

Xingyuan Chen

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8104438/publications.pdf>

Version: 2024-02-01

60
papers

1,467
citations

331670

21
h-index

361022

35
g-index

81
all docs

81
docs citations

81
times ranked

1855
citing authors

#	ARTICLE	IF	CITATIONS
1	Guidelines for Publicly Archiving Terrestrial Model Data to Enhance Usability, Intercomparison, and Synthesis. <i>Data Science Journal</i> , 2022, 21, 3.	1.3	3
2	Process Interactions Can Change Process Ranking in a Coupled Complex System Under Process Model and Parametric Uncertainty. <i>Water Resources Research</i> , 2022, 58, .	4.2	3
3	Using Ensemble Data Assimilation to Estimate Transient Hydrologic Exchange Flow Under Highly Dynamic Flow Conditions. <i>Water Resources Research</i> , 2022, 58, .	4.2	10
4	From legacy contamination to watershed systems science: a review of scientific insights and technologies developed through DOE-supported research in water and energy security. <i>Environmental Research Letters</i> , 2022, 17, 043004.	5.2	12
5	Technical note: Using long short-term memory models to fill data gaps in hydrological monitoring networks. <i>Hydrology and Earth System Sciences</i> , 2022, 26, 1727-1743.	4.9	11
6	The effects of spatial and temporal resolution of gridded meteorological forcing on watershed hydrological responses. <i>Hydrology and Earth System Sciences</i> , 2022, 26, 2245-2276.	4.9	11
7	Integrating field observations and process-based modeling to predict watershed water quality under environmental perturbations. <i>Journal of Hydrology</i> , 2021, 602, 125762.	5.4	22
8	Estimating Watershed Subsurface Permeability From Stream Discharge Data Using Deep Neural Networks. <i>Frontiers in Earth Science</i> , 2021, 9, .	1.8	10
9	Impact of Vegetation Physiology and Phenology on Watershed Hydrology in a Semiarid Watershed in the Pacific Northwest in a Changing Climate. <i>Water Resources Research</i> , 2021, 57, e2020WR028394.	4.2	6
10	Coupling surface flow with high-performance subsurface reactive flow and transport code PFLOTRAN. <i>Environmental Modelling and Software</i> , 2021, 137, 104959.	4.5	15
11	Groundwater Regulates Interannual Variations in Evapotranspiration in a Riparian Semiarid Ecosystem. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2020JD033078.	3.3	6
12	Groundwater Inflows to the Columbia River Along the Hanford Reach and Associated Nitrate Concentrations. <i>Frontiers in Water</i> , 2021, 3, .	2.3	2
13	DART-PFLOTRAN: An ensemble-based data assimilation system for estimating subsurface flow and transport model parameters. <i>Environmental Modelling and Software</i> , 2021, 142, 105074.	4.5	6
14	A novel construct for scaling groundwater–river interactions based on machine-guided hydromorphic classification. <i>Environmental Research Letters</i> , 2021, 16, 104016.	5.2	1
15	Can Simple Machine Learning Tools Extend and Improve Temperature-Based Methods to Infer Streambed Flux?. <i>Water (Switzerland)</i> , 2021, 13, 2837.	2.7	0
16	Explore Spatio-temporal Learning of Large Sample Hydrology Using Graph Neural Networks. <i>Water Resources Research</i> , 2021, 57, e2021WR030394.	4.2	27
17	Identification of Characteristic Spatial Scales to Improve the Performance of Analytical Spectral Solutions to the Groundwater Flow Equation. <i>Water Resources Research</i> , 2021, 57, .	4.2	0
18	Representing Organic Matter Thermodynamics in Biogeochemical Reactions via Substrate-Explicit Modeling. <i>Frontiers in Microbiology</i> , 2020, 11, 531756.	3.5	27

