

# Brian Berkowitz

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/8654510/brian-berkowitz-publications-by-year.pdf>

**Version:** 2024-04-19

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

256  
papers

11,612  
citations

55  
h-index

101  
g-index

282  
ext. papers

12,725  
ext. citations

5.3  
avg. IF

6.68  
L-index

#	Paper	IF	Citations
256	Electronic waste as a source of rare earth element pollution: Leaching, transport in porous media, and the effects of nanoparticles. <i>Chemosphere</i> , <b>2022</b> , 287, 132217	8.4	3
255	Stepping beyond perfectly mixed conditions in soil hydrological modelling using a Lagrangian approach. <i>Hydrology and Earth System Sciences</i> , <b>2022</b> , 26, 1615-1629	5.5	
254	When should we give up on expectant management for patients with proximal ureteral stones?. <i>Current Urology</i> , <b>2022</b> , 16, 9-14	1.7	
253	HESS Opinions: Chemical transport modeling in subsurface hydrological systems – space, time, and the holy grail of upscaling. <i>Hydrology and Earth System Sciences</i> , <b>2022</b> , 26, 2161-2180	5.5	
252	Imaging and Chemical Analysis of External and Internal Ureteral Stent Encrustation.. <i>Research and Reports in Urology</i> , <b>2022</b> , 14, 159-166	1.3	0
251	Preferential pathways for fluid and solutes in heterogeneous groundwater systems: self-organization, entropy, work. <i>Hydrology and Earth System Sciences</i> , <b>2021</b> , 25, 5337-5353	5.5	2
250	Do organic substances act as a degradable binding matrix in calcium oxalate kidney stones?. <i>BMC Urology</i> , <b>2021</b> , 21, 46	2.2	
249	Simulation of reactive solute transport in the critical zone: a Lagrangian model for transient flow and preferential transport. <i>Hydrology and Earth System Sciences</i> , <b>2021</b> , 25, 1483-1508	5.5	2
248	Response to: "Letter to the Editor, International Urology and Nephrology: in silico-in vitro-in vivo-can numerical simulations based on computational fluid dynamics (CFD) replace studies of the urinary tract?". <i>International Urology and Nephrology</i> , <b>2021</b> , 53, 1837-1838	2.3	2
247	Influence of Single Stent Size and Tandem Stents Subject to Extrinsic Ureteral Obstruction and Stent Occlusion on Stent Failure. <i>Journal of Endourology</i> , <b>2021</b> ,	2.7	2
246	Effects of particle size and surface chemistry on plastic nanoparticle transport in saturated natural porous media. <i>Chemosphere</i> , <b>2021</b> , 262, 127854	8.4	17
245	The Mobility of Plastic Nanoparticles in Aqueous and Soil Environments: A Critical Review. <i>ACS ES&amp;T Water</i> , <b>2021</b> , 1, 48-57		16
244	Reactive Transport with Fluid-Solid Interactions in Dual-Porosity Media. <i>ACS ES&amp;T Water</i> , <b>2021</b> , 1, 259-268		3
243	Failure of ureteral stents subject to extrinsic ureteral obstruction and stent occlusions. <i>International Urology and Nephrology</i> , <b>2021</b> , 53, 1535-1541	2.3	7
242	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> , <b>2021</b> , 21, 100	2.2	5
241	Uptake, translocation, weathering and speciation of gold nanoparticles in potato, radish, carrot and lettuce crops. <i>Journal of Hazardous Materials</i> , <b>2021</b> , 418, 126219	12.8	1
240	Process-Dependent Solute Transport in Porous Media. <i>Transport in Porous Media</i> , <b>2021</b> , 140, 421	3.1	3

