedings of the Institution of Mechanical Engineers Part M: Journal of Engineering for the Maritime Environment, 2020, 234, 253-271.	0.3	1
1611	Smoothed Particle Hydrodynamics Simulation of Liquid Drop Impinging Hypoelastic Surfaces. International Journal of Computational Methods, 2020, 17, 1940001.	0.8	0
1612	Nauticle: A general-purpose particle-based simulation tool. Computer Physics Communications, 2020, 246, 106855.	3.0	1
1613	Parametric studies on smoothed particle hydrodynamic simulations for accurate estimation of open surface flow force. International Journal of Naval Architecture and Ocean Engineering, 2020, 12, 85-101.	1.0	11
1614	3D gradient corrected SPH for fully resolved particleâ€"fluid interactions. Applied Mathematical Modelling, 2020, 78, 816-840.	2.2	14
1615	Delta Voronoi smoothed particle hydrodynamics, Î´-VSPH. Journal of Computational Physics, 2020, 401, 109000.	1.9	8
1616	Fixed point implementation of a variational time integrator approach for smoothed particle hydrodynamics simulation of fluids. Computers and Mathematics With Applications, 2020, 79, 1111-1130.	1.4	2
1617	Study on fracture morphology of water film on the wall of vertical corrugated plate under shear of the air flow. Annals of Nuclear Energy, 2020, 136, 107012.	0.9	3
1618	GPU-accelerated smoothed particle hydrodynamics modeling of granular flow. Powder Technology, 2020, 359, 94-106.	2.1	21
1619	A weighted meshfree collocation method for incompressible flows using radial basis functions. Journal of Computational Physics, 2020, 401, 108964.	1.9	32
1620	Recent Progress on Mesh-free Particle Methods for Simulations of Multi-phase Flows: A Review. KONA Powder and Particle Journal, 2020, 37, 132-144.	0.9	29
1621	New corrective scheme for DF-SPH. Computational Particle Mechanics, 2020, 7, 471-478.	1.5	2
1622	An fast simulation tool for fluid animation in VR application based on GPUs. Multimedia Tools and Applications, 2020, 79, 16683-16706.	2.6	11
1623	A numerical tool for modelling oscillating wave surge converter with nonlinear mechanical constraints. Renewable Energy, 2020, 146, 2024-2043.	4.3	59
1624	Characteristics of breaking vorticity in spilling and plunging waves investigated numerically by SPH. Environmental Fluid Mechanics, 2020, 20, 233-260.	0.7	21
1625	Development of a Coupled DDAâ€"SPH Method and its Application to Dynamic Simulation of Landslides Involving Solidâ€"Fluid Interaction. Rock Mechanics and Rock Engineering, 2020, 53, 113-131.	2.6	42
1626	Parallel analysis system for free-surface flow using MPS method with explicitly represented polygon wall boundary model. Computational Particle Mechanics, 2020, 7, 279-290.	1.5	7

#	Article	IF	Citations
1627	Modeling and simulation of ice–water interactions by coupling peridynamics with updated Lagrangian particle hydrodynamics. Computational Particle Mechanics, 2020, 7, 241-255.	1.5	25
1628	SPH simulation and experimental investigation of fiber orientation in UHPC beams with different placements. Construction and Building Materials, 2020, 233, 117372.	3.2	13
1629	A weakly compressible SPH method for violent multi-phase flows with high density ratio. Journal of Computational Physics, 2020, 402, 109092.	1.9	65
1630	Simulation of flow and mixing for highly viscous fluid in a twin screw extruder with a conveying element using parallelized smoothed particle hydrodynamics. Chemical Engineering Science, 2020, 212, 115311.	1.9	18
1631	Parallel modeling of cell suspension flow in complex micro-networks with inflow/outflow boundary conditions. Journal of Computational Physics, 2020, 401, 109031.	1.9	24
1632	Survey on Smoothed Particle Hydrodynamics and the Particle Systems. IEEE Access, 2020, 8, 3087-3105.	2.6	4
1633	Investigating the physical characteristics of dense granular flows by coupling the weakly compressible moving particle semi-implicit method with the rheological model. Acta Geotechnica, 2020, 15, 1815-1830.	2.9	9
1634	An enhanced weakly-compressible MPS method for free-surface flows. Computer Methods in Applied Mechanics and Engineering, 2020, 360, 112771.	3.4	24
1635	Hybrid SW-NS SPH models using open boundary conditions for simulation of free-surface flows. Ocean Engineering, 2020, 196, 106845.	1.9	13
1636	Assessment of Smoothed Particle Hydrodynamics (SPH) models for predicting wall heat transfer rate at complex boundary. Engineering Analysis With Boundary Elements, 2020, 111, 195-205.	2.0	20
1637	Wet dam-break simulation using the SPS-LES turbulent contribution on the WCMPS method to evaluate green water events. Computational Particle Mechanics, 2020, 7, 705-724.	1.5	8
1638	Numerical investigation of the solitary wave breaking over a slope by using the finite particle method. Coastal Engineering, 2020, 156, 103617.	1.7	68
1639	Semi-implicit operator splitting for the simulation of Herschel–Bulkley flows with smoothed particle hydrodynamics. Computational Particle Mechanics, 2020, 7, 699-704.	1.5	1
1640	Overview of Large-Scale Smoothed Particle Hydrodynamics Modeling of Dam Hydraulics. Journal of Hydraulic Engineering, 2020, 146, .	0.7	7
1641	An incompressible smoothed particle hydrodynamics scheme for Newtonian/non‐Newtonian multiphase flows including semi‐analytical solutions for two‐phase inelastic Poiseuille flows. International Journal for Numerical Methods in Fluids, 2020, 92, 703-726.	0.9	8
1642	GPU-accelerated numerical analysis of jet interference in a six-jet Pelton turbine using Finite Volume Particle Method. Renewable Energy, 2020, 148, 234-246.	4.3	21
1643	Numerical analysis of wave-induced current within the inhomogeneous coral reef using a refined SPH model. Coastal Engineering, 2020, 156, 103616.	1.7	28
1644	Dual-criteria time stepping for weakly compressible smoothed particle hydrodynamics. Journal of Computational Physics, 2020, 404, 109135.	1.9	30

#	ARTICLE	IF	CITATIONS
1645	Updated Lagrangian Taylor-SPH method for large deformation in dynamic problems. Applied Mathematical Modelling, 2020, 80, 238-256.	2.2	11
1646	A coupled DEM-SPH model for moisture migration in unsaturated granular material under oscillation. International Journal of Mechanical Sciences, 2020, 169, 105313.	3.6	19
1647	Particle coalescing with angular momentum conservation in SPH simulations. Computers and Fluids, 2020, 197, 104384.	1.3	3
1648	An advanced study on discretization-error-based adaptivity in Smoothed Particle Hydrodynamics. Computers and Fluids, 2020, 198, 104388.	1.3	3
1649	Numerical simulation of self-consolidating engineered cementitious composite flow with the V-funnel and U-box. Construction and Building Materials, 2020, 236, 117467.	3.2	8
1650	A smoothed particle hydrodynamics study of the collapse for a cylindrical cavity. PLoS ONE, 2020, 15, e0239830.	1.1	6
1651	3D Numerical Modelling of Tailings Dam Breach Run Out Flow over Complex Terrain: A Multidisciplinary Procedure. Water (Switzerland), 2020, 12, 2538.	1.2	15
1652	Multi-phase fluid flow simulation by using peridynamic differential operator. Ocean Engineering, 2020, 216, 108081.	1.9	19
1653	Interaction of solitary wave with submerged breakwater by smoothed particle hydrodynamics. Ocean Engineering, 2020, 216, 108108.	1.9	16
1654	A meshless approach for solving nonlinear variable-order time fractional 2D Ginzburg-Landau equation. Engineering Analysis With Boundary Elements, 2020, 120, 166-179.	2.0	13
1655	A Smoothed Particle Hydrodynamics scheme for arbitrarily shaped rigid bodies within highly viscous fluids. Journal of Computational Physics: X, 2020, 8, 100068.	1.1	4
1656	Thermo-fluid simulation using particle method based on hand-pouring motion in casting process. International Journal of Advanced Manufacturing Technology, 2020, 111, 371-382.	1.5	2
1657	Smoothed Particle Hydrodynamics Simulation of High Velocity Impact Dynamics of Molten Sand Particles. Energies, 2020, 13, 5134.	1.6	5
1658	An explicit MPS/FEM coupling algorithm for three-dimensional fluid-structure interaction analysis. Engineering Analysis With Boundary Elements, 2020, 121, 192-206.	2.0	20
1659	Modeling robocasting with smoothed particle hydrodynamics: Printing gap-spanning filaments. Additive Manufacturing, 2020, 36, 101488.	1.7	3
1660	Prediction of slurry grinding due to media and coarse rock interactions in a 3D pilot SAG mill using a coupled DEM–+–SPH model. Minerals Engineering, 2020, 159, 106614.	1.8	12
1661	A coupled Smoothed Particle Hydrodynamics-Volume Compensated Particle Method (SPH-VCPM) for Fluid Structure Interaction (FSI) modelling. Ocean Engineering, 2020, 218, 107923.	1.9	19
1662	Advanced comminution modelling: Part 2 - Mills. Applied Mathematical Modelling, 2020, 88, 307-348.	2.2	7

#	Article	IF	Citations
1663	Estudio de validaciÃ³n del modelo SPHERIMENTAL mediante el anÃ¡lisis con simulaciÃ³n hÃbrida de la toma derecha de la presa de Angostura (PerÃº). Ribagua, 2020, 7, 1-11.	0.3	0
1664	3D numerical simulation of seagrass movement under waves and currents with GPUSPH. International Journal of Sediment Research, 2021, 36, 711-722.	1.8	10
1665	A WCSPH Particle Shifting Strategy for Simulating Violent Free Surface Flows. Water (Switzerland), 2020, 12, 3189.	1.2	17
1666	An Improved Meshless Divergence-Free PBF Framework for Ocean Wave Modeling in Marine Simulator. Water (Switzerland), 2020, 12, 1873.	1.2	1
1667	A smoothed particle hydrodynamicsâ€"peridynamics coupling strategy for modeling fluidâ€"structure interaction problems. Computer Methods in Applied Mechanics and Engineering, 2020, 371, 113298.	3.4	36
1668	A new particle interaction method for fluid-solid particles. , 2020, , .		0
1669	Hydrodynamics of onshore oscillating water column devices: A numerical study using smoothed particle hydrodynamics. Ocean Engineering, 2020, 218, 108226.	1.9	15
1670	SPH simulations on water entry characteristics of a re-entry capsule. Engineering Analysis With Boundary Elements, 2020, 119, 257-268.	2.0	6
1671	Investigation on a Shallow Water Annular Tuned Liquid Damper for Suppressing Vibration of Wind Tower. Journal of Physics: Conference Series, 2020, 1618, 022015.	0.3	0
1672	Accuracy Improvements for Single Precision Implementations of the SPH Method. International Journal of Computational Fluid Dynamics, 2020, 34, 774-787.	0.5	8
1673	The Application of Godunov SPH in the Simulation of Energetic Materials. International Journal of Computational Methods, 2020, 17, 1950028.	0.8	2
1674	Recent developments on the water entry impact of wedges and projectiles. Ships and Offshore Structures, 2022, 17, 695-714.	0.9	18
1675	Experimental and numerical investigation of hyper-elastic submerged structures strengthened with cable under seismic excitations. European Journal of Environmental and Civil Engineering, 2022, 26, 4073-4092.	1.0	2
1676	Implicit Frictional Boundary Handling for SPH. IEEE Transactions on Visualization and Computer Graphics, 2020, 26, 2982-2993.	2.9	12
1677	A fully Lagrangian mixed discrete least squares meshfree method for simulating the free surface flow problems. Engineering With Computers, 2022, 38, 331-351.	3.5	3
1678	SPH model for interaction of sloshing wave with obstacle in shallow water tank. Journal of King Saud University, Engineering Sciences, 2022, 34, 126-138.	1.2	1
1679	SPH-FE-Based Numerical Simulation on Dynamic Characteristics of Structure under Water Waves. Journal of Marine Science and Engineering, 2020, 8, 630.	1.2	6
1680	Modeling in food across the scales: towards a universal mass transfer simulator of small molecules in food. SN Applied Sciences, 2020, 2, 1.	1.5	3

#	Article	IF	Citations
1681	Smoothed particle hydrodynamics simulation of converging Richtmyer–Meshkov instability. Physics of Fluids, 2020, 32, 086102.	1.6	8
1682	New instability and mixing simulations using SPH and a novel mixing measure. Journal of Hydrodynamics, 2020, 32, 684-698.	1.3	6
1683	Application of Smoothed Particle Hydrodynamics to Structural Cable Analysis. Applied Sciences (Switzerland), 2020, 10, 8983.	1.3	1
1684	Smoothed Particle Hydrodynamics Simulation for Debris Flow: A Review. IOP Conference Series: Materials Science and Engineering, 2020, 864, 012045.	0.3	3
1685	Semi–analytical Solid Boundary Conditions for Free Surface Flows. Computer Graphics Forum, 2020, 39, 131-141.	1.8	3
1686	Rigid body motion in viscous flows using the finite element method. Physics of Fluids, 2020, 32, 123311.	1.6	8
1687	Smoothed particle hydrodynamics simulation of underwater explosions with dynamic particle refinement. AIP Advances, 2020, 10, .	0.6	3
1688	Numerical modelling of mangrove merged with seawall for investigating wave mitigation over flat topography. Journal of Physics: Conference Series, 2020, 1581, 012001.	0.3	1
1689	Material point method after 25 years: Theory, implementation, and applications. Advances in Applied Mechanics, 2020, 53, 185-398.	1.4	74
1690	Flood Hazard Risk Mapping Using a Pseudo Supervised Random Forest. Remote Sensing, 2020, 12, 3206.	1.8	17
1691	Quadric SFDI for Laplacian Discretisation in Lagrangian Meshless Methods. Journal of Marine Science and Application, 2020, 19, 362-380.	0.7	7
1692	GPU-accelerated smoothed particle hydrodynamics modeling of jet formation and penetration capability of shaped charges. Journal of Fluids and Structures, 2020, 99, 103171.	1.5	9
1693	Investigations of the Hydraulic Characteristics of Stilling Basin with Baffle-Blocks Using an Integrated SPH Method. International Journal of Computational Methods, 2020, 17, 1950051.	0.8	2
1694	Role of baffle shape on debris flow impact in step-pool channel: an SPH study. Landslides, 2020, 17, 2099-2111.	2.7	32
1695	Numerical simulation of metal machining process with Eulerian and Total Lagrangian SPH. Engineering Analysis With Boundary Elements, 2020, 117, 269-283.	2.0	13
1696	3D Numerical Simulation of the Interaction between Waves and a T-Head Groin Structure. Journal of Marine Science and Engineering, 2020, 8, 227.	1.2	2
1697	An improved non-reflecting outlet boundary condition for weakly-compressible SPH. Computer Methods in Applied Mechanics and Engineering, 2020, 367, 113119.	3.4	15
1698	Smooth and Stepped Spillway Modeling Using the SPH Method. Journal of Hydraulic Engineering, 2020, 146, .	0.7	13

#	ARTICLE	IF	CITATIONS
1699	Improvement of Pressure Calculations in the Moving Particle Semi-Implicit Method for Free-Surface Flows. International Journal of Computational Methods, 2020, 17, 1950062.	0.8	1
1700	SPH evaluation of the hydrodynamic consequences induced by reef degradation. Wave Motion, 2020, 96, 102579.	1.0	4
1701	Higher-order nonlocal theory of Updated Lagrangian Particle Hydrodynamics (ULPH) and simulations of multiphase flows. Computer Methods in Applied Mechanics and Engineering, 2020, 368, 113176.	3.4	32
1702	Modelling of wave generation in a numerical tank by SPH method. Journal of Ocean Engineering and Marine Energy, 2020, 6, 121-136.	0.9	10
1703	Consistent Robin boundary enforcement of particle method for heat transfer problem with arbitrary geometry. International Journal of Heat and Mass Transfer, 2020, 157, 119919.	2.5	18
1704	Detailed study on the extension of the δ-SPH model to multi-phase flow. Computer Methods in Applied Mechanics and Engineering, 2020, 368, 113189.	3.4	48
1705	Development of Multi-GPU–Based Smoothed Particle Hydrodynamics Code for Nuclear Thermal Hydraulics and Safety: Potential and Challenges. Frontiers in Energy Research, 2020, 8, .	1.2	15
1706	Modelling fluid–structure interactions: a survey of methods and experimental verification. Proceedings of the Institution of Civil Engineers: Engineering and Computational Mechanics, 2020, 173, 159-172.	0.4	3
1707	Optimization of the Discharge and Energy Dissipation for a Real Hydro-Junction Project Based upon SPH Simulations. Water Resources Management, 2020, 34, 2717-2730.	1.9	0
1708	A coupled smoothed particle hydrodynamic and finite particle method: An efficient approach for fluid-solid interaction problems involving free-surface flow and solid failure. Engineering Analysis With Boundary Elements, 2020, 118, 143-155.	2.0	12
1709	Study of the Factors Influencing Diffusive Tortuosity Based on Pore-Scale SPH Simulation of Granular Soil. Transport in Porous Media, 2020, 132, 333-353.	1.2	19
1710	Complementary Resources for Tomorrow. Springer Proceedings in Energy, 2020, , .	0.2	0
1711	Numerical studies of submerged moored box-type floating breakwaters with different shapes of cross-sections using SPH. Coastal Engineering, 2020, 158, 103687.	1.7	32
1712	Coupled solid-liquid phase change and thermal flow simulation by particle method. International Communications in Heat and Mass Transfer, 2020, 113, 104519.	2.9	9
1713	An efficient, open source, iterative ISPH scheme. Computer Physics Communications, 2020, 255, 107283.	3.0	12
1714	A Semi-Infinite Numerical Wave Tank Using Discrete Particle Simulations. Journal of Marine Science and Engineering, 2020, 8, 159.	1.2	6
1715	A scalable parallel computing SPH framework for predictions of geophysical granular flows. Computers and Geotechnics, 2020, 121, 103474.	2.3	34
1716	Approximate aero-fluid interaction in WCSPH for aircraft fuel jettison. , 2020, , .		1