#	ARTICLE	IF	CITATIONS
19	Temporal flow variations interact with spatial physical heterogeneity to impact solute transport in managed river corridors. <i>Journal of Contaminant Hydrology</i> , 2020, 235, 103713.	3.3	7
20	Effects of Irrigation on Water, Carbon, and Nitrogen Budgets in a Semiarid Watershed in the Pacific Northwest: A Modeling Study. <i>Journal of Advances in Modeling Earth Systems</i> , 2020, 12, e2019MS001953.	3.8	15
21	Uncertainties in Turbulent Statistics and Fluxes of CO ₂ Associated With Density Effect Corrections. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL088859.	4.0	3
22	River Dynamics Control Transit Time Distributions and Biogeochemical Reactions in a Dam-Regulated River Corridor. <i>Water Resources Research</i> , 2020, 56, e2019WR026470.	4.2	12
23	High-Performance Simulation of Dynamic Hydrologic Exchange and Implications for Surrogate Flow and Reactive Transport Modeling in a Large River Corridor. <i>Frontiers in Water</i> , 2020, 2, .	2.3	2
24	Floodplain Inundation and Salinization From a Recently Restored First-Order Tidal Stream. <i>Water Resources Research</i> , 2020, 56, e2019WR026850.	4.2	15
25	Integrated hydrogeophysical modelling and data assimilation for geoelectrical leak detection. <i>Journal of Contaminant Hydrology</i> , 2020, 234, 103679.	3.3	29
26	Enlarged Nonclosure of Surface Energy Balance With Increasing Atmospheric Instabilities Linked to Changes in Coherent Structures. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2020JD032889.	3.3	6
27	Flexible and Modular Simultaneous Modeling of Flow and Reactive Transport in Rivers and Hyporheic Zones. <i>Water Resources Research</i> , 2020, 56, e2019WR026528.	4.2	21
28	Kilometer-Scale Hydrologic Exchange Flows in a Gravel Bed River Corridor and Their Implications to Solute Migration. <i>Water Resources Research</i> , 2020, 56, e2019WR025258.	4.2	19
29	Methane and nitrous oxide porewater concentrations and surface fluxes of a regulated river. <i>Science of the Total Environment</i> , 2020, 715, 136920.	8.0	20
30	Accelerated dryland expansion regulates future variability in dryland gross primary production. <i>Nature Communications</i> , 2020, 11, 1665.	12.8	158
31	Understanding Contaminant Migration Within a Dynamic River Corridor Through Field Experiments and Reactive Transport Modeling. <i>Frontiers in Water</i> , 2020, 2, .	2.3	2
32	A multirate mass transfer model to represent the interaction of multicomponent biogeochemical processes between surface water and hyporheic zones (SWAT-MRMT-R 1.0). <i>Geoscientific Model Development</i> , 2020, 13, 3553-3569.	3.6	14
33	Hierarchical sensitivity analysis for a large-scale process-based hydrological model applied to an Amazonian watershed. <i>Hydrology and Earth System Sciences</i> , 2020, 24, 4971-4996.	4.9	1
34	Hierarchical sensitivity analysis for simulating barrier island geomorphologic responses to future storms and sea-level rise. <i>Theoretical and Applied Climatology</i> , 2019, 136, 1495-1511.	2.8	3
35	Delineating Facies Spatial Distribution by Integrating Ensemble Data Assimilation and Indicator Geostatistics With Level-Set Transformation. <i>Water Resources Research</i> , 2019, 55, 2652-2671.	4.2	22
36	Using Bayesian Networks for Sensitivity Analysis of Complex Biogeochemical Models. <i>Water Resources Research</i> , 2019, 55, 3541-3555.	4.2	23

