

# 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	Optimal Time Step Length for Lagrangian Interacting-Particle Simulations of Diffusive Mixing. <i>Transport in Porous Media</i> , 2023, 146, 413-433.	2.6	3
2	A Closer Look: High-Resolution Pore-Scale Simulations of Solute Transport and Mixing Through Porous Media Columns. <i>Transport in Porous Media</i> , 2023, 146, 85-111.	2.6	7
3	Solutions to Current Challenges in Widespread Monitoring of Groundwater Quality via Crowdsensing. <i>Ground Water</i> , 2022, 60, 15-24.	1.3	4
4	Social dilemmas and poor water quality in household water systems. <i>Hydrology and Earth System Sciences</i> , 2022, 26, 1187-1202.	4.9	1
5	A Terrestrial-Aquatic Model Reveals Cross-Scale Interactions Regulate Lateral Dissolved Organic Carbon Transport From Terrestrial Ecosystems. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2022, 127, .	3.0	2
6	Addressing climate uncertainty and incomplete information in transboundary river treaties: A scenario-neutral dimensionality reduction approach. <i>Journal of Hydrology</i> , 2022, 612, 128004.	5.4	6
7	A review of spatial Markov models for predicting pre-asymptotic and anomalous transport in porous and fractured media. <i>Journal of Contaminant Hydrology</i> , 2021, 236, 103734.	3.3	18
8	anem: A Simple Web-Based Platform to Build Stakeholder Understanding of Groundwater Behavior. <i>Ground Water</i> , 2021, 59, 273-280.	1.3	4
9	Transient Surface Hydration Impacts Biogeography and Intercellular Interactions of Nonmotile Bacteria. <i>Applied and Environmental Microbiology</i> , 2021, 87, .	3.1	0
10	Upscaling bimolecular reactive transport in highly heterogeneous porous media with the Lagrangian Transport Eulerian Reaction Spatial (LATERS) Markov model. <i>Stochastic Environmental Research and Risk Assessment</i> , 2021, 35, 1529.	4.0	4
11	Random-Walk Modeling of Reactive Transport in Porous Media With a Reduced-Order Chemical Basis of Conservative Components. <i>Water Resources Research</i> , 2021, 57, e2020WR028679.	4.2	6
12	Nonparametric, data-based kernel interpolation for particle-tracking simulations and kernel density estimation. <i>Advances in Water Resources</i> , 2021, 152, 103889.	3.8	11
13	Subgrid surface connectivity for storm surge modeling. <i>Advances in Water Resources</i> , 2021, 153, 103939.	3.8	6
14	Effects of large-scale heterogeneity and temporally varying hydrologic processes on estimating immobile pore space: A mesoscale-laboratory experimental and numerical modeling investigation. <i>Journal of Contaminant Hydrology</i> , 2021, 241, 103811.	3.3	9
15	Projected changes of regional lake hydrologic characteristics in response to 21st century climate change. <i>Inland Waters</i> , 2021, 11, 335-350.	2.2	4
16	Subgrid corrections in finite-element modeling of storm-driven coastal flooding. <i>Ocean Modelling</i> , 2021, 167, 101887.	2.4	7
17	Riverine macrophytes control seasonal nutrient uptake via both physical and biological pathways. <i>Freshwater Biology</i> , 2020, 65, 178-192.	2.4	15
18	Climate change and the opportunity cost of conflict. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 1935-1940.	7.1	21

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19	Comparison of negative skewed space fractional models with time nonlocal approaches for stream solute transport modeling. <i>Journal of Hydrology</i> , 2020, 582, 124504.	5.4	3
20	Characterizing the Influence of Fracture Density on Network Scale Transport. <i>Journal of Geophysical Research: Solid Earth</i> , 2020, 125, e2019JB018547.	3.4	18
21	Predicting Vertical Concentration Profiles in the Marine Atmospheric Boundary Layer With a Markov Chain Random Walk Model. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2020JD032731.	3.3	1
