

Brian Berkowitz

List of Publications by Year in descending order

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262
papers

14,094
citations

23567

58
h-index

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111
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all docs

282
docs citations

282
times ranked

8621
citing authors

#	ARTICLE	IF	CITATIONS
1	Characterizing flow and transport in fractured geological media: A review. <i>Advances in Water Resources</i> , 2002, 25, 861-884.	3.8	1,131
2	Scaling of fracture systems in geological media. <i>Reviews of Geophysics</i> , 2001, 39, 347-383.	23.0	1,047
3	Modeling non-Fickian transport in geological formations as a continuous time random walk. <i>Reviews of Geophysics</i> , 2006, 44, .	23.0	879
4	Time behavior of solute transport in heterogeneous media: transition from anomalous to normal transport. <i>Advances in Water Resources</i> , 2004, 27, 155-173.	3.8	350
5	Measurement and analysis of non-Fickian dispersion in heterogeneous porous media. <i>Journal of Contaminant Hydrology</i> , 2003, 64, 203-226.	3.3	314
6	Flow in rock fractures: The local cubic law assumption reexamined. <i>Water Resources Research</i> , 1998, 34, 2811-2825.	4.2	290
7	Anomalous Transport in Random Fracture Networks. <i>Physical Review Letters</i> , 1997, 79, 4038-4041.	7.8	288
8	Anomalous transport in laboratory-scale, heterogeneous porous media. <i>Water Resources Research</i> , 2000, 36, 149-158.	4.2	283
9	Percolation theory and its application to groundwater hydrology. <i>Water Resources Research</i> , 1993, 29, 775-794.	4.2	278
10	Theory of anomalous chemical transport in random fracture networks. <i>Physical Review E</i> , 1998, 57, 5858-5869.	2.1	267
11	Physical pictures of transport in heterogeneous media: Advection-dispersion, random-walk, and fractional derivative formulations. <i>Water Resources Research</i> , 2002, 38, 9-1-9-12.	4.2	264
12	Percolation Theory and Network Modeling Applications in Soil Physics. <i>Surveys in Geophysics</i> , 1998, 19, 23-72.	4.6	247
13	Transport behavior of a passive solute in continuous time random walks and multirate mass transfer. <i>Water Resources Research</i> , 2003, 39, .	4.2	211
14	Anomalous Transport in "Classical" Soil and Sand Columns. <i>Soil Science Society of America Journal</i> , 2004, 68, 1539-1548.	2.2	208
15	Transport of metal oxide nanoparticles in saturated porous media. <i>Chemosphere</i> , 2010, 81, 387-393.	8.2	202
16	Analysis of fracture network connectivity using percolation theory. <i>Mathematical Geosciences</i> , 1995, 27, 467-483.	0.9	190
17	Effect of Metal Oxide Nanoparticles on Microbial Community Structure and Function in Two Different Soil Types. <i>PLoS ONE</i> , 2013, 8, e84441.	2.5	189
18	On Characterization of Anomalous Dispersion in Porous and Fractured Media. <i>Water Resources Research</i> , 1995, 31, 1461-1466.	4.2	186

