Olaf A Cirpka

List of Publications by Year
in descending order

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202	7,788	34105 52	71685 76
papers	citations	h-index	g-index

230	230	230	5240
all docs	docs citations	times ranked	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	Estimation of seepage rates in a losing stream by means of fiber-optic high-resolution vertical temperature profiling. Journal of Hydrology, 2010, 380, 154-164.	5.4	198
3	Numerical simulation of biodegradation controlled by transverse mixing. Journal of Contaminant Hydrology, 1999, 40, 159-182.	3.3	189
4	Enhancement of dilution and transverse reactive mixing in porous media: Experiments and model-based interpretation. Journal of Contaminant Hydrology, 2009, 110, 130-142.	3.3	170
5	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
6	Characterization of mixing and dilution in heterogeneous aquifers by means of local temporal moments. Water Resources Research, 2000, 36, 1221-1236.	4.2	148
7	Two-dimensional concentration distribution for mixing-controlled bioreactive transport in steady state. Advances in Water Resources, 2007, 30, 1668-1679.	3.8	143
8	Enhanced mixing and reaction through flow focusing in heterogeneous porous media. Water Resources Research, 2006, 42, .	4.2	137
9	Groundwater Dynamics and Arsenic Mobilization in Bangladesh Assessed Using Noble Gases and Tritium. Environmental Science & Technology, 2006, 40, 243-250.	10.0	130
10	Arsenic release from paddy soils during monsoonÂflooding. Nature Geoscience, 2010, 3, 53-59.	12.9	123
11	Analyzing Bank Filtration by Deconvoluting Time Series of Electric Conductivity. Ground Water, 2007, 45, 318-328.	1.3	121
12	Adsorption as a cause for iron isotope fractionation in reduced groundwater. Geochimica Et Cosmochimica Acta, 2005, 69, 4175-4185.	3.9	118
13	Shift in Mass Transfer of Wastewater Contaminants from Microplastics in the Presence of Dissolved Substances. Environmental Science & Technology, 2017, 51, 12254-12263.	10.0	118
14	Fluctuations of electrical conductivity as a natural tracer for bank filtration in a losing stream. Advances in Water Resources, 2010, 33, 1296-1308.	3.8	108
15	Evidence of Compound-Dependent Hydrodynamic and Mechanical Transverse Dispersion by Multitracer Laboratory Experiments. Environmental Science & Technology, 2010, 44, 688-693.	10.0	102
16	Determination of Transverse Dispersion Coefficients from Reactive Plume Lengths. Ground Water, 2006, 44, 212-221.	1.3	91
17	Assessing the Redox Reactivity of Structural Iron in Smectites Using Nitroaromatic Compounds As Kinetic Probes. Environmental Science & Technology, 2008, 42, 8381-8387.	10.0	91
18	Streamline-oriented grid generation for transport modelling in two-dimensional domains including wells. Advances in Water Resources, 1999, 22, 697-710.	3.8	88

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19	An advective-dispersive stream tube approach for the transfer of conservative-tracer data to reactive transport. Water Resources Research, 2000, 36, 1209-1220.	4.2	87
20	Iron isotope fractionation and atom exchange during sorption of ferrous iron to mineral surfaces. Geochimica Et Cosmochimica Acta, 2009, 73, 1795-1812.	3.9	82
21	Magnetostratigraphy of deep drilling core SG-1 in the western Qaidam Basin (NE Tibetan Plateau) and its tectonic implications. Quaternary Research, 2012, 78, 139-148.	1.7	82
22	Threeâ€Ðimensional Geostatistical Inversion of Flowmeter and Pumping Test Data. Ground Water, 2008, 46, 193-201.	1.3	81
23	Tracerâ€based characterization of hyporheic exchange and benthic biolayers in streams. Water Resources Research, 2017, 53, 1575-1594.	4.2	80
24	A field comparison of multiple techniques to quantify groundwaterâ€“surface-water interactions. Freshwater Science, 2015, 34, 139-160.	1.8	77
25	Fully coupled hydrogeophysical inversion of a laboratory salt tracer experiment monitored by electrical resistivity tomography. Water Resources Research, 2012, 48, .	4.2	76
26	Geostatistical inverse modeling of transient pumping tests using temporal moments of drawdown. Water Resources Research, 2005, 41, .	4.2	73
