

# Zhiguo He

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2688145/publications.pdf>

Version: 2024-02-01

94  
papers

1,391  
citations

394421

19  
h-index

395702

33  
g-index

94  
all docs

94  
docs citations

94  
times ranked

1239  
citing authors

#	ARTICLE	IF	CITATIONS
1	Hydrodynamics of horizontal heated buoyant jet in linearly stratified fluids. <i>Physics of Fluids</i> , 2022, 34, 025108.	4.0	0
2	A GPU-Accelerated and LTS-Based Finite Volume Shallow Water Model. <i>Water (Switzerland)</i> , 2022, 14, 922.	2.7	2
3	Impacts of River Discharge on the Sea Temperature in Changjiang Estuary and Its Adjacent Sea. <i>Journal of Marine Science and Engineering</i> , 2022, 10, 343.	2.6	0
4	Fluid-particle interaction regimes during the evolution of turbidity currents from a coupled LES/DEM model. <i>Advances in Water Resources</i> , 2022, 163, 104171.	3.8	9
5	Propagation, mixing, and turbulence characteristics of saline and turbidity currents over rough and permeable/impermeable beds. <i>Physics of Fluids</i> , 2022, 34, .	4.0	8
6	Grain-resolving simulations of submerged cohesive granular collapse. <i>Journal of Fluid Mechanics</i> , 2022, 942, .	3.4	9
7	Numerical Investigation of the Sediment Hyperpycnal Flow in the Yellow River Estuary. <i>Journal of Marine Science and Engineering</i> , 2022, 10, 943.	2.6	3
8	Large deformation mechanics of the thrust performances generated by combustion-enabled soft actuators. <i>International Journal of Mechanical Sciences</i> , 2022, 229, 107513.	6.7	10
9	Experimental study on the vertical motion of colliding gravity currents. <i>Physics of Fluids</i> , 2021, 33, 016601.	4.0	10
10	The Seasonal Variation of the Anomalously High Salinity at Subsurface Salinity Maximum in Northern South China Sea from Argo Data. <i>Journal of Marine Science and Engineering</i> , 2021, 9, 227.	2.6	1
11	Impacts of coastal reclamation on tidal and sediment dynamics in the Ruidan coast of China. <i>Ocean Dynamics</i> , 2021, 71, 323-341.	2.2	7
12	Hydrodynamics of weakly and strongly stratified two-layer lock-release gravity currents. <i>Journal of Hydraulic Research/De Recherches Hydrauliques</i> , 2021, 59, 989-1003.	1.7	6
13	Experimental study of horizontal heated buoyant jets in a linearly stratified ambience. <i>Physics of Fluids</i> , 2021, 33, .	4.0	4
14	Removal of a dense bottom layer by a gravity current. <i>Journal of Fluid Mechanics</i> , 2021, 916, .	3.4	4
15	Unified Model of Sediment Transport Threshold and Rate Across Weak and Intense Subaqueous Bedload, Windblown Sand, and Windblown Snow. <i>Journal of Geophysical Research F: Earth Surface</i> , 2021, 126, e2020JF005859.	2.8	15
16	Mechanical Metamaterials Gyro-Structure Piezoelectric Nanogenerators for Energy Harvesting under Quasi-Static Excitations in Ocean Engineering. <i>ACS Omega</i> , 2021, 6, 15348-15360.	3.5	21
17	A Computationally Efficient Shallow Water Model for Mixed Cohesive and Non-Cohesive Sediment Transport in the Yangtze Estuary. <i>Water (Switzerland)</i> , 2021, 13, 1435.	2.7	1
18	Numerical study on the morphological evolution of the Qingshuigou channel on the Yellow River Delta in response to changing water and sediment regimes. <i>IOP Conference Series: Earth and Environmental Science</i> , 2021, 820, 012023.	0.3	1

