Bill X Hu

List of Publications by Year
in descending order

88 papers	1,845 citations	279778 23 h-index	330122 37 g-index
90 all docs	90 docs citations	90 times ranked	1817 citing authors

#	Article	IF	Citations
1	Composition and functional diversity of microbial community across a mangrove-inhabited mudflat as revealed by 16S rDNA gene sequences. Science of the Total Environment, 2018, 633, 518-528.	8.0	120
2	Submarine Ground Water Discharge Driven by Tidal Pumping in a Heterogeneous Aquifer. Ground Water, 2009, 47, 558-568.	1.3	100
3	Nonlocal Reactive Transport with Physical and Chemical Heterogeneity: Linear Nonequilibrium Sorption with RandomKd. Water Resources Research, 1995, 31, 2239-2252.	4.2	82
4	Projection and uncertainty of precipitation extremes in the CMIP5 multimodel ensembles over nine major basins in China. Atmospheric Research, 2019, 226, 122-137.	4.1	73
5	Simulating flow in karst aquifers at laboratory and sub-regional scales using MODFLOW-CFP. Hydrogeology Journal, 2013, 21, 1749-1760.	2.1	65
6	Laboratory analog and numerical study of groundwater flow and solute transport in a karst aquifer with conduit and matrix domains. Journal of Contaminant Hydrology, 2009, 110, 34-44.	3.3	63
7	Characterizing microbial diversity and community composition of groundwater in a salt-freshwater transition zone. Science of the Total Environment, 2019, 678, 574-584.	8.0	60
8	Numerical Modeling of Wheat Irrigation using Coupled HYDRUS and WOFOST Models. Soil Science Society of America Journal, 2012, 76, 648-662.	2.2	54
9	Prediction of groundwater level in seashore reclaimed land using wavelet and artificial neural network-based hybrid model. Journal of Hydrology, 2019, 577, 123948.	5.4	47
10	Using data assimilation method to calibrate a heterogeneous conductivity field and improve solute transport prediction with an unknown contamination source. Stochastic Environmental Research and Risk Assessment, 2009, 23, 1155-1167.	4.0	43
11	Simulating long term nitrate-N contamination processes in the Woodville Karst Plain using CFPv2 with UMT3D. Journal of Hydrology, 2015, 524, 72-88.	5.4	42
12	Hydrogeochemical characterization and groundwater quality assessment in intruded coastal brine aquifers (Laizhou Bay, China). Environmental Science and Pollution Research, 2017, 24, 21073-21090.	5.3	41
13	Numerical modeling and sensitivity analysis of seawater intrusion in a dual-permeability coastal karst aquifer with conduit networks. Hydrology and Earth System Sciences, 2018, 22, 221-239.	4.9	38
14	Examining the influence of heterogeneous porosity fields on conservative solute transport. Journal of Contaminant Hydrology, 2009, 108, 77-88.	3.3	36
15	Simulation of regional groundwater levels in arid regions using interpretable machine learning models. Science of the Total Environment, 2022, 831, 154902.	8.0	35
16	Experimental and numerical investigations of soil water balance at the hinterland of the Badain Jaran Desert for groundwater recharge estimation. Journal of Hydrology, 2016, 540, 386-396.	5.4	34
17	Effects of climate and terrestrial storage on temporal variability of actual evapotranspiration. Journal of Hydrology, 2017, 549, 388-403.	5.4	31
18	Numerical study of groundwater flow cycling controlled by seawater/freshwater interaction in a coastal karst aquifer through conduit network using CFPv2. Journal of Contaminant Hydrology, 2015, 182, 131-145.	3.3	30