239	Elucidating the catalytic degradation of enrofloxacin by copper oxide nanoparticles through the identification of the reactive oxygen species. <i>Chemosphere</i> , <b>2020</b> , 258, 127266	8.4	9
238	Impact of Colloidal Fluid on Stent Failure Under Extrinsic Ureteral Obstruction: An Experimental Study. <i>Journal of Endourology</i> , <b>2020</b> , 34, 987-992	2.7	3
237	Influence of humic substances on the transport of indium and gallium in porous media. <i>Chemosphere</i> , <b>2020</b> , 249, 126099	8.4	1
236	Surface water and groundwater: unifying conceptualization and quantification of the two water worlds. <i>Hydrology and Earth System Sciences</i> , <b>2020</b> , 24, 1831-1858	5.5	10
235	Schwartz, The Impact of Ureteral Deformation and External Ureteral Pressure on Stent Failure in Extrinsic Ureteral Obstruction--An Experimental Study by Shilo et al. (From: Shilo Y, Modai J, Leibovici D, et al. <i>J Endourol</i> 2019;34:74; DOI: 10.1089/end.2019.0636). <i>Journal of Endourology</i> , <b>2020</b> , 34, 75	2.7	1
234	Modeling Non-Fickian Solute Transport Due to Mass Transfer and Physical Heterogeneity on Arbitrary Groundwater Velocity Fields. <i>Water Resources Research</i> , <b>2020</b> , 56, e2019WR026868	5.4	6
233	Aurora: A non-Fickian (and Fickian) particle tracking package for modeling groundwater contaminant transport with MODFLOW. <i>Environmental Modelling and Software</i> , <b>2020</b> , 134, 104871	5.2	2
232	Current knowledge on transport and reactivity of technology-critical elements (TCEs) in soil and aquifer environments. <i>Environmental Chemistry</i> , <b>2020</b> , 17, 118	3.2	1
231	Effect of nanoplastics on the transport of platinum-based pharmaceuticals in water-saturated natural soil and their effect on a soil microbial community. <i>Environmental Science: Nano</i> , <b>2020</b> , 7, 3178-3188	7.1	2
230	The Impact of Ureteral Deformation and External Ureteral Pressure on Stent Failure in Extrinsic Ureteral Obstruction: An Experimental Study. <i>Journal of Endourology</i> , <b>2020</b> , 34, 68-73	2.7	6
229	Experimental and modeling evidence of kilometer-scale anomalous tracer transport in an alpine karst aquifer. <i>Water Research</i> , <b>2020</b> , 178, 115755	12.5	16
228	Characterization of mixing and reaction between chemical species during cycles of drainage and imbibition in porous media. <i>Advances in Water Resources</i> , <b>2019</b> , 130, 113-128	4.7	4
227	Anomalous transport dependence on Péclet number, porous medium heterogeneity, and a temporally varying velocity field. <i>Physical Review E</i> , <b>2019</b> , 99, 033108	2.4	15
226	Finite-Element Method Solution of Non-Fickian Transport in Porous Media: The CTRW-FEM Package. <i>Ground Water</i> , <b>2019</b> , 57, 479-484	2.4	4
225	Effect of Phosphate, Sulfate, Arsenate, and Pyrite on Surface Transformations and Chemical Retention of Gold Nanoparticles (Au-NPs) in Partially Saturated Soil Columns. <i>Environmental Science &amp; Technology</i> , <b>2019</b> , 53, 13071-13080	10.3	5
224	Bimolecular reactive transport in a two-dimensional velocity field in disordered media. <i>Journal of Physics A: Mathematical and Theoretical</i> , <b>2019</b> , 52, 424005	2	2
223	Isotopic labelling for sensitive detection of nanoparticle uptake and translocation in plants from hydroponic medium and soil. <i>Environmental Chemistry</i> , <b>2019</b> , 16, 391	3.2	6
222	Reactive Transport in Heterogeneous Porous Media Under Different Péclet Numbers. <i>Water Resources Research</i> , <b>2019</b> , 55, 10119-10129	5.4	5

221	Catalytic Degradation of Fluorouracil and Its Derivatives by Copper-Based Nanoparticles. <i>Environmental Engineering Science</i> , <b>2019</b> , 36, 1466-1473	2	2
220	Mobility and retention of indium and gallium in saturated porous media. <i>Journal of Hazardous Materials</i> , <b>2019</b> , 363, 394-400	12.8	8
219	Transport of platinum-based pharmaceuticals in water-saturated sand and natural soil: Carboplatin and cisplatin species. <i>Chemosphere</i> , <b>2019</b> , 219, 390-399	8.4	8
218	Inertial Effects on Flow and Transport in Heterogeneous Porous Media. <i>Physical Review Letters</i> , <b>2018</b> , 120, 054504	7.4	20
217	A continuous time random walk (CTRW) integro-differential equation with chemical interaction. <i>European Physical Journal B</i> , <b>2018</b> , 91, 1	1.2	9
216	Benchmarking numerical codes for tracer transport with the aid of laboratory-scale experiments in 2D heterogeneous porous media. <i>Journal of Contaminant Hydrology</i> , <b>2018</b> , 212, 55-64	3.9	5
215	The effect of nanoparticles and humic acid on technology critical element concentrations in aqueous solutions with soil and sand. <i>Science of the Total Environment</i> , <b>2018</b> , 610-611, 1083-1091	10.2	6
214	Synthesis and characterization of isotopically-labeled silver, copper and zinc oxide nanoparticles for tracing studies in plants. <i>Environmental Pollution</i> , <b>2018</b> , 242, 1827-1837	9.3	27
213	Silver nanoparticle (Ag-NP) retention and release in partially saturated soil: column experiments and modelling. <i>Environmental Science: Nano</i> , <b>2018</b> , 5, 422-435	7.1	20
212	Controls on interactions between resident and infiltrating waters in porous media. <i>Advances in Water Resources</i> , <b>2018</b> , 121, 304-315	4.7	3
211	Transport of oxaliplatin species in water-saturated natural soil. <i>Chemosphere</i> , <b>2018</b> , 208, 829-837	8.4	6
210	Microchemical contaminants as forming agents of anthropogenic soils. <i>Ambio</i> , <b>2017</b> , 46, 109-120	6.5	10
209	Two-dimensional finite element method solution of a class of integro-differential equations: Application to non-Fickian transport in disordered media. <i>International Journal for Numerical Methods in Engineering</i> , <b>2017</b> , 112, 459-478	2.4	4
208	Time-dependent velocity-field controls on anomalous chemical transport in porous media. <i>Water Resources Research</i> , <b>2017</b> , 53, 3760-3769	5.4	24
207	Spatial and Temporal Distribution of Free and Conjugated Estrogens During Soil Column Transport. <i>Clean - Soil, Air, Water</i> , <b>2017</b> , 45,	1.6	8
206	Atrazine degradation through PEI-copper nanoparticles deposited onto montmorillonite and sand. <i>Scientific Reports</i> , <b>2017</b> , 7, 1415	4.9	23
205	Oxidation of aqueous organic pollutants using a stable copper nanoparticle suspension. <i>Canadian Journal of Chemical Engineering</i> , <b>2017</b> , 95, 343-352	2.3	15
204	Measurements and models of reactive transport in geological media. <i>Reviews of Geophysics</i> , <b>2016</b> , 54, 930-986	23.1	46

