Daniel M Tartakovsky

List of Publications by Year in Descending Order

210 papers	4,464 citations
38 h-index	57 g-index
228 ext. papers	4,989 ext. citations
4.1 avg, IF	6.14 L-index

#	Paper	IF	Citations
210	Polynomial Chaos Expansions for Stiff Random ODEs. *SIAM Journal of Scientific Computing*, **2022**, 44, A1021-A1046	2.6	0
209	Estimation of Evapotranspiration Rates and Root Water Uptake Profiles From Soil Moisture Sensor Array Data. *Water Resources Research*, **2021**, 57, e2021WR030747	5.4	0
208	Thermal Experiments for Fractured Rock Characterization: Theoretical Analysis and Inverse Modeling. *Water Resources Research*, **2021**, 57, e2021WR030608	5.4	1
207	A model of anemic tissue perfusion after blood transfusion shows critical role of endothelial response to shear stress stimuli. *Journal of Applied Physiology*, **2021**, 131, 1815-1823	3.7	0
206	Consensus Equilibrium for Subsurface Delineation. *Water Resources Research*, **2021**, 57, e2021WR030151	5.4	
205	Lagrangian models of particle-laden flows with stochastic forcing: Monte Carlo, moment equations, and method of distributions analyses. *Physics of Fluids*, **2021**, 33, 033326	4.4	1
204	Hybrid models of chemotaxis with application to leukocyte migration. *Journal of Mathematical Biology*, **2021**, 82, 23	2	2
203	GINNs: Graph-Informed Neural Networks for multiscale physics. *Journal of Computational Physics*, **2021**, 433, 110192	4.1	5
202	Probabilistic Reconstruction of Hydrofacies With Support Vector Machines. *Water Resources Research*, **2021**, 57, e2021WR029622	5.4	0
201	Exponential time differencing for problems without natural stiffness separation. *Computational Geosciences*, **2021**, 25, 1667-1679	2.7	
200	Data-driven discovery of coarse-grained equations. *Journal of Computational Physics*, **2021**, 434, 110219	4.1	6
199	Temperature estimation from current and voltage measurements in lithium-ion battery systems. *Journal of Energy Storage*, **2021**, 34, 102133	7.8	6
198	Markov chain Monte Carlo with neural network surrogates: application to contaminant source identification. *Stochastic Environmental Research and Risk Assessment*, **2021**, 35, 639-651	3.5	12
197	Dynamics of Data-driven Ambiguity Sets for Hyperbolic Conservation Laws with Uncertain Inputs. *SIAM Journal of Scientific Computing*, **2021**, 43, A2102-A2129	2.6	0
196	Mutual information for explainable deep learning of multiscale systems. *Journal of Computational Physics*, **2021**, 444, 110551	4.1	3
195	Extended dynamic mode decomposition for inhomogeneous problems. *Journal of Computational Physics*, **2021**, 444, 110550	4.1	0
194	Reply to Comment by Wang, Che, and Ghidaoui on Bayesian Update and Method of Distributions: Application to Leak Detection in Transmission Mains. *Water Resources Research*, **2020**, 56, e2020WR028603	5.4	