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19	Development of a discreteâ€continuum <scp>VDFSTâ€CFP</scp> numerical model for simulating seawater intrusion to a coastal karst aquifer with a conduit system. Water Resources Research, 2017, 53, 688-711.	4.2	30
20	Experimental study and mathematical modelling of soluble chemical transfer from unsaturated/saturated soil to surface runoff. Hydrological Processes, 2010, 24, 3065-3073.	2.6	28
21	Nonlocal nonreactive transport in heterogeneous porous media with interregional mass diffusion. Water Resources Research, 2000, 36, 1665-1675.	4.2	27
22	Long distance seawater intrusion through a karst conduit network in the Woodville Karst Plain, Florida. Scientific Reports, 2016, 6, 32235.	3.3	27
23	A sixteen-year reduction in the concentrations of aquatic PAHs corresponding to source shifts in the Elbe River, Germany. Journal of Cleaner Production, 2019, 223, 631-640.	9.3	27
24	Bacterial community variations with salinity in the saltwater-intruded estuarine aquifer. Science of the Total Environment, 2021, 755, 142423.	8.0	26
25	Diversity and predictive metabolic pathways of the prokaryotic microbial community along a groundwater salinity gradient of the Pearl River Delta, China. Scientific Reports, 2018, 8, 17317.	3.3	25
26	Projected changes of temperature extremes over nine major basins in China based on the CMIP5 multimodel ensembles. Stochastic Environmental Research and Risk Assessment, 2019, 33, 321-339.	4.0	24
27	On the teleconnection patterns to precipitation in the eastern Tianshan Mountains, China. Climate Dynamics, 2017, 49, 3123-3139.	3.8	23
28	Responses of runoff to historical and future climate variability over China. Hydrology and Earth System Sciences, 2018, 22, 1971-1991.	4.9	23
29	Comparative analysis of meteorological and hydrological drought over the Pearl River basin in southern China. Hydrology Research, 2019, 50, 301-318.	2.7	23
30	Using Bayesian Networks for Sensitivity Analysis of Complex Biogeochemical Models. Water Resources Research, 2019, 55, 3541-3555.	4.2	23
31	Comparison of the groundwater microbial community in a salt-freshwater mixing zone during the dry and wet seasons. Journal of Environmental Management, 2020, 271, 110969.	7.8	22
32	Future Precipitation-Driven Meteorological Drought Changes in the CMIP5 Multimodel Ensembles under 1.5Â°C and 2Â°C Global Warming. Journal of Hydrometeorology, 2020, 21, 2177-2196.	1.9	22
33	Using data assimilation method to calibrate a heterogeneous conductivity field conditioning on transient flow test data. Stochastic Environmental Research and Risk Assessment, 2010, 24, 1211-1223.	4.0	21
34	Assimilating transient groundwater flow data via a localized ensemble Kalman filter to calibrate a heterogeneous conductivity field. Stochastic Environmental Research and Risk Assessment, 2012, 26, 467-478.	4.0	21
35	A review of applications of fractional advectionâ€“dispersion equations for anomalous solute transport in surface and subsurface water. Wiley Interdisciplinary Reviews: Water, 2020, 7, e1448.	6.5	19
36	Evaluation and optimization of the water diversion system of ecohydrological restoration megaproject of Tarim River, China, through wavelet analysis and a neural network. Journal of Hydrology, 2022, 608, 127586.	5.4	19

