Michael Fienen

List of Publications by Year
in descending order

59 papers	2,718 citations	201674 27 h-index	206112 48 g-index
85 all docs	85 docs citations	85 times ranked	3107 citing authors

#	Article	IF	Citations
1	Pilot-Scale in Situ Bioremedation of Uranium in a Highly Contaminated Aquifer. 2. Reduction of U(VI) and Geochemical Control of U(VI) Bioavailability. Environmental Science & Technology, 2006, 40, 3986-3995.	10.0	242
2	Scripting <scp>MODFLOW</scp> Model Development Using Python and <scp>FloPy</scp>. Ground Water, 2016, 54, 733-739.	1.3	227
3	Pilot-Scale in Situ Bioremediation of Uranium in a Highly Contaminated Aquifer. 1. Conditioning of a Treatment Zone. Environmental Science & Technology, 2006, 40, 3978-3985.	10.0	160
4	CrowdHydrology: Crowdsourcing Hydrologic Data and Engaging Citizen Scientists. Ground Water, 2013, 51, 151-156.	1.3	149
5	Analyzing Bank Filtration by Deconvoluting Time Series of Electric Conductivity. Ground Water, 2007, 45, 318-328.	1.3	121
6	A statistical learning framework for groundwater nitrate models of the Central Valley, California, USA. Journal of Hydrology, 2015, 531, 902-911.	5.4	120
7	A python framework for environmental model uncertainty analysis. Environmental Modelling and Software, 2016, 85, 217-228.	4.5	80
8	Understanding the DayCent model: Calibration, sensitivity, and identifiability through inverse modeling. Environmental Modelling and Software, 2015, 66, 110-130.	4.5	77
9	An interactive Bayesian geostatistical inverse protocol for hydraulic tomography. Water Resources Research, 2008, 44, .	4.2	71
10	On Constraining Pilot Point Calibration with Regularization in PEST. Ground Water, 2009, 47, 835-844.	1.3	65
11	Bridging groundwater models and decision support with a Bayesian network. Water Resources Research, 2013, 49, 6459-6473.	4.2	63
12	Social.Waterâ€"A crowdsourcing tool for environmental data acquisition. Computers and Geosciences, 2012, 49, 164-169.	4.2	56
13	Obtaining parsimonious hydraulic conductivity fields using head and transport observations: A Bayesian geostatistical parameter estimation approach. Water Resources Research, 2009, 45, .	4.2	53
14	A Nested-Cell Approach for In Situ Remediation. Ground Water, 2006, 44, 266-274.	1.3	51
15	Effects of seaâ€level rise on barrier island groundwater system dynamics â€“ ecohydrological implications. Ecohydrology, 2014, 7, 1064-1071.	2.4	47
16	Evaluating the sources of water to wells: Three techniques for metamodeling of a groundwater flow model. Environmental Modelling and Software, 2016, 77, 95-107.	4.5	45
17	Semi-analytical homogeneous anisotropic capture zone delineation. Journal of Hydrology, 2005, 312, 39-50.	5.4	42
18	Predicting recreational water quality advisories: A comparison of statistical methods. Environmental Modelling and Software, 2016, 76, 81-94.	4.5	42

#	Article	IF	Citations
19	Growing Pains of Crowdsourced Stream Stage Monitoring Using Mobile Phones: The Development of CrowdHydrology. Frontiers in Earth Science, 2019, 7, .	1.8	42
20	Development of a joint hydrogeophysical inversion approach and application to a contaminated fractured aquifer. Water Resources Research, 2006, 42, .	4.2	41
21	An Application of Bayesian Inverse Methods to Vertical Deconvolution of Hydraulic Conductivity in a Heterogeneous Aquifer at Oak Ridge National Laboratory. Mathematical Geosciences, 2004, 36, 101-126.	0.9	39
22	A Bayesian geostatistical transfer function approach to tracer test analysis. Water Resources Research, 2006, 42, .	4.2	39
23	A cross-validation package driving Netica with python. Environmental Modelling and Software, 2015, 63, 14-23.	4.5	38
24	Mass-Transfer Limitations for Nitrate Removal in a Uranium-Contaminated Aquifer. Environmental Science & Technology, 2005, 39, 8453-8459.	10.0	36
25	Metamodeling for Groundwater Age Forecasting in the Lake Michigan Basin. Water Resources Research, 2018, 54, 4750-4766.	4.2	32
26	Capture Versus Capture Zones: Clarifying Terminology Related to Sources of Water to Wells. Ground Water, 2018, 56, 694-704.	1.3	31
27	A parametric transfer function methodology for analyzing reactive transport in nonuniform flow. Journal of Contaminant Hydrology, 2006, 83, 27-41.	3.3	30
28	The Effect of Particle Size Distribution on the Design of Urban Stormwater Control Measures. Water (Switzerland), 2016, 8, 17.	2.7	28
29	Depletion Mapping and Constrained Optimization to Support Managing Groundwater Extraction. Ground Water, 2018, 56, 18-31.	1.3	24
30	Nitrous Oxide Emissions from Cropland: a Procedure for Calibrating the DayCent Biogeochemical Model Using Inverse Modelling. Water, Air, and Soil Pollution, 2013, 224, 1.	2.4	22
31	A tool for efficient, model-independent management optimization under uncertainty. Environmental Modelling and Software, 2018, 100, 213-221.	4.5	22
32	Toward Reproducible Environmental Modeling for Decision Support: A Worked Example. Frontiers in Earth Science, 2020, 8, .	1.8	22
33	HESS Opinions: Repeatable research: what hydrologists can learn from the Duke cancer research scandal. Hydrology and Earth System Sciences, 2016, 20, 3739-3743.	4.9	21
34	Threeâ€Đimensional Distribution of Groundwater Residence Time Metrics in the Glaciated United States Using Metamodels Trained on General Numerical Simulation Models. Water Resources Research, 2021, 57, e2020WR027335.	4.2	21
35	Revisiting â€œAn Exercise in Groundwater Model Calibration and Predictionâ€•After 30 Years: Insights and New Directions. Ground Water, 2020, 58, 168-182.	1.3	20
36	Partial least squares for efficient models of fecal indicator bacteria on Great Lakes beaches. Journal of Environmental Management, 2013, 114, 470-475.	7.8	19