203	Push-pull tracer tests: Their information content and use for characterizing non-Fickian, mobile-immobile behavior. <i>Water Resources Research</i> , <b>2016</b> , 52, 9565-9585	5.4	14
202	One-Dimensional Finite Element Method Solution of a Class of Integro-Differential Equations: Application to Non-Fickian Transport in Disordered Media. <i>Transport in Porous Media</i> , <b>2016</b> , 115, 239-263 <sup>3,1</sup>		6
201	Engineered nanomaterials as a potential metapedogenetic factor: A perspective. <i>Catena</i> , <b>2016</b> , 146, 30-37	5.8	1
200	Transport of engineered nanoparticles in partially saturated sand columns. <i>Journal of Hazardous Materials</i> , <b>2016</b> , 311, 254-62	12.8	24
199	Transport of gadolinium- and arsenic-based pharmaceuticals in saturated soil under various redox conditions. <i>Chemosphere</i> , <b>2016</b> , 144, 713-20	8.4	10
198	Measurement and modeling of engineered nanoparticle transport and aging dynamics in a reactive porous medium. <i>Water Resources Research</i> , <b>2016</b> , 52, 5473-5491	5.4	11
197	Preface: Special Issue in Honor of Harvey Scher's 80th Birthday. <i>Transport in Porous Media</i> , <b>2016</b> , 115, 209-214	3.1	
196	Characterization of Bimolecular Reactive Transport in Heterogeneous Porous Media. <i>Transport in Porous Media</i> , <b>2016</b> , 115, 291-310	3.1	13
195	Structural controls on anomalous transport in fractured porous rock. <i>Water Resources Research</i> , <b>2016</b> , 52, 5634-5643	5.4	23
194	Fate and transport of free and conjugated estrogens during soil passage. <i>Environmental Pollution</i> , <b>2015</b> , 206, 80-7	9.3	26
193	Integrodifferential formulations of the continuous-time random walk for solute transport subject to bimolecular A+B $\rightarrow$ reactions: From micro- to mesoscopic. <i>Physical Review E</i> , <b>2015</b> , 91, 032113	2.4	19
192	Abiotic soil changes induced by engineered nanomaterials: A critical review. <i>Journal of Contaminant Hydrology</i> , <b>2015</b> , 181, 3-16	3.9	24
191	Visualization and analysis of nanoparticle transport and ageing in reactive porous media. <i>Journal of Hazardous Materials</i> , <b>2015</b> , 299, 513-9	12.8	8
190	Anomalous reactive transport in porous media: Experiments and modeling. <i>Physical Review E</i> , <b>2015</b> , 91, 052130	2.4	26
189	Multimodel framework for characterization of transport in porous media. <i>Water Resources Research</i> , <b>2015</b> , 51, 3384-3402	5.4	19
188	Nickel migration and retention dynamics in natural soil columns. <i>Water Resources Research</i> , <b>2015</b> , 51, 7702-7722	5.4	13
187	Contaminant Geochemistry <b>2014</b> ,		12
186	Evidence of preferential path formation and path memory effect during successive infiltration and drainage cycles in uniform sand columns. <i>Journal of Contaminant Hydrology</i> , <b>2014</b> , 165, 1-10	3.9	19

185	Interpretation and nonuniqueness of CTRW transition distributions: Insights from an alternative solute transport formulation. <i>Advances in Water Resources</i> , <b>2014</b> , 74, 54-63	4.7	17
184	Detection, fate and transport of estrogen family hormones in soil. <i>Chemosphere</i> , <b>2014</b> , 95, 336-45	8.4	42
183	First-principles derivation of reactive transport modeling parameters for particle tracking and PDE approaches. <i>Advances in Water Resources</i> , <b>2014</b> , 69, 146-158	4.7	15
182	Origins of anomalous transport in heterogeneous media: Structural and dynamic controls. <i>Water Resources Research</i> , <b>2014</b> , 50, 1490-1505	5.4	103
181	Transport of Reactive Contaminants <b>2014</b> , 267-284		
180	Reactive Transport in Heterogeneous Media. <i>NATO Science for Peace and Security Series C: Environmental Security</i> , <b>2014</b> , 243-256	0.3	
179	Interchange of Infiltrating and Resident Water in Partially Saturated Media. <i>NATO Science for Peace and Security Series C: Environmental Security</i> , <b>2014</b> , 55-66	0.3	
178	Selected Research Findings: Contaminant Transport <b>2014</b> , 285-345		
177	Selected Research Findings: Contaminant Partitioning <b>2014</b> , 171-243		0
176	Contaminant-Induced Irreversible Changes in Groundwater Chemistry <b>2014</b> , 457-500		0
175	Water Flow in the Subsurface Environment <b>2014</b> , 247-253		
174	Sorption, Retention, and Release of Contaminants <b>2014</b> , 107-146		
173	Inorganic and Organometallic Compounds <b>2014</b> , 53-77		
172	Contaminant Partitioning in the Aqueous Phase <b>2014</b> , 147-162		
171	Contaminant Impacts on the Soil/Subsurface Solid Phase <b>2014</b> , 501-569		
170	Transport of Passive Contaminants <b>2014</b> , 255-266		
169	Non-Fickian Transport in Transparent Replicas of Rough-Walled Rock Fractures. <i>Transport in Porous Media</i> , <b>2013</b> , 98, 651-682	3.1	27
168	Mobility and Interaction of Heavy Metals in a Natural Soil. <i>Transport in Porous Media</i> , <b>2013</b> , 97, 295-315	3.1	9