22	Study of phase-field lattice Boltzmann models based on the conservative Allen-Cahn equation. <i>Physical Review E</i> , 2020, 102, 023305.	2.1	15
23	Reactive particle-tracking solutions to a benchmark problem on heavy metal cycling in lake sediments. <i>Journal of Contaminant Hydrology</i> , 2020, 234, 103642.	3.3	7
24	Lagrangian Modeling of Mixing-Limited Reactive Transport in Porous Media: Multirate Interaction by Exchange With the Mean. <i>Water Resources Research</i> , 2020, 56, e2019WR026993.	4.2	12
25	The influence of meteorology and emissions on the spatio-temporal variability of PM10 in Malaysia. <i>Atmospheric Research</i> , 2020, 246, 105107.	4.1	8
26	Anionic nanoparticle and microplastic non-exponential distributions from source scale with grain size in environmental granular media. <i>Water Research</i> , 2020, 182, 116012.	11.3	26
27	Markovian transport processes in a heterogeneous, variably saturated watershed: A multi-domain spatial Markov model. <i>Advances in Water Resources</i> , 2020, 138, 103555.	3.8	6
28	Controls on fine particle retention in experimental streams. <i>Freshwater Science</i> , 2020, 39, 28-38.	1.8	2
29	A mass-transfer particle-tracking method for simulating transport with discontinuous diffusion coefficients. <i>Advances in Water Resources</i> , 2020, 140, 103577.	3.8	6
30	Using Natural Experiments and Counterfactuals for Causal Assessment: River Salinity and the Ganges Water Agreement. <i>Water Resources Research</i> , 2020, 56, e2019WR026166.	4.2	10
31	Upscaling transport of a sorbing solute in disordered non periodic porous domains. <i>Advances in Water Resources</i> , 2020, 139, 103574.	3.8	6
32	Upscaling of Solute Plumes in Periodic Porous Media Through a Trajectory-Based Spatial Markov Model. <i>Water Resources Research</i> , 2020, 56, e2020WR028408.	4.2	2
33	Cross-Scale Interactions Dictate Regional Lake Carbon Flux and Productivity Response to Future Climate. <i>Geophysical Research Letters</i> , 2019, 46, 8840-8851.	4.0	13
34	Aging and mixing as pseudo-chemical-reactions between, and on, particles: Perspectives on particle interaction and multi-modal ages in hillslopes and streams. <i>Advances in Water Resources</i> , 2019, 132, 103386.	3.8	4
35	Subgrid theory for storm surge modeling. <i>Ocean Modelling</i> , 2019, 144, 101491.	2.4	15
36	Recent advances in anomalous transport models for predicting contaminants in natural groundwater systems. <i>Current Opinion in Chemical Engineering</i> , 2019, 26, 72-80.	7.8	8

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37	Particle density estimation with grid-projected and boundary-corrected adaptive kernels. <i>Advances in Water Resources</i> , 2019, 131, 103382.	3.8	23
38	Characterizing the impact of particle behavior at fracture intersections in three-dimensional discrete fracture networks. <i>Physical Review E</i> , 2019, 99, 013110.	2.1	21
39	A Dual Domain stochastic lagrangian model for predicting transport in open channels with hyporheic exchange. <i>Advances in Water Resources</i> , 2019, 125, 57-67.	3.8	17
40	Comprehensive comparison of pore-scale models for multiphase flow in porous media. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 13799-13806.	7.1	162
41	Riverine distribution of mussel environmental DNA reflects a balance among density, transport, and removal processes. <i>Freshwater Biology</i> , 2019, 64, 1467-1479.	2.4	42
42	Transport and instream removal of the Cry1Ab protein from genetically engineered maize is mediated by biofilms in experimental streams. <i>PLoS ONE</i> , 2019, 14, e0216481.	2.5	2
43	Upscaling Mixing in Highly Heterogeneous Porous Media via a Spatial Markov Model. <i>Water (Switzerland)</i> , 2019, 11, 53.	2.7	14
44	Effects of Turbulent Hyporheic Mixing on Reach-Scale Transport. <i>Water Resources Research</i> , 2019, 55, 3780-3795.	4.2	26