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19	The dynamical foundation of fractal stream chemistry: The origin of extremely long retention times. <i>Geophysical Research Letters</i> , 2002, 29, 5-1-5-4.	4.0	170
20	Continuum models for contaminant transport in fractured porous formations. <i>Water Resources Research</i> , 1988, 24, 1225-1236.	4.2	152
21	Effects of metal oxide nanoparticles on soil properties. <i>Chemosphere</i> , 2013, 90, 640-646.	8.2	150
22	Transport of silver nanoparticles (AgNPs) in soil. <i>Chemosphere</i> , 2012, 88, 670-675.	8.2	139
23	Origins of anomalous transport in heterogeneous media: Structural and dynamic controls. <i>Water Resources Research</i> , 2014, 50, 1490-1505.	4.2	128
24	Application of Continuous Time Random Walk Theory to Tracer Test Measurements in Fractured and Heterogeneous Porous Media. <i>Ground Water</i> , 2001, 39, 593-604.	1.3	112
25	Scaling of fracture connectivity in geological formations. <i>Geophysical Research Letters</i> , 2000, 27, 2061-2064.	4.0	105
26	Computing "Anomalous" Contaminant Transport in Porous Media: The CTRW MATLAB Toolbox. <i>Ground Water</i> , 2005, 43, 947-950.	1.3	104
27	Mass transfer at fracture intersections: An evaluation of mixing models. <i>Water Resources Research</i> , 1994, 30, 1765-1773.	4.2	99
28	Field observation of flow in a fracture intersecting unsaturated chalk. <i>Water Resources Research</i> , 1999, 35, 3315-3326.	4.2	94
29	Will the Dead Sea die?. <i>Geology</i> , 1998, 26, 755.	4.4	93
30	Precipitation and dissolution of reactive solutes in fractures. <i>Water Resources Research</i> , 1998, 34, 457-470.	4.2	90
31	Fluid Flow and Solute Migration Within the Capillary Fringe. <i>Ground Water</i> , 2002, 40, 76-84.	1.3	88
32	Numerical simulation of non-Fickian transport in geological formations with multiple-scale heterogeneities. <i>Water Resources Research</i> , 2004, 40, .	4.2	88
33	In Situ Remediation of Groundwater Contaminated by Heavy- and Transition-Metal Ions by Selective Ion-Exchange Methods. <i>Environmental Science & Technology</i> , 2002, 36, 1851-1855.	10.0	85
34	Reactive Solute Transport in a Single Fracture. <i>Water Resources Research</i> , 1996, 32, 901-913.	4.2	84
35	Fractal and multifractal measures of natural and synthetic fracture networks. <i>Journal of Geophysical Research</i> , 1997, 102, 12205-12218.	3.3	84
36	Mixing-induced precipitation and porosity evolution in porous media. <i>Advances in Water Resources</i> , 2005, 28, 337-344.	3.8	84

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37	Oxidation of organic pollutants in aqueous solutions by nanosized copper oxide catalysts. <i>Applied Catalysis B: Environmental</i> , 2009, 85, 207-211.	20.2	83
38	The Role of Probabilistic Approaches to Transport Theory in Heterogeneous Media. <i>Transport in Porous Media</i> , 2001, 42, 241-263.	2.6	78
39	Analysis of field observations of tracer transport in a fractured till. <i>Journal of Contaminant Hydrology</i> , 2001, 47, 29-51.	3.3	78
40	Quantitative characterization of pore-scale disorder effects on transport in "homogeneous" granular media. <i>Physical Review E</i> , 2004, 70, 041108.	2.1	78
41	Suppression and stimulation of seafloor hydrothermal convection by exothermic mineral hydration. <i>Earth and Planetary Science Letters</i> , 2006, 243, 657-668.	4.4	78
42	Exploring the nature of non-Fickian transport in laboratory experiments. <i>Advances in Water Resources</i> , 2009, 32, 750-755.	3.8	78
43	Impact of the Capillary Fringe on Local Flow, Chemical Migration, and Microbiology. <i>Vadose Zone Journal</i> , 2004, 3, 534-548.	2.2	77
44	Morphogen gradient formation in a complex environment: An anomalous diffusion model. <i>Physical Review E</i> , 2005, 72, 041916.	2.1	75
45	Investigation of flow in water-saturated rock fractures using nuclear magnetic resonance imaging (NMR). <i>Water Resources Research</i> , 1999, 35, 347-360.	4.2	74
46	Transport and intersection mixing in random fracture networks with power law length distributions. <i>Water Resources Research</i> , 2001, 37, 2493-2501.	4.2	74
47	Structure, flow, and generalized conductivity scaling in fracture networks. <i>Water Resources Research</i> , 1998, 34, 2103-2121.	4.2	73
48	Particle tracking model of bimolecular reactive transport in porous media. <i>Water Resources Research</i> , 2010, 46, .	4.2	73
49	Stereological analysis of fracture network structure in geological formations. <i>Journal of Geophysical Research</i> , 1998, 103, 15339-15360.	3.3	70
50	Measurement and analysis of dissolution patterns in rock fractures. <i>Water Resources Research</i> , 2002, 38, 5-1-5-12.	4.2	70
51	Modeling bimolecular reactions and transport in porous media. <i>Geophysical Research Letters</i> , 2009, 36, .	4.0	70
52	The role of fractures on coupled dissolution and precipitation patterns in carbonate rocks. <i>Advances in Water Resources</i> , 2005, 28, 507-521.	3.8	69
53	Non-Fickian transport and multiple-rate mass transfer in porous media. <i>Water Resources Research</i> , 2008, 44, .	4.2	69
54	Application of Continuous Time Random Walks to Transport in Porous Media. <i>Journal of Physical Chemistry B</i> , 2000, 104, 3942-3947.	2.6	68