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37	Copula-based risk evaluation of global meteorological drought in the 21st century based on CMIP5 multi-model ensemble projections. Journal of Hydrology, 2021, 598, 126265.	5.4	18
38	The effects of monsoons and climate teleconnections on the Niangziguan Karst Spring discharge in North China. Climate Dynamics, 2017, 48, 53-70.	3.8	17
39	Controlling factors of errors in the predicted annual and monthly evaporation from the Budyko framework. Advances in Water Resources, 2018, 121, 432-445.	3.8	17
40	Global Analysis of the Role of Terrestrial Water Storage in the Evapotranspiration Estimated from the Budyko Framework at Annual to Monthly Time Scales. Journal of Hydrometeorology, 2019, 20, 2003-2021.	1.9	17
41	Simulation de lâ€™intrusion saline dans un aquifÃ¨re cÃ´tier karstique complexe en utilisant un modÃ¨le amÃ©liorÃ© dâ€™Ã©coulement dans les conduits et de transport de solutÃ©s Ã densitÃ© variable. Hydrogeology Journal, 2019, 27, 1277-1289.	2.1	17
42	Uncertainty assessment of drought characteristics projections in humid subtropical basins in China based on multiple CMIP5 models and different index definitions. Journal of Hydrology, 2021, 600, 126502.	5.4	17
43	Numerical study of groundwater flow cycling controlled by seawater/freshwater interaction in Woodville Karst Plain. Journal of Hydrology, 2019, 579, 124171.	5.4	16
44	Application of Wavelet Coherence Method to Investigate Karst Spring Discharge Response to Climate Teleconnection Patterns. Journal of the American Water Resources Association, 2016, 52, 1281-1296.	2.4	15
45	Global precipitation-related extremes at 1.5ÂÂ°C and 2ÂÂ°C of global warming targets: Projection and uncertainty assessment based on the CESM-LWR experiment. Atmospheric Research, 2021, 264, 105868.	4.1	15
46	Data assimilation methods for estimating a heterogeneous conductivity field by assimilating transient solute transport data via ensemble Kalman filter. Hydrological Processes, 2013, 27, 3873-3884.	2.6	14
47	Numerical study on tide-driven submarine groundwater discharge and seawater recirculation in heterogeneous aquifers. Stochastic Environmental Research and Risk Assessment, 2016, 30, 1741-1755.	4.0	13
48	Evaluating equilibrium and nonâ€equilibrium transport of ammonium in a loam soil column. Hydrological Processes, 2018, 32, 80-92.	2.6	13
49	Recent intensification of shortâ€term concurrent hot and dry extremes over the Pearl River basin, China. International Journal of Climatology, 2019, 39, 4924-4937.	3.5	13
50	Spatial distribution and source apportionment of polycyclic aromatic hydrocarbons in typical oasis soil of north-western China and the bacterial community response. Environmental Research, 2022, 204, 112401.	7.5	13
51	A voxel-based three-dimensional framework for flash drought identification in space and time. Journal of Hydrology, 2022, 608, 127568.	5.4	13
52	Model reduction of a coupled numerical model using proper orthogonal decomposition. Journal of Hydrology, 2013, 507, 227-240.	5.4	11
53	Grain-Size Based Additivity Models for Scaling Multi-rate Uranyl Surface Complexation in Subsurface Sediments. Mathematical Geosciences, 2016, 48, 511-535.	2.4	11
54	Characterization, modeling, and remediation of karst in a changing environment. Environmental Earth Sciences, 2018, 77, 1.	2.7	10

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55	Proper orthogonal decomposition reduced model for mass transport in heterogenous media. Stochastic Environmental Research and Risk Assessment, 2013, 27, 1181-1191.	4.0	9
56	Assessment of alternative adsorption models and global sensitivity analysis to characterize hexavalent chromium loss from soil to surface runoff. Hydrological Processes, 2018, 32, 3140-3157.	2.6	9
57	Influence of lunar semidiurnal tides on groundwater dynamics in estuarine aquifers. Hydrogeology Journal, 2020, 28, 1419-1429.	2.1	9
58	Stochastic study on groundwater flow and solute transport in a porous medium with multi-scale heterogeneity. Advances in Water Resources, 2003, 26, 541-560.	3.8	8
59	Using an Ensemble Kalman Filter Method to Calibrate Parameters and Update Soluble Chemical Transfer From Soil to Surface Runoff. Transport in Porous Media, 2012, 91, 133-152.	2.6	8
60	An efficient approximation of non-Fickian transport using a time-fractional transient storage model. Advances in Water Resources, 2020, 135, 103486.	3.8	8
61	Experimental study on soluble chemical transfer to surface runoff from soil. Environmental Science and Pollution Research, 2016, 23, 20378-20387.	5.3	7
62	Using a hybrid model to predict solute transfer from initially saturated soil into surface runoff with controlled drainage water. Environmental Science and Pollution Research, 2016, 23, 12444-12455.	5.3	7
63	Data Assimilation in Densityâ€Ðependent Subsurface Flows via Localized Iterative Ensemble Kalman Filter. Water Resources Research, 2018, 54, 6259-6281.	4.2	7
64	Prediction of the Irrigation Area Carrying Capacity in the Tarim River Basin under Climate Change. Agriculture (Switzerland), 2022, 12, 657.	3.1	7
65	Experimental and modeling study on Cr(VI) transfer from soil into surface runoff. Stochastic Environmental Research and Risk Assessment, 2016, 30, 1347-1361.	4.0	6
66	Examining a Coupled Continuum Pipe-Flow Model for Groundwater Flow and Solute Transport in a Karst aquifer. Acta Carsologica, 2012, 39, .	0.7	6
67	Using the Sequential Self-calibration Method and Genetic Algorithm Method to Optimally Design Tracer Test to Estimate Conductivity Distribution. Transport in Porous Media, 2007, 67, 31-48.	2.6	5
68	Integration of moment equations in a reduced-order modeling strategy for Monte Carlo simulations of groundwater flow. Journal of Hydrology, 2020, 590, 125257.	5.4	5
69	Stochastic Study of Solute Transport in a Nonstationary Medium. Ground Water, 2006, 44, 222-233.	1.3	4
70	Potential Impacts of Climate Variation on Potato Field Evapotranspiration: Field Experiment and Numerical Simulation of Potato Water Use in an Arid Site. Journal of Geophysical Research D: Atmospheres, 2018, 123, 10,202.	3.3	4
71	Grid convergence for numerical solutions of stochastic moment equations of groundwater flow. Stochastic Environmental Research and Risk Assessment, 2019, 33, 1565-1579.	4.0	4
72	Quantifying the integrated water and carbon cycle in a data-limited karst basin using a process-based hydrologic model. Environmental Earth Sciences, 2019, 78, 1.	2.7	4