45	Trajectories as Training Images to Simulate Advective-Diffusive, Non-Fickian Transport. <i>Water Resources Research</i> , 2019, 55, 3465-3480.	4.2	5
46	Field and Numerical Investigation of Transport Mechanisms in a Surface Storage Zone. <i>Journal of Geophysical Research F: Earth Surface</i> , 2019, 124, 938-959.	2.8	22
47	Salinization in large river deltas: Drivers, impacts and socio-hydrological feedbacks. <i>Water Security</i> , 2019, 6, 100024.	2.5	49
48	Effects of vertical hydrodynamic mixing on photomineralization of dissolved organic carbon in arctic surface waters. <i>Environmental Sciences: Processes and Impacts</i> , 2019, 21, 748-760.	3.5	8
49	A double-continuum transport model for segregated porous media: Derivation and sensitivity analysis-driven calibration. <i>Advances in Water Resources</i> , 2019, 128, 206-217.	3.8	12
50	A spatial Markov model for upscaling transport of adsorbing-desorbing solutes. <i>Journal of Contaminant Hydrology</i> , 2019, 222, 31-40.	3.3	20
51	Transport of food- and catalytic-grade titanium dioxide nanoparticles in controlled field streams with varying streambed and biofilm conditions. <i>Environmental Science: Nano</i> , 2019, 6, 3454-3466.	4.3	2
52	On the separate treatment of mixing and spreading by the reactive-particle-tracking algorithm: An example of accurate upscaling of reactive Poiseuille flow. <i>Advances in Water Resources</i> , 2019, 123, 40-53.	3.8	27
53	Modeling Benthic Versus Hyporheic Nutrient Uptake in Unshaded Streams With Varying Substrates. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2019, 124, 367-383.	3.0	19
54	Mixing-Limited Reactions in Porous Media. <i>Transport in Porous Media</i> , 2019, 130, 157-182.	2.6	61

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55	Anomalous Dispersion in Pore-Scale Simulations of Two-Phase Flow. <i>Transport in Porous Media</i> , 2019, 126, 337-353.	2.6	7
56	A simple phase-field model for interface tracking in three dimensions. <i>Computers and Mathematics With Applications</i> , 2019, 78, 1154-1165.	2.7	25
57	Spatially Explicit, Regional-Scale Simulation of Lake Carbon Fluxes. <i>Global Biogeochemical Cycles</i> , 2018, 32, 1276-1293.	4.9	14
58	A phase-field lattice Boltzmann model for simulating multiphase flows in porous media: Application and comparison to experiments of CO <sub>2</sub> sequestration at pore scale. <i>Advances in Water Resources</i> , 2018, 114, 119-134.	3.8	68
59	Anomalous behaviors during infiltration into heterogeneous porous media. <i>Advances in Water Resources</i> , 2018, 113, 180-188.	3.8	14
60	Integrated, Regional-Scale Hydrologic Modeling of Inland Lakes. <i>Journal of the American Water Resources Association</i> , 2018, 54, 1302-1324.	2.4	9
61	Predicting Downstream Concentration Histories From Upstream Data in Column Experiments. <i>Water Resources Research</i> , 2018, 54, 9684-9694.	4.2	13
62	Substrate-specific biofilms control nutrient uptake in experimental streams. <i>Freshwater Science</i> , 2018, 37, 456-471.	1.8	14
63	Water Flow and Biofilm Cover Influence Environmental DNA Detection in Recirculating Streams. <i>Environmental Science &amp; Technology</i> , 2018, 52, 8530-8537.	10.0	59
64	Diffuse interface modeling of three-phase contact line dynamics on curved boundaries: A lattice Boltzmann model for large density and viscosity ratios. <i>Journal of Computational Physics</i> , 2017, 334, 620-638.	3.8	120
65	Upscaling of dilution and mixing using a trajectory based Spatial Markov random walk model in a periodic flow domain. <i>Advances in Water Resources</i> , 2017, 103, 76-85.	3.8	27
66	FracFit: A robust parameter estimation tool for fractional calculus models. <i>Water Resources Research</i> , 2017, 53, 2559-2567.	4.2	38
67	Lagrangian simulation of mixing and reactions in complex geochemical systems. <i>Water Resources Research</i> , 2017, 53, 3513-3522.	4.2	39