27	Title is missing!. Mathematical Geosciences, 2003, 35, 53-66.	0.9	72
28	Two-dimensional characterization of hydraulic heterogeneity by multiple pumping tests. Water Resources Research, 2007, 43, .	4.2	71
29	Catchments as reactors: a comprehensive approach for water fluxes and solute turnover. Environmental Earth Sciences, 2013, 69, 317-333.	2.7	71
30	Transverse mixing in three-dimensional nonstationary anisotropic heterogeneous porous media. Water Resources Research, 2015, 51, 241-260.	4.2	71
31	Sensitivity of temporal moments calculated by the adjoint-state method and joint inversing of head and tracer data. Advances in Water Resources, 2000, 24, 89-103.	3.8	69
32	Modulation of oxygen production in Archaean oceans by episodes of Fe(II) toxicity. Nature Geoscience, 2015, 8, 126-130.	12.9	68
33	Effective dispersion in heterogeneous media under random transient flow conditions. Water Resources Research, 2003, 39, .	4.2	67
34	A modified Levenbergâ€“Marquardt algorithm for quasi-linear geostatistical inversing. Advances in Water Resources, 2004, 27, 737-750.	3.8	66
35	Stochastic fluxâ€related analysis of transverse mixing in twoâ€dimensional heterogeneous porous media. Water Resources Research, 2011, 47, .	4.2	66
36	Assessing residence times of hyporheic ground water in two alluvial flood plains of the Southern Alps using water temperature and tracers. Hydrology and Earth System Sciences, 2006, 10, 553-563.	4.9	65

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37	Toward catchment hydroâ€biogeochemical theories. Wiley Interdisciplinary Reviews: Water, 2021, 8, e1495.	6.5	65
38	Experiments on vertical transverse mixing in a large-scale heterogeneous model aquifer. Journal of Contaminant Hydrology, 2005, 80, 130-148.	3.3	64
39	Choice of dispersion coefficients in reactive transport calculations on smoothed fields. Journal of Contaminant Hydrology, 2002, 58, 261-282.	3.3	63
40	Influence of Mass-Transfer Limitations on Carbon Isotope Fractionation during Microbial Dechlorination of Trichloroethene. Environmental Science & Technology, 2009, 43, 8813-8820.	10.0	63
41	A high-resolution non-invasive approach to quantify oxygen transport across the capillary fringe and within the underlying groundwater. Journal of Contaminant Hydrology, 2011, 122, 26-39.	3.3	63
42	Geostatistical inference of hydraulic conductivity and dispersivities from hydraulic heads and tracer data. Water Resources Research, 2006, 42, .	4.2	62
43	Concentration statistics for mixing-controlled reactive transport in random heterogeneous media. Journal of Contaminant Hydrology, 2008, 98, 61-74.	3.3	62
44	Oxygen Transfer in a Fluctuating Capillary Fringe. Vadose Zone Journal, 2012, 11, vzj2011.0056.	2.2	62
45	Measurement of Mixing-Controlled Reactive Transport in Homogeneous Porous Media and Its Prediction from Conservative Tracer Test Data. Environmental Science & Technology, 2004, 38, 2089-2096.	10.0	61
46	Spatial and temporal evolution of groundwater arsenic contamination in the Red River delta, Vietnam: Interplay of mobilisation and retardation processes. Science of the Total Environment, 2020, 717, 137143.	8.0	61
47	Numerical methods for reactive transport on rectangular and streamline-oriented grids. Advances in Water Resources, 1999, 22, 711-728.	3.8	59
48	Formation of N-Nitrosodimethylamine during Chloramination of Secondary and Tertiary Amines: Role of Molecular Oxygen and Radical Intermediates. Environmental Science & Technology, 2017, 51, 280-290.	10.0	58
49	Fully coupled hydrogeophysical inversion of synthetic salt tracer experiments. Water Resources Research, 2010, 46, .	4.2	56
50	Flow-through experiments on waterâ€“rock interactions in a sandstone caused by CO2 injection at pressures and temperatures mimicking reservoir conditions. Applied Geochemistry, 2015, 58, 136-146.	3.0	55
51	Modeling in-situ uranium(VI) bioreduction by sulfate-reducing bacteria. Journal of Contaminant Hydrology, 2007, 92, 129-148.	3.3	54
52	Transverse mixing of conservative and reactive tracers in porous media: Quantification through the concepts of fluxâ€related and critical dilution indices. Water Resources Research, 2011, 47, .	4.2	53