#	ARTICLE	IF	CITATIONS
1717	Developing HME-Based Drug Products Using Emerging Science: a Fast-Track Roadmap from Concept to Clinical Batch. AAPS PharmSciTech, 2020, 21, 176.	1.5	18
1718	SPH Simulation of Structures Impacted by Tailing Debris Flow and Its Application to the Buffering Effect Analysis of Debris Checking Dams. Mathematical Problems in Engineering, 2020, 2020, 1-17.	0.6	5
1719	Progress in the Smoothed Particle Hydrodynamics Method to Simulate and Post-process Numerical Simulations of Annular Airblast Atomizers. Flow, Turbulence and Combustion, 2020, 105, 1119-1147.	1.4	8
1720	MPI Parallelisation of 3D Multiphase Smoothed Particle Hydrodynamics. International Journal of Computational Fluid Dynamics, 2020, 34, 610-621.	0.5	16
1721	Ship hull slamming analysis with smoothed particle hydrodynamics method. Applied Ocean Research, 2020, 101, 102268.	1.8	27
1722	An Incompressible Smoothed Particle Hydrodynamics (ISPH) Model of Direct Laser Interference Patterning. Computation, 2020, 8, 9.	1.0	2
1723	Simulation of cavitating fluid–Structure interaction using SPH–FE method. Mathematics and Computers in Simulation, 2020, 173, 51-70.	2.4	10
1724	Dynamics of fluid-filled space multibody systems considering the microgravity effects. Mechanism and Machine Theory, 2020, 148, 103809.	2.7	7
1725	A conservative SPH scheme using exact projection with semi-analytical boundary method for free-surface flows. Applied Mathematical Modelling, 2020, 82, 607-635.	2.2	11
1726	Studying the effects of asymmetry on freestyle swimming using smoothed particle hydrodynamics. Computer Methods in Biomechanics and Biomedical Engineering, 2020, 23, 271-284.	0.9	14
1727	A stable SPH discretization of the elliptic operator with heterogeneous coefficients. Journal of Computational and Applied Mathematics, 2020, 374, 112745.	1.1	1
1728	A PCISPH implementation using distributed multi-GPU acceleration for simulating industrial engineering applications. International Journal of High Performance Computing Applications, 2020, 34, 450-464.	2.4	3
1729	SPH Analysis of Free Surface Flow over Pivot Weirs. KSCE Journal of Civil Engineering, 2020, 24, 1183-1194.	0.9	6
1730	A novel coupling approach of smoothed finite element method with SPH for thermal fluid structure interaction problems. International Journal of Mechanical Sciences, 2020, 174, 105558.	3.6	24
1731	Numerical simulation of solitary waves overtopping on a sloping sea dike using a particle method. Wave Motion, 2020, 95, 102535.	1.0	11
1732	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.	0.9	3
1733	SPH Fluid Tactile Rendering for Ultrasonic Mid-Air Haptics. IEEE Transactions on Haptics, 2020, 13, 116-122.	1.8	5
1734	A least-squares particle model with other techniques for 2D viscoelastic fluid/free surface flow. Journal of Computational Physics, 2020, 407, 109255.	1.9	22

#	Article	IF	Citations
1735	Generating stable solitary waves with a piston-type wavemaker. Coastal Engineering, 2020, 157, 103633.	1.7	15
1736	Simulations of deep drilling of metals by continuous wave lasers using combined smoothed particle hydrodynamics and ray-tracing methods. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	1.1	7
1737	SPH simulation of the penetrating object in the wet soil. Geomechanics and Geoengineering, 2022, 17, 155-165.	0.9	2
1738	Wave force on protected submarine pipelines over porous and impermeable beds using SPH numerical model. Applied Ocean Research, 2020, 98, 102118.	1.8	17
1739	Study on the impact performance of sandwich hollow cylinders hitting water based on SPH method. Ocean Engineering, 2020, 197, 106808.	1.9	11
1740	Smoothed Particle Hydrodynamics Modeling with Advanced Boundary Conditions for Two-Dimensional Dam-Break Floods. Water (Switzerland), 2020, 12, 1142.	1.2	7
1741	Optimized incompressible smoothed particle hydrodynamics methods and validations. International Journal for Numerical Methods in Fluids, 2020, 92, 1528-1550.	0.9	3
1742	Truncation error estimates of approximate operators in a generalized particle method. Japan Journal of Industrial and Applied Mathematics, 2020, 37, 565-598.	0.5	2
1743	Modeling of van der Waals force with smoothed particle hydrodynamics: Application to the rupture of thin liquid films. Applied Mathematical Modelling, 2020, 83, 719-735.	2.2	8
1744	Hydrostatic Response of Deployable Hyperbolic-Paraboloid Umbrellas as Coastal Armor. Journal of Structural Engineering, 2020, 146, .	1.7	11
1745	Assessment of breaking waves and liquid sloshing impact. Nonlinear Dynamics, 2020, 100, 1837-1925.	2.7	29
1746	Lagrangian two-phase flow modeling of scour in front of vertical breakwater. Coastal Engineering Journal, 2020, 62, 252-266.	0.7	23
1747	Hydrodynamic forces induced by a solitary wave interacting with a submerged square barrier: Physical tests and Î´-LES-SPH simulations. Coastal Engineering, 2020, 158, 103690.	1.7	20
1748	Validation of a smoothed particle hydrodynamics model for a highly aligned discontinuous fibre composites manufacturing process. Composites Science and Technology, 2020, 196, 108152.	3.8	7
1749	A multiphase SPH model based on Roeâ€™s approximate Riemann solver for hydraulic flows with complex interface. Computer Methods in Applied Mechanics and Engineering, 2020, 365, 112999.	3.4	44
1750	Stress-Particle Smoothed Particle Hydrodynamics: An application to the failure and post-failure behaviour of slopes. Computer Methods in Applied Mechanics and Engineering, 2020, 366, 113034.	3.4	19
1751	A fluid simulation system based on the MPS method. Computer Physics Communications, 2021, 258, 107572.	3.0	4
1753	Explicit incompressible smoothed particle hydrodynamics in a multi-GPU environment for large-scale simulations. Computational Particle Mechanics, 2021, 8, 493-510.	1.5	13

#	Article	IF	Citations
1754	Multiphase smoothed particle hydrodynamics modeling of forced liquid sloshing. International Journal for Numerical Methods in Fluids, 2021, 93, 411-428.	0.9	6
1755	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.	1.9	23
1756	Characteristic parameters and process maps for fully-filled twin-screw extruder elements. Chemical Engineering Science, 2021, 230, 116202.	1.9	15
1757	Karamelo: an open source parallel C++ package for the material point method. Computational Particle Mechanics, 2021, 8, 767-789.	1.5	11
1758	Grand challenges for Smoothed Particle Hydrodynamics numerical schemes. Computational Particle Mechanics, 2021, 8, 575-588.	1.5	114
1759	Numerical study on wave forces and overtopping over various seawall structures using advanced SPH-based method. Engineering Structures, 2021, 226, 111349.	2.6	14
1760	Theoretical method for generating solitary waves using plunger-type wavemakers and its Smoothed Particle Hydrodynamics validation. Applied Ocean Research, 2021, 106, 102414.	1.8	35
1761	Analysis of damping from vertical sloshing in a SDOF system. Mechanical Systems and Signal Processing, 2021, 152, 107452.	4.4	34
1762	A multi-resolution SPH method for fluid-structure interactions. Journal of Computational Physics, 2021, 429, 110028.	1.9	81
1763	Application of SPH to Single and Multiphase Geophysical, Biophysical and Industrial Fluid Flows. International Journal of Computational Fluid Dynamics, 2021, 35, 22-78.	0.5	15
1764	SPH simulations of binary droplet deformation considering the Fowkes theory. Chemical Engineering Science, 2021, 229, 116035.	1.9	9
1765	A practical approach for extracting mechanical properties of microcapsules using a hybrid numerical model. Microfluidics and Nanofluidics, 2021, 25, 1.	1.0	8
1766	Novel pressure inlet and outlet boundary conditions for Smoothed Particle Hydrodynamics, applied to real problems in porous media flow. Journal of Computational Physics, 2021, 429, 110029.	1.9	5
1767	Coupled thermo-fluid-mechanical peridynamic model for analysing composite under fire scenarios. Composite Structures, 2021, 255, 113006.	3.1	12
1768	High-order velocity and pressure wall boundary conditions in Eulerian incompressible SPH. Journal of Computational Physics, 2021, 434, 109793.	1.9	13
1769	Coupled smoothed particle hydrodynamics-discrete element method simulations of soil liquefaction and its mitigation using gravel drains. Soil Dynamics and Earthquake Engineering, 2021, 140, 106460.	1.9	14
1770	Coupling of SPH and Voronoi-cell lattice models for simulating fluidâ€"structure interaction. Computational Particle Mechanics, 2021, 8, 813-823.	1.5	5
1771	Thermal effects on two-phase flow in 2D mixers using SPH. International Communications in Heat and Mass Transfer, 2021, 120, 105055.	2.9	4

#	Article	IF	Citations
1772	Turbulent Details Simulation for SPH Fluids via Vorticity Refinement. Computer Graphics Forum, 2021, 40, 54-67.	1.8	4
1773	Lagrangian radial basis functionâ€based particle hydrodynamics method and its application for viscous flows. International Journal for Numerical Methods in Engineering, 2021, 122, 1964-1989.	1.5	5
1774	Simulations of Laser Assisted Additive Manufacturing by Smoothed Particle Hydrodynamics. Computer Methods in Applied Mechanics and Engineering, 2021, 373, 113491.	3.4	34
1775	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.	1.2	13
1776	An integrated smoothed particle hydrodynamics method for numerical simulation of the droplet impacting with heat transfer. Engineering Analysis With Boundary Elements, 2021, 124, 1-13.	2.0	6
1777	Stochastic Volume Rendering of Multiâ€Phase SPH Data. Computer Graphics Forum, 2021, 40, 97-109.	1.8	1
1778	Comparison of SPH boundary approaches in simulating frictional soilâ€"structure interaction. Acta Geotechnica, 2021, 16, 2389-2408.	2.9	16
1779	Direct numerical simulation of incompressible multiphase flow with vaporization using moving particle semi-implicit method. Journal of Computational Physics, 2021, 425, 109911.	1.9	10
1780	A Comparison Between Weakly-Compressible Smoothed Particle Hydrodynamics (WCSPH) and Moving Particle Semi-Implicit (MPS) Methods for 3D Dam-Break Flows. International Journal of Computational Methods, 2021, 18, 2050036.	0.8	3
1781	Recent Features and Industrial Applications of the Hybrid SPH-FE Method. International Journal of Computational Fluid Dynamics, 2021, 35, 106-128.	0.5	4
1782	Multiphase SPH Modelling of Supercooled Large Droplets Freezing on Aircraft Surfaces. International Journal of Computational Fluid Dynamics, 2021, 35, 79-92.	0.5	6
1783	Effect of Initial Pitching Angle on Helicopter Ditching Characteristics Using Smoothed-Particle-Hydrodynamics Method. Journal of Aircraft, 2021, 58, 167-181.	1.7	6
1784	A meshless method to solve nonlinear variable-order time fractional 2D reactionâ€"diffusion equation involving Mittag-Leffler kernel. Engineering With Computers, 2021, 37, 731-743.	3.5	14
1785	Parametric Modeling of Depth-Limited Wave Spectra under Hurricane Conditions with Applications to Kinetic Umbrellas against Storm Surge Inundation. Water (Switzerland), 2021, 13, 251.	1.2	4
1786	Incompressibility Enforcement for Multiple-Fluid SPH Using Deformation Gradient. IEEE Transactions on Visualization and Computer Graphics, 2022, 28, 3417-3427.	2.9	3
1787	Real-time simulation of realistic fluid animation based on stable SPH-SWE numerical model. Wuli Xuebao/Acta Physica Sinica, 2021, .	0.2	1
1788	A COMPARATIVE STUDY OF OpenFOAM AND DualSPHysics FOR NON-NEWTONIAN FLUID FLOW ANALYSIS. Journal of Japan Society of Civil Engineers Ser B3 (Ocean Engineering), 2021, 77, I_49-I_54.	0.0	0
1789	VisualSPHysics: advanced fluid visualization for SPH models. Computational Particle Mechanics, 2022, 9, 897-910.	1.5	4

#	ARTICLE	IF	CITATIONS
1790	Dynamics and rheology of a suspension of super-paramagnetic chains under the combined effect of a shear flow and a rotating magnetic field. Soft Matter, 2021, 17, 6006-6019.	1.2	1
1791	SPH-ALE Scheme for Weakly Compressible Viscous Flow with a Posteriori Stabilization. Water (Switzerland), 2021, 13, 245.	1.2	7
1792	SPH Variants on Multi-GPU Architectures. , 2021, , 115-131.		0
1793	High-Resolution Modelling of Axisymmetric Granular Column Collapse Using Parallelized SPH. Lecture Notes in Civil Engineering, 2021, , 515-523.	0.3	0
1794	Adapted SIMPLE Algorithm for Incompressible SPH Fluids With a Broad Range Viscosity. IEEE Transactions on Visualization and Computer Graphics, 2022, 28, 3168-3179.	2.9	1
1795	Smoothed particle hydrodynamics method from a large eddy simulation perspective. Generalization to a quasi-Lagrangian model. Physics of Fluids, 2021, 33, .	1.6	43
1796	A novel approach to determine residual stress field during FSW of AZ91 Mg alloy using combined smoothed particle hydrodynamics/neuro-fuzzy computations and ultrasonic testing. Journal of Magnesium and Alloys, 2021, , .	5.5	20
1798	Double-Diffusive of a Nanofluid in a Rectangle-Shape Mounted on a Cavity Saturated by Heterogeneous Porous Media. Journal of Mathematics, 2021, 2021, 1-14.	0.5	2
1799	A<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e1106" altimg="si210.svg"><mml:mi>Î»</mml:mi></mml:math>SPHâ€"SPIM coupled method for fluidâ€"structure interaction problems. Journal of Fluids and Structures, 2021, 101, 103210.	1.5	21
1800	Numerical Simulation on the Whole Sinking Process of Open Caisson with an Improved SPH Method. Mathematical Problems in Engineering, 2021, 2021, 1-9.	0.6	2
1801	Industrial Applications of Smoothed Particle Hydrodynamics. International Journal of Computational Fluid Dynamics, 2021, 35, 1-2.	0.5	3
1802	Two-phase SPH for sloshing simulation in prismatic tank. IOP Conference Series: Materials Science and Engineering, 2021, 1034, 012058.	0.3	0
1803	SPH Simulation for Short Fibre Recycling Using Water Jet Alignment. International Journal of Computational Fluid Dynamics, 2021, 35, 129-142.	0.5	3
1804	SPH-Based Wave Tank Simulations. Journal of the Computational Structural Engineering Institute of Korea, 2021, 34, 59-69.	0.1	0
1805	Numerical investigation of the mechanism of granular flow impact on rigid control structures. Acta Geotechnica, 2021, 16, 2505-2527.	2.9	38
1806	The Effect of Iterative Procedures on the Robustness and Fidelity of Augmented Lagrangian SPH. Symmetry, 2021, 13, 472.	1.1	1
1807	Numerical study on the dynamic characteristics of water entry of cavity body using two-phase SPH method. Acta Mechanica Sinica/Lixue Xuebao, 2021, 37, 1072-1089.	1.5	12
1808	A well-balanced and positivity-preserving SPH method for shallow water flows in open channels. Journal of Hydraulic Research/De Recherches Hydrauliques, 2021, 59, 903-916.	0.7	6

