Diogo Bolster

List of Publications by Year in descending order

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173 papers	5,589 citations	76326 40 h-index	106344 65 g-index
181 all docs	181 docs citations	181 times ranked	5089 citing authors

#	Article	IF	Citations
1	Improving the representation of hydrologic processes in Earth System Models. Water Resources Research, 2015, 51, 5929-5956.	4.2	366
2	Controls on eDNA movement in streams: Transport, Retention, and Resuspension. Scientific Reports, 2017, 7, 5065.	3.3	218
3	Particle tracking and the diffusionâ€reaction equation. Water Resources Research, 2013, 49, 1-6.	4.2	192
4	Flow Intermittency, Dispersion, and Correlated Continuous Time Random Walks in Porous Media. Physical Review Letters, 2013, 110, 184502.	7.8	184
5	Comprehensive comparison of pore-scale models for multiphase flow in porous media. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 13799-13806.	7.1	162
6	Non-Fickian mixing: Temporal evolution of the scalar dissipation rate in heterogeneous porous media. Advances in Water Resources, 2010, 33, 1468-1475.	3.8	147
7	Coupled hydromechanical modeling of CO2 sequestration in deep saline aquifers. International Journal of Greenhouse Gas Control, 2010, 4, 910-919.	4.6	139
8	Influence of Stream Bottom Substrate on Retention and Transport of Vertebrate Environmental DNA. Environmental Science & Technology, 2016, 50, 8770-8779.	10.0	131
9	Improved locality of the phase-field lattice-Boltzmann model for immiscible fluids at high density ratios. Physical Review E, 2017, 96, 053301.	2.1	122
10	Diffuse interface modeling of three-phase contact line dynamics on curved boundaries: A lattice Boltzmann model for large density and viscosity ratios. Journal of Computational Physics, 2017, 334, 620-638.	3.8	120
11	Dynamics of thin vortex rings. Journal of Fluid Mechanics, 2008, 609, 319-347.	3.4	110
12	Effects of CO2 Compressibility on CO2 Storage in Deep Saline Aquifers. Transport in Porous Media, 2010, 85, 619-639.	2.6	84
13	Modeling bimolecular reactions and transport in porous media via particle tracking. Advances in Water Resources, 2013, 53, 56-65.	3.8	79
14	Mixing in confined stratified aquifers. Journal of Contaminant Hydrology, 2011, 120-121, 198-212.	3.3	77
15	A weighted multiple-relaxation-time lattice Boltzmann method for multiphase flows and its application to partial coalescence cascades. Journal of Computational Physics, 2017, 341, 22-43.	3.8	77
16	Effective poreâ€scale dispersion upscaling with a correlated continuous time random walk approach. Water Resources Research, 2011, 47, .	4.2	75
17	Probabilistic risk analysis of groundwater remediation strategies. Water Resources Research, 2009, 45, .	4.2	72
18	A phase-field lattice Boltzmann model for simulating multiphase flows in porous media: Application and comparison to experiments of CO2 sequestration at pore scale. Advances in Water Resources, 2018, 114, 119-134.	3.8	68

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19	Multicomponent reactive transport in multicontinuum media. Water Resources Research, 2009, 45, .	4.2	66
20	Distribution- Versus Correlation-Induced Anomalous Transport in Quenched Random Velocity Fields. Physical Review Letters, 2010, 105, 244301.	7.8	65
21	Persistence of incomplete mixing: A key to anomalous transport. Physical Review E, 2011, 84, 015301.	2.1	65
22	Connecting the dots: Semi-analytical and random walk numerical solutions of the diffusionâ€“reaction equation with stochastic initial conditions. Journal of Computational Physics, 2014, 263, 91-112.	3.8	65
23	Modeling preasymptotic transport in flows with significant inertial and trapping effects â€“ The importance of velocity correlations and a spatial Markov model. Advances in Water Resources, 2014, 70, 89-103.	3.8	63
24	A comparison of Eulerian and Lagrangian transport and non-linear reaction algorithms. Advances in Water Resources, 2017, 99, 15-37.	3.8	61