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55	Continuous time random walk and multirate mass transfer modeling of sorption. <i>Chemical Physics</i> , 2003, 295, 71-80.	1.9	68
56	Application of a percolation model to flow in fractured hard rocks. <i>Journal of Geophysical Research</i> , 1991, 96, 10015-10021.	3.3	66
57	Flow pattern variability in natural fracture intersections. <i>Geophysical Research Letters</i> , 1999, 26, 1765-1768.	4.0	65
58	The Mobility of Plastic Nanoparticles in Aqueous and Soil Environments: A Critical Review. <i>ACS ES&T Water</i> , 2021, 1, 48-57.	4.6	63
59	Aquifer Characteristics Derived From the Interaction Between Water Levels of a Terminal Lake (Dead) Tj ETQq1 1 0.784314 rgBT /Ovenlo	4.2	60
60	A generalized growth model for simulating initial migration of dense non-aqueous phase liquids. <i>Water Resources Research</i> , 1998, 34, 611-622.	4.2	59
61	Fate and transport of carbamazepine in soil aquifer treatment (SAT) infiltration basin soils. <i>Chemosphere</i> , 2011, 82, 244-252.	8.2	58
62	The development and influence of gas bubbles in phreatic aquifers under natural flow conditions. <i>Transport in Porous Media</i> , 1989, 4, 295.	2.6	57
63	Measurements and models of reactive transport in geological media. <i>Reviews of Geophysics</i> , 2016, 54, 930-986.	23.0	57
64	Effects of air injection on flow through porous media: Observations and analyses of laboratory-scale processes. <i>Water Resources Research</i> , 2004, 40, .	4.2	56
65	Experimental and modeling investigation of multicomponent reactive transport in porous media. <i>Journal of Contaminant Hydrology</i> , 2011, 120-121, 27-44.	3.3	56
66	Quantifying Solute Transport at the Shale Hills Critical Zone Observatory. <i>Vadose Zone Journal</i> , 2011, 10, 843-857.	2.2	55
67	Effects of pore-size controlled solubility on reactive transport in heterogeneous rock. <i>Geophysical Research Letters</i> , 2007, 34, .	4.0	53
68	Catalytic Transformation of Persistent Contaminants Using a New Composite Material Based on Nanosized Zero-Valent Iron. <i>ACS Applied Materials & Interfaces</i> , 2012, 4, 3416-3423.	8.0	53
69	Percolation approach to the problem of hydraulic conductivity in porous media. <i>Transport in Porous Media</i> , 1992, 9, 275-286.	2.6	52
70	Evolution of hydraulic conductivity by precipitation and dissolution in carbonate rock. <i>Water Resources Research</i> , 2003, 39, .	4.2	52
71	Use of Nanosized Catalysts for Transformation of Chloro-Organic Pollutants. <i>Environmental Science & Technology</i> , 2005, 39, 1283-1290.	10.0	51
72	Detection, fate and transport of estrogen family hormones in soil. <i>Chemosphere</i> , 2014, 95, 336-345.	8.2	51