#	Article	IF	Citations
37	Highâ€Throughput Computing Versus Highâ€Performance Computing for Groundwater Applications. Ground Water, 2015, 53, 180-184.	1.3	19
38	Metamodels to Bridge the Gap Between Modeling and Decision Support. Ground Water, 2015, 53, 511-512.	1.3	18
39	A Semiâ€Structured <scp>MODFLOWâ€USG</scp> Model to Evaluate Local Water Sources to Wells for Decision Support. Ground Water, 2016, 54, 532-544.	1.3	17
40	Regression Modeling of Particle Size Distributions in Urban Storm Water: Advancements through Improved Sample Collection Methods. Journal of Environmental Engineering, ASCE, 2012, 138, 1186-1193.	1.4	16
41	Towards improved environmental modeling outcomes: Enabling low-cost access to high-dimensional, geostatistical-based decision-support analyses. Environmental Modelling and Software, 2021, 139, 105022.	4.5	16
42	DigitalCrust â€“ a 4D data system of material properties for transforming research on crustal fluid flow. Geofluids, 2015, 15, 372-379.	0.7	13
43	Crossâ€Scale Interactions Dictate Regional Lake Carbon Flux and Productivity Response to Future Climate. Geophysical Research Letters, 2019, 46, 8840-8851.	4.0	13
44	<scp>SFRmaker</scp> and Linesinkâ€Maker: Rapid Construction of Streamflow Routing Networks from Hydrography Data. Ground Water, 2021, 59, 761-771.	1.3	13
45	The Three-Point Problem, Vector Analysis and Extension to the N-Point Problem. Journal of Geoscience Education, 2005, 53, 257-262.	1.4	12
46	Wrangling distributed computing for high-throughput environmental science: An introduction to HTCondor. PLoS Computational Biology, 2018, 14, e1006468.	3.2	11
47	A Simple Method for Simulating Groundwater Interactions with Fens to Forecast Development Effects. Ground Water, 2020, 58, 524-534.	1.3	10
48	Riskâ€Based Wellhead Protection Decision Support: A Repeatable Workflow Approach. Ground Water, 2022, 60, 71-86.	1.3	10
49	Assessing spatial transferability of a random forest metamodel for predicting drainage fraction. Journal of Hydrology, 2022, 612, 128177.	5.4	8
50	Multiâ€Constrained Catchment Scale Optimization of Groundwater Abstraction Using Linear Programming. Ground Water, 2021, 59, 503-516.	1.3	7
51	A model-independent tool for evolutionary constrained multi-objective optimization under uncertainty. Environmental Modelling and Software, 2022, 149, 105316.	4.5	7
52	Estimating first-order reaction rate coefficient for transport with nonequilibrium linear mass transfer in heterogeneous media. Journal of Contaminant Hydrology, 2008, 98, 50-60.	3.3	6
53	Prioritizing river basins for intensive monitoring and assessment by the US Geological Survey. Environmental Monitoring and Assessment, 2020, 192, 458.	2.7	6
54	Inverse Modeling with RZWQM2 to Predict Water Quality. Advances in Agricultural Systems Modeling, 0, , 327-363.	0.3	5

#	Article	IF	Citations
55	MODFLOW-Style Parameters in Underdetermined Parameter Estimation. Ground Water, 2012, 50, 149-153.	1.3	4
56	We Speak for the Data. Ground Water, 2013, 51, n/a-n/a.	1.3	4
57	Groundwater Model Simulations of Stakeholderâ€Identified Scenarios in a Highâ€Conflict Irrigated Area. Ground Water, 2020, 58, 973-986.	1.3	4
58	Extending the Capture Map Concept to Estimate Discrete and Riskâ€Based Streamflow Depletion Potential. Ground Water, 2021, 59, 571-580.	1.3	2
59	A scalable model-independent iterative data assimilation tool for sequential and batch estimation of high dimensional model parameters and states. Environmental Modelling and Software, 2022, 150, 105284.	4.5	1