#	Article	IF	Citations
1809	SPH numerical computations of wave impact onto a vertical wall with experimental comparisons. Comptes Rendus - Mecanique, 2021, 349, 117-143.	0.3	0
1810	Particle approximation of the two-fluid model for superfluid ^{4}He using smoothed particle hydrodynamics. Journal of Physics Communications, 2021, 5, 035001.	0.5	6
1811	Numerical Simulation of Long Duration Sloshing Using Smoothed Particle Hydrodynamics. IOP Conference Series: Materials Science and Engineering, 2021, 1096, 012033.	0.3	0
1812	DualSPHysics: from fluid dynamics to multiphysics problems. Computational Particle Mechanics, 2022, 9, 867-895.	1.5	131
1813	The applicability of SPH and MPS methods to numerical flow simulation of fresh cementitious materials. Construction and Building Materials, 2021, 274, 121736.	3.2	11
1814	Implicit molecular stresses in weakly compressible particle-based discretization methods for fluid flow. Physical Review E, 2021, 103, 033304.	0.8	3
1815	Single-phase SPH modelling of plunge pool dynamic pressures at a near-prototype scale. Journal of Hydraulic Research/De Recherches Hydrauliques, 0, , 1-15.	0.7	1
1816	Improvements in MLPG formulation for 3D wave interaction with fixed structures. Computers and Fluids, 2021, 218, 104826.	1.3	7
1817	Experimental and SPH studies of reciprocal wet-bed dam-break flow over obstacles. International Journal of Modern Physics C, 2021, 32, 2150098.	0.8	2
1818	On the use of multibody dynamics techniques to simulate fluid dynamics and fluid–solid interaction problems. Multibody System Dynamics, 2021, 53, 29-57.	1.7	6
1819	Verification and application of 2-D DDA-SPH method in solving fluid–structure interaction problems. Journal of Fluids and Structures, 2021, 102, 103252.	1.5	11
1820	Advanced Analytical Truck Tires-Terrain Interaction Model. , 0, , .		4
1821	A physically consistent particle method for high-viscous free-surface flow calculation. Computational Particle Mechanics, 2022, 9, 265-276.	1.5	8
1822	A CAD-compatible body-fitted particle generator for arbitrarily complex geometry and its application to wave-structure interaction. Journal of Hydrodynamics, 2021, 33, 195-206.	1.3	27
1823	A Local Semi-Fixed Ghost Particles Boundary Method for WCSPH. Journal of Marine Science and Engineering, 2021, 9, 416.	1.2	1
1824	The particle-attached element interpolation for density correction in smoothed particle hydrodynamics. Advances in Engineering Software, 2021, 154, 102972.	1.8	5
1825	Review on research progress of floating breakwater. International Journal of Engineering and Applied Sciences (IJEAS), 2021, 8, .	0.1	0
1826	A modified smoothed particle hydrodynamics for modelling fluid-fracture interaction at mesoscale. Computational Particle Mechanics, 2022, 9, 277-297.	1.5	3

#	Article	IF	Citations
1827	Development of Cryogenic Extrusion Techniques and Modelling of a Twin Screw Extruder: A Review. Journal of Fusion Energy, 2021, 40, 1.	0.5	2
1828	Virtual Experiments of Particle Mixing Process with the SPH-DEM Model. Materials, 2021, 14, 2199.	1.3	9
1829	Two-dimensional continuum modelling granular column collapse by non-local peridynamics in a mesh-free method with rheology. Journal of Fluid Mechanics, 2021, 917, .	1.4	6
1830	MPSâ€Based Model to Solve Oneâ€Dimensional Shallow Water Equations. Water Resources Research, 2021, 57, e2020WR028742.	1.7	4
1831	Double-diffusive convection of a rotating circular cylinder in a porous cavity suspended by nano-encapsulated phase change materials. Case Studies in Thermal Engineering, 2021, 24, 100864.	2.8	55
1832	Coupling edge-based smoothed finite element method with smoothed particle hydrodynamics for fluid structure interaction problems. Ocean Engineering, 2021, 225, 108772.	1.9	39
1833	Fluidâ€"rigid-body interaction simulations and validations using a coupled stabilized ISPHâ€"DEM incorporated with the energy-tracking impulse method for multiple-body contacts. Computer Methods in Applied Mechanics and Engineering, 2021, 377, 113681.	3.4	21
1834	Modified dynamic boundary conditions (mDBC) for general-purpose smoothed particle hydrodynamics (SPH): application to tank sloshing, dam break and fish pass problems. Computational Particle Mechanics, 2022, 9, 1-15.	1.5	59
1835	A particle-based modelling approach to food processing operations. Food and Bioproducts Processing, 2021, 127, 14-57.	1.8	9
1836	Influence of Orientation and Arrangement of Structures on Tsunami Impact Forces: Numerical Investigation with Smoothed Particle Hydrodynamics. Journal of Waterway, Port, Coastal and Ocean Engineering, 2021, 147, 04021006.	0.5	16
1837	Incompressible smoothed particle hydrodynamics model of a rectangular tuned liquid damper containing screens. Journal of Fluids and Structures, 2021, 103, 103295.	1.5	13
1838	An improved form of smoothed particle hydrodynamics method for crack propagation simulation applied in rock mechanics. International Journal of Mining Science and Technology, 2021, 31, 421-428.	4.6	40
1839	A generic smoothed wall boundary in multi-resolution particle method for fluidâ€"structure interaction problem. Computer Methods in Applied Mechanics and Engineering, 2021, 378, 113726.	3.4	8
1840	Improved divergenceâ€free smoothed particle hydrodynamics via priority of divergenceâ€free solver and SOR. Computer Animation and Virtual Worlds, 2021, 32, e2006.	0.7	2
1841	Numerical simulation of pile installations in a hypoplastic framework using an SPH based method. Computers and Geotechnics, 2021, 133, 104006.	2.3	11
1842	Numerical simulation of landslide generated impulse waves using a Î´-LES-SPH model. Advances in Water Resources, 2021, 151, 103890.	1.7	10
1843	Enhancement of Î´-SPH for ocean engineering applications through incorporation of a background mesh scheme. Applied Ocean Research, 2021, 110, 102508.	1.8	41
1844	Investigation of the Outflow and Spreading-Solidification Behaviour of Stratified Molten Metal. Journal of Nuclear Engineering, 2021, 2, 168-189.	0.7	4

#	Article	IF	Citations
1845	Stress distribution analysis of oral mucosa under soft denture liners using smoothed particle hydrodynamics method. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 117, 104390.	1.5	1
1846	Numerical study of texture in material extrusion: Orientation in a multicomponent system of spheres and ellipsoids. Journal of Non-Newtonian Fluid Mechanics, 2021, 291, 104532.	1.0	2
1847	Coupled SPH-DEM simulations of liquefaction-induced flow failure. Soil Dynamics and Earthquake Engineering, 2021, 144, 106683.	1.9	11
1848	A new transformation free generalized (5,5)HOC discretization of transient Navier-Stokes/Boussinesq equations on nonuniform grids. International Journal of Heat and Mass Transfer, 2021, 171, 120821.	2.5	1
1849	SPH-DEM simulations of saturated granular soils liquefaction incorporating particles of irregular shape. Computers and Geotechnics, 2021, 134, 104060.	2.3	16
1850	Simulation of flow past a sphere on a rough bed using smoothed particle hydrodynamics (SPH). Computational Particle Mechanics, 2022, 9, 927-940.	1.5	3
1851	Analysis of molten metal spreading and solidification behaviors utilizing moving particle full-implicit method. Frontiers in Energy, 2021, 15, 959-973.	1.2	4
1852	3-D Numerical Study of a Bottom Ramp Fish Passage Using Smoothed Particle Hydrodynamics. Water (Switzerland), 2021, 13, 1595.	1.2	4
1853	A meshless technique based on the moving least squares shape functions for nonlinear fractal-fractional advection-diffusion equation. Engineering Analysis With Boundary Elements, 2021, 127, 8-17.	2.0	9
1854	SPH simulations of 3D dam-break flow against various forms of the obstacle: Toward an optimal design. Ocean Engineering, 2021, 229, 108978.	1.9	20
1855	Comprehensive numerical assessment of molten iron–slag trickle flow and gas countercurrent in complex coke bed by Eulerian–Lagrangian approach. Chemical Engineering Journal, 2021, 414, 128606.	6.6	8
1856	Simulation of droplet spreading on surfaces with asymmetrical wettability using multiphase Smoothed Particle Hydrodynamics (SPH). European Physical Journal Plus, 2021, 136, 1.	1.2	2
1857	Direct numerical simulation of atomization by jet impact using moving particle semi-implicit method with GPU acceleration. Computational Particle Mechanics, 0, , 1.	1.5	6
1858	Smooth particle hydrodynamics simulations of long-duration violent three-dimensional sloshing in tanks. Ocean Engineering, 2021, 229, 108925.	1.9	20
1859	Angular particle impact on ductile materials using the Lagrangian gradient smoothing method. Tribology Transactions, 0, , 1-19.	1.1	0
1860	Modeling the Response of Structure–Tuned Liquid Damper Systems Under Large Amplitude Excitation Using Smoothed Particle Hydrodynamics. Journal of Vibration and Acoustics, Transactions of the ASME, 2022, 144, .	1.0	4
1861	Analysis of the formation mechanism of coarse-dense structure of silver paste in die bonding. Advanced Powder Technology, 2021, 32, 2020-2028.	2.0	3
1862	Ballistic impact response of an alumina-based granular material: Experimental and numerical analyses. Powder Technology, 2021, 385, 273-286.	2.1	2

#	Article	IF	Citations
1863	Numerical Analysis of the Hydraulic Fracturing of Pressure Tunnel Lining Based on the 2P-IKSPH Method. Mathematical Problems in Engineering, 2021, 2021, 1-13.	0.6	0
1864	Simulation of Brash Ice Behavior in the Gulf of Bothnia Using Smoothed Particle Hydrodynamics Formulation. Journal of Cold Regions Engineering - ASCE, 2021, 35, .	0.5	4
1865	A particle interaction-based crack model using an improved smoothed particle hydrodynamics for fatigue crack growth simulations. International Journal of Fracture, 2021, 229, 229-244.	1.1	8
1866	Numerical Simulations of Red-Blood Cells in Fluid Flow: A Discrete Multiphysics Study. ChemEngineering, 2021, 5, 33.	1.0	0
1867	Application of recent SPH formulations to simulate free-surface flow in a vertical slot fishway. Computational Particle Mechanics, 0, , 1.	1.5	1
1868	Explicit calculation for the pressure Poisson equation to simulate incompressible fluid flows in a mesh‐free method. International Journal for Numerical Methods in Fluids, 2021, 93, 3034-3052.	0.9	5
1869	Strategies for smarter catchment hydrology models: incorporating scaling and better process representation. Geoscience Letters, 2021, 8, .	1.3	19
1870	Dual-Point Symmetric Smoothed Particle Hydrodynamics for modelling of Fourier and non-Fourier heat conduction phenomena. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2021, 43, 1.	0.8	0
1871	An explicit stabilised material point method for coupled hydromechanical problems in two-phase porous media. Computers and Geotechnics, 2021, 135, 104112.	2.3	27
1872	SPH modeling of wave interaction with reshaped and non-reshaped berm breakwaters with permeable layers. Applied Ocean Research, 2021, 112, 102714.	1.8	13
1873	Simulation of fully nonlinear water wave propagation over the flat bottom and uneven bottom by meshless numerical wave tank. Archive of Applied Mechanics, 2021, 91, 4329-4341.	1.2	1
1874	Numerical modeling of the dam-break wave impact on elastic sluice gate: A new benchmark case for hydroelasticity problems. Ocean Engineering, 2021, 231, 108870.	1.9	20
1875	A fully resolved SPH-DEM method for heterogeneous suspensions with arbitrary particle shape. Powder Technology, 2021, 387, 509-526.	2.1	41
1876	Research and application of SPH parallel algorithm based on particle decomposition. Journal of Physics: Conference Series, 2021, 1985, 012005.	0.3	0
1877	Modelling Particle Agglomeration on through Elastic Valves under Flow. ChemEngineering, 2021, 5, 40.	1.0	4
1878	A discrete scheme of the fluid motion equation based on the pore-scale SPH method. AIP Advances, 2021, 11, .	0.6	1
1879	Smooth particle hydrodynamics simulation of dam-break impacting different obstacles. Journal of Physics: Conference Series, 2021, 1985, 012003.	0.3	1
1880	Real-time simulation of violent boiling in concentrated sulfuric acid dilution. Visual Computer, 2021, 37, 2631-2642.	2.5	1

#	ARTICLE	IF	CITATIONS
1881	Efficient parallelization of SPH algorithm on modern multi-core CPUs and massively parallel GPUs. International Journal of Modeling, Simulation, and Scientific Computing, 2021, 12, 2150054.	0.9	2
1882	Applications of micropolar SPH in geomechanics. Acta Geotechnica, 2021, 16, 2355-2369.	2.9	16
1883	Simulation of Polymer Melt Injection Molding Filling Flow Based on an Improved SPH Method with Modified Low€Dissipation Riemann Solver. Macromolecular Theory and Simulations, 2022, 31, 2100029.	0.6	10
1884	Numerical Investigation of Surge Waves Generated by Submarine Debris Flows. Water (Switzerland), 2021, 13, 2276.	1.2	4
1885	An integrative smoothed particle hydrodynamics method for modeling cardiac function. Computer Methods in Applied Mechanics and Engineering, 2021, 381, 113847.	3.4	27
1886	An Improved Smoothed Particle Hydrodynamics Method and Its Application in Rock Hydraulic Fracture Modelling. Rock Mechanics and Rock Engineering, 2021, 54, 6039-6055.	2.6	7
1887	Using the Goldilocks Principle to model coral ecosystem engineering. Proceedings of the Royal Society B: Biological Sciences, 2021, 288, 20211260.	1.2	17
1888	Unified particle system for multiple-fluid flow and porous material. ACM Transactions on Graphics, 2021, 40, 1-14.	4.9	4
1889	Algorithms for uniform particle initialization in domains with complex boundaries. Computer Physics Communications, 2021, 265, 108008.	3.0	6
1890	A study of capillarity phenomena by using a computer-based simulation approach. European Journal of Physics, 2021, 42, 055704.	0.3	4
1891	Highly directionally spread, overturning breaking waves modelled with Smoothed Particle Hydrodynamics: A case study involving the Draupner wave. Ocean Modelling, 2021, 164, 101822.	1.0	4
1892	Numerical simulation of scattering process of armour blocks on additional rubble mound behind breakwater during tsunami overflow using SPH method. Computational Particle Mechanics, 2022, 9, 953-968.	1.5	5
1893	Numerical and Physical Modelling of Wave Overtopping on a Smooth Impermeable Dike with Promenade under Strong Incident Waves. Journal of Marine Science and Engineering, 2021, 9, 865.	1.2	7
1894	An alternative SPH formulation: ADER-WENO-SPH. Computer Methods in Applied Mechanics and Engineering, 2021, 382, 113871.	3.4	20
1895	SPH Open Boundary Simulation of Free-Surface Flow Over Ogee-crested Spillway. Tikrit Journal of Engineering Science, 2021, 28, 137-151.	0.2	0
1896	A new type of WENO scheme in SPH for compressible flows with discontinuities. Computer Methods in Applied Mechanics and Engineering, 2021, 381, 113770.	3.4	17
1897	Unified particle system for multiple-fluid flow and porous material. ACM Transactions on Graphics, 2021, 40, 1-14.	4.9	0
1898	An efficient method to calculate depth-integrated, phase-averaged momentum balances in non-hydrostatic models. Ocean Modelling, 2021, 165, 101846.	1.0	5

