Xilin Xia

List of Publications by Year in descending order

31 papers	1,004 citations	516215 16 h-index	433756 31 g-index
33 all docs	33 docs citations	33 times ranked	758 citing authors

#	Article	IF	Citations
1	A deep convolutional neural network model for rapid prediction of fluvial flood inundation. Journal of Hydrology, 2020, 590, 125481.	2.3	126
2	An efficient and stable hydrodynamic model with novel source term discretization schemes for overland flow and flood simulations. Water Resources Research, 2017, 53, 3730-3759.	1.7	123
3	Realâ€Time Flood Forecasting Based on a Highâ€Performance 2â€D Hydrodynamic Model and Numerical Weather Predictions. Water Resources Research, 2020, 56, e2019WR025583.	1.7	103
4	A full-scale fluvial flood modelling framework based on a high-performance integrated hydrodynamic modelling system (HiPIMS). Advances in Water Resources, 2019, 132, 103392.	1.7	97
5	Neurocomputing in surface water hydrology and hydraulics: A review of two decades retrospective, current status and future prospects. Journal of Hydrology, 2020, 588, 125085.	2.3	75
6	A new efficient implicit scheme for discretising the stiff friction terms in the shallow water equations. Advances in Water Resources, 2018, 117, 87-97.	1.7	58
7	City-scale hydrodynamic modelling of urban flash floods: the issues of scale and resolution. Natural Hazards, 2019, 96, 473-496.	1.6	53
8	A GPU-accelerated smoothed particle hydrodynamics (SPH) model for the shallow water equations. Environmental Modelling and Software, 2016, 75, 28-43.	1.9	49
9	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
10	A novel 1D-2D coupled model for hydrodynamic simulation of flows in drainage networks. Advances in Water Resources, 2020, 137, 103519.	1.7	37
11	Catchment-scale High-resolution Flash Flood Simulation Using the GPU-based Technology. Procedia Engineering, 2016, 154, 975-981.	1.2	35
12	A new depth-averaged model for flow-like landslides over complex terrains with curvatures and steep slopes. Engineering Geology, 2018, 234, 174-191.	2.9	35
13	Efficient urban flood simulation using a GPU-accelerated SPH model. Environmental Earth Sciences, 2015, 74, 7285-7294.	1.3	27
14	Recommendations for Improving Integration in National End-to-End Flood Forecasting Systems: An Overview of the FFIR (Flooding From Intense Rainfall) Programme. Water (Switzerland), 2019, 11, 725.	1.2	24
15	A quantitative multi-hazard risk assessment framework for compound flooding considering hazard inter-dependencies and interactions. Journal of Hydrology, 2022, 607, 127477.	2.3	23
16	New prospects for computational hydraulics by leveraging high-performance heterogeneous computing techniques. Journal of Hydrodynamics, 2016, 28, 977-985.	1.3	20
17	Contradiction between the Câ€property and mass conservation in adaptive grid based shallow flow models: cause and solution. International Journal for Numerical Methods in Fluids, 2015, 78, 17-36.	0.9	13
18	Large-scale flood risk assessment under different development strategies: the Luanhe River Basin in China. Sustainability Science, 2022, 17, 1365-1384.	2.5	10

#	Article	IF	Citations
19	A coupled hydrodynamic and particle-tracking model for full-process simulation of nonpoint source pollutants. Environmental Modelling and Software, 2021, 136, 104951.	1.9	9
20	A coupled discrete element and depth-averaged model for dynamic simulation of flow-like landslides. Computers and Geotechnics, 2022, 141, 104537.	2.3	9
21	Simulation of Hydraulic Structures in 2D High-Resolution Urban Flood Modeling. Water (Switzerland), 2019, 11, 2139.	1.2	8
22	A Multi-Scale Mapping Approach Based on a Deep Learning CNN Model for Reconstructing High-Resolution Urban DEMs. Water (Switzerland), 2020, 12, 1369.	1.2	7
23	Development of an SDG interlinkages analysis model at the river basin scale: a case study in the Luanhe River Basin, China. Sustainability Science, 2022, 17, 1405-1433.	2.5	7
24	Movement process analysis of the high-speed long-runout Shuicheng landslide over 3-D complex terrain using a depth-averaged numerical model. Landslides, 2021, 18, 3213-3226.	2.7	4
25	Robust absorbing boundary conditions for shallow water flow models. Environmental Earth Sciences, 2015, 74, 7407-7422.	1.3	3
26	Spatiotemporal differentiation and influencing factors of urban water supply system resilience in the Yangtze River Delta urban agglomeration. Natural Hazards, 2022, 114, 101-126.	1.6	3
27	Investigating the Impact of Spatial Distribution of Sustainable Drainage System (SuDS) Components on Their Flood Mitigation Performance in Communities with High Groundwater Levels. Water (Switzerland), 2022, 14, 1367.	1.2	2
28	Reply to Comment by Lu et al. on â€œAn Efficient and Stable Hydrodynamic Model With Novel Source Term Discretization Schemes for Overland Flow and Flood Simulationsâ€• Water Resources Research, 2018, 54, 628-630.	1.7	1
29	A New Physically-Based Simulation Framework for Modelling Flow-Like Landslides. International Journal of Geohazards and Environment, 2015, 1, 94-100.	0.4	1
30	A new GPU-accelerated coupled discrete element and depth-averaged model for simulation of flow-like landslides. Environmental Modelling and Software, 2022, 153, 105412.	1.9	1
31	Report on the 15th international symposium on geo-disaster reduction, 25â€“30 august 2017, Oki Islands - Matsue - Kyoto, Japan. Geoenvironmental Disasters, 2017, 4, .	1.8	0