193	Method of Distributions for Quantification of Geologic Uncertainty in Flow Simulations. *Water Resources Research*, **2020**, 56, e2020WR027643	5.4	5
192	Prediction Accuracy of Dynamic Mode Decomposition. *SIAM Journal of Scientific Computing*, **2020**, 42, A1639-A1662	2.6	10
191	Structural and Magnetic Properties Control of Pr0.7Ba0.3MnO3 with Sr-Doping. *Physics of the Solid State*, **2020**, 62, 845-850	0.8	1
190	Data-Informed Method of Distributions for Hyperbolic Conservation Laws. *SIAM Journal of Scientific Computing*, **2020**, 42, A559-A583	2.6	8
189	Bayesian Update and Method of Distributions: Application to Leak Detection in Transmission Mains. *Water Resources Research*, **2020**, 56, e2019WR025879	5.4	11
188	Lagrangian dynamic mode decomposition for construction of reduced-order models of advection-dominated phenomena. *Journal of Computational Physics*, **2020**, 407, 109229	4.1	11
187	Learning on dynamic statistical manifolds. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2020**, 476, 20200213	2.4	6
186	Modified immersed boundary method for flows over randomly rough surfaces. *Journal of Computational Physics*, **2020**, 406, 109195	4.1	1
185	Tensor methods for the Boltzmann-BGK equation. *Journal of Computational Physics*, **2020**, 421, 109744	4.1	6
184	Estimation of distributions via multilevel Monte Carlo with stratified sampling. *Journal of Computational Physics*, **2020**, 419, 109572	4.1	10
183	Accelerated Multilevel Monte Carlo With Kernel-Based Smoothing and Latinized Stratification. *Water Resources Research*, **2020**, 56, e2019WR026984	5.4	6
182	Resource-Constrained Model Selection for Uncertainty Propagation and Data Assimilation. *SIAM-ASA Journal on Uncertainty Quantification*, **2020**, 8, 1118-1138	1.8	2
181	Solute dispersion in bifurcating networks. *Journal of Fluid Mechanics*, **2020**, 901,	3.7	2
180	Quantification of Predictive Uncertainty in Models of FtsZ ring assembly in Escherichia coli. *Journal of Theoretical Biology*, **2020**, 484, 110006	2.3	
179	Analytical model for gravity segregation of horizontal multiphase flow in porous media. *Physics of Fluids*, **2020**, 32, 046602	4.4	9
178	A Mechanistic Analysis of Possible Blood Transfusion Failure to Increase Circulatory Oxygen Delivery in Anemic Patients. *Annals of Biomedical Engineering*, **2019**, 47, 1094-1105	4.7	3
177	Microstructural heterogeneity drives reaction initiation in granular materials. *Applied Physics Letters*, **2019**, 114, 254101	3.4	3
176	Diffusion in Porous Media: Phenomena and Mechanisms. *Transport in Porous Media*, **2019**, 130, 105-127	3.1	30

175	Causality and Bayesian Network PDEs for multiscale representations of porous media. *Journal of Computational Physics*, **2019**, 394, 658-678	4.1	8
174	Distribution-Based Global Sensitivity Analysis in Hydrology. *Water Resources Research*, **2019**, 55, 8708-8720	5.4	13
173	Stochastic self-tuning hybrid algorithm for reaction-diffusion systems. *Journal of Chemical Physics*, **2019**, 151, 244117	3.9	4
172	Probabilistic Forecast of Single-Phase Flow in Porous Media With Uncertain Properties. *Water Resources Research*, **2019**, 55, 8631-8645	5.4	6
171	Efficient gHMC Reconstruction of Contaminant Release History. *Frontiers in Environmental Science*, **2019**, 7,	4.8	4
170	Global sensitivity analysis of multiscale properties of porous materials. *Journal of Applied Physics*, **2018**, 123, 075103	2.5	4
169	Efficient models of polymerization applied to FtsZ ring assembly in. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 4933-4938	11.5	4
168	Nonlocal PDF methods for Langevin equations with colored noise. *Journal of Computational Physics*, **2018**, 367, 87-101	4.1	5
167	A Hybrid Multiscale Model of Miscible Reactive Fronts. *Water Resources Research*, **2018**, 54, 61-71	5.4	6
166	Hydrodynamic dispersion in a tube with diffusive losses through its walls. *Journal of Fluid Mechanics*, **2018**, 837, 546-561	3.7	6
165	The frequency domain approach to analyse field-scale miscible flow transport experiments in the soils. *Biosystems Engineering*, **2018**, 168, 96-104	4.8	1
164	Information-Theoretic Approach to Bidirectional Scaling. *Water Resources Research*, **2018**, 54, 4916-4928	5.4	6
163	Probabilistic Forecasting of Nitrogen Dynamics in Hyporheic Zone. *Water Resources Research*, **2018**, 54, 4417-4431	5.4	4
162	Method of Distributions for Water Hammer Equations With Uncertain Parameters. *Water Resources Research*, **2018**, 54, 9398-9411	5.4	15
161	Parallel tensor methods for high-dimensional linear PDEs. *Journal of Computational Physics*, **2018**, 375, 519-539	4.1	8
160	Interpretation of Heat-Pulse Tracer Tests for Characterization of Three-Dimensional Velocity Fields in Hyporheic Zone. *Water Resources Research*, **2018**, 54, 4028-4039	5.4	4
159	On the use of reverse Brownian motion to accelerate hybrid simulations. *Journal of Computational Physics*, **2017**, 334, 68-80	4.1	3
158	Effective Ion Diffusion in Charged Nanoporous Materials. *Journal of the Electrochemical Society*, **2017**, 164, E53-E61	3.9	21