#	ARTICLE	IF	CITATIONS
1899	Numerical Study on the Hydrodynamic Characteristics of a Double-Row Floating Breakwater Composed of a Pontoon and an Airbag. Journal of Marine Science and Engineering, 2021, 9, 983.	1.2	9
1900	Particle methods in ocean and coastal engineering. Applied Ocean Research, 2021, 114, 102734.	1.8	174
1901	Study of the Dilatancy/Contraction Mechanism of Landslide Fluidization Behavior Using an Initially Saturated Granular Column Collapse Simulation. Water Resources Research, 2021, 57, e2020WR028802.	1.7	7
1902	A corrected WCSPH scheme with improved interface treatments for the viscous/viscoelastic two-phase flows. Computational Particle Mechanics, 2022, 9, 633-653.	1.5	3
1903	Overcoming excessive numerical dissipation in SPH modeling of water waves. Coastal Engineering, 2021, 170, 104018.	1.7	22
1904	Dual-time smoothed particle hydrodynamics for incompressible fluid simulation. Computers and Fluids, 2021, 227, 105031.	1.3	4
1905	A novel smoothed particle hydrodynamics and finite element coupling scheme for fluid–structure interaction: The sliding boundary particle approach. Computer Methods in Applied Mechanics and Engineering, 2021, 383, 113922.	3.4	21
1906	Boundary condition enforcement for renormalised weakly compressible meshless Lagrangian methods. Engineering Analysis With Boundary Elements, 2021, 130, 332-351.	2.0	2
1907	Lagrangian multiscale simulation of complex flows. Physics of Fluids, 2021, 33, .	1.6	9
1908	Coupled SPH–FEM Modeling of Tsunami-Borne Large Debris Flow and Impact on Coastal Structures. Journal of Marine Science and Engineering, 2021, 9, 1068.	1.2	56
1909	An improved smoothed particle hydrodynamics approach using new inverse kernel function. Journal of Ocean Engineering and Science, 2022, 7, 327-336.	1.7	4
1910	Towards a High Order Convergent ALE-SPH Scheme with Efficient WENO Spatial Reconstruction. Water (Switzerland), 2021, 13, 2432.	1.2	10
1911	Modeling of the Fluid Flow and Design of an Experimental Test Stand for Ejector Deep Hole Drilling Processes. Lecture Notes in Production Engineering, 2022, , 186-194.	0.3	0
1912	Modified ISPHP method for modeling the damping of a waves train on an inclined porous structure. International Journal for Numerical Methods in Fluids, 0, , .	0.9	2
1913	An efficient fully Lagrangian solver for modeling wave interaction with oscillating wave surge converter. Ocean Engineering, 2021, 236, 109540.	1.9	18
1915	Numerical simulations of adhesive spreading during bonding-induced squeeze. Journal of Adhesion, 2022, 98, 2517-2549.	1.8	3
1916	SPH simulations of water entry problems using an improved boundary treatment. Ocean Engineering, 2021, 238, 109679.	1.9	23
1917	Numerical simulation on jet breakup in the fuel-coolant interaction using smoothed particle hydrodynamics. Nuclear Engineering and Technology, 2021, 53, 3264-3274.	1.1	5

#	Article	IF	Citations
1918	SPH simulation of supercooled large droplets impacting hydrophobic and superhydrophobic surfaces. Computers and Fluids, 2021, 229, 105055.	1.3	9
1919	Study on the wedge penetrating fluid interfaces characterized by different density-ratios: Numerical investigations with a multi-phase SPH model. Ocean Engineering, 2021, 237, 109538.	1.9	23
1920	Generalized entropically damped artificial compressibility for weakly compressible SPH. Computers and Fluids, 2021, 229, 105093.	1.3	2
1921	Smoothed particle hydrodynamics (SPH) and its applications in geomechanics: From solid fracture to granular behaviour and multiphase flows in porous media. Computers and Geotechnics, 2021, 138, 104315.	2.3	89
1922	SPHinXsys: An open-source multi-physics and multi-resolution library based on smoothed particle hydrodynamics. Computer Physics Communications, 2021, 267, 108066.	3.0	61
1923	Surface tension and wettability calculation using density gradient potential in a physically consistent particle method. Computer Methods in Applied Mechanics and Engineering, 2021, 385, 114072.	3.4	11
1924	Modeling granular material dynamics and its two-way coupling with moving solid bodies using a continuum representation and the SPH method. Computer Methods in Applied Mechanics and Engineering, 2021, 385, 114022.	3.4	19
1925	A data-driven smoothed particle hydrodynamics method for fluids. Engineering Analysis With Boundary Elements, 2021, 132, 12-32.	2.0	6
1926	Numerical modelling of interaction between aluminium structure and explosion in soil. Applied Mathematical Modelling, 2021, 99, 760-784.	2.2	5
1927	A Mindlin shell model based on the corrective smoothed particle method and accuracy implementation of the free boundary. Computer Methods in Applied Mechanics and Engineering, 2021, 385, 114028.	3.4	1
1928	Simulation of random wave overtopping by a WCSPH model. Applied Ocean Research, 2021, 116, 102888.	1.8	25
1929	Review on the local weak form-based meshless method (MLPG): Developments and Applications in Ocean Engineering. Applied Ocean Research, 2021, 116, 102883.	1.8	12
1930	PySPH: A Python-based Framework for Smoothed Particle Hydrodynamics. ACM Transactions on Mathematical Software, 2021, 47, 1-38.	1.6	25
1931	The nonlocal, local and mixed forms of the SPH method. Computer Methods in Applied Mechanics and Engineering, 2021, 387, 114164.	3.4	8
1932	Fast detection of free surface and surface tension modelling via single-phase SPH. Applied Mathematical Modelling, 2021, 100, 33-54.	2.2	5
1933	The magnetic power on natural convection of NEPCM suspended in a porous annulus between a hexagonal-shaped cavity and dual curves. Case Studies in Thermal Engineering, 2021, 28, 101354.	2.8	19
1934	Towards predicting the product quality in hot-melt extrusion: Pilot plant scale extrusion. International Journal of Pharmaceutics: X, 2021, 3, 100084.	1.2	3
1935	Further enhancement of the particle shifting technique: Towards better volume conservation and particle distribution in SPH simulations of violent free-surface flows. Applied Mathematical Modelling, 2022, 101, 214-238.	2.2	38

#	Article	IF	Citations
1936	Determining local residence time distributions in twin-screw extruder elements via smoothed particle hydrodynamics. Chemical Engineering Science, 2022, 247, 117029.	1.9	14
1937	A global analysis of a coupled violent vertical sloshing problem using an SPH methodology. Engineering Applications of Computational Fluid Mechanics, 2021, 15, 865-888.	1.5	12
1938	SPH modelling of dam breach run out flow for a site planning tailings storage facility. E3S Web of Conferences, 2021, 303, 01051.	0.2	0
1939	SPH simulation of the 2007 Chehalis Lake landslide and subsequent tsunami. Journal of Hydraulic Research/De Recherches Hydrauliques, 2021, 59, 863-887.	0.7	9
1940	A parameter-free total Lagrangian smooth particle hydrodynamics algorithm applied to problems with free surfaces. Computational Particle Mechanics, 2021, 8, 859-892.	1.5	5
1941	Mathematical Modelling of Ingot Caster Filling Systems. , 0, , 271-276.		4
1943	Development of computationally efficient augmented Lagrangian SPH for incompressible flows and its quantitative comparison with WCSPH simulating flow past a circular cylinder. International Journal for Numerical Methods in Engineering, 2020, 121, 4187-4207.	1.5	9
1944	Turbulence Enhancement for SPH Fluids Visualization. Lecture Notes in Computer Science, 2019, , 254-260.	1.0	1
1946	A LSQ-SPH Approach for Solving Compressible Viscous Flows. , 2001, , 901-910.		9
1947	Scientific Computing in Urban Water Management. , 2014, , 173-193.		4
1948	Fast Prototyping of Virtual Reality Based Surgical Simulators with PhysX-enabled GPU. Lecture Notes in Computer Science, 2010, , 176-188.	1.0	6
1949	Improving Understanding of Human Swimming Using Smoothed Particle Hydrodynamics. IFMBE Proceedings, 2010, , 174-177.	0.2	4
1950	Computational Studies of the Locomotion of Dolphins and Sharks Using Smoothed Particle Hydrodynamics. IFMBE Proceedings, 2010, , 22-25.	0.2	6
1952	A physically consistent particle method for incompressible fluid flow calculation. Computational Particle Mechanics, 2021, 8, 69-86.	1.5	14
1953	Smoothed Particle Hydrodynamics for investigating hydraulic and mechanical behaviour of an embankment under action of flooding and overburden loads. Computers and Geotechnics, 2018, 94, 31-45.	2.3	11
1954	Finite particle method for static deformation problems solved using JFNK method. Computers and Geotechnics, 2020, 122, 103502.	2.3	10
1955	Modelling tire-moist terrain interaction using advanced computational techniques. Journal of Terramechanics, 2020, 91, 23-30.	1.4	1
1956	Smoothed Particle Hydrodynamics multiphase modelling of an experimental microfluidic device for conformal coating of pancreatic islets. Medical Engineering and Physics, 2020, 77, 19-30.	0.8	4

#	ARTICLE	IF	CITATIONS
1957	Two-phase SPH model based on an improved Riemann solver for water entry problems. Ocean Engineering, 2020, 199, 107039.	1.9	29
1958	Modeling the agglomeration of settling particles in a dewatering process. Physics of Fluids, 2020, 32, .	1.6	7
1959	Double-diffusive convection of solid particles in a porous X-shaped cavity filled with a nanofluid. Physica Scripta, 2021, 96, 015301.	1.2	8
1960	Quantifying hydrodynamic collective states of magnetic colloidal spinners and rollers. Physical Review Fluids, 2019, 4, .	1.0	14
1961	Application of Multiphase Particle Methods in Atomization and Breakup Regimes of Liquid Jets. , 2014, , .		2
1962	A Particle-Based Model for Prediction of Cement Diffusion During Osteoporotic Hip Augmentation Surgery: Theory and Validation. , 2010, , .		3
1963	Combined Smoothed Particle Hydrodynamics - Ray Tracing Method for Simulations of Keyhole Formation in Laser Melting of Bulk and Powder Metal Targets. , 2019, , .		4
1964	SPH MODELING OF LAVA FLOWS WITH GPU IMPLEMENTATION. World Scientific Series on Nonlinear Science, Series B, 2010, , 183-188.	0.2	2
1966	Blue noise sampling using an SPH-based method. ACM Transactions on Graphics, 2015, 34, 1-11.	4.9	33
1967	Volume Maps: An Implicit Boundary Representation for SPH. , 2019, , .		22
1968	Could a Pile of Slippery Sacks Behave Like an Ocean?. Monthly Weather Review, 2002, 130, 2975-2988.	0.5	14
1969	Smoothed particle hydrodynamics for soil mechanics. , 2006, , 275-281.		11
1970	Numerical modeling of the flow and seabed erosion around a pipeline using Smoothed Particle Hydrodynamics (SPH). , 2014, , 725-732.		1
1971	Fluid-structure interaction by the mixed SPH-FE method with application to aircraft ditching. International Journal of Multiphysics, 2015, 9, 249-266.	0.3	18
1972	Application of a mesh-free method to modelling brittle fracture and fragmentation of a concrete column during projectile impact. Computers and Concrete, 2015, 16, 933-961.	0.7	4
1973	Gas-liquid interface treatment in underwater explosion problem using moving least squares-smoothed particle hydrodynamics. Interaction and Multiscale Mechanics, 2008, 1, 251-278.	0.4	3
1974	A MULTISCALE METHOD FOR GEOPHYSICAL FLOW EVENTS. International Journal for Multiscale Computational Engineering, 2012, 10, 375-390.	0.8	5
1975	Simulating Solitary Wave Generation Using Incompressible SPH. Annals of Limnology and Oceanography, 2016, 1, 013-021.	0.2	1

#	ARTICLE	IF	CITATIONS
1976	Numerical Study on Soil Collapse Using SPH with Elastic-Plastic Models. International Journal of Applied Physics and Mathematics, 2018, 8, 66-78.	0.3	1
1978	Eulerian ISPH Method for Simulating Internal Flows. Journal of Applied Fluid Mechanics, 2016, 9, 1477-1490.	0.4	7
1981	Three Dimensional Simulation of Lime Particle Penetration into Molten Iron Bath Using Smoothed Particle Hydrodynamics. ISIJ International, 2016, 56, 1537-1542.	0.6	13
1982	Development of ADEM-SPH Coupling Model for Analysis of Solid to Liquid Phase Transition Behaviors. ISIJ International, 2020, 60, 1469-1478.	0.6	7
1983	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.	0.1	7
1984	Dam break Smoothed Particle Hydrodynamic modeling based on Riemann solvers. WIT Transactions on Engineering Sciences, 2010, , .	0.0	10
1985	Evaluation of wave energy transmission through a floating breakwater using the SPH method. WIT Transactions on the Built Environment, 2013, , .	0.0	1
1986	Smoothed particle hydrodynamics applied in fluid structure interactions. WIT Transactions on the Built Environment, 2013, , .	0.0	2
1987	A numerical study of heat diffusion using the Lagrangian particle SPH method and the Eulerian Finite-Volume method: analysis of convergence, consistency and computational cost. WIT Transactions on Engineering Sciences, 2014, , .	0.0	1
1988	PySPH: a reproducible and high-performance framework for smoothed particle hydrodynamics. , 2016, , .		14
1989	Evaluatoin of Incompressible and Compressible SPH Methods in Modeling Dam Break Flows. International Journal of Coastal and Offshore Engineering, 2018, 2, 45-57.	0.2	6
1990	Simulating Fluid and Structure Interaction using Exponential Basis Functions. Journal of Applied Fluid Mechanics, 2018, 11, 787-799.	0.4	1
1991	The SPH Method for Simulating the Progressive Sliding Failure of a River Levee. Japanese Geotechnical Journal, 2014, 9, 687-696.	0.0	4
1992	Simulation of Water-Soil-Structure Interactions Using Incompressible Smoothed Particle Hydrodynamics. Computers, Materials and Continua, 2020, 65, 205-224.	1.5	2
1993	Application of Smooth Particle Hydrodynamics Method for Modelling Blood Flow with Thrombus Formation. CMES - Computer Modeling in Engineering and Sciences, 2020, 122, 831-862.	0.8	8
1994	Current Achievements and Future Perspectives on Particle Simulation Technologies for Fluid Dynamics and Heat Transfer. Journal of Nuclear Science and Technology, 2011, 48, 155-168.	0.7	3
1995	SPH Simulations of Binary Collision between Liquid Droplets with Different Surface Tension and Interfacial Tension. Japanese Journal of Multiphase Flow, 2012, 25, 451-458.	0.1	3
1996	Modeling Two-Phase Flows Using SPH Method. Journal of Applied Sciences, 2008, 8, 3817-3826.	0.1	29

#	ARTICLE	IF	CITATIONS
1997	A New Treatment for Boundary of Laminar Flow Inlet or Outlet in SPH. Journal of Software Engineering, 2014, 8, 321-327.	0.2	5
1999	Modelling Dam Break Evolution over a Wet Bed with Smoothed Particle Hydrodynamics: A Parameter Study. Engineering, 2015, 07, 248-260.	0.4	9
2000	Smoothed Particle Hydrodynamic Modelling of Hydraulic Jumps: Bulk Parameters and Free Surface Fluctuations. Engineering, 2016, 08, 386-402.	0.4	8
2001	Numerical Simulation of Interaction of a Current with a Circular Cylinder near a Rigid Bed. Journal of Applied Mathematics and Physics, 2016, 04, 398-411.	0.2	3
2002	An Improved CSPM Approach for Accurate Second-Derivative Approximations with SPH. Journal of Applied Mathematics and Physics, 2017, 05, 168-184.	0.2	14
2003	SPH Particle Collisions for the Reduction of Particle Clustering, Interface Stabilisation and Wall Modelling. Journal of Applied Mathematics and Physics, 2018, 06, 1860-1882.	0.2	3
2004	Numerical Simulation of Molten Metal Droplet Behavior in Gas Metal Arc Welding by Three-Dimensional Incompressible Smoothed Particle Hydrodynamics Method. Journal of Flow Control Measurement &amp Visualization, 2018, 06, 66-81.	0.1	9
2005	Numerical simulation of lava flow using a GPU SPH model. Annals of Geophysics, 2011, 54, .	0.5	17
2007	Corrección termodinámica de la difusión numérica del método W-SPH. Ingeniería Del Agua, 2015, 19, 1.	0.2	2
2012	SPH Modeling of Surge Overflow over RCC Strengthened Levee. International Journal of Ocean System Engineering, 2012, 2, 200-208.	0.3	1
2013	SPH Modeling of Hydraulics and Erosion of HPTRM Levee. Journal of Advanced Research in Ocean Engineering, 2015, 1, 1-13.	0.0	4
2014	2D Model of a Floating Body Under Nonlinear Waves. , 0, , .		1
2017	Incompressible fluid simulation on CUDA using SPH method. Nauka I Obrazovanie, 2012, 12, .	0.1	1
2018	A new repulsive model for solid boundary condition in smoothed particle hydrodynamics. Wuli Xuebao/Acta Physica Sinica, 2013, 62, 044702.	0.2	7
2019	Investigations on the process of droplet impact on an orifice plate. Wuli Xuebao/Acta Physica Sinica, 2013, 62, 194704.	0.2	3
2020	Simulation of two-dimensional droplet collisions based on SPH method of multi-phase flows with large density differences. Wuli Xuebao/Acta Physica Sinica, 2013, 62, 214701.	0.2	9
2021	Numerical study of collision process between two equal diameter liquid micro-droplets using a modified smoothed particle hydrodynamics method. Wuli Xuebao/Acta Physica Sinica, 2013, 62, 224701.	0.2	6
2022	An improved pre-processing method for somooth particle hydrodynamics. Wuli Xuebao/Acta Physica Sinica, 2014, 63, 144702.	0.2	4

