Xuehang Song

List of Publications by Year
in descending order

27 papers	495 citations	687363 13 h-index	713466 21 g-index
33 all docs	33 docs citations	33 times ranked	538 citing authors

#	Article	IF	Citations
1	Drought Conditions Maximize the Impact of High‐Frequency Flow Variations on Thermal Regimes and Biogeochemical Function in the Hyporheic Zone. Water Resources Research, 2018, 54, 7361-7382.	4.2	63
2	Numerical Comparison of Iterative Ensemble Kalman Filters for Unsaturated Flow Inverse Modeling. Vadose Zone Journal, 2014, 13, 1-12.	2.2	47
3	Regulation-Structured Dynamic Metabolic Model Provides a Potential Mechanism for Delayed Enzyme Response in Denitrification Process. Frontiers in Microbiology, 2017, 8, 1866.	3.5	40
4	Dam Operations and Subsurface Hydrogeology Control Dynamics of Hydrologic Exchange Flows in a Regulated River Reach. Water Resources Research, 2019, 55, 2593-2612.	4.2	39
5	Impacts of different types of measurements on estimating unsaturated flow parameters. Journal of Hydrology, 2015, 524, 549-561.	5.4	35
6	Simulating One‐Dimensional Unsaturated Flow in Heterogeneous Soils with Water Content‐Based Richards Equation. Vadose Zone Journal, 2013, 12, 1-13.	2.2	32
7	A geostatistics‐informed hierarchical sensitivity analysis method for complex groundwater flow and transport modeling. Water Resources Research, 2017, 53, 4327-4343.	4.2	30
8	Integrated hydrogeophysical modelling and data assimilation for geoelectrical leak detection. Journal of Contaminant Hydrology, 2020, 234, 103679.	3.3	29
9	Using Bayesian Networks for Sensitivity Analysis of Complex Biogeochemical Models. Water Resources Research, 2019, 55, 3541-3555.	4.2	23
10	Delineating Facies Spatial Distribution by Integrating Ensemble Data Assimilation and Indicator Geostatistics With Level‐Set Transformation. Water Resources Research, 2019, 55, 2652-2671.	4.2	22
11	Kilometer‐Scale Hydrologic Exchange Flows in a Gravel Bed River Corridor and Their Implications to Solute Migration. Water Resources Research, 2020, 56, e2019WR025258.	4.2	19
12	Riverbed Hydrologic Exchange Dynamics in a Large Regulated River Reach. Water Resources Research, 2018, 54, 2715-2730.	4.2	17
13	Coupling surface flow with high-performance subsurface reactive flow and transport code PFLOTRAN. Environmental Modelling and Software, 2021, 137, 104959.	4.5	15
14	A New Approach to Quantify Shallow Water Hydrologic Exchanges in a Large Regulated River Reach. Water (Switzerland), 2017, 9, 703.	2.7	12
15	River Dynamics Control Transit Time Distributions and Biogeochemical Reactions in a Dam‐Regulated River Corridor. Water Resources Research, 2020, 56, e2019WR026470.	4.2	12
16	Machine Learning Analysis of Hydrologic Exchange Flows and Transit Time Distributions in a Large Regulated River. Frontiers in Artificial Intelligence, 2021, 4, 648071.	3.4	10
17	Using Ensemble Data Assimilation to Estimate Transient Hydrologic Exchange Flow Under Highly Dynamic Flow Conditions. Water Resources Research, 2022, 58, .	4.2	10
18	Temporal flow variations interact with spatial physical heterogeneity to impact solute transport in managed river corridors. Journal of Contaminant Hydrology, 2020, 235, 103713.	3.3	7

#	Article	IF	Citations
19	Groundwater characterization and monitoring at a complex industrial waste site using electrical resistivity imaging. Hydrogeology Journal, 2020, 28, 2115-2127.	2.1	7
20	Spatial Mapping of Riverbed Grain-Size Distribution Using Machine Learning. Frontiers in Water, 2020, 2, .	2.3	5
21	Modeling of streamflow in a 30‰km long reach spanning 5 years using OpenFOAM 5.x. Geoscientific Model Development, 2022, 15, 2917-2947.	3.6	4
22	Hierarchical sensitivity analysis for simulating barrier island geomorphologic responses to future storms and sea-level rise. Theoretical and Applied Climatology, 2019, 136, 1495-1511.	2.8	3
23	Scale-dependent spatial variabilities of hydrological exchange flows and transit time in a large regulated river. Journal of Hydrology, 2021, 598, 126283.	5.4	3
24	High-Performance Simulation of Dynamic Hydrologic Exchange and Implications for Surrogate Flow and Reactive Transport Modeling in a Large River Corridor. Frontiers in Water, 2020, 2, .	2.3	2
25	Modeling framework for evaluating the impacts of hydrodynamic pressure on hydrologic exchange fluxes and residence time for a large-scale river section over a long-term period. Environmental Modelling and Software, 2022, 148, 105277.	4.5	2
26	A novel construct for scaling groundwater–river interactions based on machine-guided hydromorphic classification. Environmental Research Letters, 2021, 16, 104016.	5.2	1
27	Can Simple Machine Learning Tools Extend and Improve Temperature-Based Methods to Infer Streambed Flux?. Water (Switzerland), 2021, 13, 2837.	2.7	0