25	Mixing-Limited Reactions in Porous Media. Transport in Porous Media, 2019, 130, 157-182.	2.6	61
26	Water Flow and Biofilm Cover Influence Environmental DNA Detection in Recirculating Streams. Environmental Science & Technology, 2018, 52, 8530-8537.	10.0	59
27	Solute dispersion in channels with periodically varying apertures. Physics of Fluids, 2009, 21, .	4.0	57
28	Modelling the transport of environmental DNA through a porous substrate using continuous flow-through column experiments. Journal of the Royal Society Interface, 2016, 13, 20160290.	3.4	57
29	Anomalous mixing and reaction induced by superdiffusive nonlocal transport. Physical Review E, 2010, 82, 021119.	2.1	51
30	Effect of fouling layer spatial distribution on permeate flux: A theoretical and experimental study. Journal of Membrane Science, 2014, 471, 130-137.	8.2	51
31	On the formation of breakthrough curves tailing during convergent flow tracer tests in threeâ€dimensional heterogeneous aquifers. Water Resources Research, 2013, 49, 4157-4173.	4.2	50
32	Incomplete mixing and reactions with fractional dispersion. Advances in Water Resources, 2012, 37, 86-93.	3.8	49
33	Probabilistic analysis of groundwater-related risks at subsurface excavation sites. Engineering Geology, 2012, 125, 35-44.	6.3	49
34	Substrate size and heterogeneity control anomalous transport in small streams. Geophysical Research Letters, 2014, 41, 8335-8341.	4.0	49
35	Salinization in large river deltas: Drivers, impacts and socio-hydrological feedbacks. Water Security, 2019, 6, 100024.	2.5	49
36	A riskâ€based probabilistic framework to estimate the endpoint of remediation: Concentration rebound by rateâ€limited mass transfer. Water Resources Research, 2013, 49, 1929-1942.	4.2	47

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37	The impact of inertial effects on solute dispersion in a channel with periodically varying aperture. Physics of Fluids, 2012, 24, .	4.0	46
38	Biofilm growth in gravel bed streams controls solute residence time distributions. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 1840-1850.	3.0	44
39	Rock dissolution patterns and geochemical shutdown of â€“brineâ€“carbonate reactions during convective mixing in porous media. Journal of Fluid Mechanics, 2015, 764, 296-315.	3.4	43
40	A particle number conserving <scp>L</scp>agrangian method for mixingâ€driven reactive transport. Water Resources Research, 2016, 52, 1518-1527.	4.2	43
41	Riverine distribution of mussel environmental <scp>DNA</scp> reflects a balance among density, transport, and removal processes. Freshwater Biology, 2019, 64, 1467-1479.	2.4	42
42	Semianalytical Solution for $$ext{ CO}_{2}$$ Plume Shape and Pressure Evolution During $$ext{ CO}_{2}$$ Injection in Deep Saline Formations. Transport in Porous Media, 2013, 97, 43-65.	2.6	40
43	Lagrangian simulation of mixing and reactions in complex geochemical systems. Water Resources Research, 2017, 53, 3513-3522.	4.2	39
44	Dynamic similarity, the dimensionless science. Physics Today, 2011, 64, 42-47.	0.3	38
45	FracFit: A robust parameter estimation tool for fractional calculus models. Water Resources Research, 2017, 53, 2559-2567.	4.2	38
46	Analytical models of contaminant transport in coastal aquifers. Advances in Water Resources, 2007, 30, 1962-1972.	3.8	37
47	Contaminants in ventilated filling boxes. Journal of Fluid Mechanics, 2007, 591, 97-116.	3.4	35
48	Apparent directional mass-transfer capacity coefficients in three-dimensional anisotropic heterogeneous aquifers under radial convergent transport. Water Resources Research, 2014, 50, 1205-1224.	4.2	35
49	Arbitrarily complex chemical reactions on particles. Water Resources Research, 2016, 52, 9190-9200.	4.2	35
50	Upscaling transport of a reacting solute through a peridocially convergingâ€“diverging channel at pre-asymptotic times. Journal of Contaminant Hydrology, 2015, 182, 1-15.	3.3	33