#	Article	IF	Citations
2023	Comparisons among weakly-compressible and incompressible smoothed particle hdrodynamic algorithms for natural convection. Wuli Xuebao/Acta Physica Sinica, 2014, 63, 224701.	0.2	2
2024	GPU-ACCELERATED SPH MODEL FOR WATER WAVES AND FREE SURFACE FLOWS. Coastal Engineering Proceedings, 2011, , 9.	0.1	7
2025	DESIGN OF A 3D PHYSICAL AND NUMERICAL EXPERIMENT ON FLOATING OFF-SHORE WIND TURBINES. Coastal Engineering Proceedings, 2012, , 67.	0.1	8
2026	NUMERICAL MODELING OF TSUNAMI-INDUCED HYDRODYNAMIC FORCES ON ONSHORE STRUCTURES USING SPH. Coastal Engineering Proceedings, 2012, , 81.	0.1	12
2027	SPH MODEL TO SIMULATE MOVEMENT OF GRASS MEADOW OF POSIDONIA UNDER WAVES. Coastal Engineering Proceedings, 2012, 1, 56.	0.1	2
2028	On the Feasibility of Freak Waves Formation within the Harbor Due to the Presence of Infra-Gravity Waves of Bound Mode Underlying the Ever-Present Swells. Journal of Korean Society of Coastal and Ocean Engineers, 2019, 31, 17-27.	0.1	13
2029	SPH Viscous Flow Around a Circular Cylinder: Impact of Viscous Formulation and Background Pressure. International Journal of Computational Fluid Dynamics, 2021, 35, 451-467.	0.5	1
2030	A numerical model for the simulation of oil–ice interaction. Physics of Fluids, 2021, 33, .	1.6	2
2031	Mesh-free peridynamic coupled simulation of impacting collapse of a granular column with various heights. Physics of Fluids, 2021, 33, .	1.6	4
2032	Comparison between the Lagrangian and Eulerian Approach for Simulating Regular and Solitary Waves Propagation, Breaking and Run-Up. Applied Sciences (Switzerland), 2021, 11, 9421.	1.3	2
2033	Numerical investigation of non-Newtonian power law flows using B-spline material point method. Journal of Non-Newtonian Fluid Mechanics, 2021, 298, 104678.	1.0	3
2034	SPH numerical simulation of debris flows and avalanches. , 2002, , 541-546.		1
2035	An MLSPH algorithm for free surface flows in engineering applications. , 2003, , 873-876.		1
2037	Investigation of Flow Conditioning in Pipes. , 2003, , 777-778.		0
2038	Modélisation du déferlement des vagues avec une méthode VOF sans reconstruction d'interface. , 2004, , .		0
2039	Numerical simulation of the flow around a planing wedged cylinder by a particle method. Journal of the Society of Naval Architects of Japan, 2004, 2004, 81-89.	0.2	1
2040	A fully mesh-less Lagrangian numerical method for prediction of free water surface. , 2004, , 345-352.		0
2041	Uso de la técnica SPH para el estudio de la interacción entre olas y estructuras. Ingeniería Del Agua, 2004, 11, 147.	0.2	0

#	Article	IF	Citations
2042	Numerical Analysis of Blood Flow in Micro-Circulation and its Visualization by Ray-Tracing Technique. Journal of the Visualization Society of Japan, 2006, 26, 140-145_1.	0.0	0
2046	Study on the Effects of Computational Parameters in SPH Method. Journal of the Society of Naval Architects of Korea, 2007, 44, 398-407.	0.2	4
2049	Real-Time Water Wave Simulation with Surface Advection based on Mass Conservancy. International Journal of Contents, 2008, 4, 7-12.	0.1	0
2050	Fluid Simulations in Academy Awarded Movies. Journal of the Korea Computer Graphics Society, 2008, 14, 19-30.	0.1	0
2051	Numerical investigation of sandy beach evolution using an incompressible smoothed particle hydrodynamics method. WIT Transactions on Ecology and the Environment, 2009, , .	0.0	0
2052	7. USING A PARTICLE HYBRID METHOD TO MODEL COASTAL BLUFF COLLAPSE DURING EXTREME EVENTS. , 2009, , .		0
2055	On Multi-resolution Point-Based Haptic Rendering of Suture. Lecture Notes in Computer Science, 2010, , 144-151.	1.0	0
2056	Particle distribution and numerical stability in smoothed particle hydrodynamics method. Wuli Xuebao/Acta Physica Sinica, 2010, 59, 3654.	0.2	21
2057	Simulation en méthode particulaire des sollicitations hydrodynamiques d'ouvrages marins. , 2010, , .		0
2058	HPC for hydraulics and industrial environmental flow simulations. Lecture Notes in Computational Science and Engineering, 2010, , 377-387.	0.1	1
2059	SPH Corrección de la deficienccia de límites para la mejora de condiciones de contornos en superficies deformables. Ciencia Y Tecnología De Buques, 2010, 4, 21.	0.1	0
2060	Numerical Simulation of Two-dimensional Nonlinear Waves on Beaches Using a Smoothed Particle Hydrodynamics Method. Journal of the Society of Naval Architects of Korea, 2010, 47, 525-532.	0.2	1
2061	Parallel summation of symmetric inter-particle forces in smoothed particle hydrodynamics. Lecture Notes in Computational Science and Engineering, 2011, , 235-248.	0.1	0
2062	10 SPH â€" a versatile multiphysics modeling tool. Developments in Heat Transfer, 2010, , 383-424.	0.1	0
2064	Some Consideration on Derivative Approximation of Particle Methods. Computational Methods in Applied Sciences (Springer), 2011, , 233-245.	0.1	0
2065	The deformation process of viscous liquid drop studied by using kernel gradient corrected SPH method. Wuli Xuebao/Acta Physica Sinica, 2011, 60, 054701.	0.2	9
2066	Numerical investigation of floating breakwater movement using SPH method. International Journal of Naval Architecture and Ocean Engineering, 2011, 3, 122-125.	1.0	1
2067	Failure Characteristics of Oil Boom Considering the Nonlinear Interaction of Oil Boom with Waves. Journal of Korean Society of Coastal and Ocean Engineers, 2011, 23, 193-204.	0.1	0

#	Article	IF	Citations
2068	Numerical simulation of droplet impact on liquid with smoothed particle hydrodynamics method. Wuli Xuebao/Acta Physica Sinica, 2012, 61, 054701.	0.2	13
2069	Simulation en méthode particulaire d'un écoulement de houle sur des ouvrages marins. , 2012, , .		0
2070	A Multiscale Approach to Investigate Wettability of Surfaces with Designed Coating. , 2012, , 203-212.		1
2072	Simulation of Gravity Wave Propagation in Free Surface Flows by an Incompressible SPH Algorithm. International Journal of Engineering, Transactions B: Applications, 2012, 25, 239-248.	0.6	1
2073	SPH MODELING OF MEAN VELOCITY CIRCULATION IN A RIP CURRENT SYSTEM. Coastal Engineering Proceedings, 2012, 1, 37.	0.1	2
2075	Particle Based Fluid Animation Using CUDA. Advances in Intelligent Systems and Computing, 2013, , 503-510.	0.5	0
2076	SIMULATING THE EFFECT OF FLOW VOLUME ON SCOURING PROCESS AROUND BREAKWATER UNDER TSUNAMI CONDITION BY SPH METHOD. International Journal of GEOMATE, 2013, , .	0.1	0
2077	Numerical simulation of deformation process of viscous liquid drop based on the incompressible smoothed particle hydrodynamics. Wuli Xuebao/Acta Physica Sinica, 2013, 62, 124702.	0.2	4
2078	Monitoring Technology and Efficient Particle Searching Algorithm for SPH Model. Journal of Convergence Information Technology, 2013, 8, 768-776.	0.1	0
2079	The performance of the SPH method in simulating surface runoff along a saturated soil slope. International Journal of Safety and Security Engineering, 2013, 3, 77-87.	0.5	0
2081	Improved Model for Soil as a Two-Phase Mixture Based on Smoothed Particle Hydrodynamics (SPH). Journal of Applied Mathematics and Physics, 2014, 02, 1053-1060.	0.2	0
2082	SPH Modeling for Flow Behavior of Liquefied Soils. , 2014, , 133-154.		0
2083	Numerical SPH Calculations of Fluid Flow Through Saturated and Non-saturated Porous Media. Environmental Science and Engineering, 2014, , 481-496.	0.1	0
2085	An Investigation Into The Coupling Of Sloshing Effect Due To Translation Force Of Flng Motions. IPTEK: the Journal for Technology and Science, 2014, 25, .	0.2	0
2086	EXPLICIT MOVING PARTICLE SIMULATION METHOD ON GPU CLUSTERS. , 0, , .		1
2087	Hypoplastic constitutive model in SPH. , 2014, , 1863-1867.		0
2089	APPLICATION OF DRAG MODEL ON SPH-DEM COUPLING ANALYSIS METHOD FOR THE FAILURE SIMULATION OF RUBBLE MOUND FOUNDATION AT A CAISSON BREAKWATER DURING TSUNAMI. Journal of Japan Society of Civil Engineers Ser A2 (Applied Mechanics (AM)), 2015, 71, I_579-I_586.	0.1	2
2090	SPH Code Development and Validation for Numerical Simulation of Liquid-Liquid Swirl Coaxial Injector. Journal of the Korean Society for Aeronautical & Space Sciences, 2015, 43, 8-22.	0.0	0

#	Article	IF	Citations
2092	Numerical Investigation of the Propagation of Shock Waves and Dead Zones in Rapid Flows of Granular Materials using SPH Method. Journal of Japan Society of Civil Engineers Ser A2 (Applied) Tj ETQq0 0 0 rgBT0/Overlock 10 Tf 50 7		
2093	Numerical Simulation of Water Flow in a Venturi Tube Using the Smoothed Particle Hydrodynamics Method. Environmental Science and Engineering, 2015, , 481-487.	0.1	0
2094	A new boundary treatment method in smoothed particle hydrodynamics. Wuli Xuebao/Acta Physica Sinica, 2015, 64, 094701.	0.2	3
2095	Numerical simulation on the motion characteristics of freely rising bubbles using smoothed particle hydrodynamics method. Wuli Xuebao/Acta Physica Sinica, 2015, 64, 174701.	0.2	7
2097	Realistic Simulation of Incompressible Fluids with Arbitrarily Shaped Boundaries. International Journal of Multimedia and Ubiquitous Engineering, 2015, 10, 219-232.	0.3	0
2098	SPH Analysis of Interfacial Flow of the Two Immiscible Melts. , 2016, , 589-596.		0
2099	Modeling of landslide generated waves in Three Gorges Reservoir, China using SPH method. Japanese Geotechnical Society Special Publication, 2016, 2, 1183-1188.	0.2	2
2101	Development of smoothed particle hydrodynamics method for analysis of high-speed two-phase flows in hydropower spillways. AIP Conference Proceedings, 2017, , .	0.3	0
2102	SMOOTHED PARTICLE HYDRODYNAMICS SIMULATION OF SKI JUMP FLOW. Journal of Japan Society of Civil Engineers Ser B1 (Hydraulic Engineering), 2017, 73, I_589-I_594.	0.0	0
2104	A Hybrid Finite Element and Mesh-Free Particle Method for Disaster-Resilient Design of Structures. , 2017, , 303-310.		0
2105	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.	0.1	0
2106	Adaptive Air-Particle Method for Vortex Effects of Water in Free Surface. Journal of the Korea Computer Graphics Society, 2017, 23, 17-24.	0.1	0
2108	Spatial Solutions Based on the Smoothed Particle Method and the Finite Element Method—A Hybrid Approach. Advanced Structured Materials, 2018, , 55-73.	0.3	0
2110	Simulation of Abrasive Wear with a Coupled Approach Considering Particles of Different Sizes. Springer Proceedings in Physics, 2018, , 49-67.	0.1	0
2111	Improvement of Fluid Simulation Runtime of Smoothed Particle Hydrodynamics by Using Graphics Processing Unit (GPU). Journal of ICT Research and Applications, 2017, 11, 230.	0.5	0
2112	Simulation of Soil Behavior due to Dam Break Using Moving Particle Simulation. Journal of Ocean Engineering and Technology, 2017, 31, 388-396.	0.5	0
2113	Numerical Simulation of Wave Transformation Over Deep-Sea Platform Reef Using SPH Method. , 2018, , .		0
2114	Run-up Estimation Due to Interaction Solitary Wave with Nonlinear Slope Beaches Using SPH Method. UqyÄnÅ«s/shinÄsÄ«, 2018, 9, 29-37.	0.1	0

#	ARTICLE	IF	CITATIONS
2115	IMPROVEMENT OF WEAKLY COMPRESSIBLE SPH METHOD FOR TURBULENT FREE SURFACE FLOWS. Journal of Japan Society of Civil Engineers Ser B1 (Hydraulic Engineering), 2019, 75, I_583-I_588.	0.0	2
2116	Sensitivity Analysis of Tire-Soil Interaction Using Finite Element Analysis and Smoothed Particle Hydrodynamics Techniques. , 0, , .		0
2117	High Precise Benchmarks by CSD (Computational Solid Dynamics) with Meshfree Methods. , 0, , .		1
2118	Numerical Modelling of Metal Forming by SPH with Multi-GPU Acceleration. , 0, , .		0
2119	Semi-implicit incompressible SPH fluid simulation in a marine simulator. , 2019, , .		1
2120	Vorticity constraints in multiphase flow mixture models. , 2019, , .		0
2121	Sloshing simulation of a tank oscillating towards multiple degrees of freedom by particle method. ACC Journal, 2019, 25, 7-16.	0.1	0
2122	A Parametric Study of Dam Break Flow Feature Over a Dry Bed Using SPH Modeling. , 2020, , 79-86.		0
2123	Düzenli Dalgalar Üreten Bir Sayısal Dalga Tankının SPH Yöntemi ile Modellenmesi. Uludağ University Journal of the Faculty of Engineering, 0, , 551-570.	0.2	1
2124	Nonprehensile Manipulation Control and Task Planning for Deformable Object Manipulation: Results from the RoDyMan Project. Lecture Notes in Electrical Engineering, 2020, , 76-100.	0.3	2
2125	Smoothed particle hydrodynamics simulation for debris flow: A review. AIP Conference Proceedings, 2020, , .	0.3	0
2126	Air-Assisted Atomization at Constant Mass and Momentum Flow Rate: Investigation into the Ambient Pressure Influence With the Smoothed Particle Hydrodynamics Method. Journal of Engineering for Gas Turbines and Power, 2020, 142, .	0.5	1
2127	Modelagem matemática em dinâmica dos fluídos: uma aplicação do método Smoothed-particle Hydrodynamics. Research, Society and Development, 2020, 9, e739975109.	0.0	0
2128	Prediction of Softening Behavior of Simulant Sinter Ore by ADEM-SPH Model. ISIJ International, 2020, 60, 1545-1550.	0.6	2
2129	Surface Tension Model for Free-Surface Problems in SPH. , 0, , .		0
2130	The effect of thixotropy on dam-break flow: a numerical study by smoothed particle hydrodynamics. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2021, 43, 1.	0.8	3
2131	Smoothed Particle Hydrodynamics. Lecture Notes in Applied and Computational Mechanics, 2022, , 101-123.	2.0	0
2132	Thermosolutal convection of nano–encapsulated phase change materials within a porous circular cylinder containing crescent with periodic side-wall temperature and concentration: ISPH simulation. Physica Scripta, 2021, 96, 125243.	1.2	6