167	Catalytic degradation of brominated flame retardants by copper oxide nanoparticles. <i>Chemosphere</i> , <b>2013</b> , 93, 172-7	8.4	35
166	Reactive transport in disordered media: Role of fluctuations in interpretation of laboratory experiments. <i>Advances in Water Resources</i> , <b>2013</b> , 51, 86-103	4.7	21
165	Effects of metal oxide nanoparticles on soil properties. <i>Chemosphere</i> , <b>2013</b> , 90, 640-6	8.4	118
164	Fickian and non-Fickian diffusion with bimolecular reactions. <i>Physical Review E</i> , <b>2013</b> , 87,	2.4	9
163	Quantification of Non-Fickian Transport in Fractured Formations. <i>Geophysical Monograph Series</i> , <b>2013</b> , 23-31	1.1	1
162	Record-breaking statistics for random walks in the presence of measurement error and noise. <i>Physical Review Letters</i> , <b>2013</b> , 110, 180602	7.4	20
161	Comparative analysis of formulations for conservative transport in porous media through sensitivity-based parameter calibration. <i>Water Resources Research</i> , <b>2013</b> , 49, 5206-5220	5.4	27
160	Effect of metal oxide nanoparticles on microbial community structure and function in two different soil types. <i>PLoS ONE</i> , <b>2013</b> , 8, e84441	3.7	152
159	Water Flow and Solute Transport in Unsaturated Fractured Chalk. <i>Geophysical Monograph Series</i> , <b>2013</b> , 183-196	1.1	2
158	Experimental and modeling analysis of coupled non-Fickian transport and sorption in natural soils. <i>Journal of Contaminant Hydrology</i> , <b>2012</b> , 132, 28-36	3.9	23
157	Interplay between resident and infiltrating water: Estimates from transient water flow and solute transport. <i>Journal of Hydrology</i> , <b>2012</b> , 458-459, 40-50	6	11
156	Catalytic transformation of persistent contaminants using a new composite material based on nanosized zero-valent iron. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2012</b> , 4, 3416-23	9.5	51
155	Copper Oxide Nanoparticle-Coated Quartz Sand as a Catalyst for Degradation of an Organic Dye in Water. <i>Water, Air, and Soil Pollution</i> , <b>2012</b> , 223, 3105-3115	2.6	7
154	Enrofloxacin oxidative degradation facilitated by metal oxide nanoparticles. <i>Chemosphere</i> , <b>2012</b> , 86, 144-9	8.4	42
153	Transport of silver nanoparticles (AgNPs) in soil. <i>Chemosphere</i> , <b>2012</b> , 88, 670-5	8.4	127
152	Estimation of Single-Metal and Competitive Sorption Isotherms through Maximum Likelihood and Model Quality Criteria. <i>Soil Science Society of America Journal</i> , <b>2012</b> , 76, 1229-1245	2.5	12
151	Soil-Subsurface Change <b>2012</b> ,		17
150	Chemical Pollutants as a Factor of Soil Subsurface Irreversible Transformation: An Introductory Discussion <b>2012</b> , 1-9		1

149	Properties and Behavior of Selected Inorganic and Organometallic Contaminants <b>2012</b> , 39-74		1
148	On the Retention and Transformation of Contaminants in Soil and the Subsurface <b>2012</b> , 75-111		
147	Contaminant-Induced Irreversible Changes in Properties of the Soil-Subsurface Regime <b>2012</b> , 263-360		
146	Record setting during dispersive transport in porous media. <i>Geophysical Research Letters</i> , <b>2011</b> , 38, n/a-n/a		7
145	Dissolution and precipitation dynamics during dedolomitization. <i>Water Resources Research</i> , <b>2011</b> , 47,	5.4	22
144	Quantifying Solute Transport at the Shale Hills Critical Zone Observatory. <i>Vadose Zone Journal</i> , <b>2011</b> , 10, 843-857	2.7	49
143	Measurements of Interactions between Resident and Infiltrating Water in a Lattice Micromodel. <i>Vadose Zone Journal</i> , <b>2011</b> , 10, 624-633	2.7	15
142	Experimental and modeling investigation of multicomponent reactive transport in porous media. <i>Journal of Contaminant Hydrology</i> , <b>2011</b> , 120-121, 27-44	3.9	52
141	Non-Fickian transport in porous media with bimodal structural heterogeneity. <i>Journal of Contaminant Hydrology</i> , <b>2011</b> , 120-121, 213-21	3.9	29
140	Fate and transport of carbamazepine in soil aquifer treatment (SAT) infiltration basin soils. <i>Chemosphere</i> , <b>2011</b> , 82, 244-52	8.4	52
139	Anomalous transport in correlated velocity fields. <i>Physical Review E</i> , <b>2010</b> , 81, 011128	2.4	16
138	Transport in disordered media with spatially nonuniform fields. <i>Physical Review E</i> , <b>2010</b> , 81, 031102	2.4	8
137	Use of Nanoparticles for Degradation of Water Contaminants in Oxidative and Reductive Reactions. <i>ACS Symposium Series</i> , <b>2010</b> , 23-37	0.4	1
136	Particle tracking model of bimolecular reactive transport in porous media. <i>Water Resources Research</i> , <b>2010</b> , 46,	5.4	66
135	Reply to comment by V. P. Shkilev on "Non-Fickian transport and multiple-rate mass transfer in porous media" <i>Water Resources Research</i> , <b>2010</b> , 46,	5.4	
134	Contaminant geochemistry--a new perspective. <i>Die Naturwissenschaften</i> , <b>2010</b> , 97, 1-17	2	19
133	Transport Equation Evaluation of Coupled Continuous Time Random Walks. <i>Journal of Statistical Physics</i> , <b>2010</b> , 141, 1093-1103	1.5	2
132	Transport of metal oxide nanoparticles in saturated porous media. <i>Chemosphere</i> , <b>2010</b> , 81, 387-93	8.4	173