51	Elimination of the Reaction Rate â€œScale Effectâ€• Application of the Lagrangian Reactive Particleâ€Tracking Method to Simulate Mixingâ€Limited, Fieldâ€Scale Biodegradation at the Schoolcraft (MI,) Tj ET Q q 1 1 0.784314 rg B	3.4	33
52	Visualization of Mixing Processes in a Heterogeneous Sand Box Aquifer. Environmental Science & Technology, 2012, 46, 3228-3235.	10.0	32
53	Effects of benthic and hyporheic reactive transport on breakthrough curves. Freshwater Science, 2015, 34, 301-315.	1.8	32
54	Covariation in patterns of turbulenceâ€driven hyporheic flow and denitrification enhances reachâ€scale nitrogen removal. Water Resources Research, 2017, 53, 6927-6944.	4.2	30

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55	The front speed of intrusions into a continuously stratified medium. Journal of Fluid Mechanics, 2008, 594, 369-377.	3.4	29
56	Effective twoâ€phase flow in heterogeneous media under temporal pressure fluctuations. Water Resources Research, 2009, 45, .	4.2	29
57	A divide and conquer approach to cope with uncertainty, human health risk, and decision making in contaminant hydrology. Water Resources Research, 2011, 47, .	4.2	29
58	Fractal patterns in riverbed morphology produce fractal scaling of water storage times. Geophysical Research Letters, 2015, 42, 5309-5315.	4.0	28
59	Predicting the enhancement of mixing-driven reactions in nonuniform flows using measures of flow topology. Physical Review E, 2014, 90, 051001.	2.1	27
60	Upscaling of dilution and mixing using a trajectory based Spatial Markov random walk model in a periodic flow domain. Advances in Water Resources, 2017, 103, 76-85.	3.8	27
61	On the separate treatment of mixing and spreading by the reactive-particle-tracking algorithm: An example of accurate upscaling of reactive Poiseuille flow. Advances in Water Resources, 2019, 123, 40-53.	3.8	27
62	Hypermixing in linear shear flow. Water Resources Research, 2011, 47, .	4.2	26
63	Effects of Turbulent Hyporheic Mixing on Reachâ€Scale Transport. Water Resources Research, 2019, 55, 3780-3795.	4.2	26
64	Anionic nanoparticle and microplastic non-exponential distributions from source scale with grain size in environmental granular media. Water Research, 2020, 182, 116012.	11.3	26
65	A simple phase-field model for interface tracking in three dimensions. Computers and Mathematics With Applications, 2019, 78, 1154-1165.	2.7	25
66	Effect of spatial concentration fluctuations on effective kinetics in diffusionâ€reaction systems. Water Resources Research, 2012, 48, .	4.2	23
67	Peak and tail scaling of breakthrough curves in hydrologic tracer tests. Advances in Water Resources, 2015, 78, 1-8.	3.8	23
68	Particle density estimation with grid-projected and boundary-corrected adaptive kernels. Advances in Water Resources, 2019, 131, 103382.	3.8	23
69	Intrusive gravity currents between two stably stratified fluids. Journal of Fluid Mechanics, 2010, 647, 53-69.	3.4	22
70	Probabilistic analysis of maintenance and operation of artificial recharge ponds. Advances in Water Resources, 2012, 36, 23-35.	3.8	22
71	Pre-asymptotic Transport Upscaling in Inertial and Unsteady Flows Through Porous Media. Transport in Porous Media, 2015, 109, 411-432.	2.6	22
72	An Integrated Experimental and Modeling Approach to Predict Sediment Mixing from Benthic Burrowing Behavior. Environmental Science & Technology, 2016, 50, 10047-10054.	10.0	22

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73	Field and Numerical Investigation of Transport Mechanisms in a Surface Storage Zone. Journal of Geophysical Research F: Earth Surface, 2019, 124, 938-959.	2.8	22
74	A quick and inexpensive method to quantify spatially variable infiltration capacity for artificial recharge ponds using photographic images. Journal of Hydrology, 2012, 430-431, 118-126.	5.4	21