#	ARTICLE	IF	CITATIONS
2133	Droplet behavior analysis on inclined, highly sticky, or slippery superhydrophobic nanostructured surfaces by observation and SPH simulation. Chemical Engineering Science, 2022, 248, 117214.	1.9	5
2134	Validation of the applicability of the particle-based open-source software DualSPHysics to violent flow fields. Coastal Engineering Journal, 2021, 63, 545-572.	0.7	4
2135	SPH-DEM coupling method based on GPU and its application to the landslide tsunami. Part I: method and validation. Acta Geotechnica, 2022, 17, 2101-2119.	2.9	15
2136	Investigation of the Effect of Sequential Dam-Break Problem on the Elastic Structure Located Downstream with a Fluid-Structure Interaction Method. Journal of the Institute of Science and Technology, 2020, 10, 2659-2667.	0.3	0
2137	Continuum Modeling and Simulation of Robotic Appendage Interaction With Granular Material. Journal of Applied Mechanics, Transactions ASME, 2021, 88, .	1.1	3
2138	SPH MODELLING OF TSUNAMI WAVE IMPACT ON LOW-RISE STRUCTURES. Coastal Engineering Proceedings, 2020, , 17.	0.1	0
2139	A new SPH density formulation for 3D free-surface flows. Computers and Fluids, 2022, 232, 105193.	1.3	6
2140	Sparse Inpainting with Smoothed Particle Hydrodynamics. SIAM Journal on Imaging Sciences, 2021, 14, 1669-1705.	1.3	3
2141	Vortex Siphon â€" From 1:1 Scale Physical Model to SPH Simulation and Prototype. Springer Water, 2020, , 795-807.	0.2	1
2142	Modeling of Multipurpose Fixed Breakwater Wave Energy Converter Using SPH Method. Springer Proceedings in Energy, 2020, , 149-162.	0.2	3
2143	Simulation of Waves on Boom and Oil Plume Rising using Smoothed Particle Hydrodynamics. Journal of Applied Fluid Mechanics, 2020, 13, 39-54.	0.4	0
2144	Comparison of Slope Stability Using Smoothed Particle Hydrodynamics, Finite Element Method, and Limit Equilibrium Method. Lecture Notes in Civil Engineering, 2020, , 295-310.	0.3	0
2145	Static Finite Particle Method and Geomechanics Application. Japanese Geotechnical Society Special Publication, 2020, 8, 82-85.	0.2	0
2146	USING THE SPH METHOD FOR MODELING THE CRYSTALLIZATION PROCESS OF ALUMINUM ALLOYS. World Science, 2020, 1, 26-33.	0.0	0
2147	Evaluation of Flow Paths due to Leakages of Flammable Liquids by the SPH Method: Application to Real Engines. , 0, , .		0
2148	Effective Pressure for Two Phase Water-Sediment Models using SPH Method. Journal of Applied Fluid Mechanics, 2020, 13, 1193-1206.	0.4	2
2150	Object-oriented framework for parallel smoothed particle hydrodynamics simulations. , 2006, , 151-167.		0
2151	Performance Evaluation of ANCF Tetrahedral Elements in the Analysis of Liquid Sloshing. Journal of Verification, Validation and Uncertainty Quantification, 2020, 5, .	0.3	0

#	Article	IF	Citations
2152	3D Simulation of Wave Slamming on a Horizontal Deck Using WCSPH. Lecture Notes in Civil Engineering, 2021, , 385-394.	0.3	0
2154	Simulating multi-phase sloshing flows with the SPH method. Applied Ocean Research, 2022, 118, 102989.	1.8	12
2155	TaÅŸkÄ±n Modelleme YÃ¶ntemlerinin GÃ¶zden GeÃ§irilmesi ve KarÅŸÄ±laÅŸtÄ±rÄ±lmasÄ±. European Journal of Science and Technology, 0, , .	0.5	0
2156	Numerical analysis of hydroelasticity problems by coupling WCSPH with multibody dynamics. Ocean Engineering, 2022, 243, 110205.	1.9	9
2157	Numerical study on the dissipation mechanisms in sloshing flows induced by violent and high-frequency accelerations. I. Theoretical formulation and numerical investigation. Physical Review Fluids, 2021, 6, .	1.0	10
2159	The core-merging giant impact in Earthâ€™s accretion history and its implications. Acta Geochimica, 2022, 41, 553-567.	0.7	1
2160	Investigation of the Thermal Field on Solid Propellant Grain with Cracks by Moving Particle Semiâ€Implicit Method. Propellants, Explosives, Pyrotechnics, 0, , .	1.0	0
2161	Adaptive particle refinement strategies in smoothed particle hydrodynamics. Computer Methods in Applied Mechanics and Engineering, 2022, 389, 114276.	3.4	7
2162	Da Vinci's observation of turbulence: A French-Italian study aiming at numerically reproducing the physics behind one of his drawings, 500 years later. Physics of Fluids, 2021, 33, .	1.6	7
2163	Numerical Simulation of Detonation and Brisance Performance of Aluminized HMX Using Densityâ€Adaptive SPH. Propellants, Explosives, Pyrotechnics, 2021, 46, 1800-1814.	1.0	3
2164	How to train your solver: A method of manufactured solutions for weakly compressible smoothed particle hydrodynamics. Physics of Fluids, 2021, 33, 127108.	1.6	2
2165	On removing the numerical instability induced by negative pressures in SPH simulations of typical fluidâ€"structure interaction problems in ocean engineering. Applied Ocean Research, 2021, 117, 102938.	1.8	27
2167	Construction of a Peridynamic Model for Viscous Flow. SSRN Electronic Journal, 0, , .	0.4	0
2168	A numerical study on sloshing mitigation by vertical floating rigid baffle. Journal of Fluids and Structures, 2022, 109, 103456.	1.5	12
2169	Study on solid block landslide generated tsunami using a modified Î´-les-SPH model. Ocean Engineering, 2022, 245, 110473.	1.9	5
2170	A generalized hybrid smoothed particle hydrodynamicsâ€"peridynamics algorithm with a novel Lagrangian mapping for solution and failure analysis of fluidâ€"structure interaction problems. Computer Methods in Applied Mechanics and Engineering, 2022, 389, 114370.	3.4	23
2171	Application of a Moving Particle Semi-Implicit Numerical Wave Flume (MPS-NWF) to model design waves. Coastal Engineering, 2022, 172, 104066.	1.7	6
2172	A high-efficient splitting step reduced-dimension pure meshless method for transient 2D/3D Maxwellâ€™s equations in complex irregular domain. Engineering Analysis With Boundary Elements, 2022, 136, 131-143.	2.0	3

#	ARTICLE	IF	CITATIONS
2173	Development of SPH for simulation of non-isothermal viscoelastic free surface flows with application to injection molding. Applied Mathematical Modelling, 2022, 104, 782-805.	2.2	5
2174	Numerical simulations of multi-layer-liquid sloshing by multiphase MPS method. Journal of Hydrodynamics, 2021, 33, 938-949.	1.3	12
2175	Numerical Simulation of Rock Thermal Fracture Considering Friction Effect in the Framework of Smooth Particle Hydrodynamics Based on Total Lagrangian Formula. Rock Mechanics and Rock Engineering, 2022, 55, 1663-1685.	2.6	6
2176	GENERIC-compliant simulations of Brownian multi-particle systems: modeling stochastic lubrication. SeMA Journal, 2022, 79, 165-185.	1.0	2
2177	Meshfree Methods in Geohazards Prevention: A Survey. Archives of Computational Methods in Engineering, 2022, 29, 3151-3182.	6.0	4
2178	An improved multi-phase weakly-compressible SPH model for modeling various landslides. Powder Technology, 2022, 397, 117120.	2.1	6
2179	A meshless Lagrangian particle-based porosity formulation for under-resolved generalised finite difference-DEM coupling in fluidised beds. Powder Technology, 2022, 398, 117079.	2.1	1
2180	A Review of SPH Techniques for Hydrodynamic Simulations of Ocean Energy Devices. Energies, 2022, 15, 502.	1.6	27
2181	On three-dimensional SPH modelling of large-scale landslides. Canadian Geotechnical Journal, 2022, 59, 24-39.	1.4	19
2182	Optimizations for predictive–corrective particle-based fluid simulation on GPU. Visual Computer, 0, , 1.	2.5	0
2183	The simulation of sediment transport and erosion caused by free-surface flow based on two-phase SPH model with the improved Shields criterion. Ocean Dynamics, 2022, 72, 169-186.	0.9	1
2184	Smoothed Particle Hydrodynamics simulations of reef surf zone processes driven by plunging irregular waves. Ocean Modelling, 2022, 171, 101945.	1.0	8
2185	Comparison of MPS and SPH methods for solving forced motion ship flooding problems. Applied Ocean Research, 2022, 118, 103001.	1.8	11
2186	Superquadric DEM-SPH coupling method for interaction between non-spherical granular materials and fluids. Particuology, 2022, 71, 20-33.	2.0	3
2187	Numerical Simulation Study of Debris Particles Movement Characteristics by Smoothed Particle Hydrodynamics. Journal of Disaster Research, 2022, 17, 237-245.	0.4	0
2188	Numerical study of waves generated during iceberg calving in sliding mode. Ocean Engineering, 2022, 246, 110622.	1.9	1
2189	Application of finite volume particle method for axisymmetric modeling of droplet formation in dripping and Rayleigh regimes. Computers and Fluids, 2022, 236, 105321.	1.3	2
2190	Characteristics of iceberg calving-generated waves based on three-dimensional SPH simulations. Coastal Engineering, 2022, 173, 104090.	1.7	1

#	ARTICLE	IF	CITATIONS
2191	Physical process-based runout modeling and hazard assessment of catastrophic debris flow using SPH incorporated with ArcGIS: A case study of the Hongchun gully. Catena, 2022, 212, 106052.	2.2	11
2192	SARS-CoV-2 rate of spread in and across tissue, groundwater and soil: A meshless algorithm for the fractional diffusion equation. Engineering Analysis With Boundary Elements, 2022, 138, 108-117.	2.0	25
2193	Simulation of Morphology Evolution in Spray Drying of Suspensions by a Meshfree Approach. Chemie-Ingenieur-Technik, 2022, 94, 340-347.	0.4	1
2194	The effects of smoothing length on the onset of wave breaking in smoothed particle hydrodynamics (SPH) simulations of highly directionally spread waves. Computational Particle Mechanics, 2022, 9, 1031-1047.	1.5	1
2195	MPS modeling of cross-sectional averaged shallow water flows with open boundaries using TVD-MacCormack predictor-corrector. Journal of Hydrology, 2022, 608, 127566.	2.3	4
2196	A staggered semi-implicit hybrid finite volume / finite element scheme for the shallow water equations at all Froude numbers. Applied Numerical Mathematics, 2022, 175, 108-132.	1.2	14
2197	Fluidâ€"structure interaction with ALE formulation and skeleton-based structural models. Journal of Fluids and Structures, 2022, 110, 103513.	1.5	9
2198	Rigid-Body Analysis of a Beveled Shape Structure in Regular Waves Using the Weakly Compressible Smoothed Particle Hydrodynamics (WCSPH) Method. Journal of Marine Science and Application, 2021, 20, 621.	0.7	1
2199	DEVELOPMENT OF MULTI-RESOLUTION SPH METHOD AND ITS VALIDATION. Journal of Japan Society of Civil Engineers Ser B1 (Hydraulic Engineering), 2021, 77, I_955-I_960.	0.0	0
2201	Numerical modeling of the flow of self-consolidating engineered cementitious composite (ECC) using smoothed particle hydrodynamics. , 2022, , 321-336.		1
2203	A Coupled Biomechanical-Smoothed Particle Hydrodynamics Model for Horse Racing Tracks. Frontiers in Bioengineering and Biotechnology, 2022, 10, 766748.	2.0	2
2204	Improved Smoothed Particle Hydrodynamics (SPH) Model for Simulation of Abrasive Water-Jet (AWJ). International Journal of Computational Methods, 0, , .	0.8	1
2205	Modeling Coastal Freak Wave Occurrence. Journal of Marine Science and Engineering, 2022, 10, 323.	1.2	2
2206	A weakly compressible smoothed particle hydrodynamics framework for melting multiphase flow. AIP Advances, 2022, 12, 025329.	0.6	1
2207	DEMâ€"SPH coupling method for the interaction between irregularly shaped granular materials and fluids. Powder Technology, 2022, 400, 117249.	2.1	6
2208	Application of smoothed particle hydrodynamics method for simulating the flooding process of a damaged ship cabin in full-time domain. Ocean Engineering, 2022, 248, 110716.	1.9	6
2209	Analysis and application of the modified smoothed particle hydrodynamics method to simulate cavitating flow. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2022, 44, 1.	0.8	0
2210	Traction control design for off-road mobility using an SPH-DAE cosimulation framework. Multibody System Dynamics, 2022, 55, 165-188.	1.7	7

#	ARTICLE	IF	CITATIONS
2211	A hydraulic–mechanical coupling model based on smoothed particle dynamics for simulating rock fracture. Arabian Journal of Geosciences, 2022, 15, 1.	0.6	3
2212	Numerical simulation of droplet coalescence based on the SPH method. Theoretical and Applied Mechanics Letters, 2022, 12, 100333.	1.3	1
2213	Air-core vortex formation in a draining reservoir using smoothed-particle hydrodynamics (SPH). Physics of Fluids, 2022, 34, 037101.	1.6	1
2214	An investigation into the nonlinear effects in the roll motion of 2-D bodies by SPH method. Ocean Engineering, 2022, 248, 110679.	1.9	0
2215	A coupled thermo-mechanical bond-based smoothed particle dynamics model for simulating thermal cracking in rocks. Engineering Fracture Mechanics, 2022, 265, 108364.	2.0	4
2216	Implicit iterative particle shifting for meshless numerical schemes using kernel basis functions. Computer Methods in Applied Mechanics and Engineering, 2022, 393, 114716.	3.4	10
2217	A general Neural Particle Method for hydrodynamics modeling. Computer Methods in Applied Mechanics and Engineering, 2022, 393, 114740.	3.4	18
2218	An improved impermeable solid boundary scheme for Meshless Local Petrov–Galerkin method. European Journal of Mechanics, B/Fluids, 2022, 95, 94-105.	1.2	2
2219	Numerical Simulation of Mixing in Active Micromixers Using SPH. Transport in Porous Media, 0, , 1.	1.2	3
2220	<scp>Three–dimensional</scp> weakly compressible moving particle simulation coupled with geometrically nonlinear shell for hydro–elastic free–surface flows. International Journal for Numerical Methods in Fluids, 2022, 94, 1048-1081.	0.9	2
2221	SPH study of wave force on simplified superstructure of open-type sea access road. Ocean Engineering, 2022, 249, 110869.	1.9	7
2222	An immersed finite element material point (IFEMP) method for free surface fluid–structure interaction problems. Computer Methods in Applied Mechanics and Engineering, 2022, 393, 114809.	3.4	10
2223	Feasibility of Kinetic Umbrellas as Deployable Flood Barriers during Landfalling Hurricanes. Journal of Structural Engineering, 2022, 148, .	1.7	7
2224	SPH-DEM modeling of the seismic response of shallow foundations resting on liquefiable sand. Soil Dynamics and Earthquake Engineering, 2022, 156, 107210.	1.9	3
2225	A dynamic relaxation method with operator splitting and random-choice strategy for SPH. Journal of Computational Physics, 2022, 458, 111105.	1.9	5
2226	An efficient and generalized solid boundary condition for SPH: Applications to multi-phase flow and fluid–structure interaction. European Journal of Mechanics, B/Fluids, 2022, 94, 276-292.	1.2	16
2227	Investigation of Numerical Modelling Techniques for Predicting Highly Nonlinear Extreme Waves in Shallow and Deep Water. , 2021, , .		0
2228	Sph Modeling Of Extreme Wave Overtopping On A Fixed Deck. , 2021, , .		0

#	ARTICLE	IF	CITATIONS
2229	Sonlu Elemanlar Modeli Anomaliliklerinin SÄ±vÄ± Depolama TanklarÄ±nÄ±n Sismik Performans DeÄŸerlendirmesine Etkisi. TÃ¼rk Deprem AraÅŸtÄ±rma Dergisi, 0, , .	0.8	0
2230	A Novel Improved Coupled Dynamic Solid Boundary Treatment for 2D Fluid Sloshing Simulation. Journal of Marine Science and Engineering, 2021, 9, 1395.	1.2	3
2231	Elasticâ€"viscoplastic constitutive theory of dense granular flow and its three-dimensional numerical realization. Physics of Fluids, 2021, 33, .	1.6	2
2232	Multiphase flow simulation of water entry of a structure with complex geometry using a three-dimensional parallel compressible model. Physics of Fluids, 2021, 33, .	1.6	6
2233	Research on the Coupled Waterâ€"Soil SPH Algorithm Improvement and Application Based on Two-phase Mixture Theory. International Journal of Computational Methods, 2022, 19, .	0.8	1
2234	Study on the Resonant Behaviors of a Bottom-Hinged Oscillating Wave Surge Converter. Journal of Marine Science and Engineering, 2022, 10, 2.	1.2	6
2235	Numerical Investigation of Pollutant Transport in a Realistic Terrain with the SPH-SWE Method. Frontiers in Environmental Science, 2022, 10, .	1.5	1
2237	The Analysis of Particle Flow using the Parallelised Smoothed Particle Hydrodynamics Method. , 0, , .		0
2238	Sigma-Sph, a Covariance-Based Smoothed Particle Hydrodynamics with an Application to Simulating Disc Fragmentation. SSRN Electronic Journal, 0, , .	0.4	0
2239	Numerical Study of the Ice Breaking Resistance of the Icebreaker in the Yellow River Through Smoothed-Particle Hydrodynamics. Journal of Marine Science and Application, 2022, 21, 1-14.	0.7	6
2240	Study on physical behaviors according to element formulations of ballistic impact simulation models. International Journal of Protective Structures, 0, , 204141962210958.	1.4	0
2241	Mixed Smoothed Particle Hydrodynamics Method for Planar Elasticity Problems. Iranian Journal of Science and Technology - Transactions of Civil Engineering, 2023, 47, 491-504.	1.0	1
2242	The Effect of River Channel Characteristics on Landslide-Generated Waves and the Dynamic Water Pressure of the Dam Surface. Water (Switzerland), 2022, 14, 1543.	1.2	1
2243	The effect of thixotropy on deformation of a single droplet under simple shear flow. Computers and Mathematics With Applications, 2022, 117, 206-215.	1.4	4
2244	Mechanism and flow process of debris avalanche in mining waste dump based on improved SPH simulation. Engineering Failure Analysis, 2022, 138, 106345.	1.8	2
2245	Convergence-improved source term of pressure Poisson equation for moving particle semi-implicit. Applied Ocean Research, 2022, 124, 103189.	1.8	0
2246	Investigation on the bouncing and coalescence behaviors of bubble pairs based on an improved APR-SPH method. Ocean Engineering, 2022, 255, 111401.	1.9	9
2247	VecDualSPHysics: A vectorized implementation of Smoothed Particle Hydrodynamics method for simulating fluid flows on multi-core processors. Journal of Computational Physics, 2022, 463, 111234.	1.9	4