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73	Laboratory experiments on dispersive transport across interfaces: The role of flow direction. <i>Water Resources Research</i> , 2009, 45, .	4.2	50
74	Catalytic degradation of brominated flame retardants by copper oxide nanoparticles. <i>Chemosphere</i> , 2013, 93, 172-177.	8.2	49
75	On Fracture Structure and Preferential Flow in Unsaturated Chalk. <i>Ground Water</i> , 2000, 38, 444-451.	1.3	48
76	Enrofloxacin oxidative degradation facilitated by metal oxide nanoparticles. <i>Chemosphere</i> , 2012, 86, 144-149.	8.2	47
77	Carbonate dissolution and precipitation in coastal environments: Laboratory analysis and theoretical consideration. <i>Water Resources Research</i> , 2004, 40, .	4.2	46
78	Effects of junction transfer characteristics on transport in fracture networks. <i>Water Resources Research</i> , 2001, 37, 909-923.	4.2	45
79	Stochastic pore-scale growth models of DNAPL migration in porous media. <i>Advances in Water Resources</i> , 2001, 24, 309-323.	3.8	45
80	Effects of particle size and surface chemistry on plastic nanoparticle transport in saturated natural porous media. <i>Chemosphere</i> , 2021, 262, 127854.	8.2	45
81	Towards a unified framework for anomalous transport in heterogeneous media. <i>Chemical Physics</i> , 2002, 284, 349-359.	1.9	44
82	Transport behavior in three-dimensional fracture intersections. <i>Water Resources Research</i> , 2003, 39, .	4.2	42
83	Spatial behavior of anomalous transport. <i>Physical Review E</i> , 2002, 65, 031101.	2.1	41
84	Random walk particle tracking simulations of non-Fickian transport in heterogeneous media. <i>Journal of Computational Physics</i> , 2010, 229, 4304-4314.	3.8	41
85	Modeling of surface roughness effects on glaze ice accretion. <i>Journal of Thermophysics and Heat Transfer</i> , 1991, 5, 54-60.	1.6	40
86	A Numerical Study of the Distribution of Water in Partially Saturated Porous Rock. <i>Transport in Porous Media</i> , 2001, 45, 301-317.	2.6	40
87	Boundary conditions along permeable fracture walls: Influence on flow and conductivity. <i>Water Resources Research</i> , 1989, 25, 1919-1922.	4.2	39
88	Transport behavior of coupled continuous-time random walks. <i>Physical Review E</i> , 2008, 78, 041110.	2.1	39
89	Synthesis and characterization of isotopically-labeled silver, copper and zinc oxide nanoparticles for tracing studies in plants. <i>Environmental Pollution</i> , 2018, 242, 1827-1837.	7.5	39
90	Experimental and modeling evidence of kilometer-scale anomalous tracer transport in an alpine karst aquifer. <i>Water Research</i> , 2020, 178, 115755.	11.3	39

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91	A Measurement System to Determine Water Flux and Solute Transport Through Fractures in the Unsaturated Zone. <i>Ground Water</i> , 1998, 36, 444-449.	1.3	37
92	Anaerobic treatment of intensive fish culture effluents: digestion of fish feed and release of volatile fatty acids. <i>Aquaculture</i> , 1995, 133, 9-20.	3.5	36
93	Non-Fickian transport in porous media with bimodal structural heterogeneity. <i>Journal of Contaminant Hydrology</i> , 2011, 120-121, 213-221.	3.3	36
94	Three-dimensional flow measurements in rock fractures. <i>Water Resources Research</i> , 1999, 35, 3955-3959.	4.2	35
95	Non-Fickian Transport in Transparent Replicas of Rough-Walled Rock Fractures. <i>Transport in Porous Media</i> , 2013, 98, 651-682.	2.6	35
96	Fate and transport of free and conjugated estrogens during soil passage. <i>Environmental Pollution</i> , 2015, 206, 80-87.	7.5	35
97	Analytic derivation of percolation thresholds in anisotropic systems of permeable objects. <i>Physical Review A</i> , 1991, 43, 6604-6612.	2.5	34
98	Flow, dissolution, and precipitation in dolomite. <i>Water Resources Research</i> , 2003, 39, .	4.2	32
99	Atrazine degradation through PEI-copper nanoparticles deposited onto montmorillonite and sand. <i>Scientific Reports</i> , 2017, 7, 1415.	3.3	32
100	Continuous time random walks revisited: first passage time and spatial distributions. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2004, 334, 46-66.	2.6	31
101	Reductive hydrogenation of polycyclic aromatic hydrocarbons catalyzed by metalloporphyrins. <i>Chemosphere</i> , 2007, 68, 210-217.	8.2	31
102	Continuous time random walks and heat transfer in porous media. <i>Transport in Porous Media</i> , 2007, 67, 413-430.	2.6	31
103	Structural controls on anomalous transport in fractured porous rock. <i>Water Resources Research</i> , 2016, 52, 5634-5643.	4.2	31
104	Effective Medium Analysis of Random Lattices. <i>Transport in Porous Media</i> , 2000, 40, 145-151.	2.6	30
105	Dissolution and precipitation dynamics during dedolomitization. <i>Water Resources Research</i> , 2011, 47, .	4.2	30
106	Abiotic soil changes induced by engineered nanomaterials: A critical review. <i>Journal of Contaminant Hydrology</i> , 2015, 181, 3-16.	3.3	30
107	Inertial Effects on Flow and Transport in Heterogeneous Porous Media. <i>Physical Review Letters</i> , 2018, 120, 054504.	7.8	30
108	Comparative analysis of formulations for conservative transport in porous media through sensitivity-based parameter calibration. <i>Water Resources Research</i> , 2013, 49, 5206-5220.	4.2	29