75	Characterization of bedload intermittency near the threshold of motion using a Lagrangian sediment transport model. Environmental Fluid Mechanics, 2017, 17, 111-137.	1.6	21
76	Characterizing the impact of particle behavior at fracture intersections in three-dimensional discrete fracture networks. Physical Review E, 2019, 99, 013110.	2.1	21
77	Climate change and the opportunity cost of conflict. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 1935-1940.	7.1	21
78	Effects of incomplete mixing on reactive transport in flows through heterogeneous porous media. Physical Review Fluids, 2017, 2, .	2.5	21
79	The response of natural displacement ventilation to time-varying heat sources. Energy and Buildings, 2008, 40, 2099-2110.	6.7	20
80	A spatial Markov model for upscaling transport of adsorbing-desorbing solutes. Journal of Contaminant Hydrology, 2019, 222, 31-40.	3.3	20
81	Concentration statistics for transport in random media. Physical Review E, 2009, 80, 010101.	2.1	19
82	The fluid mechanics of dissolution trapping in geologic storage of CO₂. Journal of Fluid Mechanics, 2014, 740, 1-4.	3.4	19
83	Parameterizing the Spatial Markov Model From Breakthrough Curve Data Alone. Water Resources Research, 2017, 53, 10888-10898.	4.2	19
84	Modeling Benthic Versus Hyporheic Nutrient Uptake in Unshaded Streams With Varying Substrates. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 367-383.	3.0	19
85	Anomalous kinetics in diffusion limited reactions linked to non-Gaussian concentration probability distribution function. Journal of Chemical Physics, 2011, 135, 174104.	3.0	18
86	A Bayesian approach to integrate temporal data into probabilistic risk analysis of monitored NAPL remediation. Advances in Water Resources, 2012, 36, 108-120.	3.8	18
87	A Lagrangian Transport Eulerian Reaction Spatial (LATERS) Markov Model for Prediction of Effective Bimolecular Reactive Transport. Water Resources Research, 2017, 53, 9040-9058.	4.2	18
88	Characterizing the Influence of Fracture Density on Network Scale Transport. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB018547.	3.4	18
89	A review of spatial Markov models for predicting pre-asymptotic and anomalous transport in porous and fractured media. Journal of Contaminant Hydrology, 2021, 236, 103734.	3.3	18
90	Mixing-driven equilibrium reactions in multidimensional fractional advectionâ€“dispersion systems. Physica A: Statistical Mechanics and Its Applications, 2013, 392, 2513-2525.	2.6	17

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91	Effect of polydispersity on natural organic matter transport. Water Research, 2013, 47, 2231-2240.	11.3	17
92	A Dual Domain stochastic lagrangian model for predicting transport in open channels with hyporheic exchange. Advances in Water Resources, 2019, 125, 57-67.	3.8	17
93	Incomplete mixing and reactions in laminar shear flow. Physical Review E, 2015, 92, 012922.	2.1	16
94	Oscillating pendulum decay by emission of vortex rings. Physical Review E, 2010, 81, 046317.	2.1	15
95	Introduction to special section on Modeling highly heterogeneous aquifers: Lessons learned in the last 30 years from the <scp>MADE</scp> experiments and others. Water Resources Research, 2017, 53, 2581-2584.	4.2	15
96	Subgrid theory for storm surge modeling. Ocean Modelling, 2019, 144, 101491.	2.4	15
97	Riverine macrophytes control seasonal nutrient uptake via both physical and biological pathways. Freshwater Biology, 2020, 65, 178-192.	2.4	15
98	Study of phase-field lattice Boltzmann models based on the conservative Allen-Cahn equation. Physical Review E, 2020, 102, 023305.	2.1	15
99	Particle transport in low-energy ventilation systems. Part 2: Transients and experiments. Indoor Air, 2009, 19, 130-144.	4.3	14
100	The significance of model structure in one-dimensional stream solute transport models with multiple transient storage zones â€“ competing vs. nested arrangements. Journal of Hydrology, 2013, 497, 133-144.	5.4	14