#	Article	IF	Citations
2248	Analysis of the cutting fluid behavior with a modified micro single-lip deep hole drilling tool. CIRP Journal of Manufacturing Science and Technology, 2022, 38, 93-104.	2.3	2
2249	Parallel adaptive weakly-compressible SPH for complex moving geometries. Computer Physics Communications, 2022, 277, 108377.	3.0	5
2250	Two-dimensional smoothed particle hydrodynamics (SPH) simulation of multiphase melting flows and associated interface behavior. Engineering Applications of Computational Fluid Mechanics, 2022, 16, 588-629.	1.5	7
2251	GPU-based SPH-DEM Method to Examine the Three-Phase Hydrodynamic Interactions between Multiphase Flow and Solid Particles. International Journal of Multiphase Flow, 2022, 153, 104125.	1.6	9
2252	A coupled discrete element material point method for fluid–solid–particle interactions with large deformations. Computer Methods in Applied Mechanics and Engineering, 2022, 395, 115023.	3.4	5
2253	Study on the weakly compressible SPH method for improving pressure distribution of violent fluid-structure impact flows. Water Science and Technology: Water Supply, 0, , .	1.0	1
2254	Border mapping multi-resolution (BMMR) technique for incompressible projection-based particle methods. Computer Methods in Applied Mechanics and Engineering, 2022, 396, 115013.	3.4	3
2255	Wall-layer boundary condition method for laminar and turbulent flows in weakly-compressible SPH. European Journal of Mechanics, B/Fluids, 2022, 95, 276-288.	1.2	3
2256	Numerical Computation of Sloshing-Induced Force in Complex Ship Tanks under the Excitation of Ship Rolling Motion Based on the MPS Method. Applied Sciences (Switzerland), 2022, 12, 5130.	1.3	3
2257	A multi-layer SPH method for generic water–soil dynamic coupling problems. Part I: Revisit, theory, and validation. Computer Methods in Applied Mechanics and Engineering, 2022, 396, 115106.	3.4	16
2258	Vibrating behavior of submerged floating tunnel in current field investigated with hybrid vector-autoregressive model. Ocean Engineering, 2022, 256, 111359.	1.9	1
2259	Impact pressure of dam-break waves on a vertical wall with various downstream conditions by an explicit mesh-free method. Ocean Engineering, 2022, 256, 111569.	1.9	10
2262	Multiphase large-eddy simulations of human cough jet development and expiratory droplet dispersion. Journal of Fluid Mechanics, 2022, 942, .	1.4	7
2263	An algorithm for implementing a boundary viscous force with single-layer wall particles based on WCSPH. Journal of Computational Physics, 2022, 464, 111328.	1.9	2
2265	DualSPHysics simulations of spillway hydraulics: a comparison between single- and two-phase modelling approaches. Journal of Hydraulic Research/De Recherches Hydrauliques, 2022, 60, 835-852.	0.7	14
2266	An improved recoil pressure boundary condition for the simulation of deep penetration laser beam welding using the SPH method. European Journal of Mechanics, B/Fluids, 2022, 96, 26-38.	1.2	4
2267	Numerical simulation of sloshing in the propellant tank of reusable rocket vehicle using meshfree method. Computational Particle Mechanics, 0, , .	1.5	0
2268	Lagrangian-to-Eulerian Mapping for Modal Decomposition of Multiphase Flows via Smoothed-Particle Hydrodynamics. , 2022, , .		0

#	Article	IF	Citations
2269	A bond-based smoothed particle hydrodynamics considering frictional contact effect for simulating rock fracture. Acta Geotechnica, 2023, 18, 625-649.	2.9	8
2270	A smoothed particle hydrodynamics approach for phase field modeling of brittle fracture. Computer Methods in Applied Mechanics and Engineering, 2022, 398, 115191.	3.4	9
2271	3D multi-resolution SPH modeling of the water entry dynamics of free-fall lifeboats. Ocean Engineering, 2022, 257, 111648.	1.9	23
2272	Dynamic simulation of the water inrush process in tunnel construction using a three-dimensional coupled discontinuous deformation analysis and smoothed particle hydrodynamics method. Tunnelling and Underground Space Technology, 2022, 127, 104612.	3.0	10
2273	Experimental investigation and SPH simulation on interaction between regular waves and vertical breakwater under medium-long period waves. International Journal of Naval Architecture and Ocean Engineering, 2022, 14, 100467.	1.0	2
2274	Mathematical and Computational Modeling of Poroelastic Cell Scaffolds Used in the Design of an Implantable Bioartificial Pancreas. Fluids, 2022, 7, 222.	0.8	0
2275	An improved SPH-FEM coupling approach for modeling fluid–structure interaction problems. Computational Particle Mechanics, 2023, 10, 313-330.	1.5	7
2276	Fully implicit, stabilised, three-field material point method for dynamic coupled problems. Engineering With Computers, 2022, 38, 5583-5602.	3.5	5
2277	Lagrangian meshfree particle method (SPH) based simulation for granular flow in a rotating drum with regularized $\mu(I)$ elastoplastic model. Powder Technology, 2022, 408, 117699.	2.1	3
2278	Comparison of hydrodynamic performance of floating breakwater with taut, slack, and hybrid mooring systems: An SPH-based preliminary investigation. Ocean Engineering, 2022, 258, 111818.	1.9	6
2279	A fully explicit incompressible Smoothed Particle Hydrodynamics method for multiphase flow problems. Engineering Analysis With Boundary Elements, 2022, 143, 501-524.	2.0	4
2280	An artificial damping method for total Lagrangian SPH method with application in biomechanics. Engineering Analysis With Boundary Elements, 2022, 143, 1-13.	2.0	16
2281	A numerically robust, parallel-friendly variant of BiCGSTAB for the semi-implicit integration of the viscous term in Smoothed Particle Hydrodynamics. Journal of Computational Physics, 2022, 466, 111413.	1.9	3
2282	Mechanisms of pop-up delamination in laminated composites pierced by the initial pure waterjet in abrasive waterjet machining. Composite Structures, 2022, 297, 115968.	3.1	3
2283	Numerical Simulation Low Filling Ratio of Sway Sloshing in the Prismatic Tank Using Smoothed Particle Hydrodynamics. CFD Letters, 2022, 14, 113-123.	0.4	3
2284	Review of the State-of-Art of MPS Method in Ocean Engineering. Journal of Marine Science and Engineering, 2022, 10, 1003.	1.2	0
2285	基于自适应核函数的SPH方法及其应用研究. Scientia Sinica: Physica, Mechanica Et Astronomica, 2022, , .	0.2	0
2286	Three-dimensional smoothed particle hydrodynamics modeling of near-shore current flows over rough topographic surface. Frontiers in Marine Science, 0, 9, .	1.2	10

#	Article	IF	Citations
2287	æ—¶é—´ç©ºé—´â€¡è‡ªé€‚åº"å…‰æ»'ç²'åœµä½"åŠ¨åŠ›å¦åœ¨å†²å‡»ç°æ'žå§ä½¢é—é˜ä¸çš"åº"ç". Scientia Sinica: Physica, Mec	0.9	0
2288	æ³¢æµ¬äŽå§å²"çƒ"æžæµ¬è€¦â'è¿‡ç¨çš"SPHæ¡æ‹Ÿç"ç©¶. Scientia Sinica: Physica, Mechanica Et Astronomica, 2022, , .	0.2	0
2289	Experimental and Numerical Characterization of Violent Sloshing Flows Using a Single Degree of Freedom Approach. Applied Sciences (Switzerland), 2022, 12, 7897.	1.3	2
2290	Effect of numerical speed of sound and density diffusion on SPH modeling of rigid body migration in plane Poiseuille flow. Computational Particle Mechanics, 0, , .	1.5	0
2291	Parametric Design and Numerical Investigation of Hydrodynamic Characteristics of a New Type of Armour Block TB-CUBE Based on SPH Method. Journal of Marine Science and Engineering, 2022, 10, 1116.	1.2	3
2292	Smoothed particle hydrodynamic simulations of electro-coalescence in waterâ€"oil systems. Physics of Fluids, 2022, 34, .	1.6	4
2293	Generalized and efficient wall boundary condition treatment in GPU-accelerated smoothed particle hydrodynamics. Computer Physics Communications, 2022, 281, 108507.	3.0	3
2294	On the stability of submerged rigid breakwaters against solitary waves. Coastal Engineering, 2022, 177, 104196.	1.7	5
2295	A shift model based on particle collisions - preserving kinetic energy and potential energy in a constant force field - to avoid particle clustering in SPH. Journal of Computational Physics, 2022, , 111530.	1.9	0
2296	Research on Lateral Bearing Behavior of Spliced Helical Piles with the SPH Method. Applied Sciences (Switzerland), 2022, 12, 8215.	1.3	4
2297	Modelling urban sewer flooding and quantitative microbial risk assessment: A critical review. Journal of Flood Risk Management, 2022, 15, .	1.6	7
2298	Techniques for second-order convergent weakly compressible smoothed particle hydrodynamics schemes without boundaries. Physics of Fluids, 2022, 34, .	1.6	5
2299	A CIP-based numerical simulation of wave interaction with a fluid-filled membrane submerged breakwater. Ocean Engineering, 2022, 260, 111819.	1.9	2
2300	A three-dimensional fluid-structure interaction model based on SPH and lattice-spring method for simulating complex hydroelastic problems. Ocean Engineering, 2022, 260, 112026.	1.9	13
2301	SPH simulations of thixo-viscoplastic fluid flow past a cylinder. Journal of Non-Newtonian Fluid Mechanics, 2022, 308, 104891.	1.0	4
2302	An efficient MPS refined technique with adaptive variable-size particles. Engineering Analysis With Boundary Elements, 2022, 143, 663-676.	2.0	4
2303	A decoupled SPH-FEM analysis of hydrodynamic wave pressure on hyperbolic-paraboloid thin-shell coastal armor and corresponding structural response. Engineering Structures, 2022, 268, 114738.	2.6	3
2304	A finite particle method based on a Riemann solver for modeling incompressible flows. Computers and Mathematics With Applications, 2022, 124, 74-88.	1.4	2

#	Article	IF	Citations
2305	Two-phase fully-coupled smoothed particle hydrodynamics (SPH) model for unsaturated soils and its application to rainfall-induced slope collapse. Computers and Geotechnics, 2022, 151, 104964.	2.3	11
2306	Smoothed particle hydrodynamics for cohesive dense granular media. Engineering Analysis With Boundary Elements, 2022, 144, 199-220.	2.0	1
2307	Construction of a peridynamic model for viscous flow. Journal of Computational Physics, 2022, 468, 111509.	1.9	3
2308	Liquefaction induced permanent ground deformations and energy dissipation analysis based on smoothed particle hydrodynamics method (SPH): validation by large-scale model tests. Granular Matter, 2022, 24, .	1.1	0
2309	Development of smoothed particle hydrodynamics method for modeling active nematics. International Journal for Numerical Methods in Engineering, 2023, 124, 159-182.	1.5	4
2310	A multi-resolution particle method with high order accuracy for solid-liquid phase change represented by sharp moving interface. Computers and Fluids, 2022, 247, 105646.	1.3	3
2311	A coupled SPH-PD model for fluidâ€"structure interaction in an irregular channel flow considering the structural failure. Computer Methods in Applied Mechanics and Engineering, 2022, 401, 115573.	3.4	10
2312	Macroscopic modelling for screens inside a tuned liquid damper using incompressible smoothed particle hydrodynamics. Ocean Engineering, 2022, 263, 112320.	1.9	4
2313	Three-dimensional coupling between Boussinesq (FEM) and Navierâ€"Stokes (particle based) models for wave structure interaction. Ocean Engineering, 2022, 263, 112426.	1.9	1
2314	Detecting mixing barriers in Twin-Screw extruder elements via Lagrangian Coherent Structures. Chemical Engineering Science, 2022, 263, 118069.	1.9	4
2315	INVESTIGATING DIFFERENT WCSPH DISCRETIZATION METHODS USED FOR WEDGE IMPACT PROBLEMS. , 2022, 49, 49-74.		1
2316	Study of the Imbibition Phenomenon in Porous Media by the Smoothed Particle Hydrodynamic (SPH) Method. Entropy, 2022, 24, 1212.	1.1	9
2317	Stabilized smoothed particle finite element method for coupled large deformation problems in geotechnics. Acta Geotechnica, 2023, 18, 1215-1231.	2.9	7
2318	The role of time integration in energy conservation in Smoothed Particle Hydrodynamics fluid dynamics simulations. European Journal of Mechanics, B/Fluids, 2023, 97, 78-92.	1.2	2
2319	Flood Uncertainty Estimation Using Deep Ensembles. Water (Switzerland), 2022, 14, 2980.	1.2	3
2320	Smoothed particle method for fluid-structure interaction. Scientia Sinica: Physica, Mechanica Et Astronomica, 2022, 52, 104702.	0.2	2
2321	Dynamic Model of High-Temperature Sintered Iron Ore Plastic Deformation Considering Reduction Degree. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 0, , .	1.0	0
2322	A Lagrangian particle model on GPU for contaminant transport in groundwater. Computational Particle Mechanics, 2023, 10, 587-601.	1.5	5

#	ARTICLE	IF	CITATIONS
2323	Overview of Moving Particle Semi-implicit Techniques for Hydrodynamic Problems in Ocean Engineering. Journal of Marine Science and Application, 2022, 21, 1-22.	0.7	13
2324	Dissolution characteristics of solutes with different shapes using the moving particle semi-implicit method. Physics of Fluids, 2022, 34, .	1.6	1
2325	An explicit particle method for simulation of multiphase flows. Ocean Engineering, 2022, 264, 112484.	1.9	1
2326	A novel coupled Riemann SPHâ€"RKPM model for the simulation of weakly compressible fluidâ€"structure interaction problems. Ocean Engineering, 2022, 266, 112447.	1.9	2
2327	Study on incompressible fluid analysis by three-dimensional particle method with finite volume techniques. EPJ Web of Conferences, 2022, 269, 01020.	0.1	0
2328	Simulating melt spreading into shallow water using moving particle hydrodynamics with turbulence model. Computational Particle Mechanics, 2023, 10, 677-690.	1.5	3
2329	Numerical Model of Constrained Wave Energy Hyperbaric Converter under Full-Scale Sea Wave Conditions. Journal of Marine Science and Engineering, 2022, 10, 1489.	1.2	3
2330	A Multiscale Simulation of Polymer Melt Injection Molding Filling Flow Using SPH Method with Slip-Link Model. Polymers, 2022, 14, 4334.	2.0	1
2331	Experimental and Numerical Investigation of Beach Slope Effects on the Hydrodynamic Loading of Tsunami-like Surges on a Vertical Wall. Journal of Marine Science and Engineering, 2022, 10, 1580.	1.2	2
2332	Numerical simulation of drop deformation under simple shear flow of Giesekus fluids by SPH. International Journal of Numerical Methods for Heat and Fluid Flow, 2023, 33, 263-281.	1.6	2
2333	Initial particle arrangement for the arbitrarily complex geometry of mesh-free methods. Computational Particle Mechanics, 0, , .	1.5	0
2334	Smoothed Particle Hydrodynamics Simulation of the Dynamic Water Pressure inside an Arch Rib of an Arch Bridge Subjected to Seismic Excitation. Applied Sciences (Switzerland), 2022, 12, 10626.	1.3	1
2335	A simple <scp>Eulerianâ€"Lagrangian</scp> weakly compressible smoothed particle hydrodynamics method for fluid flow and heat transfer. International Journal for Numerical Methods in Engineering, 2023, 124, 928-958.	1.5	4
2336	Numerical Simulation of Mixing Fluid with Ferrofluid in a Magnetic Field Using the Meshless SPH Method. Fluids, 2022, 7, 341.	0.8	1
2337	Applicable Investigation of SPH in Characterization of Fluid Flow in Uniform and Non-Uniform Periodic Porous Media. Sustainability, 2022, 14, 14320.	1.6	2
2338	Enhanced resolution of the continuity equation in explicit weakly compressible SPH simulations of incompressible freeâ€"surface fluid flows. Applied Mathematical Modelling, 2023, 116, 84-121.	2.2	38
2339	Analytical solutions for the dynamic analysis of a modular floating structure for urban expansion. Ocean Engineering, 2022, 266, 112878.	1.9	1
2340	Numerical investigation of wave run-up and impact forces on large offshore jacket platforms. Ocean Engineering, 2022, 266, 112539.	1.9	2