131	Random walk particle tracking simulations of non-Fickian transport in heterogeneous media. <i>Journal of Computational Physics</i> , <b>2010</b> , 229, 4304-4314	4.1	40
130	Oxidation of organic pollutants in aqueous solutions by nanosized copper oxide catalysts. <i>Applied Catalysis B: Environmental</i> , <b>2009</b> , 85, 207-211	21.8	72
129	Exploring the nature of non-Fickian transport in laboratory experiments. <i>Advances in Water Resources</i> , <b>2009</b> , 32, 750-755	4.7	61
128	Application of a mixing-ratios based formulation to model mixing-driven dissolution experiments. <i>Advances in Water Resources</i> , <b>2009</b> , 32, 756-766	4.7	10
127	Reductive dechlorination of atrazine catalyzed by metalloporphyrins. <i>Chemosphere</i> , <b>2009</b> , 75, 48-55	8.4	14
126	Laboratory experiments on dispersive transport across interfaces: The role of flow direction. <i>Water Resources Research</i> , <b>2009</b> , 45,	5.4	41
125	Simulation of the interplay between resident and infiltrating water in partially saturated porous media. <i>Water Resources Research</i> , <b>2009</b> , 45,	5.4	19
124	Modeling bimolecular reactions and transport in porous media. <i>Geophysical Research Letters</i> , <b>2009</b> , 36, n/a-n/a	4.9	63
123	Non-Fickian transport and multiple-rate mass transfer in porous media. <i>Water Resources Research</i> , <b>2008</b> , 44,	5.4	58
122	Contaminant-induced irreversible changes in properties of the soil-vadose-aquifer zone: an overview. <i>Chemosphere</i> , <b>2008</b> , 71, 1409-21	8.4	20
121	Numerical study of diffusion on a random-mixed-bond lattice. <i>Physical Review E</i> , <b>2008</b> , 77, 031119	2.4	1
120	Transport behavior of coupled continuous-time random walks. <i>Physical Review E</i> , <b>2008</b> , 78, 041110	2.4	38
119	Contaminant Geochemistry <b>2008</b> ,		41
118	Effects of pore-size controlled solubility on reactive transport in heterogeneous rock. <i>Geophysical Research Letters</i> , <b>2007</b> , 34,	4.9	38
117	Phase separation and convection in heterogeneous porous media: Implications for seafloor hydrothermal systems. <i>Journal of Geophysical Research</i> , <b>2007</b> , 112,		7
116	Continuous time random walks and heat transfer in porous media. <i>Transport in Porous Media</i> , <b>2007</b> , 67, 413-430	3.1	28
115	Pore-scale imbibition experiments in dry and prewetted porous media. <i>Advances in Water Resources</i> , <b>2007</b> , 30, 2373-2386	4.7	5
114	Reductive hydrogenation of polycyclic aromatic hydrocarbons catalyzed by metalloporphyrins. <i>Chemosphere</i> , <b>2007</b> , 68, 210-7	8.4	24

113	Behavior and stability of organic contaminant droplets in aqueous solutions. <i>Chemosphere</i> , <b>2007</b> , 69, 1593-601	8.4	6
112	Experimental and numerical studies of the $^{18}\text{O}$ exchange between $\text{CO}_2$ and water in the atmosphere-soil invasion flux. <i>Geochimica Et Cosmochimica Acta</i> , <b>2007</b> , 71, 2657-2671	5.5	11
111	Pore-scale study of drainage displacement under combined capillary and gravity effects in index-matched porous media. <i>Water Resources Research</i> , <b>2006</b> , 42,	5.4	23
110	An experimental analogue for convection and phase separation in hydrothermal systems. <i>Journal of Geophysical Research</i> , <b>2006</b> , 111,		7
109	Suppression and stimulation of seafloor hydrothermal convection by exothermic mineral hydration. <i>Earth and Planetary Science Letters</i> , <b>2006</b> , 243, 657-668	5.3	71
108	Modeling non-Fickian transport in geological formations as a continuous time random walk. <i>Reviews of Geophysics</i> , <b>2006</b> , 44,	23.1	746
107	Magnetic resonance imaging and quantitative analysis of particle deposition in porous media. <i>Environmental Science &amp; Technology</i> , <b>2005</b> , 39, 7208-16	10.3	16
106	Mixing-induced precipitation and porosity evolution in porous media. <i>Advances in Water Resources</i> , <b>2005</b> , 28, 337-344	4.7	74
105	The role of fractures on coupled dissolution and precipitation patterns in carbonate rocks. <i>Advances in Water Resources</i> , <b>2005</b> , 28, 507-521	4.7	56
104	Use of nanosized catalysts for transformation of chloro-organic pollutants. <i>Environmental Science &amp; Technology</i> , <b>2005</b> , 39, 1283-90	10.3	43
103	Computing "anomalous" contaminant transport in porous media: the CTRW MATLAB toolbox. <i>Ground Water</i> , <b>2005</b> , 43, 947-50	2.4	92
102	Morphogen gradient formation in a complex environment: an anomalous diffusion model. <i>Physical Review E</i> , <b>2005</b> , 72, 041916	2.4	69
101	Exact effective transport dynamics in a one-dimensional random environment. <i>Physical Review E</i> , <b>2005</b> , 72, 031110	2.4	17
100	Impact of the Capillary Fringe on Local Flow, Chemical Migration, and Microbiology. <i>Vadose Zone Journal</i> , <b>2004</b> , 3, 534-548	2.7	67
99	Quantitative characterization of pore-scale disorder effects on transport in "homogeneous" granular media. <i>Physical Review E</i> , <b>2004</b> , 70, 041108	2.4	74
98	Time behavior of solute transport in heterogeneous media: transition from anomalous to normal transport. <i>Advances in Water Resources</i> , <b>2004</b> , 27, 155-173	4.7	292
97	Continuous time random walks revisited: first passage time and spatial distributions. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>2004</b> , 334, 46-66	3.3	28
96	Diffusion in multicomponent systems: a free energy approach. <i>Chemical Physics</i> , <b>2004</b> , 302, 21-30	2.3	11