53	Relevance of local compoundâ€specific transverse dispersion for conservative and reactive mixing in heterogeneous porous media. Water Resources Research, 2011, 47, .	4.2	53
54	Experimental Evidence of Helical Flow in Porous Media. Physical Review Letters, 2015, 115, 194502.	7.8	52

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55	Experimental investigation of compound-specific dilution of solute plumes in saturated porous media: 2-D vs. 3-D flow-through systems. Journal of Contaminant Hydrology, 2015, 172, 33-47.	3.3	52
56	A Nested-Cell Approach for In Situ Remediation. Ground Water, 2006, 44, 266-274.	1.3	51
57	Transport of volatile compounds in porous media in the presence of a trapped gas phase. Journal of Contaminant Hydrology, 2001, 49, 263-285.	3.3	50
58	Impact of sampling volume on the probability density function of steady state concentration. Water Resources Research, 2008, 44, .	4.2	49
59	AQDS and Redox-Active NOM Enables Microbial Fe(III)-Mineral Reduction at cm-Scales. Environmental Science & Technology, 2020, 54, 4131-4139.	10.0	49
60	Homogenization of Richards equation in permeability fields with different connectivities. Water Resources Research, 2005, 41, .	4.2	47
61	Towards improved instrumentation for assessing river-groundwater interactions in a restored river corridor. Hydrology and Earth System Sciences, 2011, 15, 2531-2549.	4.9	47
62	Propagation of Seasonal Temperature Signals into an Aquifer upon Bank Infiltration. Ground Water, 2011, 49, 491-502.	1.3	47
63	Comparison of instantaneous and constantâ€rate stream tracer experiments through nonâ€parametric analysis of residence time distributions. Water Resources Research, 2008, 44, .	4.2	46
64	Experimental and numerical studies on excessâ€air formation in quasiâ€saturated porous media. Water Resources Research, 2008, 44, .	4.2	46
65	Morphological, hydrological, biogeochemical and ecological changes and challenges in river restoration â€“ the Thur River case study. Hydrology and Earth System Sciences, 2014, 18, 2449-2462.	4.9	46
66	Enhancement of plume dilution in twoâ€dimensional and threeâ€dimensional porous media by flow focusing in highâ€permeability inclusions. Water Resources Research, 2015, 51, 5582-5602.	4.2	46
67	Stochastic evaluation of mixing-controlled steady-state plume lengths in two-dimensional heterogeneous domains. Journal of Contaminant Hydrology, 2012, 138-139, 22-39.	3.3	45
68	Numerical simulation of isotope fractionation in steady-state bioreactive transport controlled by transverse mixing. Journal of Contaminant Hydrology, 2012, 140-141, 95-106.	3.3	45
69	Modeling the dynamics of oxygen consumption upon riverbank filtration by a stochasticâ€“convective approach. Journal of Hydrology, 2013, 505, 352-363.	5.4	45
70	Probability density functions of hydraulic head and velocity in threeâ€dimensional heterogeneous porous media. Water Resources Research, 2008, 44, .	4.2	44
71	Gas exchange at river cascades: field experiments and model calculations. Environmental Science & Technology, 1993, 27, 2086-2097.	10.0	41
72	Shapeâ€free inference of hyporheic traveltime distributions from synthetic conservative and â€œsmartâ€• tracer tests in streams. Water Resources Research, 2011, 47, .	4.2	41

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73	Concurrent conservative and reactive tracer tests in a stream undergoing hyporheic exchange. Water Resources Research, 2013, 49, 3024-3037.	4.2	41
74	Helicity and flow topology in three-dimensional anisotropic porous media. Advances in Water Resources, 2014, 73, 134-143.	3.8	41
75	Application of Experimental Polystyrene Partition Constants and Diffusion Coefficients to Predict the Sorption of Neutral Organic Chemicals to Multiwell Plates in in Vivo and in Vitro Bioassays. Environmental Science & Technology, 2018, 52, 13511-13522.	10.0	40
76	Investigating riparian groundwater flow close to a losing river using diurnal temperature oscillations at high vertical resolution. Hydrology and Earth System Sciences, 2012, 16, 473-487.	4.9	39