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109	Anomalous reactive transport in porous media: Experiments and modeling. <i>Physical Review E</i> , 2015, 91, 052130.	2.1	29
110	Time-dependent velocity field controls on anomalous chemical transport in porous media. <i>Water Resources Research</i> , 2017, 53, 3760-3769.	4.2	29
111	Experimental and modeling analysis of coupled non-Fickian transport and sorption in natural soils. <i>Journal of Contaminant Hydrology</i> , 2012, 132, 28-36.	3.3	27
112	Transport of engineered nanoparticles in partially saturated sand columns. <i>Journal of Hazardous Materials</i> , 2016, 311, 254-262.	12.4	27
113	An experimental and numerical investigation of saltwater movement in coupled saturated-partially saturated systems. <i>Water Resources Research</i> , 2002, 38, 5-1-5-11.	4.2	26
114	Pore-scale study of drainage displacement under combined capillary and gravity effects in index-matched porous media. <i>Water Resources Research</i> , 2006, 42, .	4.2	26
115	Pre-posterior analysis as a tool for data evaluation: Application to aquifer contamination. <i>Water Resources Management</i> , 1988, 2, 11-20.	3.9	25
116	Soil-Subsurface Change. , 2012, , .		25
117	The Nubian Sandstone aquifer in the central and northern Negev, Israel: delineation of the hydrogeological model under conditions of scarce data. <i>Journal of Hydrology</i> , 1992, 132, 107-135.	5.4	24
118	Silver nanoparticle (Ag-NP) retention and release in partially saturated soil: column experiments and modelling. <i>Environmental Science: Nano</i> , 2018, 5, 422-435.	4.3	24
119	Electronic waste as a source of rare earth element pollution: Leaching, transport in porous media, and the effects of nanoparticles. <i>Chemosphere</i> , 2022, 287, 132217.	8.2	24
120	Dispersion in Sub-Representative Elementary Volume Fracture Networks: Percolation Theory and Random Walk Approaches. <i>Water Resources Research</i> , 1991, 27, 3159-3164.	4.2	23
121	Reactive transport in disordered media: Role of fluctuations in interpretation of laboratory experiments. <i>Advances in Water Resources</i> , 2013, 51, 86-103.	3.8	23
122	Contaminant-induced irreversible changes in properties of the soil's "vadose" aquifer zone: An overview. <i>Chemosphere</i> , 2008, 71, 1409-1421.	8.2	22
123	Simulation of the interplay between resident and infiltrating water in partially saturated porous media. <i>Water Resources Research</i> , 2009, 45, .	4.2	22
124	Contaminant geochemistry—a new perspective. <i>Die Naturwissenschaften</i> , 2010, 97, 1-17.	1.6	22
125	Multimodel framework for characterization of transport in porous media. <i>Water Resources Research</i> , 2015, 51, 3384-3402.	4.2	22
126	The interaction of two major old water bodies and its implication for the exploitation of groundwater in the multiple aquifer system of the central and northern Negev, Israel. <i>Journal of Hydrology</i> , 1993, 143, 169-190.	5.4	21