95	Carbonate dissolution and precipitation in coastal environments: Laboratory analysis and theoretical consideration. <i>Water Resources Research</i> , <b>2004</b> , 40,	5-4	36
94	Numerical simulation of non-Fickian transport in geological formations with multiple-scale heterogeneities. <i>Water Resources Research</i> , <b>2004</b> , 40,	5-4	79
93	Effects of air injection on flow through porous media: Observations and analyses of laboratory-scale processes. <i>Water Resources Research</i> , <b>2004</b> , 40,	5-4	44
92	Dedolomitization and flow in fractures. <i>Geophysical Research Letters</i> , <b>2004</b> , 31,	4-9	10
91	Anomalous Transport in Classical Soil and Sand Columns. <i>Soil Science Society of America Journal</i> , <b>2004</b> , 68, 1539-1548	2-5	184
90	Impact of the Capillary Fringe on Local Flow, Chemical Migration, and Microbiology. <i>Vadose Zone Journal</i> , <b>2004</b> , 3, 534-548	2-7	1
89	Salt-pump mechanism for contaminant intrusion into coastal aquifers. <i>Science</i> , <b>2003</b> , 300, 950	33-3	17
88	Transport behavior in three-dimensional fracture intersections. <i>Water Resources Research</i> , <b>2003</b> , 39,	5-4	35
87	Measurement and analysis of non-Fickian dispersion in heterogeneous porous media. <i>Journal of Contaminant Hydrology</i> , <b>2003</b> , 64, 203-26	3-9	274
86	Continuous time random walk and multirate mass transfer modeling of sorption. <i>Chemical Physics</i> , <b>2003</b> , 295, 71-80	2-3	64
85	Evolution of hydraulic conductivity by precipitation and dissolution in carbonate rock. <i>Water Resources Research</i> , <b>2003</b> , 39,	5-4	47
84	Transport behavior of a passive solute in continuous time random walks and multirate mass transfer. <i>Water Resources Research</i> , <b>2003</b> , 39,	5-4	191
83	Mixing-driven diagenesis and mineral deposition: CaCO <sub>3</sub> precipitation in salt water-fresh water mixing zones. <i>Geophysical Research Letters</i> , <b>2003</b> , 30, n/a-n/a	4-9	10
82	Flow, dissolution, and precipitation in dolomite. <i>Water Resources Research</i> , <b>2003</b> , 39,	5-4	23
81	Response to Comment on "Salt-Pump Mechanism for Contaminant Intrusion into Coastal Aquifers". <i>Science</i> , <b>2003</b> , 302, 784c-784	33-3	4
80	8-Hydroxyquinoline-5-sulfonic Acid (HQS) Impregnated on Lewatit MP 600 for Cadmium Complexation: Implication of Solvent Impregnated Resins for Water Remediation. <i>Separation Science and Technology</i> , <b>2003</b> , 38, 149-163	2-5	15
79	Characterizing flow and transport in fractured geological media: A review. <i>Advances in Water Resources</i> , <b>2002</b> , 25, 861-884	4-7	908
78	Towards a unified framework for anomalous transport in heterogeneous media. <i>Chemical Physics</i> , <b>2002</b> , 284, 349-359	2-3	41

77	Fluid flow and solute migration within the capillary fringe. <i>Ground Water</i> , <b>2002</b> , 40, 76-84	2.4	78
76	In situ remediation of groundwater contaminated by heavy- and transition-metal ions by selective ion-exchange methods. <i>Environmental Science &amp; Technology</i> , <b>2002</b> , 36, 1851-5	10.3	72
75	Measurement and analysis of dissolution patterns in rock fractures. <i>Water Resources Research</i> , <b>2002</b> , 38, 5-1-5-12	5.4	57
74	An experimental and numerical investigation of saltwater movement in coupled saturated partially saturated systems. <i>Water Resources Research</i> , <b>2002</b> , 38, 5-1-5-11	5.4	22
73	Spatial behavior of anomalous transport. <i>Physical Review E</i> , <b>2002</b> , 65, 031101	2.4	38
72	The dynamical foundation of fractal stream chemistry: The origin of extremely long retention times. <i>Geophysical Research Letters</i> , <b>2002</b> , 29, 5-1-5-4	4.9	152
71	Physical pictures of transport in heterogeneous media: Advection-dispersion, random-walk, and fractional derivative formulations. <i>Water Resources Research</i> , <b>2002</b> , 38, 9-1-9-12	5.4	211
70	Stochastic pore-scale growth models of DNAPL migration in porous media. <i>Advances in Water Resources</i> , <b>2001</b> , 24, 309-323	4.7	37
69	A Numerical Study of the Distribution of Water in Partially Saturated Porous Rock. <i>Transport in Porous Media</i> , <b>2001</b> , 45, 301-317	3.1	37
68	Dispersion in Heterogeneous Geological Formations: Preface (Transport in Porous Media Special Issue). <i>Transport in Porous Media</i> , <b>2001</b> , 42, 1-2	3.1	2
67	The Role of Probabilistic Approaches to Transport Theory in Heterogeneous Media. <i>Transport in Porous Media</i> , <b>2001</b> , 42, 241-263	3.1	75
66	Application of continuous time random walk theory to tracer test measurements in fractured and heterogeneous porous media. <i>Ground Water</i> , <b>2001</b> , 39, 593-603	2.4	95
65	Analysis of field observations of tracer transport in a fractured till. <i>Journal of Contaminant Hydrology</i> , <b>2001</b> , 47, 29-51	3.9	70
64	Advective transport in the percolation backbone in two dimensions. <i>Physical Review E</i> , <b>2001</b> , 64, 056305	2.4	5
63	Scaling of fracture systems in geological media. <i>Reviews of Geophysics</i> , <b>2001</b> , 39, 347-383	23.1	794
62	Transport and intersection mixing in random fracture networks with power law length distributions. <i>Water Resources Research</i> , <b>2001</b> , 37, 2493-2501	5.4	63
61	Effects of junction transfer characteristics on transport in fracture networks. <i>Water Resources Research</i> , <b>2001</b> , 37, 909-923	5.4	39
60	The Role of Probabilistic Approaches to Transport Theory in Heterogeneous Media <b>2001</b> , 241-263		1