77	Joint inference of groundwaterâ€“recharge and hydraulicâ€“conductivity fields from head data using the ensemble Kalman filter. Hydrology and Earth System Sciences, 2016, 20, 555-569.	4.9	39
78	Debatesâ€”Stochastic subsurface hydrology from theory to practice: Does stochastic subsurface hydrology help solving practical problems of contaminant hydrogeology?. Water Resources Research, 2016, 52, 9218-9227.	4.2	38
79	Efficient geostatistical inverse methods for structured and unstructured grids. Water Resources Research, 2006, 42, .	4.2	37
80	Fate of wastewater contaminants in rivers: Using conservative-tracer based transfer functions to assess reactive transport. Science of the Total Environment, 2019, 656, 1250-1260.	8.0	37
81	Mass-Transfer Limitations for Nitrate Removal in a Uranium-Contaminated Aquifer. Environmental Science & Technology, 2005, 39, 8453-8459.	10.0	36
82	Modeling and inverting reactive stream tracers undergoing two-site sorption and decay in the hyporheic zone. Water Resources Research, 2013, 49, 3406-3422.	4.2	36
83	On-line fluorometry of multiple reactive and conservative tracers in streams. Environmental Earth Sciences, 2013, 69, 349-358.	2.7	35
84	Uncertainty and data worth analysis for the hydraulic design of funnel-and-gate systems in heterogeneous aquifers. Water Resources Research, 2004, 40, .	4.2	34
85	Temporal-moment matching for truncated breakthrough curves for step or step-pulse injection. Advances in Water Resources, 2006, 29, 1306-1313.	3.8	34
86	Delineating subsurface heterogeneity at a loop of River Steinlach using geophysical and hydrogeological methods. Environmental Earth Sciences, 2013, 69, 335-348.	2.7	32
87	Travel-Time Based Model of Bioremediation Using Circulation Wells. Ground Water, 2001, 39, 422-432.	1.3	30
88	A parametric transfer function methodology for analyzing reactive transport in nonuniform flow. Journal of Contaminant Hydrology, 2006, 83, 27-41.	3.3	30
89	Temporal moments in geoelectrical monitoring of salt tracer experiments. Water Resources Research, 2008, 44, .	4.2	30
90	Helical flow in three-dimensional nonstationary anisotropic heterogeneous porous media. Water Resources Research, 2015, 51, 261-280.	4.2	30

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91	Large-scale sandbox experiment on longitudinal effective dispersion in heterogeneous porous media. Water Resources Research, 2004, 40, .	4.2	29
92	Effects of sorption on transverse mixing in transient flows. Journal of Contaminant Hydrology, 2005, 78, 207-229.	3.3	28
93	Cell-Sorting at the A/P Boundary in the Drosophila Wing Primordium: A Computational Model to Consolidate Observed Non-Local Effects of Hh Signaling. PLoS Computational Biology, 2011, 7, e1002025.	3.2	28
94	Microbial Reductive Dechlorination in Large-Scale Sandbox Model. Journal of Environmental Engineering, ASCE, 1999, 125, 861-870.	1.4	27
95	Stochastic analysis of nonlinear biodegradation in regimes controlled by both chromatographic and dispersive mixing. Water Resources Research, 2006, 42, .	4.2	27
96	Simulating the transition of a semi-arid rainfed catchment towards irrigation agriculture. Journal of Hydrology, 2011, 409, 663-681.	5.4	27
97	Dynamics of Suspended and Attached Aerobic Toluene Degraders in Small-Scale Flow-through Sediment Systems under Growth and Starvation Conditions. Environmental Science & Technology, 2015, 49, 7161-7169.	10.0	26
98	Temporal moments for transport with mass transfer described by an arbitrary memory function in heterogeneous media. Water Resources Research, 2008, 44, .	4.2	25
99	How well do mean breakthrough curves predict mixingâ€controlled reactive transport?. Water Resources Research, 2011, 47, .	4.2	25
100	Effect of natural particles on the transport of lindane in saturated porous media: Laboratory experiments and model-based analysis. Journal of Contaminant Hydrology, 2013, 149, 13-26.	3.3	25
101	Exposure-time based modeling of nonlinear reactive transport in porous media subject to physical and geochemical heterogeneity. Journal of Contaminant Hydrology, 2016, 192, 35-49.	3.3	25
