Peng Hu

List of Publications by Year
in descending order

43 papers	564 citations	623734 14 h-index	642732 23 g-index
43 all docs	43 docs citations	43 times ranked	375 citing authors

#	Article	IF	Citations
1	Numerical modelling of turbidity currents in the Xiaolangdi reservoir, Yellow River, China. Journal of Hydrology, 2012, 464-465, 41-53.	5.4	58
2	Fully coupled mathematical modeling of turbidity currents over erodible bed. Advances in Water Resources, 2009, 32, 1-15.	3.8	51
3	Hydrodynamics of Gravity Currents Down a Ramp in Linearly Stratified Environments. Journal of Hydraulic Engineering, 2017, 143, .	1.5	37
4	Multiple Time Scales of Fluvial Processes with Bed Load Sediment and Implications for Mathematical Modeling. Journal of Hydraulic Engineering, 2011, 137, 267-276.	1.5	36
5	Well-balanced numerical modelling of non-uniform sediment transport in alluvial rivers. International Journal of Sediment Research, 2015, 30, 117-130.	3.5	35
6	Computationally efficient modeling of hydro-sediment-morphodynamic processes using a hybrid local time step/global maximum time step. Advances in Water Resources, 2019, 127, 26-38.	3.8	34
7	Numerical modelling of riverbed grain size stratigraphic evolution. International Journal of Sediment Research, 2014, 29, 329-343.	3.5	26
8	Numerical simulation of dam-break flow and bed change considering the vegetation effects. International Journal of Sediment Research, 2017, 32, 105-120.	3.5	25
9	Non-capacity or capacity model for fluvial sediment transport. Water Management, 2012, 165, 193-211.	1.2	24
10	Well-balanced and flexible morphological modeling of swash hydrodynamics and sediment transport. Coastal Engineering, 2015, 96, 27-37.	4.0	19
11	Non-capacity transport of non-uniform bed load sediment in alluvial rivers. Journal of Mountain Science, 2016, 13, 377-396.	2.0	18
12	Investigations of dynamic behaviors of lock-exchange turbidity currents down a slope based on direct numerical simulation. Advances in Water Resources, 2018, 119, 164-177.	3.8	16
13	Is it appropriate to model turbidity currents with the three€equation model?. Journal of Geophysical Research F: Earth Surface, 2015, 120, 1153-1170.	2.8	15
14	Improved Local Time Step for 2D Shallow-Water Modeling Based on Unstructured Grids. Journal of Hydraulic Engineering, 2019, 145, .	1.5	15
15	Separation of particle-laden gravity currents down a slope in linearly stratified environments. Physics of Fluids, 2019, 31, .	4.0	15
16	Unified Model of Sediment Transport Threshold and Rate Across Weak and Intense Subaqueous Bedload, Windblown Sand, and Windblown Snow. Journal of Geophysical Research F: Earth Surface, 2021, 126, e2020JF005859.	2.8	15
17	Numerical investigation of a sandbar formation and evolution in a tide-dominated estuary using a hydro-morphodynamic model. Coastal Engineering Journal, 2018, 60, 466-483.	1.9	14
18	Reconciled bedload sediment transport rates in ephemeral and perennial rivers. Earth Surface Processes and Landforms, 2010, 35, 1655-1665.	2.5	13

