Songdong Shao

List of Publications by Year
in descending order

49 papers	2,846 citations	28 h-index	48 g-index

185998

205818

49 all docs	49 docs citations	49 times ranked	1349 citing authors

#	Article	IF	Citations
1	Incompressible SPH method for simulating Newtonian and non-Newtonian flows with a free surface. Advances in Water Resources, 2003, 26, 787-800.	1.7	835
2	Enhanced predictions of wave impact pressure by improved incompressible SPH methods. Applied Ocean Research, 2009, 31, 111-131.	1.8	140
3	Incompressible SPH flow model for wave interactions with porous media. Coastal Engineering, 2010, 57, 304-316.	1.7	136
4	SPH-LES Model for Numerical Investigation of Wave Interaction with Partially Immersed Breakwater. Coastal Engineering Journal, 2004, 46, 39-63.	0.7	130
5	Development of a projection-based SPH method for numerical wave flume with porous media of variable porosity. Coastal Engineering, 2018, 140, 1-22.	1.7	92
6	Turbulence particle models for tracking free surfaces. Journal of Hydraulic Research/De Recherches Hydrauliques, 2005, 43, 276-289.	0.7	91
7	Two-phase SPH simulation of fluid–structure interactions. Journal of Fluids and Structures, 2016, 65, 155-179.	1.5	90
8	Incompressible SPH simulation of water entry of a free–falling object. International Journal for Numerical Methods in Fluids, 2009, 59, 91-115.	0.9	88
9	An improved incompressible SPH model for simulation of wave–structure interaction. Computers and Fluids, 2013, 71, 113-123.	1.3	85
10	Incompressible SPH simulation of wave breaking and overtopping with turbulence modelling. International Journal for Numerical Methods in Fluids, 2006, 50, 597-621.	0.9	76
11	Corrected First-Order Derivative ISPH in Water Wave Simulations. Coastal Engineering Journal, 2017, 59, 1750010-1-1750010-29.	0.7	71
12	Simulating Coupled Motion of Progressive Wave and Floating Curtain Wall by SPH-LES Model. Coastal Engineering Journal, 2004, 46, 171-202.	0.7	68
13	Incompressible SPH scour model for movable bed dam break flows. Advances in Water Resources, 2015, 82, 39-50.	1.7	62
14	Incompressible smoothed particle hydrodynamics simulation of multifluid flows. International Journal for Numerical Methods in Fluids, 2012, 69, 1715-1735.	0.9	54
15	SPH simulation of solitary wave interaction with a curtain-type breakwater. Journal of Hydraulic Research/De Recherches Hydrauliques, 2005, 43, 366-375.	0.7	50
16	Numerical study of PPE source term errors in the incompressible SPH models. International Journal for Numerical Methods in Fluids, 2015, 77, 358-379.	0.9	49
17	Improved SPH simulation of spilled oil contained by flexible floating boom under wave–current coupling condition. Journal of Fluids and Structures, 2018, 76, 272-300.	1.5	46
18	Incompressible SPH simulation of solitary wave interaction with movable seawalls. Journal of Fluids and Structures, 2017, 69, 72-88.	1.5	45

#	Article	IF	Citations
19	SPH modelling of depthâ€limited turbulent open channel flows over rough boundaries. International Journal for Numerical Methods in Fluids, 2017, 83, 3-27.	0.9	43
20	SPH modelling of turbulent open channel flow over and within natural gravel beds with rough interfacial boundaries. Advances in Water Resources, 2020, 140, 103557.	1.7	39
21	Source term treatment of SWEs using surface gradient upwind method. Journal of Hydraulic Research/De Recherches Hydrauliques, 2012, 50, 145-153.	0.7	37
22	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
23	Incompressible SPH simulation of wave interaction with porous structure. Ocean Engineering, 2015, 110, 126-139.	1.9	37
24	SPH modeling of solitary wave fissions over uneven bottoms. Coastal Engineering, 2012, 60, 261-275.	1.7	34
25	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
26	A Comparative Study on Violent Sloshing with Complex Baffles Using the ISPH Method. Applied Sciences (Switzerland), 2018, 8, 904.	1.3	31
27	Scaling of Velocity Profiles for Depth-Limited Open Channel Flows over Simulated Rigid Vegetation. Journal of Hydraulic Engineering, 2012, 138, 673-683.	0.7	30
28	SPHâ€based numerical treatment of the interfacial interaction of flow with porous media. International Journal for Numerical Methods in Fluids, 2020, 92, 219-245.	0.9	30
29	SWE-SPHysics Simulation of Dam Break Flows at South-Gate Gorges Reservoir. Water (Switzerland), 2017, 9, 387.	1.2	27
30	Wave Impact Simulations by an Improved ISPH Model. Journal of Waterway, Port, Coastal and Ocean Engineering, 2014, 140, .	0.5	24
31	3D ISPH erosion model for flow passing a vertical cylinder. Journal of Fluids and Structures, 2018, 78, 374-399.	1.5	24
32	Cylindrical Smoothed Particle Hydrodynamics Simulations of Water Entry. Journal of Fluids Engineering, Transactions of the ASME, 2019, 141, .	0.8	24
33	An improved solid boundary treatment for waveâ€"float interactions using ISPH method. International Journal of Naval Architecture and Ocean Engineering, 2018, 10, 329-347.	1.0	20
34	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
35	Incompressible SPH simulation of open channel flow over smooth bed. Journal of Hydro-Environment Research, 2015, 9, 340-353.	1.0	18
36	MPM simulation of solitary wave run-up on permeable boundaries. Applied Ocean Research, 2021, 111, 102602.	1.8	18

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37	Study on SPH Viscosity Term Formulations. Applied Sciences (Switzerland), 2018, 8, 249.	1.3	16
38	SPH study of the evolution of water–water interfaces in dam break flows. Natural Hazards, 2015, 78, 531-553.	1.6	15
39	Smoothed Particle Hydrodynamics Simulation of Wave Overtopping Characteristics for Different Coastal Structures. Scientific World Journal, The, 2012, 2012, 1-10.	0.8	14
40	SPHysics simulation of laboratory shallow free surface turbulent flows over a rough bed. Journal of Hydraulic Research/De Recherches Hydrauliques, 2018, 56, 727-747.	0.7	14
41	Advances in Modelling and Prediction on the Impact of Human Activities and Extreme Events on Environments. Water (Switzerland), 2020, 12, 1768.	1.2	14
42	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
43	Water–sediment flow modeling for field case studies in Southwest China. Natural Hazards, 2015, 78, 1197-1224.	1.6	9
44	SPH modeling of tidal bore scenarios. Natural Hazards, 2015, 75, 1247-1270.	1.6	6
45	An Improved 2D + t Incompressible Smoothed Particle Hydrodynamics Approach for High-Speed Vessel Waves. Journal of Coastal Research, 2019, 35, 1106.	0.1	5
46	Applications of Coupled Explicit–Implicit Solution of SWEs for Unsteady Flow in Yangtze River. Water (Switzerland), 2017, 9, 91.	1.2	3
47	An Enhanced Particle Method for Simulation of Fluid Flow Interactions with Saturated Porous Media. Journal of Japan Society of Civil Engineers Ser B2 (Coastal Engineering), 2017, 73, I_841-I_846.	0.0	2
48	Study on two-phase dynamic behaviours within non-homogeneous debris flow. Water Management, 2018, 171, 283-298.	0.4	1
49	MODELING OF WAVE OVERTOPPING USING RANS-VOF AND INCOMPRESSIBLE SPH MODELS. , 2009, , .		0