102	Combining 3D Hydraulic Tomography with Tracer Tests for Improved Transport Characterization. Ground Water, 2016, 54, 498-507.	1.3	25
103	Determination of hyporheic travel time distributions and other parameters from concurrent conservative and reactive tracer tests by localâ€inâ€global optimization. Water Resources Research, 2017, 53, 4984-5001.	4.2	25
104	Model Complexity Needed for Quantitative Analysis of High Resolution Isotope and Concentration Data from a Toluene-Pulse Experiment. Environmental Science & Technology, 2013, 47, 6900-6907.	10.0	24
105	Three-dimensional geostatistical inversion of synthetic tomographic pumping and heat-tracer tests in a nested-cell setup. Advances in Water Resources, 2014, 63, 77-90.	3.8	23
106	Reply to comments on â€œTwo-dimensional concentration distribution for mixing-controlled bioreactive transport in steady stateâ€•by H. Shao et al.. Advances in Water Resources, 2009, 32, 298-301.	3.8	22
107	Efficient calibration of a distributed pde -based hydrological model using grid coarsening. Journal of Hydrology, 2014, 519, 3290-3304.	5.4	22
108	Tracer Tomography: Design Concepts and Field Experiments Using Heat as a Tracer. Ground Water, 2015, 53, 139-148.	1.3	22

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109	Impact of Heterogeneity on Oxygen Transfer in a Fluctuating Capillary Fringe. Ground Water, 2015, 53, 57-70.	1.3	22
110	Contaminant concentration versus flow velocity: drivers of biodegradation and microbial growth in groundwater model systems. Biodegradation, 2018, 29, 211-232.	3.0	22
111	Combining implicit geological modeling, field surveys, and hydrogeological modeling to describe groundwater flow in a karst aquifer. Hydrogeology Journal, 2020, 28, 2779-2802.	2.1	22
112	Experimental determination of transverse dispersivity in a helix and a cochlea. Water Resources Research, 2006, 42, .	4.2	21
113	Impact of non-idealities in gas-tracer tests on the estimation of reaeration, respiration, and photosynthesis rates in streams. Water Research, 2015, 83, 205-216.	11.3	21
114	On the validity of travel-time based nonlinear bioreactive transport models in steady-state flow. Journal of Contaminant Hydrology, 2015, 175-176, 26-43.	3.3	21
115	Compound-Specific Stable Isotope Fractionation of Pesticides and Pharmaceuticals in a Mesoscale Aquifer Model. Environmental Science & Technology, 2016, 50, 5729-5739.	10.0	21
116	Cumulative relative reactivity: A concept for modeling aquifer-scale reactive transport. Water Resources Research, 2016, 52, 8117-8137.	4.2	21
117	First-order variance of travel time in nonstationary formations. Water Resources Research, 2004, 40, .	4.2	20
118	Sorption and transformation of the reactive tracers resazurin and resorufin in natural river sediments. Hydrology and Earth System Sciences, 2014, 18, 3151-3163.	4.9	20
119	Traveltimeâ€based descriptions of transport and mixing in heterogeneous domains. Water Resources Research, 2008, 44, .	4.2	19
120	Probability density function of steady state concentration in twoâ€dimensional heterogeneous porous media. Water Resources Research, 2011, 47, .	4.2	19
121	Direct Experimental Evidence of Non-first Order Degradation Kinetics and Sorption-Induced Isotopic Fractionation in a Mesoscale Aquifer: ¹³C/¹²C Analysis of a Transient Toluene Pulse. Environmental Science & Technology, 2013, 47, 6892-6899.	10.0	19
122	Turnover and legacy of sediment-associated PAH in a baseflow-dominated river. Science of the Total Environment, 2019, 671, 754-764.	8.0	19
123	Stochastic evaluation of mass discharge from pointlike concentration measurements. Journal of Contaminant Hydrology, 2010, 111, 36-47.	3.3	18
124	Mass Transfer Limitation during Slow Anaerobic Biodegradation of 2-Methylnaphthalene. Environmental Science & Technology, 2019, 53, 9481-9490.	10.0	18
125	Mass-Transfer-Limited Biodegradation at Low Concentrationsâ€”Evidence from Reactive Transport Modeling of Isotope Profiles in a Bench-Scale Aquifer. Environmental Science & Technology, 2021, 55, 7386-7397.	10.0	18
126	Upscaling of Two-Phase Flow Processes in Porous Media. , 2005, , 237-257.		17