157	Posttransfusion Increase of Hematocrit per se Does Not Improve Circulatory Oxygen Delivery due to Increased Blood Viscosity. *Anesthesia and Analgesia*, **2017**, 124, 1547-1554	3.9	19
156	Optimal design of nanoporous materials for electrochemical devices. *Applied Physics Letters*, **2017**, 110, 143103	3.4	3
155	A tightly-coupled domain-decomposition approach for highly nonlinear stochastic multiphysics systems. *Journal of Computational Physics*, **2017**, 330, 884-901	4.1	3
154	An analytical model for carrier-facilitated solute transport in weakly heterogeneous porous media. *Applied Mathematical Modelling*, **2017**, 44, 261-273	4.5	3
153	. *Proceedings of the IEEE*, **2017**, 105, 319-329	14.3	
152	Effects of Hydraulic Soil Properties on Vegetation Pattern Formation in Sloping Landscapes. *Bulletin of Mathematical Biology*, **2017**, 79, 2773-2784	2.1	4
151	Impact of parametric uncertainty on estimation of the energy deposition into an irradiated brain tumor. *Journal of Computational Physics*, **2017**, 348, 139-150	4.1	3
150	Estimation of Intrinsic Length Scales of Flow in Unsaturated Porous Media. *Water Resources Research*, **2017**, 53, 9980-9987	5.4	7
149	Impact of Hydrogeological Uncertainty on Estimation of Environmental Risks Posed by Hydrocarbon Transportation Networks. *Water Resources Research*, **2017**, 53, 8686-8697	5.4	9
148	Method of Distributions for Uncertainty Quantification **2017**, 763-783		3
147	Particle Methods for Heat Transfer in Fractured Media. *Transport in Porous Media*, **2016**, 115, 311-326	3.1	14
146	Noise-driven interfaces and their macroscopic representation. *Physical Review E*, **2016**, 94, 052802	2.4	1
145	Efficient Multiscale Models of Polymer Assembly. *Biophysical Journal*, **2016**, 111, 185-96	2.9	5
144	Shear-Induced Nitric Oxide Production by Endothelial Cells. *Biophysical Journal*, **2016**, 111, 208-21	2.9	46
143	Conservative tightly-coupled simulations of stochastic multiscale systems. *Journal of Computational Physics*, **2016**, 313, 400-414	4.1	4
142	Simulating social-ecological systems: the Island Digital Ecosystem Avatars (IDEA) consortium. *GigaScience*, **2016**, 5, 14	7.6	7
141	Analytical models of axisymmetric reaction–diffusion phenomena in composite media. *International Journal of Heat and Mass Transfer*, **2016**, 99, 425-431	4.9	5
140	Stochastic Collocation Methods for Nonlinear Parabolic Equations with Random Coefficients. *SIAM-ASA Journal on Uncertainty Quantification*, **2016**, 4, 475-494	1.8	15