68	Upscaling chemical reactions in multicontinuum systems: When might time fractional equations work?. <i>Chaos, Solitons and Fractals</i> , 2017, 102, 414-425.	5.1	14
69	A weighted multiple-relaxation-time lattice Boltzmann method for multiphase flows and its application to partial coalescence cascades. <i>Journal of Computational Physics</i> , 2017, 341, 22-43.	3.8	77
70	Introduction to special section on Modeling highly heterogeneous aquifers: Lessons learned in the last 30 years from the <sc>MADE</sc> experiments and others. <i>Water Resources Research</i> , 2017, 53, 2581-2584.	4.2	15
71	A Process-Based Model for Bioturbation-Induced Mixing. <i>Scientific Reports</i> , 2017, 7, 14287.	3.3	6
72	Improved locality of the phase-field lattice-Boltzmann model for immiscible fluids at high density ratios. <i>Physical Review E</i> , 2017, 96, 053301.	2.1	122

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73	Covariation in patterns of turbulence-driven hyporheic flow and denitrification enhances reach-scale nitrogen removal. <i>Water Resources Research</i> , 2017, 53, 6927-6944.	4.2	30
74	Noise-Driven Return Statistics: Scaling and Truncation in Stochastic Storage Processes. <i>Scientific Reports</i> , 2017, 7, 302.	3.3	7
75	Controls on eDNA movement in streams: Transport, Retention, and Resuspension. <i>Scientific Reports</i> , 2017, 7, 5065.	3.3	218
76	Localized Point Mixing Rate Potential in Heterogeneous Velocity Fields. <i>Transport in Porous Media</i> , 2017, 119, 391-402.	2.6	10
77	Parameterizing the Spatial Markov Model From Breakthrough Curve Data Alone. <i>Water Resources Research</i> , 2017, 53, 10888-10898.	4.2	19
78	A comparison of Eulerian and Lagrangian transport and non-linear reaction algorithms. <i>Advances in Water Resources</i> , 2017, 99, 15-37.	3.8	61
79	Characterization of bedload intermittency near the threshold of motion using a Lagrangian sediment transport model. <i>Environmental Fluid Mechanics</i> , 2017, 17, 111-137.	1.6	21
80	Transport of Single-Layered Graphene Oxide Nanosheets through Quartz and Iron Oxide-Coated Sand Columns. <i>Journal of Environmental Engineering, ASCE</i> , 2017, 143, .	1.4	8
81	Elimination of the Reaction Rate Scale Effect: Application of the Lagrangian Reactive Particle Tracking Method to Simulate Mixing-Limited, Field-Scale Biodegradation at the Schoolcraft (MI), Tj ETQ 1 1 0.784314 rg	1.0	33
82	A Lagrangian Transport Eulerian Reaction Spatial (LATERs) Markov Model for Prediction of Effective Bimolecular Reactive Transport. <i>Water Resources Research</i> , 2017, 53, 9040-9058.	4.2	18
83	Effects of incomplete mixing on reactive transport in flows through heterogeneous porous media. <i>Physical Review Fluids</i> , 2017, 2, .	2.5	21
84	Biofilm growth in gravel bed streams controls solute residence time distributions. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2016, 121, 1840-1850.	3.0	44
85	An Integrated Experimental and Modeling Approach to Predict Sediment Mixing from Benthic Burrowing Behavior. <i>Environmental Science &amp; Technology</i> , 2016, 50, 10047-10054.	10.0	22
86	Influence of Stream Bottom Substrate on Retention and Transport of Vertebrate Environmental DNA. <i>Environmental Science &amp; Technology</i> , 2016, 50, 8770-8779.	10.0	131
87	Arbitrarily complex chemical reactions on particles. <i>Water Resources Research</i> , 2016, 52, 9190-9200.	4.2	35
88	Testing the limits of the spatial Markov model for upscaling transport: The role of nonmonotonic effective velocity autocorrelations. <i>Physical Review E</i> , 2016, 94, 043107.	2.1	12
89	A particle number conserving Lagrangian method for mixing-driven reactive transport. <i>Water Resources Research</i> , 2016, 52, 1518-1527.	4.2	43
90	Modelling the transport of environmental DNA through a porous substrate using continuous flow-through column experiments. <i>Journal of the Royal Society Interface</i> , 2016, 13, 20160290.	3.4	57