101	Upscaling chemical reactions in multicontinuum systems: When might time fractional equations work?. Chaos, Solitons and Fractals, 2017, 102, 414-425.	5.1	14
102	Spatially Explicit, Regionalâ€Scale Simulation of Lake Carbon Fluxes. Global Biogeochemical Cycles, 2018, 32, 1276-1293.	4.9	14
103	Anomalous behaviors during infiltration into heterogeneous porous media. Advances in Water Resources, 2018, 113, 180-188.	3.8	14
104	Substrate-specific biofilms control nutrient uptake in experimental streams. Freshwater Science, 2018, 37, 456-471.	1.8	14
105	Upscaling Mixing in Highly Heterogeneous Porous Media via a Spatial Markov Model. Water (Switzerland), 2019, 11, 53.	2.7	14
106	Combining physical-based models and satellite images for the spatio-temporal assessment of soil infiltration capacity. Stochastic Environmental Research and Risk Assessment, 2011, 25, 1065-1075.	4.0	13
107	Timeâ€Dependent Health Risk from Contaminated Groundwater Including Use of Reliability, Resilience, and Vulnerability as Measures. Journal of the American Water Resources Association, 2014, 50, 14-28.	2.4	13
108	A Dynamic, Multivariate Sustainability Measure for Robust Analysis of Water Management under Climate and Demand Uncertainty in an Arid Environment. Water (Switzerland), 2015, 7, 5928-5958.	2.7	13

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109	Predicting Downstream Concentration Histories From Upstream Data in Column Experiments. Water Resources Research, 2018, 54, 9684-9694.	4.2	13
110	Crossâ€Scale Interactions Dictate Regional Lake Carbon Flux and Productivity Response to Future Climate. Geophysical Research Letters, 2019, 46, 8840-8851.	4.0	13
111	Particle transport in low-energy ventilation systems. Part 1: theory of steady states. Indoor Air, 2009, 19, 122-129.	4.3	12
112	Testing the limits of the spatial Markov model for upscaling transport: The role of nonmonotonic effective velocity autocorrelations. Physical Review E, 2016, 94, 043107.	2.1	12
113	A double-continuum transport model for segregated porous media: Derivation and sensitivity analysis-driven calibration. Advances in Water Resources, 2019, 128, 206-217.	3.8	12
114	Lagrangian Modeling of Mixingâ€Limited Reactive Transport in Porous Media: Multirate Interaction by Exchange With the Mean. Water Resources Research, 2020, 56, e2019WR026993.	4.2	12
115	Transients in natural ventilation â€" A time-periodically-varying source. Building Services Engineering Research and Technology, 2008, 29, 119-135.	1.8	11
116	Anomalous dispersion in chemically heterogeneous media induced by long-range disorder correlation. Journal of Fluid Mechanics, 2012, 695, 366-389.	3.4	11
117	Nonparametric, data-based kernel interpolation for particle-tracking simulations and kernel density estimation. Advances in Water Resources, 2021, 152, 103889.	3.8	11
118	Natural Organic Matter Transport Modeling with a Continuous Time Random Walk Approach. Environmental Engineering Science, 2014, 31, 98-106.	1.6	10
119	Localized Point Mixing Rate Potential in Heterogeneous Velocity Fields. Transport in Porous Media, 2017, 119, 391-402.	2.6	10
120	Using Natural Experiments and Counterfactuals for Causal Assessment: River Salinity and the Ganges Water Agreement. Water Resources Research, 2020, 56, e2019WR026166.	4.2	10
121	The impact of buoyancy on front spreading in heterogeneous porous media in twoâ€phase immiscible flow. Water Resources Research, 2011, 47, .	4.2	9
122	Introduction to the special issue on uncertainty quantification and risk assessment. Advances in Water Resources, 2012, 36, 1-2.	3.8	9
123	Integrated, Regionalâ€Scale Hydrologic Modeling of Inland Lakes. Journal of the American Water Resources Association, 2018, 54, 1302-1324.	2.4	9
124	Effects of large-scale heterogeneity and temporally varying hydrologic processes on estimating immobile pore space: A mesoscale-laboratory experimental and numerical modeling investigation. Journal of Contaminant Hydrology, 2021, 241, 103811.	3.3	9