59	Buoyancy-driven dissolution enhancement in rock fractures. <i>Geology</i> , <b>2000</b> , 28, 1051	5	14
58	On Fracture Structure and Preferential Flow in Unsaturated Chalk. <i>Ground Water</i> , <b>2000</b> , 38, 444-451	2.4	43
57	Effective Medium Analysis of Random Lattices. <i>Transport in Porous Media</i> , <b>2000</b> , 40, 145-151	3.1	25
56	The Impact of Biased Sampling on the Estimation of the Semivariogram Within Fractured Media Containing Multiple Fracture Sets. <i>Mathematical Geosciences</i> , <b>2000</b> , 32, 543-560		6
55	Application of Continuous Time Random Walks to Transport in Porous Media. <i>Journal of Physical Chemistry B</i> , <b>2000</b> , 104, 3942-3947	3.4	64
54	Scaling of fracture connectivity in geological formations. <i>Geophysical Research Letters</i> , <b>2000</b> , 27, 2061-2064	4.9	76
53	Anomalous transport in laboratory-scale, heterogeneous porous media. <i>Water Resources Research</i> , <b>2000</b> , 36, 149-158	5.4	228
52	Buoyancy-driven dissolution enhancement in rock fractures. <i>Geology</i> , <b>2000</b> , 28, 1051-1054	5	2
51	A Monte Carlo Model for the Flow of Dust in a Porous Comet Nucleus. <i>Icarus</i> , <b>1999</b> , 137, 348-354	3.8	5
50	Field observation of flow in a fracture intersecting unsaturated chalk. <i>Water Resources Research</i> , <b>1999</b> , 35, 3315-3326	5.4	80
49	Three-dimensional flow measurements in rock fractures. <i>Water Resources Research</i> , <b>1999</b> , 35, 3955-3959	5.4	31
48	Investigation of flow in water-saturated rock fractures using nuclear magnetic resonance imaging (NMRI). <i>Water Resources Research</i> , <b>1999</b> , 35, 347-360	5.4	63
47	Flow pattern variability in natural fracture intersections. <i>Geophysical Research Letters</i> , <b>1999</b> , 26, 1765-1768	4.8	50
46	Percolation Theory and Network Modeling Applications in Soil Physics. <i>Surveys in Geophysics</i> , <b>1998</b> , 19, 23-72	7.6	217
45	A Measurement System to Determine Water Flux and Solute Transport Through Fractures in the Unsaturated Zone. <i>Ground Water</i> , <b>1998</b> , 36, 444-449	2.4	30
44	Precipitation and dissolution of reactive solutes in fractures. <i>Water Resources Research</i> , <b>1998</b> , 34, 457-470	3.4	86
43	A generalized growth model for simulating initial migration of dense non-aqueous phase liquids. <i>Water Resources Research</i> , <b>1998</b> , 34, 611-622	5.4	50
42	Stereological analysis of fracture network structure in geological formations. <i>Journal of Geophysical Research</i> , <b>1998</b> , 103, 15339-15360		56