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73	Using an ensemble Kalman filter method to calibrate parameters of a prediction model for chemical transport from soil to surface runoff. Environmental Science and Pollution Research, 2021, 28, 4404-4416.	5.3	4
74	Data assimilation with multiple types of observation boreholes via the ensemble Kalman filter embedded within stochastic moment equations. Hydrology and Earth System Sciences, 2021, 25, 1689-1709.	4.9	4
75	An efficient fractional-in-time transient storage model for simulating the multi-peaked breakthrough curves. Journal of Hydrology, 2021, 600, 126570.	5.4	4
76	Application of a data assimilation method via an ensemble Kalman filter to reactive urea hydrolysis transport modeling. Stochastic Environmental Research and Risk Assessment, 2014, 28, 729-741.	4.0	3
77	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
78	Comparison of negative skewed space fractional models with time nonlocal approaches for stream solute transport modeling. Journal of Hydrology, 2020, 582, 124504.	5.4	3
79	Numerical Simulation of Groundwater Flow and Solute Transport in a Karst Aquifer with Conduits. , 0, , .		2
80	Identification of hydraulic conductivity distributions in density dependent flow fields of submarine groundwater discharge modeling using adjoint-state sensitivities. Science China Earth Sciences, 2016, 59, 770-779.	5.2	2
81	Effect of intermittent operation model on the function of soil infiltration system. Environmental Science and Pollution Research, 2018, 25, 9615-9625.	5.3	2
82	Decadal exploration of karst hydrogeology in the Woodville Karst Plain (WKP): A review of field investigation and modeling development. Journal of Hydrology, 2021, 594, 125937.	5.4	2
83	Spatioâ€temporal variability of dryness and wetness based on standardized precipitation evapotranspiration index and standardized wetness index and its relation to the normalized difference vegetation index. International Journal of Climatology, 0, , .	3.5	2
84	Spatiotemporal Variations of Evapotranspiration in Amazonia Using the Wavelet Phase Difference Analysis. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.3	2
85	The Influence of Seasonal Recharge and Groundwater Pumping on the Seawater Intrusion in a Coastal Karst Aquifer. Journal of Coastal Research, 2022, 38, .	0.3	2
86	Hierarchical sensitivity analysis for a large-scale process-based hydrological model applied to an Amazonian watershed. Hydrology and Earth System Sciences, 2020, 24, 4971-4996.	4.9	1
87	Theoretical Application of Ensemble Kalman Filter to Adsorptive Solute Cr(VI) Transfer from Soil into Surface Runoff. Advanced Materials Research, 0, 919-921, 1257-1261.	0.3	0
88	Comparison between gradient based UCODE_2005 and the ensemble Kalman Filter for transient groundwater flow inverse modeling. Science China Earth Sciences, 2017, 60, 899-909.	5.2	0