#	ARTICLE	IF	CITATIONS
19	Porous Shallow Water Modeling for Urban Floods in the Zhoushan City, China. <i>Frontiers in Earth Science</i> , 2021, 9, .	1.8	2
20	Contribution of sediments to stratification in a fluvial estuarine system during a low-discharge period. <i>Estuarine, Coastal and Shelf Science</i> , 2021, 261, 107537.	2.1	1
21	Role of barâ€channel interactions in a dominant branch shift: The Taipingkou waterway, Yangtze River, China. <i>River Research and Applications</i> , 2021, 37, 494-508.	1.7	12
22	Particle-laden gravity currents interacting with stratified ambient water using direct numerical simulations. <i>Environmental Earth Sciences</i> , 2021, 80, 1.	2.7	4
23	Untethered, high-speed soft jumpers enabled by combustion for motions through multiphase environments. <i>Smart Materials and Structures</i> , 2021, 30, 015035.	3.5	14
24	Effects of climate change on peak runoff and flood levels in Qu River Basin, East China. <i>Journal of Hydro-Environment Research</i> , 2020, 28, 34-47.	2.2	24
25	Interaction impacts of tides, waves and winds on storm surge in a channel-island system: observational and numerical study in Yangshan Harbor. <i>Ocean Dynamics</i> , 2020, 70, 307-325.	2.2	17
26	Layer-averaged numerical study on effect of Reynolds number on turbidity currents. <i>Journal of Hydraulic Research/De Recherches Hydrauliques</i> , 2020, 58, 628-637.	1.7	4
27	Effect of Inclination Angles on the Local Scour around a Submerged Cylinder. <i>Water (Switzerland)</i> , 2020, 12, 2687.	2.7	6
28	Transport and Deposition Patterns of Particles Laden by Rising Submarine Hydrothermal Plumes. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL089935.	4.0	10
29	A RANS numerical study of experimental swash flows and its bed shear stress estimation. <i>Applied Ocean Research</i> , 2020, 100, 102145.	4.1	3
30	Experimental Study on Sand Dike Breaching by Wave Overtopping. <i>Applied Ocean Research</i> , 2020, 101, 102195.	4.1	6
31	Numerical modeling of scour and deposition around permeable cylindrical structures. <i>International Journal of Sediment Research</i> , 2020, 35, 278-286.	3.5	6
32	High-speed soft actuators based on combustion-enabled transient driving method (TDM). <i>Extreme Mechanics Letters</i> , 2020, 37, 100731.	4.1	16
33	Opportunities for blue carbon strategies in China. <i>Ocean and Coastal Management</i> , 2020, 194, 105241.	4.4	60
34	Numerical Investigation on the Adaptation of Dam-Break Flow-Induced Bed Load Transport to the Capacity Regime over a Sloping Bed. <i>Journal of Coastal Research</i> , 2020, 36, .	0.3	5
35	Front propagation of gravity currents on inclined bottoms in linearly stratified fluids. <i>Environmental Fluid Mechanics</i> , 2019, 19, 279-296.	1.6	3
36	Large Effects of Particle Size Heterogeneity on Dynamic Saltation Threshold. <i>Journal of Geophysical Research F: Earth Surface</i> , 2019, 124, 2311-2321.	2.8	8

#	ARTICLE	IF	CITATIONS
37	Impacts of Sea Level Rise and River Discharge on the Hydrodynamics Characteristics of Jakarta Bay (Indonesia). <i>Water (Switzerland)</i> , 2019, 11, 1384.	2.7	13
38	Improved Local Time Step for 2D Shallow-Water Modeling Based on Unstructured Grids. <i>Journal of Hydraulic Engineering</i> , 2019, 145, .	1.5	15
39	Separation of particle-laden gravity currents down a slope in linearly stratified environments. <i>Physics of Fluids</i> , 2019, 31, .	4.0	15
40	Numerical modelling study of seawater intrusion in Indus River Estuary, Pakistan. <i>Ocean Engineering</i> , 2019, 184, 74-84.	4.3	23
41	Computationally efficient modeling of hydro-sediment-morphodynamic processes using a hybrid local time step/global maximum time step. <i>Advances in Water Resources</i> , 2019, 127, 26-38.	3.8	34
42	Numerical simulation of two coalescing turbulent forced plumes in linearly stratified fluids. <i>Physics of Fluids</i> , 2019, 31, .	4.0	23
43	Changes in the Hydrodynamics of Hangzhou Bay Due to Land Reclamation in the Past 60 Years. , 2019, , 77-93.		1
44	Numerical modeling of lock-exchange gravity/turbidity currents by a high-order upwinding combined compact difference scheme. <i>International Journal of Sediment Research</i> , 2019, 34, 240-250.	3.5	7
45	Integral model for multiple forced plumes arranged around a circle in a linearly stratified environment. <i>Physical Review Fluids</i> , 2019, 4, .	2.5	9
46	Transition of a Hyperpycnal Flow Into a Saline Turbidity Current Due to Differential Diffusivities. <i>Geophysical Research Letters</i> , 2018, 45, 11,875.	4.0	10
47	Dynamic Interaction and Mixing of Two Turbulent Forced Plumes in Linearly Stratified Ambience. <i>Journal of Hydraulic Engineering</i> , 2018, 144, .	1.5	11
48	Numerical investigation of a sandbar formation and evolution in a tide-dominated estuary using a hydro-morphodynamic model. <i>Coastal Engineering Journal</i> , 2018, 60, 466-483.	1.9	14
49	A numerical study on the effect of tidal flat's slope on tidal dynamics in the Xiangshan Bay, China. <i>Acta Oceanologica Sinica</i> , 2018, 37, 29-40.	1.0	4
50	Front Velocity and Front Location of Lock-Exchange Gravity Currents Descending a Slope in a Linearly Stratified Environment. <i>Journal of Hydraulic Engineering</i> , 2018, 144, .	1.5	12
51	Investigations of dynamic behaviors of lock-exchange turbidity currents down a slope based on direct numerical simulation. <i>Advances in Water Resources</i> , 2018, 119, 164-177.	3.8	16
52	The impacts of the large-scale hydraulic structures on tidal dynamics in open-type bay: numerical study in Jakarta Bay. <i>Ocean Dynamics</i> , 2018, 68, 1141-1154.	2.2	10
53	A well-balanced positivity preserving two-dimensional shallow flow model with wetting and drying fronts over irregular topography. <i>Journal of Hydrodynamics</i> , 2018, 30, 618-631.	3.2	5
54	Dynamics of sediment transport and stratification in Changjiang River Estuary, China. <i>Estuarine, Coastal and Shelf Science</i> , 2018, 213, 1-17.	2.1	31