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127	Assessing hyporheic exchange and associated travel times by hydraulic, chemical, and isotopic monitoring at the Steinlach Test Site, Germany. Environmental Earth Sciences, 2013, 69, 359-372.	2.7	17
128	Global sensitivity analysis and adaptive stochastic sampling of a subsurface-flow model using active subspaces. Hydrology and Earth System Sciences, 2019, 23, 3787-3805.	4.9	17
129	In-situ mass spectrometry improves the estimation of stream reaeration from gas-tracer tests. Science of the Total Environment, 2019, 655, 1062-1070.	8.0	17
130	Numerical evaluation of solute dispersion and dilution in unsaturated heterogeneous media. Water Resources Research, 2002, 38, 2-1-2-15.	4.2	16
131	Breakthrough curve tailing in a dipole flow field. Water Resources Research, 2007, 43, .	4.2	15
132	Non-stationary nonparametric inference of river-to-groundwater travel-time distributions. Journal of Hydrology, 2014, 519, 3386-3399.	5.4	15
133	Using travel times to simulate multi-dimensional bioreactive transport in time-periodic flows. Journal of Contaminant Hydrology, 2016, 187, 1-17.	3.3	15
134	Direct Breakthrough Curve Prediction From Statistics of Heterogeneous Conductivity Fields. Water Resources Research, 2018, 54, 271-285.	4.2	15
135	Theoretical basis for the measurement of local transverse dispersion in isotropic porous media. Water Resources Research, 2001, 37, 243-252.	4.2	14
136	Use of steady-state concentration measurements in geostatistical inversion. Advances in Water Resources, 2009, 32, 607-619.	3.8	14
137	Optimized Sustainable Groundwater Extraction Management: General Approach and Application to the City of Lucknow, India. Water Resources Management, 2013, 27, 4349-4368.	3.9	14
138	Accounting for the Decreasing Reaction Potential of Heterogeneous Aquifers in a Stochastic Framework of Aquiferâ€Scale Reactive Transport. Water Resources Research, 2018, 54, 442-463.	4.2	14
139	Contributions of catchment and in-stream processes to suspended sediment transport in a dominantly groundwater-fed catchment. Hydrology and Earth System Sciences, 2018, 22, 3903-3921.	4.9	14
140	Structural controls on the hydrogeological functioning of a floodplain. Hydrogeology Journal, 2020, 28, 2675-2696.	2.1	14
141	Experimental Sensitivity Analysis of Oxygen Transfer in the Capillary Fringe. Ground Water, 2014, 52, 37-49.	1.3	13
142	Fringe-controlled biodegradation under dynamic conditions: Quasi 2-D flow-through experiments and reactive-transport modeling. Journal of Contaminant Hydrology, 2015, 172, 100-111.	3.3	13
143	Experimental investigation of transverse mixing in porous media under helical flow conditions. Physical Review E, 2016, 94, 013113.	2.1	13
144	Process-based modeling of arsenic(III) oxidation by manganese oxides under circumneutral pH conditions. Water Research, 2020, 185, 116195.	11.3	13

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145	Estimating climate-change effects on a Mediterranean catchment under various irrigation conditions. Journal of Hydrology: Regional Studies, 2015, 4, 550-570.	2.4	12
146	The impact of sedimentary anisotropy on solute mixing in stacked scourâ€pool structures. Water Resources Research, 2017, 53, 2813-2832.	4.2	12
147	Interpolation of Steadyâ€State Concentration Data by Inverse Modeling. Ground Water, 2010, 48, 569-579.	1.3	11
148	Efficient geostatistical inversion of transient groundwater flow using preconditioned nonlinear conjugate gradients. Advances in Water Resources, 2017, 102, 161-177.	3.8	11
149	A mobile-mobile transport model for simulating reactive transport in connected heterogeneous fields. Journal of Hydrology, 2018, 560, 97-108.	5.4	11
150	Modeling of Contaminant Biodegradation and Compound-Specific Isotope Fractionation in Chemostats at Low Dilution Rates. Environmental Science & Technology, 2019, 53, 1186-1196.	10.0	11
151	Impact of Biomass-Decay Terms on the Simulation of Pulsed Bioremediation. Ground Water, 2000, 38, 254-263.	1.3	10
152	Dispersion on kriged hydraulic conductivity fields. Water Resources Research, 2003, 39, .	4.2	10