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91	Rock dissolution patterns and geochemical shutdown of “brine” carbonate reactions during convective mixing in porous media. <i>Journal of Fluid Mechanics</i> , 2015, 764, 296-315.	3.4	43
92	Fractal patterns in riverbed morphology produce fractal scaling of water storage times. <i>Geophysical Research Letters</i> , 2015, 42, 5309-5315.	4.0	28
93	Incomplete mixing and reactions in laminar shear flow. <i>Physical Review E</i> , 2015, 92, 012922.	2.1	16
94	Improving the representation of hydrologic processes in Earth System Models. <i>Water Resources Research</i> , 2015, 51, 5929-5956.	4.2	366
95	A Dynamic, Multivariate Sustainability Measure for Robust Analysis of Water Management under Climate and Demand Uncertainty in an Arid Environment. <i>Water (Switzerland)</i> , 2015, 7, 5928-5958.	2.7	13
96	Effects of benthic and hyporheic reactive transport on breakthrough curves. <i>Freshwater Science</i> , 2015, 34, 301-315.	1.8	32
97	Peak and tail scaling of breakthrough curves in hydrologic tracer tests. <i>Advances in Water Resources</i> , 2015, 78, 1-8.	3.8	23
98	Characterization of the endemic equilibrium and response to mutant injection in a multi-strain disease model. <i>Journal of Theoretical Biology</i> , 2015, 368, 27-36.	1.7	2
99	Mobility of Dissolved Organic Matter from the Suwannee River (Georgia, USA) in Sand-Packed Columns. <i>Environmental Engineering Science</i> , 2015, 32, 4-13.	1.6	6
100	Pre-asymptotic Transport Upscaling in Inertial and Unsteady Flows Through Porous Media. <i>Transport in Porous Media</i> , 2015, 109, 411-432.	2.6	22
101	Upscaling transport of a reacting solute through a periodically converging/diverging channel at pre-asymptotic times. <i>Journal of Contaminant Hydrology</i> , 2015, 182, 1-15.	3.3	33
102	Natural Organic Matter Transport Modeling with a Continuous Time Random Walk Approach. <i>Environmental Engineering Science</i> , 2014, 31, 98-106.	1.6	10
103	Oscillating-grid experiments in water and superfluid helium. <i>Physical Review E</i> , 2014, 89, 053016.	2.1	3
104	Connecting the dots: Semi-analytical and random walk numerical solutions of the diffusion-reaction equation with stochastic initial conditions. <i>Journal of Computational Physics</i> , 2014, 263, 91-112.	3.8	65
105	The fluid mechanics of dissolution trapping in geologic storage of CO <sub>2</sub> . <i>Journal of Fluid Mechanics</i> , 2014, 740, 1-4.	3.4	19
106	Predicting the enhancement of mixing-driven reactions in nonuniform flows using measures of flow topology. <i>Physical Review E</i> , 2014, 90, 051001.	2.1	27
107	Effect of fouling layer spatial distribution on permeate flux: A theoretical and experimental study. <i>Journal of Membrane Science</i> , 2014, 471, 130-137.	8.2	51
108	Time-Dependent Health Risk from Contaminated Groundwater Including Use of Reliability, Resilience, and Vulnerability as Measures. <i>Journal of the American Water Resources Association</i> , 2014, 50, 14-28.	2.4	13

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109	Modeling preasymptotic transport in flows with significant inertial and trapping effects – The importance of velocity correlations and a spatial Markov model. <i>Advances in Water Resources</i> , 2014, 70, 89-103.	3.8	63
110	Substrate size and heterogeneity control anomalous transport in small streams. <i>Geophysical Research Letters</i> , 2014, 41, 8335-8341.	4.0	49
111	Apparent directional mass-transfer capacity coefficients in three-dimensional anisotropic heterogeneous aquifers under radial convergent transport. <i>Water Resources Research</i> , 2014, 50, 1205-1224.	4.2	35
112	Buoyant convection from a discrete source in a leaky porous medium. <i>Journal of Fluid Mechanics</i> , 2014, 755, 204-229.	3.4	8