#	ARTICLE	IF	CITATIONS
55	Numerical simulation of dam-break flow and bed change considering the vegetation effects. <i>International Journal of Sediment Research</i> , 2017, 32, 105-120.	3.5	25
56	Scaling for turbulent viscosity of buoyant plumes in stratified fluids: PIV measurement with implications for submarine hydrothermal plume turbulence. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2017, 129, 89-98.	1.4	17
57	Responses of water environment to tidal flat reduction in Xiangshan Bay: Part II locally re-suspended sediment dynamics. <i>Estuarine, Coastal and Shelf Science</i> , 2017, 198, 114-127.	2.1	18
58	Limitations of empirical sediment transport formulas for shallow water and their consequences for swash zone modelling. <i>Journal of Hydraulic Research/De Recherches Hydrauliques</i> , 2017, 55, 114-120.	1.7	6
59	Hydrodynamics of Gravity Currents Down a Ramp in Linearly Stratified Environments. <i>Journal of Hydraulic Engineering</i> , 2017, 143, .	1.5	37
60	Effect of precipitation on the wind retrieval from synthetic aperture radar. , 2016, , .		0
61	Spatio-temporal distribution of internal waves in the Andaman Sea based on satellite remote sensing. , 2016, , .		5
62	International scientists discuss impact on China's estuarine and coastal environment by intensive anthropogenic activities " The 2nd workshop on sediment dynamics of muddy coasts and estuaries: Physics, biology and their interactions, Zhoushan, China, 23-26 October, 2015. <i>Estuarine, Coastal and Shelf Science</i> , 2016, 168, ii-iii.	2.1	2
63	Variations of temperature, salinity and current in the southern tidal passage of the Hangzhou Bay, China. <i>Acta Oceanologica Sinica</i> , 2016, 35, 30-37.	1.0	10
64	A Multi-Phase Mathematical Model for Gravity Currents. , 2016, , .		0
65	A numerical study on the high-velocity impact behavior of pressure pipes. <i>Journal of Zhejiang University: Science A</i> , 2016, 17, 443-453.	2.4	7
66	Rainband feature tracking for wind speeds around typhoon eyes using multiple sensors. <i>International Journal of Remote Sensing</i> , 2016, 37, 2016-2031.	2.9	3
67	Experiments on gravity currents down a ramp in unstratified and linearly stratified salt water environments. <i>Zhongguo Kexue Jishu Kexue/Scientia Sinica Technologica</i> , 2016, 46, 570-578.	0.5	3
68	An Introduction to Zhejiang University - Zhairuoshan Experimental Research Observatory and Retrieved Data Analysis. , 2015, , .		0
69	Is it appropriate to model turbidity currents with the three-equation model?. <i>Journal of Geophysical Research F: Earth Surface</i> , 2015, 120, 1153-1170.	2.8	15
70	Modeling of Breaching Due to Overtopping Flow and Waves Based on Coupled Flow and Sediment Transport. <i>Water (Switzerland)</i> , 2015, 7, 4283-4304.	2.7	10
71	Impact of moving rainfall events on hillslope pollutant transport. <i>Environmental Earth Sciences</i> , 2015, 74, 5989-5999.	2.7	3
72	An optimized dispersion relation-preserving combined compact difference scheme to solve advection equations. <i>Journal of Computational Physics</i> , 2015, 300, 92-115.	3.8	11