41	Structure, flow, and generalized conductivity scaling in fracture networks. <i>Water Resources Research</i> , <b>1998</b> , 34, 2103-2121	5.4	66
40	Flow in rock fractures: The local cubic law assumption reexamined. <i>Water Resources Research</i> , <b>1998</b> , 34, 2811-2825	5.4	238
39	Will the Dead Sea die?. <i>Geology</i> , <b>1998</b> , 26, 755	5	77
38	Theory of anomalous chemical transport in random fracture networks. <i>Physical Review E</i> , <b>1998</b> , 57, 5858-5869	5.4	243
37	Theory of continuum percolation. III. Low-density expansion. <i>Physical Review E</i> , <b>1997</b> , 56, 1379-1395	2.4	8
36	Anomalous Transport in Random Fracture Networks. <i>Physical Review Letters</i> , <b>1997</b> , 79, 4038-4041	7.4	253
35	Fractal and multifractal measures of natural and synthetic fracture networks. <i>Journal of Geophysical Research</i> , <b>1997</b> , 102, 12205-12218		60
34	Reactive Solute Transport in a Single Fracture. <i>Water Resources Research</i> , <b>1996</b> , 32, 901-913	5.4	75
33	Influence of embedded fractures on contaminant diffusion in geological formations. <i>Geophysical Research Letters</i> , <b>1996</b> , 23, 925-928	4.9	5
32	Analysis of fracture network connectivity using percolation theory. <i>Mathematical Geosciences</i> , <b>1995</b> , 27, 467-483		152
31	Application of the central-particle-potential approximation for percolation in interacting systems. <i>Physical Review E</i> , <b>1995</b> , 52, 4482-4494	2.4	8
30	Anaerobic treatment of intensive fish culture effluents: digestion of fish feed and release of volatile fatty acids. <i>Aquaculture</i> , <b>1995</b> , 133, 9-20	4.4	33
29	Are sedimentary salt layers always impermeable?. <i>Geophysical Research Letters</i> , <b>1995</b> , 22, 2761-2764	4.9	16
28	On Characterization of Anomalous Dispersion in Porous and Fractured Media. <i>Water Resources Research</i> , <b>1995</b> , 31, 1461-1466	5.4	167
27	Aquifer Characteristics Derived From the Interaction Between Water Levels of a Terminal Lake (Dead Sea) and an Adjacent Aquifer. <i>Water Resources Research</i> , <b>1995</b> , 31, 893-902	5.4	53
26	Continuum percolation conductivity exponents in restricted domains. <i>Journal of Statistical Physics</i> , <b>1995</b> , 80, 1415-1423	1.5	4
25	Random-adding determination of percolation thresholds in interacting systems. <i>Physical Review E</i> , <b>1994</b> , 49, R949-R952	2.4	16
24	Is Old Faithful a strange attractor?. <i>Journal of Geophysical Research</i> , <b>1994</b> , 99, 4495-4503		15

23	Mass transfer at fracture intersections: An evaluation of mixing models. <i>Water Resources Research</i> , <b>1994</b> , 30, 1765-1773	5.4	83
22	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> , <b>1993</b> , 143, 169-190	6	18
21	Percolation theory and its application to groundwater hydrology. <i>Water Resources Research</i> , <b>1993</b> , 29, 775-794	5.4	227
20	Reply [to Comment on Analysis of subsurface flow and formation anisotropy in a fractured aquitard using transient water level data] by B. Rophe, B. Berkowitz, M. Magaritz, and D. Ronen. <i>Water Resources Research</i> , <b>1993</b> , 29, 4175-4175	5.4	
19	Vertical Heterogeneity in Horizontal Components of Specific Discharge: Case Study Analysis. <i>Ground Water</i> , <b>1993</b> , 31, 33-40	2.4	7
18	Analysis of subsurface flow and formation anisotropy in a fractured aquitard using transient water level data. <i>Water Resources Research</i> , <b>1992</b> , 28, 199-207	5.4	13
17	A spatial, time-dependent approach to estimation of hydrologic data. <i>Journal of Hydrology</i> , <b>1992</b> , 135, 133-142	6	5
16	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> , <b>1992</b> , 132, 107-135	6	19
15	Percolation approach to the problem of hydraulic conductivity in porous media. <i>Transport in Porous Media</i> , <b>1992</b> , 9, 275-286	3.1	44
14	An algorithm and Pascal program for geostatistical mapping. <i>Computers and Geosciences</i> , <b>1991</b> , 17, 489-503	4.3	1
13	Analytic derivation of percolation thresholds in anisotropic systems of permeable objects. <i>Physical Review A</i> , <b>1991</b> , 43, 6604-6612	2.6	27
12	Modeling of surface roughness effects on glaze ice accretion. <i>Journal of Thermophysics and Heat Transfer</i> , <b>1991</b> , 5, 54-60	1.3	32
11	Solute transport in fracture channel and parallel plate models. <i>Geophysical Research Letters</i> , <b>1991</b> , 18, 227-230	4.9	10
10	Application of a percolation model to flow in fractured hard rocks. <i>Journal of Geophysical Research</i> , <b>1991</b> , 96, 10015		51
9	Dispersion in Sub-Representative Elementary Volume Fracture Networks: Percolation Theory and Random Walk Approaches. <i>Water Resources Research</i> , <b>1991</b> , 27, 3159-3164	5.4	17
8	Can contaminated, fractured, porous aquifers be restored?. <i>Die Naturwissenschaften</i> , <b>1990</b> , 77, 431-433	2	3
7	Column Relaxation Methods for Least Norm Problems. <i>SIAM Journal on Scientific and Statistical Computing</i> , <b>1990</b> , 11, 975-989		7
6	The development and influence of gas bubbles in phreatic aquifers under natural flow conditions. <i>Transport in Porous Media</i> , <b>1989</b> , 4, 295	3.1	47

5	Boundary conditions along permeable fracture walls: Influence on flow and conductivity. <i>Water Resources Research</i> , <b>1989</b> , 25, 1919-1922	5-4	34
4	A scale-dependent equation for solute transport in porous media. <i>Transport in Porous Media</i> , <b>1988</b> , 3, 199-205	3-1	2
3	Pre-posterior analysis as a tool for data evaluation: Application to aquifer contamination. <i>Water Resources Management</i> , <b>1988</b> , 2, 11-20	3-7	24
2	Continuum models for contaminant transport in fractured porous formations. <i>Water Resources Research</i> , <b>1988</b> , 24, 1225-1236	5-4	129
1	Comment on "The Operational Significance of the Continuum Hypothesis in the Theory of Water Movement Through Soils and Aquifers" by P. Baveye and G. Sposito. <i>Water Resources Research</i> , <b>1985</b> , 21, 1293-1293	5-4	1