#	Reference	IF	Cites
139	The method of distributions for dispersive transport in porous media with uncertain hydraulic properties. *Water Resources Research*, **2016**, 52, 4700-4712	5.4	30
138	Critical Behavior in Double-Exchange Ferromagnets of Pr0.6Sr0.4MnO3 Nanoparticles. *IEEE Transactions on Magnetics*, **2015**, 51, 1-4	2	2
137	Coexistence of short- and long-range ferromagnetic order in nanocrystalline Fe2Mn1⊠Cu Al (x=0.0, 0.1 and 0.3) synthesized by high-energy ball milling. *Journal of Magnetism and Magnetic Materials*, **2015**, 394, 37-43	2.8	1
136	A boundary-layer solution for flow at the soil-root interface. *Journal of Mathematical Biology*, **2015**, 70, 1645-68	2	9
135	Data-driven models of groundwater salinization in coastal plains. *Journal of Hydrology*, **2015**, 531, 187-197	5.7	6
134	Method of Distributions for Uncertainty Quantification **2015**, 1-22		4
133	Impact of Data Assimilation on Cost-Accuracy Tradeoff in Multifidelity Models. *SIAM-ASA Journal on Uncertainty Quantification*, **2015**, 3, 954-968	1.8	9
132	Design of nanoporous materials with optimal sorption capacity. *Journal of Applied Physics*, **2015**, 117, 244304	2.5	8
131	Linear functional minimization for inverse modeling. *Water Resources Research*, **2015**, 51, 4516-4531	5.4	7
130	Impact of stochastic fluctuations in the cell free layer on nitric oxide bioavailability. *Frontiers in Computational Neuroscience*, **2015**, 9, 131	3.5	1
129	Critical behavior and magnetocaloric effect of Pr1⊠CaxMnO3. *Journal of Applied Physics*, **2015**, 117, 17D122	2.5	2
128	Temperature fields induced by geothermal devices. *Energy*, **2015**, 93, 1896-1903	7.9	12
127	Analytical models of heat conduction in fractured rocks. *Journal of Geophysical Research: Solid Earth* , **2014**, 119, 83-98	3.6	33
126	Non-Newtonian flow of blood in arterioles: consequences for wall shear stress measurements. *Microcirculation*, **2014**, 21, 628-39	2.9	49
125	Identifying transport behavior of single-molecule trajectories. *Biophysical Journal*, **2014**, 107, 2345-51	2.9	5
124	Hematocrit dispersion in asymmetrically bifurcating vascular networks. *American Journal of Physiology - Heart and Circulatory Physiology*, **2014**, 307, H1576-86	5.2	16
123	Replacing the Transfusion of 1-2 Units of Blood with Plasma Expanders that Increase Oxygen Delivery Capacity: Evidence from Experimental Studies. *Journal of Functional Biomaterials*, **2014**, 5, 232-45	4.8	4
122	Vegetation pattern formation due to interactions between water availability and toxicity in plant-soil feedback. *Bulletin of Mathematical Biology*, **2014**, 76, 2866-83	2.1	33

121	Information theoretic approach to complex biological network reconstruction: application to cytokine release in RAW 264.7 macrophages. *BMC Systems Biology*, **2014**, 8, 77	3.5	8
120	Cumulative distribution function solutions of advection-reaction equations with uncertain parameters. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2014**, 470, 20140189	2.4	19
119	Noise propagation in hybrid models of nonlinear systems: The Ginzburg–Landau equation. *Journal of Computational Physics*, **2014**, 262, 313-324	4.1	9
118	Stochastic smoothed profile method for modeling random roughness in flow problems. *Computer Methods in Applied Mechanics and Engineering*, **2013**, 263, 99-112	5.7	11
117	Assessment and management of risk in subsurface hydrology: A review and perspective. *Advances in Water Resources*, **2013**, 51, 247-260	4.7	118
116	Probability density function method for Langevin equations with colored noise. *Physical Review Letters*, **2013**, 110, 140602	7.4	22
115	A New Physiological Boundary Condition for Hemodynamics. *SIAM Journal on Applied Mathematics*, **2013**, 73, 1203-1223	1.8	15
114	COMPUTING GREEN'S FUNCTIONS FOR FLOW IN HETEROGENEOUS COMPOSITE MEDIA **2013**, 3, 39-46		3
113	Stochastic Forecasting of Algae Blooms in Lakes. *Springer Proceedings in Mathematics and Statistics*, **2013**, 99-108	0.2	
112	Anomalous diffusion of single particles in cytoplasm. *Biophysical Journal*, **2013**, 104, 1652-60	2.9	82
111	Particle-tracking simulations of anomalous transport in hierarchically fractured rocks. *Computers and Geosciences*, **2013**, 50, 52-58	4.5	28
110	Exact PDF equations and closure approximations for advective-reactive transport. *Journal of Computational Physics*, **2013**, 243, 323-343	4.1	54
109	Hybrid modeling of heterogeneous geochemical reactions in fractured porous media. *Water Resources Research*, **2013**, 49, 7945-7956	5.4	13
108	CDF Solutions of Buckley--Leverett Equation with Uncertain Parameters. *Multiscale Modeling and Simulation*, **2013**, 11, 118-133	1.8	21
107	Probabilistic analysis of groundwater-related risks at subsurface excavation sites. *Engineering Geology*, **2012**, 125, 35-44	6	43
106	Impact of endothelium roughness on blood flow. *Journal of Theoretical Biology*, **2012**, 300, 152-60	2.3	16
105	Autoregulation and mechanotransduction control the arteriolar response to small changes in hematocrit. *American Journal of Physiology - Heart and Circulatory Physiology*, **2012**, 303, H1096-106	5.2	26
104	Stochastic operator-splitting method for reaction-diffusion systems. *Journal of Chemical Physics*, **2012**, 137, 184102	3.9	12