125	Communication: A full solution of the annihilation reaction A + B â†' â^... based on time-subordination. Journal of Chemical Physics, 2013, 138, 131101.	3.0	8
126	Buoyant convection from a discrete source in a leaky porous medium. Journal of Fluid Mechanics, 2014, 755, 204-229.	3.4	8

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127	Transport of Single-Layered Graphene Oxide Nanosheets through Quartz and Iron Oxideâ€“Coated Sand Columns. Journal of Environmental Engineering, ASCE, 2017, 143, .	1.4	8
128	Recent advances in anomalous transport models for predicting contaminants in natural groundwater systems. Current Opinion in Chemical Engineering, 2019, 26, 72-80.	7.8	8
129	Effects of vertical hydrodynamic mixing on photomineralization of dissolved organic carbon in arctic surface waters. Environmental Sciences: Processes and Impacts, 2019, 21, 748-760.	3.5	8
130	The influence of meteorology and emissions on the spatio-temporal variability of PM10 in Malaysia. Atmospheric Research, 2020, 246, 105107.	4.1	8
131	Noise-Driven Return Statistics: Scaling and Truncation in Stochastic Storage Processes. Scientific Reports, 2017, 7, 302.	3.3	7
132	Anomalous Dispersion in Pore-Scale Simulations of Two-Phase Flow. Transport in Porous Media, 2019, 126, 337-353.	2.6	7
133	Reactive particle-tracking solutions to a benchmark problem on heavy metal cycling in lake sediments. Journal of Contaminant Hydrology, 2020, 234, 103642.	3.3	7
134	Subgrid corrections in finite-element modeling of storm-driven coastal flooding. Ocean Modelling, 2021, 167, 101887.	2.4	7
135	A Closer Look: High-Resolution Pore-Scale Simulations of Solute Transport and Mixing Through Porous Media Columns. Transport in Porous Media, 2023, 146, 85-111.	2.6	7
136	Slowing of vortex rings by development of Kelvin waves. Physical Review E, 2010, 82, 036309.	2.1	6
137	Product rule for vector fractional derivatives. Fractional Calculus and Applied Analysis, 2012, 15, .	2.2	6
138	A numerical investigation of mixing and spreading across an angled discontinuity. Advances in Water Resources, 2013, 62, 280-291.	3.8	6
139	Mobility of Dissolved Organic Matter from the Suwannee River (Georgia, USA) in Sand-Packed Columns. Environmental Engineering Science, 2015, 32, 4-13.	1.6	6
140	A Process-Based Model for Bioturbation-Induced Mixing. Scientific Reports, 2017, 7, 14287.	3.3	6
141	Markovian transport processes in a heterogeneous, variably saturated watershed: A multi-domain spatial Markov model. Advances in Water Resources, 2020, 138, 103555.	3.8	6
142	A mass-transfer particle-tracking method for simulating transport with discontinuous diffusion coefficients. Advances in Water Resources, 2020, 140, 103577.	3.8	6
143	Upscaling transport of a sorbing solute in disordered non periodic porous domains. Advances in Water Resources, 2020, 139, 103574.	3.8	6
144	Randomâ€Walk Modeling of Reactive Transport in Porous Media With a Reducedâ€Order Chemical Basis of Conservative Components. Water Resources Research, 2021, 57, e2020WR028679.	4.2	6

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145	Subgrid surface connectivity for storm surge modeling. Advances in Water Resources, 2021, 153, 103939.	3.8	6
146	Addressing climate uncertainty and incomplete information in transboundary river treaties: A scenario-neutral dimensionality reduction approach. Journal of Hydrology, 2022, 612, 128004.	5.4	6
147	An analytical approach to transient homovalent cation exchange problems. Journal of Hydrology, 2009, 378, 281-289.	5.4	5
148	Trajectories as Training Images to Simulate Advectiveâ€Diffusive, Nonâ€Fickian Transport. Water Resources Research, 2019, 55, 3465-3480.	4.2	5
149	Probabilistic risk analysis of building contamination. Indoor Air, 2008, 18, 351-364.	4.3	4