113	Semianalytical Solution for $\text{CO}_2$ Plume Shape and Pressure Evolution During $\text{CO}_2$ Injection in Deep Saline Formations. <i>Transport in Porous Media</i> , 2013, 97, 43-65.	2.6	40
114	Mixing-driven equilibrium reactions in multidimensional fractional advection–dispersion systems. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2013, 392, 2513-2525.	2.6	17
115	The significance of model structure in one-dimensional stream solute transport models with multiple transient storage zones – competing vs. nested arrangements. <i>Journal of Hydrology</i> , 2013, 497, 133-144.	5.4	14
116	A numerical investigation of mixing and spreading across an angled discontinuity. <i>Advances in Water Resources</i> , 2013, 62, 280-291.	3.8	6
117	Effect of polydispersity on natural organic matter transport. <i>Water Research</i> , 2013, 47, 2231-2240.	11.3	17
118	Flow Intermittency, Dispersion, and Correlated Continuous Time Random Walks in Porous Media. <i>Physical Review Letters</i> , 2013, 110, 184502.	7.8	184
119	Modeling bimolecular reactions and transport in porous media via particle tracking. <i>Advances in Water Resources</i> , 2013, 53, 56-65.	3.8	79
120	On the formation of breakthrough curves tailing during convergent flow tracer tests in three-dimensional heterogeneous aquifers. <i>Water Resources Research</i> , 2013, 49, 4157-4173.	4.2	50
121	Communication: A full solution of the annihilation reaction $A + B \rightarrow \dots$ based on time-subordination. <i>Journal of Chemical Physics</i> , 2013, 138, 131101.	3.0	8
122	A risk-based probabilistic framework to estimate the endpoint of remediation: Concentration rebound by rate-limited mass transfer. <i>Water Resources Research</i> , 2013, 49, 1929-1942.	4.2	47
123	Particle tracking and the diffusion–reaction equation. <i>Water Resources Research</i> , 2013, 49, 1-6.	4.2	192
124	Anomalous dispersion in chemically heterogeneous media induced by long-range disorder correlation. <i>Journal of Fluid Mechanics</i> , 2012, 695, 366-389.	3.4	11
125	The impact of inertial effects on solute dispersion in a channel with periodically varying aperture. <i>Physics of Fluids</i> , 2012, 24, .	4.0	46
126	Visualization of Mixing Processes in a Heterogeneous Sand Box Aquifer. <i>Environmental Science &amp; Technology</i> , 2012, 46, 3228-3235.	10.0	32



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127	The effect of initial spatial correlations on late time kinetics of bimolecular irreversible reactions. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2012, 391, 4654-4660.	2.6	4
128	A Bayesian approach to integrate temporal data into probabilistic risk analysis of monitored NAPL remediation. <i>Advances in Water Resources</i> , 2012, 36, 108-120.	3.8	18
129	Probabilistic analysis of maintenance and operation of artificial recharge ponds. <i>Advances in Water Resources</i> , 2012, 36, 23-35.	3.8	22
130	Incomplete mixing and reactions with fractional dispersion. <i>Advances in Water Resources</i> , 2012, 37, 86-93.	3.8	49
131	Introduction to the special issue on uncertainty quantification and risk assessment. <i>Advances in Water Resources</i> , 2012, 36, 1-2.	3.8	9
132	Effect of spatial concentration fluctuations on effective kinetics in diffusion-reaction systems. <i>Water Resources Research</i> , 2012, 48, .	4.2	23
133	Probabilistic analysis of groundwater-related risks at subsurface excavation sites. <i>Engineering Geology</i> , 2012, 125, 35-44.	6.3	49
134	A quick and inexpensive method to quantify spatially variable infiltration capacity for artificial recharge ponds using photographic images. <i>Journal of Hydrology</i> , 2012, 430-431, 118-126.	5.4	21
135	Product rule for vector fractional derivatives. <i>Fractional Calculus and Applied Analysis</i> , 2012, 15, .	2.2	6