#	Article	IF	Citations
19	Front Velocity and Front Location of Lock-Exchange Gravity Currents Descending a Slope in a Linearly Stratified Environment. Journal of Hydraulic Engineering, 2018, 144, .	1.5	12
20	Role of barâ€channel interactions in a dominant branch shift: The Taipingkou waterway, Yangtze River, China. River Research and Applications, 2021, 37, 494-508.	1.7	12
21	Modeling of Breaching Due to Overtopping Flow and Waves Based on Coupled Flow and Sediment Transport. Water (Switzerland), 2015, 7, 4283-4304.	2.7	10
22	Fluid-particle interaction regimes during the evolution of turbidity currents from a coupled LES/DEM model. Advances in Water Resources, 2022, 163, 104171.	3.8	9
23	Numerical modeling of the propagation and morphological changes of turbidity currents using a cost-saving strategy of solution updating. International Journal of Sediment Research, 2020, 35, 587-599.	3.5	7
24	Well-balanced two-dimensional coupled modelling of submarine turbidity currents. Proceedings of the Institution of Civil Engineers: Maritime Engineering, 2012, 165, 169-188.	0.2	6
25	Limitations of empirical sediment transport formulas for shallow water and their consequences for swash zone modelling. Journal of Hydraulic Research/De Recherches Hydrauliques, 2017, 55, 114-120.	1.7	6
26	Layer-averaged numerical study on effect of Reynolds number on turbidity currents. Journal of Hydraulic Research/De Recherches Hydrauliques, 2020, 58, 628-637.	1.7	4
27	A Numerical Study on Impacts of Sediment Erosion/Deposition on Debris Flow Propagation. Water (Switzerland), 2021, 13, 1698.	2.7	4
28	Comment on â€œLong waves in erodible channels and morphodynamic influenceâ€•by Stefano Lanzoni et al.. Water Resources Research, 2008, 44, .	4.2	3
29	Numerical analysis of adaptation-to-capacity length for fluvial sediment transport. Journal of Mountain Science, 2014, 11, 1491-1498.	2.0	3
30	Experiments on gravity currents down a ramp in unstratified and linearly stratified salt water environments. Zhongguo Kexue Jishu Kexue/Scientia Sinica Technologica, 2016, 46, 570-578.	0.5	3
31	A new two-phase shallow water hydro-sediment-morphodynamic model based on the HLLC solver and the hybrid LTS/GMaTS approach. Advances in Water Resources, 2022, 166, 104254.	3.8	3
32	A Well-Balanced and Fully Coupled Noncapacity Model for Dam-Break Flooding. Mathematical Problems in Engineering, 2015, 2015, 1-13.	1.1	2
33	Analytical model for lateral depth-averaged velocity distributions in curved channels. Water Management, 2021, 174, 99-108.	1.2	2
34	A hybrid first-order and WENO scheme for the high-resolution and computationally efficient modeling of pollutant transport. Computers and Fluids, 2021, 225, 104951.	2.5	2
35	Porous Shallow Water Modeling for Urban Floods in the Zhoushan City, China. Frontiers in Earth Science, 2021, 9, .	1.8	2
36	A New Strength Criterion for Frozen Clay Considering Temperature Effect. Springer Series in Geomechanics and Geoengineering, 2018, , 1340-1344.	0.1	2

#	Article	IF	Citations
37	A GPU-Accelerated and LTS-Based Finite Volume Shallow Water Model. Water (Switzerland), 2022, 14, 922.	2.7	2
38	Multiple time scales of fluvial processes â€" theory and applications. Theoretical and Applied Mechanics Letters, 2011, 1, 052001.	2.8	1
39	A 2D well-balanced, coupled model of water flow, sediment transport, and bed evolution based on unstructured grids with efficient variable storage strategy. International Journal of Sediment Research, 2021, 36, 151-160.	3.5	1
40	A Computationally Efficient Shallow Water Model for Mixed Cohesive and Non-Cohesive Sediment Transport in the Yangtze Estuary. Water (Switzerland), 2021, 13, 1435.	2.7	1
41	Dredging Volume Estimation and Dredging Timing for Waterway Maintenance: A Case Study Using a Depth-Averaged Hydrosedimentâ€"Morphodynamic Model with Transient Dredging Effects. Journal of Waterway, Port, Coastal and Ocean Engineering, 2022, 148, .	1.2	1
42	Multiple Time Scales and Coupled Mathematical Modeling of Turbidity Currents. , 2008, , .		0
43	Experimental Study on the Strength Characteristics of Frozen Clay on Ï€ Plane. Springer Series in Geomechanics and Geoengineering, 2018, , 1394-1398.	0.1	0