#	Article	IF	Citations
2341	An integrative SPH method for heat transfer problems involving fluid-structure interaction. Acta Mechanica Sinica/Lixue Xuebao, 2023, 39, .	1.5	2
2342	A multi-phase SPH simulation of oil spill diffusion in seawater currents. Acta Mechanica Sinica/Lixue Xuebao, 2023, 39, .	1.5	2
2343	Smoothed particle hydrodynamics: Methodology development and recent achievement. Journal of Hydrodynamics, 2022, 34, 767-805.	1.3	28
2344	How to train your solver: Verification of boundary conditions for smoothed particle hydrodynamics. Physics of Fluids, 2022, 34, .	1.6	3
2345	A Numerical Investigation of the Energy Efficiency Enhancement of Oscillating Water Column Wave Energy Converter Systems. Energies, 2022, 15, 8276.	1.6	6
2346	Importance of Initial Particle Distribution in Modeling Dam Break Analysis with SPH. KSCE Journal of Civil Engineering, 2023, 27, 218-232.	0.9	1
2347	Numerical Simulation ofÂShip Tank Sloshing Based onÂMPS Method. Communications in Computer and Information Science, 2022, , 125-137.	0.4	0
2348	Physical Motivation. SpringerBriefs in Mathematics, 2022, , 3-19.	0.2	0
2349	Solitary wave interaction with upright thin porous barriers. Ocean Engineering, 2023, 268, 113394.	1.9	5
2350	Analysis method of the water inrush and collapse in jointed rock mass tunnels: A case study. Engineering Analysis With Boundary Elements, 2023, 146, 838-850.	2.0	16
2351	DEM-enriched contact approach for material point method. Computer Methods in Applied Mechanics and Engineering, 2023, 404, 115814.	3.4	2
2352	A meshless method coupling peridynamics with corrective smoothed particle method for predicting material failure. Engineering Analysis With Boundary Elements, 2023, 147, 125-137.	2.0	1
2353	An enhanced implicit viscosity ISPH method for simulating free-surface flow coupled with solid-liquid phase change. Journal of Computational Physics, 2023, 474, 111809.	1.9	3
2354	A novel MPI-based parallel smoothed particle hydrodynamics framework with dynamic load balancing for free surface flow. Computer Physics Communications, 2023, 284, 108608.	3.0	4
2355	Globally time-reversible fluid simulations with smoothed particle hydrodynamics. Computer Physics Communications, 2023, 284, 108593.	3.0	3
2356	Research Progress of SPH Simulations for Complex Multiphase Flows in Ocean Engineering. Energies, 2022, 15, 9000.	1.6	3
2357	Numerical investigation of the flow characteristics of Bingham fluid on a slope with corrected smooth particle hydrodynamics. Frontiers in Environmental Science, 0, 10, .	1.5	0
2359	Theoretical framework bridging classical and quantum mechanics for the dynamics of cryogenic liquid helium-4 using smoothed-particle hydrodynamics. Physics of Fluids, 2022, 34, .	1.6	3

#	ARTICLE	IF	CITATIONS
2360	Development of a non-local partial Peridynamic explicit mesh-free incompressible method and its validation for simulating dry dense granular flows. Acta Geotechnica, 2023, 18, 3133-3152.	2.9	2
2361	Efficient mesh-free modeling of liquid droplet impact on elastic surfaces. Engineering With Computers, 2023, 39, 3441-3471.	3.5	2
2362	Mesh-Free Methods with Special Focus on SPH. Springer Tracts in Civil Engineering, 2023, , 655-710.	0.3	0
2363	A coupled SPHâ€"DEM model for erosion process of solid surface by abrasive water-jet impact. Computational Particle Mechanics, 2023, 10, 1093-1112.	1.5	4
2364	Preparative Knowledge of Classical Mechanics. Springer Tracts in Civil Engineering, 2023, , 149-225.	0.3	0
2365	A dendritic freezing model for in-flight supercooled large droplets impingement and solidification. Computers and Fluids, 2023, 254, 105778.	1.3	1
2366	Simulation of floating debris in SPH shallow water flow model with tsunami application. Advances in Water Resources, 2023, 171, 104363.	1.7	5
2367	Evaluation of particleâ€'based smoothed particle hydrodynamics boundary handling approaches in computer animation. Computer Animation and Virtual Worlds, 2023, 34, .	0.7	3
2368	On the derivation of a component-free scheme for Lagrangian fluidâ€"structure interaction problems. Acta Mechanica, 2023, 234, 1777-1809.	1.1	1
2369	Kernel broken smooth particle hydrodynamics method for crack propagation simulation applied in layered rock cells and tunnels. Underground Space (China), 2023, 10, 55-75.	3.4	3
2370	SPHydro: Promoting smoothed particle hydrodynamics method toward extensive applications in ocean engineering. Physics of Fluids, 2023, 35, .	1.6	17
2371	An SPH study of slamming and splashing at the bow of SYSU vessel. Ocean Engineering, 2023, 269, 113581.	1.9	6
2372	A review of computational methods for studying oscillating water columns â€" the Navier-Stokes based equation approach. Renewable and Sustainable Energy Reviews, 2023, 174, 113124.	8.2	10
2373	Numerical study on the structural response of a masonry arch bridge subject to flood flow and debris impact. Structures, 2023, 48, 782-797.	1.7	6
2374	A modified friction-viscous solid boundary of the SPH method for landslide simulation. Computers and Geotechnics, 2023, 155, 105238.	2.3	3
2375	CFD Analysis of a Hydrostatic Pressure Machine with an Open Source Solver. Fluids, 2023, 8, 9.	0.8	0
2376	Evaluation of SPH and FVM Models of Kinematically Prescribed Peristalsis-like Flow in a Tube. Fluids, 2023, 8, 6.	0.8	4
2377	Lattice Boltzmann models for hydraulic engineering problems. , 2023, , 245-256.		0

#	ARTICLE	IF	CITATIONS
2378	On methodology and application of smoothed particle hydrodynamics in fluid, solid and biomechanics. Acta Mechanica Sinica/Lixue Xuebao, 2023, 39, .	1.5	9
2379	Flow processes occurring within the body but still external to the body's epithelial layer (gastrointestinal and respiratory tracts). , 2023, , 361-424.		0
2380	Confirmation of vehicle stability criteria through a combination of smoothed particle hydrodynamics and laboratory measurements. Journal of Flood Risk Management, 0, , .	1.6	1
2381	Whole-body movement modeling in realistic environments for understanding performance and injury. , 2023, , 709-765.		1
2382	Flow and remodeling processes occurring within the body proper. , 2023, , 591-655.		0
2383	A pressure-dependent adaptive resolution scheme for smoothed particle hydrodynamics simulation of underwater explosion. Ocean Engineering, 2023, 270, 113695.	1.9	7
2384	An improved multiphase SPH algorithm with kernel gradient correction for modelling fuelâ€"coolant interaction. Frontiers in Energy Research, 0, 11, .	1.2	0
2385	A review on the progress and research directions of ocean engineering. Ocean Engineering, 2023, 272, 113617.	1.9	35
2386	Modelling of sloped and curved bottom sloshing tanks with screens using smoothed particle hydrodynamics. International Journal of Dynamics and Control, 0, , .	1.5	1
2387	Numerical simulation the fracture of rock in the framework of plastic-bond-based SPH and its applications. Computers and Geotechnics, 2023, 157, 105359.	2.3	4
2388	An improved SPH method for simulating crack propagation and coalescence in rocks with pre-existing cracks. Engineering Fracture Mechanics, 2023, 282, 109148.	2.0	4
2389	The local radial basis function collocation method for elastic wave propagation analysis in 2D composite plate. Engineering Analysis With Boundary Elements, 2023, 150, 571-582.	2.0	4
2390	Blood pressure-driven rupture of blood vessels. Journal of the Mechanics and Physics of Solids, 2023, 174, 105274.	2.3	3
2391	Simulation of droplet bouncing on flexible substrate in 2D and 3D with WC-TL SPH method. Journal of Fluids and Structures, 2023, 119, 103864.	1.5	1
2392	Simulation of brittle fractures using energy-bond-based smoothed particle hydrodynamics. International Journal of Mechanical Sciences, 2023, 248, 108236.	3.6	10
2393	Study on the propagation of regular water waves in a numerical wave flume with the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si163.svg" display="inline" id="d1e821"><mml:mi>δ</mml:mi></mml:math>-SPH<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si165.svg" display="inline" id="d1e826"><mml:msup><mml:mrow /><mml:mrow><mml:mi mathvariant="normal">C</mml:mi></mml:mrow></mml:msup></mml:math> model. Applied Ocean Research	1.8	4
2394	A numerical flume for waves on variable sheared currents using smoothed particle hydrodynamics (SPH) with open boundaries. Applied Ocean Research, 2023, 135, 103527.	1.8	6
2395	Hydrodynamic investigation on the submerged tunnel suspended from a fixed platform using SPH method. Ocean Engineering, 2023, 277, 114357.	1.9	1

#	ARTICLE	IF	CITATIONS
2396	Point to point time optimal handling of unmounted rigid objects and liquid-filled containers. Mechanism and Machine Theory, 2023, 184, 105286.	2.7	0
2397	A three-dimensional ISPH-FVM coupling method for simulation of bubble rising in viscous stagnant liquid. Ocean Engineering, 2023, 278, 114497.	1.9	3
2398	On the accuracy of SPH formulations with boundary integral terms. Mathematics and Computers in Simulation, 2023, 210, 320-345.	2.4	2
2399	Smoothed particle hydrodynamics for modelling cold-water coral habitats in changing oceans. Journal of Sea Research, 2023, 192, 102358.	0.6	1
2400	SIMULATION OF OVERLAND FLOW DUE TO RAINFALL USING SMOOTHED PARTICLE HYDRODYNAMICS. Journal of Japan Society of Civil Engineers Ser B1 (Hydraulic Engineering), 2022, 78, I_553-I_558.	0.0	0
2401	A novel implicit meshless particle method: NURBS-based particle hydrodynamics (NBPH). Computer Methods in Applied Mechanics and Engineering, 2023, 406, 115895.	3.4	1
2402	A unified and modular coupling of particle methods with fem for civil engineering problems. Computational Particle Mechanics, 0, , .	1.5	0
2403	Natural convection of NEPCM in a partial porous H-shaped cavity: ISPH simulation. International Journal of Numerical Methods for Heat and Fluid Flow, 2023, 33, 2232-2249.	1.6	9
2404	Two-phase MPM modelling of debris flow impact against dual rigid barriers. Geotechnique, 0, , 1-14.	2.2	6
2406	A multi-order smoothed particle hydrodynamics method for cardiac electromechanics with the Purkinje network. Computer Methods in Applied Mechanics and Engineering, 2023, 407, 115885.	3.4	1
2407	ä¸€ç§æ"¹è¿›çš"å…‰æ»'ç²'åå•å¨å›å¦ æ³•å¨œå°ºé¸æ‡æ¶ä»¶å²©©èˆè¾¾å¦ä¸çš"éŒè¯ä¸Žåº"ç"¨. Diqiu Kexue - Zhongguo Dizhi Daxue Xuebao/Earth Science - Journal of China University of Geosciences, 2022, 47, 4469.	0.1	1
2408	Lagrangian computational fluid dynamics for nuclear Thermal-Hydraulics & safety. Nuclear Engineering and Design, 2023, 405, 112228.	0.8	3
2409	Simulation of water entryâ€"exit problems highlighting suction phenomena by coupled Eulerianâ€"Lagrangian approach. European Journal of Mechanics, B/Fluids, 2023, 100, 37-51.	1.2	0
2410	Clone particles: A simplified technique to enforce solid boundary conditions in SPH. Computer Methods in Applied Mechanics and Engineering, 2023, 409, 115973.	3.4	3
2411	Modelling of the Liquid Jet Discharge into a Liquid-Filled Space by the VOF Method. Thermal Engineering (English Translation of Teploenergetika), 2023, 70, 63-72.	0.4	5
2412	Characterization and modeling of greenwater overtopping of a sea-level deck. Ocean Engineering, 2023, 275, 114131.	1.9	3
2413	An improved smooth particle hydrodynamics method for modelling crack propagation in layered rock cells and slopes. Bulletin of Engineering Geology and the Environment, 2023, 82, .	1.6	4
2414	Applying surface tension as pressure boundary condition in free surface flow analysis by moving particle simulation method. Computational Particle Mechanics, 0, , .	1.5	0

#	Article	IF	Citations
2415	A SPH-lattice spring method for modelling Fluid Structure Interaction involving composite body and free surface. Computational Particle Mechanics, 2023, 10, 1587-1612.	1.5	5
2416	Grid-Stamping on a Polygon Model for Implementing Arbitrary-Shaped Boundary Conditions in a Moving Particle Semi-Implicit Method. Journal of Marine Science and Engineering, 2023, 11, 742.	1.2	0
2417	Implementation of improved spatial derivative discretization in DualSPHysics: simulation and convergence study. Computational Particle Mechanics, 0, , .	1.5	0
2418	Simulation of submerged granular flows by development of a two-phase incompressible explicit mesh-free method. International Journal of Sediment Research, 2023, , .	1.8	1
2419	Numerical Simulation of In-Flight Icing Supercooled Large Droplets Freezing via Smoothed Particle Hydrodynamics. , 2023, , 1-48.		0
2420	Numerical simulations of Brownian suspensions using Smoothed Dissipative Particle Dynamics: Diffusion, rheology and microstructure. Journal of Non-Newtonian Fluid Mechanics, 2023, 317, 105044.	1.0	1
2421	Other Topics: Modeling ofÂFluids, Membranes andÂTemperature Effects. Scientific Computation, 2023, , 361-390.	0.2	0
2422	A coupled peridynamicsâ€"smoothed particle hydrodynamics model for fracture analysis of fluidâ€"structure interactions. Ocean Engineering, 2023, 279, 114582.	1.9	34
2423	SPH modeling of dam-break bores on smooth and macro-roughness slopes. Ocean Engineering, 2023, 279, 114484.	1.9	1
2436	Stabilization methods. , 2023, , 53-70.		0
2461	Off-Road Terrain Characterization and Modeling. , 2023, , 77-116.		0
2466	A Blood Flow Game Based on Smoothed Particles Hydrodynamics Concepts. , 2023, , .		0
2544	Fluid Modeling Through Navierâ€"Stokes Equations and Numerical Methods. SpringerBriefs in Mathematics, 2023, , 11-31.	0.2	0
2555	Smoothed particle hydrodynamics modelling of multiphase flows: an overview. Acta Mechanica, 0, , .	1.1	0
2557	Numerical Simulation of In-Flight Icing Supercooled Large Droplets Freezing via Smoothed Particle Hydrodynamics. , 2024, , 127-174.		0
2569	SPH Simulation of Solitary Wave Impact on Coastal Bridge Superstructures. Mechanisms and Machine Science, 2024, , 595-606.	0.3	0
2572	Simulation ofÂFree-Surface Fluid Dynamics: Parallelization forÂGPUs. Lecture Notes in Computer Science, 2023, , 217-231.	1.0	0
2598	Unified Framework for Real-Time Fluid Simulation in Virtual Rotator Cuff Arthroscopic Skill Trainer (ViRCAST). , 2023, , .		0

#	ARTICLE	IF	CITATIONS
2600	Numerical simulation of various Reynold's number fluid flow around a cylinder using DualSPHysics. AIP Conference Proceedings, 2024, , .	0.3	0
2602	An Improved GPU Acceleration Framework forÂSmoothed Particle Hydrodynamics. Lecture Notes in Computer Science, 2024, , 190-201.	1.0	0