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127	Is Old Faithful a strange attractor?. Journal of Geophysical Research, 1994, 99, 4495-4503.	3.3	21
128	Evidence of preferential path formation and path memory effect during successive infiltration and drainage cycles in uniform sand columns. Journal of Contaminant Hydrology, 2014, 165, 1-10.	3.3	21
129	The Human Impact on All Soil-Forming Factors during the Anthropocene. ACS Environmental Au, 2022, 2, 11-19.	7.0	21
130	Random-adding determination of percolation thresholds in interacting systems. Physical Review E, 1994, 49, R949-R952.	2.1	20
131	Record-Breaking Statistics for Random Walks in the Presence of Measurement Error and Noise. Physical Review Letters, 2013, 110, 180602.	7.8	20
132	Exact effective transport dynamics in a one-dimensional random environment. Physical Review E, 2005, 72, 031110.	2.1	19
133	Integrodifferential formulations of the continuous-time random walk for solute transport subject to bimolecular $A + B \rightarrow AB$. From micro- to mesoscopic. Physical Review E, 2015, 91, 032113.	2.1	19
134	Oxidation of aqueous organic pollutants using a stable copper nanoparticle suspension. Canadian Journal of Chemical Engineering, 2017, 95, 343-352.	1.7	19
135	Anomalous transport dependence on Péclet number, porous medium heterogeneity, and a temporally varying velocity field. Physical Review E, 2019, 99, 033108.	2.1	19
136	Buoyancy-driven dissolution enhancement in rock fractures. Geology, 2000, 28, 1051.	4.4	18
137	Salt-Pump Mechanism for Contaminant Intrusion into Coastal Aquifers. Science, 2003, 300, 950-950.	12.6	18
138	Magnetic Resonance Imaging and Quantitative Analysis of Particle Deposition in Porous Media. Environmental Science & Technology, 2005, 39, 7208-7216.	10.0	18
139	Interpretation and nonuniqueness of CTRW transition distributions: Insights from an alternative solute transport formulation. Advances in Water Resources, 2014, 74, 54-63.	3.8	18
140	Characterization of Bimolecular Reactive Transport in Heterogeneous Porous Media. Transport in Porous Media, 2016, 115, 291-310.	2.6	18
141	Elucidating the catalytic degradation of enrofloxacin by copper oxide nanoparticles through the identification of the reactive oxygen species. Chemosphere, 2020, 258, 127266.	8.2	18
142	Are sedimentary salt layers always impermeable?. Geophysical Research Letters, 1995, 22, 2761-2764.	4.0	17
143	8-Hydroxyquinoline-5-sulfonic Acid (HQS) Impregnated on Lewatit MP 600 for Cadmium Complexation: Implication of Solvent Impregnated Resins for Water Remediation. Separation Science and Technology, 2003, 38, 149-163.	2.5	17
144	Reductive dechlorination of atrazine catalyzed by metalloporphyrins. Chemosphere, 2009, 75, 48-55.	8.2	17