153	Simplified simulation of steady state bioreactive transport with kinetic solute uptake by the biomass. Water Resources Research, 2010, 46, .	4.2	10
154	Efficient parallelization of geostatistical inversion using the quasi-linear approach. Computers and Geosciences, 2012, 44, 78-85.	4.2	10
155	A travel timeâ€based approach to model kinetic sorption in highly heterogeneous porous media via reactive hydrofacies. Water Resources Research, 2016, 52, 9390-9411.	4.2	10
156	Mechanisms of distinct activated carbon and biochar amendment effects on petroleum vapour biofiltration in soil. Environmental Sciences: Processes and Impacts, 2017, 19, 1260-1269.	3.5	10
157	Modeling the Fate of Pharmaceuticals in a Fourthâ€Order River Under Competing Assumptions of Transient Storage. Water Resources Research, 2020, 56, e2019WR026100.	4.2	10
158	Helical Flow and Transient Solute Dilution in Porous Media. Transport in Porous Media, 2016, 111, 591-603.	2.6	9
159	Preconditioning an ensemble Kalman filter for groundwater flow using environmental-tracer observations. Journal of Hydrology, 2017, 545, 42-54.	5.4	9
160	A Critical Assessment of Relating Resazurinâ€“Resorufin Experiments to Reachâ€Scale Metabolism in Lowland Streams. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 3538-3555.	3.0	9
161	Chromium (VI) removal kinetics by magnetite-coated sand: Small-scale flow-through column experiments. Journal of Hazardous Materials, 2021, 415, 125648.	12.4	9
162	Quantifying Minimum Monolith Size and Solute Dilution from Multiâ€Compartment Percolation Sampler Data. Vadose Zone Journal, 2006, 5, 1086-1092.	2.2	8

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163	Surface Transient Storage Under Lowâ€Flow Conditions in Streams With Rough Bathymetry. Water Resources Research, 2021, 57, e2021WR029899.	4.2	8
164	Unraveling biogeochemical complexity through better integration of experiments and modeling. Environmental Sciences: Processes and Impacts, 2021, 23, 1825-1833.	3.5	8
165	Absolute/Convective Instability Dichotomy in a Soret-Driven Thermosolutal Convection Induced in a Porous Layer by Inclined Thermal and Vertical Solutal Gradients. Transport in Porous Media, 2012, 95, 425-446.	2.6	7
166	Modeling substrate-bacteria-grazer interactions coupled to substrate transport in groundwater. Water Resources Research, 2014, 50, 4149-4162.	4.2	7
167	Comparison of Two Ensemble Kalman-Based Methods for Estimating Aquifer Parameters from Virtual 2-D Hydraulic and Tracer Tomographic Tests. Geosciences (Switzerland), 2020, 10, 276.	2.2	7
168	Sampling behavioral model parameters for ensemble-based sensitivity analysis using Gaussian process emulation and active subspaces. Stochastic Environmental Research and Risk Assessment, 2020, 34, 1813-1830.	4.0	7
169	Magnitude of Diffusion- and Transverse Dispersion-Induced Isotope Fractionation of Organic Compounds in Aqueous Systems. Environmental Science & Technology, 2021, 55, 4772-4782.	10.0	7
170	Particle-Facilitated Transport of Lindane in Water-Saturated Tropical Lateritic Porous Media. Journal of Environmental Quality, 2014, 43, 1392-1403.	2.0	6
171	Revealing vertical aquifer heterogeneity and hydraulic anisotropy by pumping partially penetrating wells. Hydrogeology Journal, 2022, 30, 463-477.	2.1	6
172	Altered transport of lindane caused by the retention of natural particles in saturated porous media. Journal of Contaminant Hydrology, 2014, 162-163, 47-63.	3.3	5
173	Using an integrated hydrological model to estimate the usefulness of meteorological drought indices in a changing climate. Hydrology and Earth System Sciences, 2016, 20, 4159-4175.	4.9	5
174	Directâ€Push Color Logging Images Spatial Heterogeneity of Organic Carbon in Floodplain Sediments. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2020JG005887.	3.0	5
175	Does It Pay Off to Explicitly Link Functional Gene Expression to Denitrification Rates in Reaction Models?. Frontiers in Microbiology, 2021, 12, 684146.	3.5	5
176	Anomaly effect-driven optimization of direct-current geoelectric mapping surveys in large areas. Journal of Applied Geophysics, 2020, 176, 104002.	2.1	5
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