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	Riskâ€Based Wellhead Protection Decision Support: A Repeatable Workflow Approach. Ground Water, 2022, 60, 71-86.	1.3	10
2	A model-independent tool for evolutionary constrained multi-objective optimization under uncertainty. Environmental Modelling and Software, 2022, 149, 105316.	4.5	7
3	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
4	Assessing spatial transferability of a random forest metamodel for predicting drainage fraction. Journal of Hydrology, 2022, 612, 128177.	5.4	8
5	Multiâ€Constrained Catchment Scale Optimization of Groundwater Abstraction Using Linear Programming. Ground Water, 2021, 59, 503-516.	1.3	7
6	Threeâ€Dimensional 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
7	Extending the Capture Map Concept to Estimate Discrete and Riskâ€Based Streamflow Depletion Potential. Ground Water, 2021, 59, 571-580.	1.3	2
8	<scp>SFRmaker</scp> and Linesinkâ€Maker: Rapid Construction of Streamflow Routing Networks from Hydrography Data. Ground Water, 2021, 59, 761-771.	1.3	13
9	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
10	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
11	A Simple Method for Simulating Groundwater Interactions with Fens to Forecast Development Effects. Ground Water, 2020, 58, 524-534.	1.3	10
12	Toward Reproducible Environmental Modeling for Decision Support: A Worked Example. Frontiers in Earth Science, 2020, 8, .	1.8	22
13	Prioritizing river basins for intensive monitoring and assessment by the US Geological Survey. Environmental Monitoring and Assessment, 2020, 192, 458.	2.7	6
14	Groundwater Model Simulations of Stakeholderâ€Identified Scenarios in a Highâ€Conflict Irrigated Area. Ground Water, 2020, 58, 973-986.	1.3	4
15	Crossâ€Scale Interactions Dictate Regional Lake Carbon Flux and Productivity Response to Future Climate. Geophysical Research Letters, 2019, 46, 8840-8851.	4.0	13
16	Growing Pains of Crowdsourced Stream Stage Monitoring Using Mobile Phones: The Development of CrowdHydrology. Frontiers in Earth Science, 2019, 7, .	1.8	42
17	Capture Versus Capture Zones: Clarifying Terminology Related to Sources of Water to Wells. Ground Water, 2018, 56, 694-704.	1.3	31
18	Depletion Mapping and Constrained Optimization to Support Managing Groundwater Extraction. Ground Water, 2018, 56, 18-31.	1.3	24

#	Article	IF	Citations
19	A tool for efficient, model-independent management optimization under uncertainty. Environmental Modelling and Software, 2018, 100, 213-221.	4.5	22
20	Wrangling distributed computing for high-throughput environmental science: An introduction to HTCondor. PLoS Computational Biology, 2018, 14, e1006468.	3.2	11
21	Metamodeling for Groundwater Age Forecasting in the Lake Michigan Basin. Water Resources Research, 2018, 54, 4750-4766.	4.2	32
22	The Effect of Particle Size Distribution on the Design of Urban Stormwater Control Measures. Water (Switzerland), 2016, 8, 17.	2.7	28
23	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
24	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
25	A python framework for environmental model uncertainty analysis. Environmental Modelling and Software, 2016, 85, 217-228.	4.5	80
26	Scripting <scp>MODFLOW</scp> Model Development Using Python and <scp>FloPy</scp>. Ground Water, 2016, 54, 733-739.	1.3	227
27	Predicting recreational water quality advisories: A comparison of statistical methods. Environmental Modelling and Software, 2016, 76, 81-94.	4.5	42
28	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
29	DigitalCrust â€“ a 4D data system of material properties for transforming research on crustal fluid flow. Geofluids, 2015, 15, 372-379.	0.7	13
30	Metamodels to Bridge the Gap Between Modeling and Decision Support. Ground Water, 2015, 53, 511-512.	1.3	18
31	A statistical learning framework for groundwater nitrate models of the Central Valley, California, USA. Journal of Hydrology, 2015, 531, 902-911.	5.4	120
32	Highâ€Throughput Computing Versus Highâ€Performance Computing for Groundwater Applications. Ground Water, 2015, 53, 180-184.	1.3	19
33	Understanding the DayCent model: Calibration, sensitivity, and identifiability through inverse modeling. Environmental Modelling and Software, 2015, 66, 110-130.	4.5	77
34	A cross-validation package driving Netica with python. Environmental Modelling and Software, 2015, 63, 14-23.	4.5	38
35	Effects of seaâ€level rise on barrier island groundwater system dynamics â€“ ecohydrological implications. Ecohydrology, 2014, 7, 1064-1071.	2.4	47
36	CrowdHydrology: Crowdsourcing Hydrologic Data and Engaging Citizen Scientists. Ground Water, 2013, 51, 151-156.	1.3	149

#	Article	IF	Citations
37	Bridging groundwater models and decision support with a Bayesian network. Water Resources Research, 2013, 49, 6459-6473.	4.2	63
38	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
39	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
40	We Speak for the Data. Ground Water, 2013, 51, n/a-n/a.	1.3	4
41	Social.Waterâ€"A crowdsourcing tool for environmental data acquisition. Computers and Geosciences, 2012, 49, 164-169.	4.2	56
42	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
43	MODFLOW-Style Parameters in Underdetermined Parameter Estimation. Ground Water, 2012, 50, 149-153.	1.3	4
44	On Constraining Pilot Point Calibration with Regularization in PEST. Ground Water, 2009, 47, 835-844.	1.3	65
45	Obtaining parsimonious hydraulic conductivity fields using head and transport observations: A Bayesian geostatistical parameter estimation approach. Water Resources Research, 2009, 45, .	4.2	53
46	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
47	An interactive Bayesian geostatistical inverse protocol for hydraulic tomography. Water Resources Research, 2008, 44, .	4.2	71
48	Analyzing Bank Filtration by Deconvoluting Time Series of Electric Conductivity. Ground Water, 2007, 45, 318-328.	1.3	121
49	A Bayesian geostatistical transfer function approach to tracer test analysis. Water Resources Research, 2006, 42, .	4.2	39
50	Development of a joint hydrogeophysical inversion approach and application to a contaminated fractured aquifer. Water Resources Research, 2006, 42, .	4.2	41
51	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
52	A Nested-Cell Approach for In Situ Remediation. Ground Water, 2006, 44, 266-274.	1.3	51
53	A parametric transfer function methodology for analyzing reactive transport in nonuniform flow. Journal of Contaminant Hydrology, 2006, 83, 27-41.	3.3	30
54	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

#	Article	IF	Citations
55	The Three-Point Problem, Vector Analysis and Extension to the N-Point Problem. Journal of Geoscience Education, 2005, 53, 257-262.	1.4	12
56	Mass-Transfer Limitations for Nitrate Removal in a Uranium-Contaminated Aquifer. Environmental Science & Technology, 2005, 39, 8453-8459.	10.0	36
57	Semi-analytical homogeneous anisotropic capture zone delineation. Journal of Hydrology, 2005, 312, 39-50.	5.4	42
58	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
59	Inverse Modeling with RZWQM2 to Predict Water Quality. Advances in Agricultural Systems Modeling, 0, , 327-363.	0.3	5