#	ARTICLE	IF	CITATIONS
37	Dam Operations and Subsurface Hydrogeology Control Dynamics of Hydrologic Exchange Flows in a Regulated River Reach. <i>Water Resources Research</i> , 2019, 55, 2593-2612.	4.2	39
38	Mechanistic links between underestimated CO ₂ fluxes and non-closure of the surface energy balance in a semi-arid sagebrush ecosystem. <i>Environmental Research Letters</i> , 2019, 14, 044016.	5.2	16
39	Groundwater-River Water Exchange Enhances Growing Season Evapotranspiration and Carbon Uptake in a Semiarid Riparian Ecosystem. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2019, 124, 99-114.	3.0	21
40	Subsurface biogeochemistry is a missing link between ecology and hydrology in dam-impacted river corridors. <i>Science of the Total Environment</i> , 2019, 657, 435-445.	8.0	19
41	Riverbed Hydrologic Exchange Dynamics in a Large Regulated River Reach. <i>Water Resources Research</i> , 2018, 54, 2715-2730.	4.2	17
42	Drought Conditions Maximize the Impact of High-Frequency Flow Variations on Thermal Regimes and Biogeochemical Function in the Hyporheic Zone. <i>Water Resources Research</i> , 2018, 54, 7361-7382.	4.2	63
43	A geostatistics-informed hierarchical sensitivity analysis method for complex groundwater flow and transport modeling. <i>Water Resources Research</i> , 2017, 53, 4327-4343.	4.2	30
44	A new process sensitivity index to identify important system processes under process model and parametric uncertainty. <i>Water Resources Research</i> , 2017, 53, 3476-3490.	4.2	41
45	A novel approach to evaluate soil heat flux calculation: An analytical review of nine methods. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 6934-6949.	3.3	38
46	PFLOTRAN-E4D: A parallel open source PFLOTRAN module for simulating time-lapse electrical resistivity data. <i>Computers and Geosciences</i> , 2017, 99, 72-80.	4.2	21
47	Regulation-Structured Dynamic Metabolic Model Provides a Potential Mechanism for Delayed Enzyme Response in Denitrification Process. <i>Frontiers in Microbiology</i> , 2017, 8, 1866.	3.5	40
48	Coupling a three-dimensional subsurface flow and transport model with a land surface model to simulate stream-aquifer-land interactions (CPAV1.0). <i>Geoscientific Model Development</i> , 2017, 10, 4539-4562.	3.6	25
49	Soil respiration across a permafrost transition zone: spatial structure and environmental correlates. <i>Biogeosciences</i> , 2017, 14, 4341-4354.	3.3	7
50	A new and inexpensive non-bit-for-bit solution reproducibility test based on time step convergence (TSC1.0). <i>Geoscientific Model Development</i> , 2017, 10, 537-552.	3.6	9
51	River stage influences on uranium transport in a hydrologically dynamic groundwater-surface water transition zone. <i>Water Resources Research</i> , 2016, 52, 1568-1590.	4.2	42
52	Four-dimensional electrical conductivity monitoring of stage-driven river water intrusion: Accounting for water table effects using a transient mesh boundary and conditional inversion constraints. <i>Water Resources Research</i> , 2015, 51, 6177-6196.	4.2	33
53	An Analysis Platform for Multiscale Hydrogeologic Modeling with Emphasis on Hybrid Multiscale Methods. <i>Ground Water</i> , 2015, 53, 38-56.	1.3	62
54	Application of ensemble-based data assimilation techniques for aquifer characterization using tracer data at Hanford 300 area. <i>Water Resources Research</i> , 2013, 49, 7064-7076.	4.2	37

#	ARTICLE	IF	CITATIONS
55	A strategy for improved computational efficiency of the method of anchored distributions. <i>Water Resources Research</i> , 2013, 49, 3257-3275.	4.2	5
56	A statistical method for estimating wood thermal diffusivity and probe geometry using in situ heat response curves from sap flow measurements. <i>Tree Physiology</i> , 2012, 32, 1458-1470.	3.1	11
57	Three-dimensional Bayesian geostatistical aquifer characterization at the Hanford 300 Area using tracer test data. <i>Water Resources Research</i> , 2012, 48, .	4.2	40
58	A Bayesian approach for inverse modeling, data assimilation, and conditional simulation of spatial random fields. <i>Water Resources Research</i> , 2010, 46, .	4.2	70
59	Groundwater uptake by woody vegetation in a semiarid oak savanna. <i>Water Resources Research</i> , 2010, 46, .	4.2	163
60	Observations and stochastic modeling of soil moisture control on evapotranspiration in a Californian oak savanna. <i>Water Resources Research</i> , 2008, 44, .	4.2	44