#	ARTICLE	IF	CITATIONS
73	Well-balanced and flexible morphological modeling of swash hydrodynamics and sediment transport. <i>Coastal Engineering</i> , 2015, 96, 27-37.	4.0	19
74	Finite volume method solution of pollutant transport in catchment sheet flow. <i>Hydrology Research</i> , 2014, 45, 182-189.	2.7	0
75	Development of a Cell-Centered Godunov-Type Finite Volume Model for Shallow Water Flow Based on Unstructured Mesh. <i>Mathematical Problems in Engineering</i> , 2014, 2014, 1-15.	1.1	7
76	Soil erosion and pollutant transport during rainfall-runoff processes. <i>Water Resources</i> , 2014, 41, 604-611.	0.9	19
77	Modeling pollutant transport in overland flow over non-planar and non-homogenous infiltrating surfaces. <i>Journal of Zhejiang University: Science A</i> , 2013, 14, 110-119.	2.4	1
78	Analysis of the Dynamic Response in Blast-Loaded CFRP-Strengthened Metallic Beams. <i>Advances in Materials Science and Engineering</i> , 2013, 2013, 1-13.	1.8	4
79	Depth-Averaged Two-Dimensional Model of Unsteady Flow and Sediment Transport due to Noncohesive Embankment Break/Breaching. <i>Journal of Hydraulic Engineering</i> , 2012, 138, 503-516.	1.5	65
80	Physically-based approach to analyze rainfall-triggered landslide using hydraulic gradient as slide direction. <i>Journal of Zhejiang University: Science A</i> , 2012, 13, 943-957.	2.4	10
81	Experimental study of the impact of rainfall characteristics on runoff generation and soil erosion. <i>Journal of Hydrology</i> , 2012, 424-425, 99-111.	5.4	171
82	Calibration of Nodal Demand in Water Distribution Systems. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2011, 137, 31-40.	2.6	38
83	Prediction and application for rain induced shallow landslides in natural catchments. , 2011, , .		1
84	Earthen Embankment Breaching. <i>Journal of Hydraulic Engineering</i> , 2011, 137, 1549-1564.	1.5	170
85	Prediction of Changes in Soil Moisture Due to Rainfall, Infiltration, and Evapotranspiration Using a Physically-Based Model. , 2009, , .		0
86	A Depth-Averaged 2-D Model of Non-Cohesive Dam/Levee Breach Processes. , 2009, , .		5
87	Numerical analysis of effects of large wood structures on channel morphology and fish habitat suitability in a Southern US sandy creek. <i>Ecohydrology</i> , 2009, 2, 370-380.	2.4	25
88	A physically-based integrated numerical model for flow, upland erosion, and contaminant transport in surface-subsurface systems. <i>Science in China Series D: Earth Sciences</i> , 2009, 52, 3391-3400.	0.9	1
89	Integrated Two-Dimensional Surface and Three-Dimensional Subsurface Contaminant Transport Model Considering Soil Erosion and Sorption. <i>Journal of Hydraulic Engineering</i> , 2009, 135, 1028-1040.	1.5	11
90	Effects of vegetation on flow conveyance and sediment transport capacity. <i>International Journal of Sediment Research</i> , 2009, 24, 247-259.	3.5	42

#	ARTICLE	IF	CITATIONS
91	Cutting management of riparian vegetation by using hydrodynamic model simulations. <i>Advances in Water Resources</i> , 2008, 31, 1299-1308.	3.8	29
92	Coupled Finite-Volume Model for 2D Surface and 3D Subsurface Flows. <i>Journal of Hydrologic Engineering - ASCE</i> , 2008, 13, 835-845.	1.9	25
93	A Depth-Averaged 2-D Analysis of Fish Habitat Suitability Impacted by Vegetation and Sediment. , 2006, , 1.		2
94	Investigation of Storm Tides Induced by Super Typhoon in Macro-Tidal Hangzhou Bay. <i>Frontiers in Marine Science</i> , 0, 9, .	2.5	9