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145	Anomalous transport in correlated velocity fields. <i>Physical Review E</i> , 2010, 81, 011128.	2.1	17
146	Measurements of Interactions between Resident and Infiltrating Water in a Lattice Micromodel. <i>Vadose Zone Journal</i> , 2011, 10, 624-633.	2.2	17
147	Estimation of Single-Metal and Competitive Sorption Isotherms through Maximum Likelihood and Model Quality Criteria. <i>Soil Science Society of America Journal</i> , 2012, 76, 1229-1245.	2.2	17
148	Push&pull tracer tests: Their information content and use for characterizing non&Fickian, mobile&immobile behavior. <i>Water Resources Research</i> , 2016, 52, 9565-9585.	4.2	17
149	Contaminant Geochemistry. , 2014, , .		16
150	First-principles derivation of reactive transport modeling parameters for particle tracking and PDE approaches. <i>Advances in Water Resources</i> , 2014, 69, 146-158.	3.8	16
151	Surface water and groundwater: unifying conceptualization and quantification of the two &water worlds&. <i>Hydrology and Earth System Sciences</i> , 2020, 24, 1831-1858.	4.9	16
152	Mixing-driven diagenesis and mineral deposition: CaCO ₃ precipitation in salt water - fresh water mixing zones. <i>Geophysical Research Letters</i> , 2003, 30, n/a-n/a.	4.0	15
153	Analysis of subsurface flow and formation anisotropy in a fractured aquitard using transient water level data. <i>Water Resources Research</i> , 1992, 28, 199-207.	4.2	14
154	Theory of continuum percolation. III. Low-density expansion. <i>Physical Review E</i> , 1997, 56, 1379-1395.	2.1	14
155	Nickel migration and retention dynamics in natural soil columns. <i>Water Resources Research</i> , 2015, 51, 7702-7722.	4.2	14
156	Transport of gadolinium- and arsenic-based pharmaceuticals in saturated soil under various redox conditions. <i>Chemosphere</i> , 2016, 144, 713-720.	8.2	14
157	Modeling Non&Fickian Solute Transport Due to Mass Transfer and Physical Heterogeneity on Arbitrary Groundwater Velocity Fields. <i>Water Resources Research</i> , 2020, 56, e2019WR026868.	4.2	14
158	Solute transport in fracture channel and parallel plate models. <i>Geophysical Research Letters</i> , 1991, 18, 227-230.	4.0	13
159	Application of the central-particle-potential approximation for percolation in interacting systems. <i>Physical Review E</i> , 1995, 52, 4482-4494.	2.1	13
160	Failure of ureteral stents subject to extrinsic ureteral obstruction and stent occlusions. <i>International Urology and Nephrology</i> , 2021, 53, 1535-1541.	1.4	13
161	Comparative study of renal drainage with different ureteral stents subject to extrinsic ureteral obstruction using an in vitro ureter-stent model. <i>BMC Urology</i> , 2021, 21, 100.	1.4	13
162	Uptake, translocation, weathering and speciation of gold nanoparticles in potato, radish, carrot and lettuce crops. <i>Journal of Hazardous Materials</i> , 2021, 418, 126219.	12.4	13

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163	Diffusion in multicomponent systems: a free energy approach. <i>Chemical Physics</i> , 2004, 302, 21-30.	1.9	12
164	Application of a mixing-ratios based formulation to model mixing-driven dissolution experiments. <i>Advances in Water Resources</i> , 2009, 32, 756-766.	3.8	12
165	Interplay between resident and infiltrating water: Estimates from transient water flow and solute transport. <i>Journal of Hydrology</i> , 2012, 458-459, 40-50.	5.4	12
166	Measurement and modeling of engineered nanoparticle transport and aging dynamics in a reactive porous medium. <i>Water Resources Research</i> , 2016, 52, 5473-5491.	4.2	12
167	Microchemical contaminants as forming agents of anthropogenic soils. <i>Ambio</i> , 2017, 46, 109-120.	5.5	12
168	Effect of Phosphate, Sulfate, Arsenate, and Pyrite on Surface Transformations and Chemical Retention of Gold Nanoparticles (Au ⁰ -NPs) in Partially Saturated Soil Columns. <i>Environmental Science & Technology</i> , 2019, 53, 13071-13080.	10.0	12
169	Preferential pathways for fluid and solutes in heterogeneous groundwater systems: self-organization, entropy, work. <i>Hydrology and Earth System Sciences</i> , 2021, 25, 5337-5353.	4.9	12
170	Experimental and numerical studies of the 18O exchange between CO ₂ and water in the atmosphere-soil invasion flux. <i>Geochimica Et Cosmochimica Acta</i> , 2007, 71, 2657-2671.	3.9	11
171	Copper Oxide Nanoparticle-Coated Quartz Sand as a Catalyst for Degradation of an Organic Dye in Water. <i>Water, Air, and Soil Pollution</i> , 2012, 223, 3105-3115.	2.4	11
172	Reactive Transport in Heterogeneous Porous Media Under Different Péclet Numbers. <i>Water Resources Research</i> , 2019, 55, 10119-10129.	4.2	11
173	Transport of platinum-based pharmaceuticals in water-saturated sand and natural soil: Carboplatin and cisplatin species. <i>Chemosphere</i> , 2019, 219, 390-399.	8.2	11
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