136	The impact of buoyancy on front spreading in heterogeneous porous media in two-phase immiscible flow. <i>Water Resources Research</i> , 2011, 47, .	4.2	9
137	A divide and conquer approach to cope with uncertainty, human health risk, and decision making in contaminant hydrology. <i>Water Resources Research</i> , 2011, 47, .	4.2	29
138	Effective pore-scale dispersion upscaling with a correlated continuous time random walk approach. <i>Water Resources Research</i> , 2011, 47, .	4.2	75
139	Hypermixing in linear shear flow. <i>Water Resources Research</i> , 2011, 47, .	4.2	26
140	Dynamic similarity, the dimensionless science. <i>Physics Today</i> , 2011, 64, 42-47.	0.3	38
141	Mixing in confined stratified aquifers. <i>Journal of Contaminant Hydrology</i> , 2011, 120-121, 198-212.	3.3	77
142	Combining physical-based models and satellite images for the spatio-temporal assessment of soil infiltration capacity. <i>Stochastic Environmental Research and Risk Assessment</i> , 2011, 25, 1065-1075.	4.0	13
143	Mean arterial pressure nonlinearity in an elastic circulatory system subjected to different hematocrits. <i>Biomechanics and Modeling in Mechanobiology</i> , 2011, 10, 591-598.	2.8	4
144	On an experimentally observed phenomenon on vortex rings during their translational movement in a real liquid. <i>Annalen Der Physik</i> , 2011, 523, 360-379.	2.4	2

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145	An appreciation of the 1939 paper "On an experimentally observed phenomenon on vortex rings ..." by Carl Heinz Krutzsch. <i>Annalen Der Physik</i> , 2011, 523, 380-382.	2.4	1
146	Persistence of incomplete mixing: A key to anomalous transport. <i>Physical Review E</i> , 2011, 84, 015301.	2.1	65
147	Anomalous kinetics in diffusion limited reactions linked to non-Gaussian concentration probability distribution function. <i>Journal of Chemical Physics</i> , 2011, 135, 174104.	3.0	18
148	Intrusive gravity currents between two stably stratified fluids. <i>Journal of Fluid Mechanics</i> , 2010, 647, 53-69.	3.4	22
149	Effects of CO2 Compressibility on CO2 Storage in Deep Saline Aquifers. <i>Transport in Porous Media</i> , 2010, 85, 619-639.	2.6	84
150	Coupled hydromechanical modeling of CO2 sequestration in deep saline aquifers. <i>International Journal of Greenhouse Gas Control</i> , 2010, 4, 910-919.	4.6	139
151	Non-Fickian mixing: Temporal evolution of the scalar dissipation rate in heterogeneous porous media. <i>Advances in Water Resources</i> , 2010, 33, 1468-1475.	3.8	147
152	Distribution- Versus Correlation-Induced Anomalous Transport in Quenched Random Velocity Fields. <i>Physical Review Letters</i> , 2010, 105, 244301.	7.8	65
153	Oscillating pendulum decay by emission of vortex rings. <i>Physical Review E</i> , 2010, 81, 046317.	2.1	15
154	Anomalous mixing and reaction induced by superdiffusive nonlocal transport. <i>Physical Review E</i> , 2010, 82, 021119.	2.1	51
155	Slowing of vortex rings by development of Kelvin waves. <i>Physical Review E</i> , 2010, 82, 036309.	2.1	6
156	Multipoint concentration statistics for transport in stratified random velocity fields. <i>Physical Review E</i> , 2009, 80, 036306.	2.1	4
157	Concentration statistics for transport in random media. <i>Physical Review E</i> , 2009, 80, 010101.	2.1	19
158	Solute dispersion in channels with periodically varying apertures. <i>Physics of Fluids</i> , 2009, 21, .	4.0	57
159	An analytical approach to transient homovalent cation exchange problems. <i>Journal of Hydrology</i> , 2009, 378, 281-289.	5.4	5
160	Particle transport in low-energy ventilation systems. Part 1: theory of steady states. <i>Indoor Air</i> , 2009, 19, 122-129.	4.3	12
161	Multicomponent reactive transport in multicontinuum media. <i>Water Resources Research</i> , 2009, 45, .	4.2	66
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