150	Hydrogeophysical Approach for Identification of Layered Structures of the Vadose Zone from Electrical Resistivity Data. Vadose Zone Journal, 2008, 7, 1253-1260.	2.2	4
151	Multipoint concentration statistics for transport in stratified random velocity fields. Physical Review E, 2009, 80, 036306.	2.1	4
152	Mean arterial pressure nonlinearity in an elastic circulatory system subjected to different hematocrits. Biomechanics and Modeling in Mechanobiology, 2011, 10, 591-598.	2.8	4
153	The effect of initial spatial correlations on late time kinetics of bimolecular irreversible reactions. Physica A: Statistical Mechanics and Its Applications, 2012, 391, 4654-4660.	2.6	4
154	Aging and mixing as pseudo-chemical-reactions between, and on, particles: Perspectives on particle interaction and multi-modal ages in hillslopes and streams. Advances in Water Resources, 2019, 132, 103386.	3.8	4
155	anem: A Simple Webâ€Based Platform to Build Stakeholder Understanding of Groundwater Behavior. Ground Water, 2021, 59, 273-280.	1.3	4
156	Upscaling bimolecular reactive transport in highly heterogeneous porous media with the LAgrangian Transport Eulerian Reaction Spatial (LATERS) Markov model. Stochastic Environmental Research and Risk Assessment, 2021, 35, 1529.	4.0	4
157	Projected changes of regional lake hydrologic characteristics in response to 21st century climate change. Inland Waters, 2021, 11, 335-350.	2.2	4
158	Solutions to Current Challenges in Widespread Monitoring of Groundwater Quality via Crowdsensing. Ground Water, 2022, 60, 15-24.	1.3	4
159	Oscillating-grid experiments in water and superfluid helium. Physical Review E, 2014, 89, 053016.	2.1	3
160	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
161	Characterizing Reactive Transport Behavior in a Three-Dimensional Discrete Fracture Network. Transport in Porous Media, 0, , 1.	2.6	3
162	Optimal Time Step Length for Lagrangian Interacting-Particle Simulations of Diffusive Mixing. Transport in Porous Media, 2023, 146, 413-433.	2.6	3

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163	On an experimentally observed phenomenon on vortex rings during their translational movement in a real liquid. Annalen Der Physik, 2011, 523, 360-379.	2.4	2
164	Characterization of the endemic equilibrium and response to mutant injection in a multi-strain disease model. Journal of Theoretical Biology, 2015, 368, 27-36.	1.7	2
165	Transport and instream removal of the Cry1Ab protein from genetically engineered maize is mediated by biofilms in experimental streams. PLoS ONE, 2019, 14, e0216481.	2.5	2
166	Transport of food- and catalytic-grade titanium dioxide nanoparticles in controlled field streams with varying streambed and biofilm conditions. Environmental Science: Nano, 2019, 6, 3454-3466.	4.3	2
167	Controls on fine particle retention in experimental streams. Freshwater Science, 2020, 39, 28-38.	1.8	2
168	Upscaling of Solute Plumes in Periodic Porous Media Through a Trajectoryâ€Based Spatial Markov Model. Water Resources Research, 2020, 56, e2020WR028408.	4.2	2
169	A Terrestrialâ€Aquatic Model Reveals Crossâ€Scale Interactions Regulate Lateral Dissolved Organic Carbon Transport From Terrestrial Ecosystems. Journal of Geophysical Research G: Biogeosciences, 2022, 127, .	3.0	2
170	An appreciation of the 1939 paper â€œOn an experimentally observed phenomenon on vortex rings ...â€•by Carlâ€Heinz Krutzsch. Annalen Der Physik, 2011, 523, 380-382.	2.4	1
171	Predicting Vertical Concentration Profiles in the Marine Atmospheric Boundary Layer With a Markov Chain Random Walk Model. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032731.	3.3	1
172	Social dilemmas and poor water quality in household water systems. Hydrology and Earth System Sciences, 2022, 26, 1187-1202.	4.9	1
173	Transient Surface Hydration Impacts Biogeography and Intercellular Interactions of Nonmotile Bacteria. Applied and Environmental Microbiology, 2021, 87, .	3.1	0