103	Lagrangian models of reactive transport in heterogeneous porous media with uncertain properties. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2012**, 468, 1154-1174	2.4	20
102	A Bayesian approach to integrate temporal data into probabilistic risk analysis of monitored NAPL remediation. *Advances in Water Resources*, **2012**, 36, 108-120	4.7	17
101	Probabilistic analysis of maintenance and operation of artificial recharge ponds. *Advances in Water Resources*, **2012**, 36, 23-35	4.7	21
100	Introduction to the special issue on uncertainty quantification and risk assessment. *Advances in Water Resources*, **2012**, 36, 1-2	4.7	8
99	Semi-analytical solutions for solute transport and exchange in fractured porous media. *Water Resources Research*, **2012**, 48,	5.4	66
98	Uncertainty quantification in kinematic-wave models. *Journal of Computational Physics*, **2012**, 231, 7868-7880	4.1	22
97	PEG-albumin supraplasma expansion is due to increased vessel wall shear stress induced by blood viscosity shear thinning. *American Journal of Physiology - Heart and Circulatory Physiology*, **2012**, 302, H2489-97	5.2	21
96	Comparison of statistical and optimisation-based methods for data-driven network reconstruction of biochemical systems. *IET Systems Biology*, **2012**, 6, 155-63	1.4	8
95	Hybrid models of reactive transport in porous and fractured media. *Advances in Water Resources*, **2011**, 34, 1140-1150	4.7	94
94	PROBABILISTIC PREDICTIONS OF INFILTRATION INTO HETEROGENEOUS MEDIA WITH UNCERTAIN HYDRAULIC PARAMETERS **2011**, 1, 35-47		9
93	Applicability regimes for macroscopic models of reactive transport in porous media. *Journal of Contaminant Hydrology*, **2011**, 120-121, 18-26	3.9	132
92	PDF equations for advective-reactive transport in heterogeneous porous media with uncertain properties. *Journal of Contaminant Hydrology*, **2011**, 120-121, 129-40	3.9	67
91	Mean arterial pressure nonlinearity in an elastic circulatory system subjected to different hematocrits. *Biomechanics and Modeling in Mechanobiology*, **2011**, 10, 591-8	3.8	4
90	Reduced complexity models for probabilistic forecasting of infiltration rates. *Advances in Water Resources*, **2011**, 34, 375-382	4.7	14
89	Integration of cardiovascular regulation by the blood/endothelium cell-free layer. *Wiley Interdisciplinary Reviews: Systems Biology and Medicine*, **2011**, 3, 458-70	6.6	15
88	The effect of small changes in hematocrit on nitric oxide transport in arterioles. *Antioxidants and Redox Signaling*, **2011**, 14, 175-85	8.4	35
87	Functional optical imaging at the microscopic level. *Journal of Biomedical Optics*, **2010**, 15, 011102	3.5	4
86	Stochastic hybrid modeling of intracellular calcium dynamics. *Journal of Chemical Physics*, **2010**, 133, 165101	3.9	16

85	Probability density functions for passive scalars dispersed in random velocity fields. *Geophysical Research Letters*, **2010**, 37, n/a-n/a	4.9	38
84	Predicting vertical connectivity within an aquifer system. *Bayesian Analysis*, **2010**, 5,	2.3	8
83	Elastic response of carbon nanotube forests to aerodynamic stresses. *Physical Review Letters*, **2010**, 105, 144504	7.4	36
82	Uncertainty quantification via random domain decomposition and probabilistic collocation on sparse grids. *Journal of Computational Physics*, **2010**, 229, 6995-7012	4.1	44
81	Probability density functions for advective-reactive transport in radial flow. *Stochastic Environmental Research and Risk Assessment*, **2010**, 24, 985-992	3.5	20
80	On the use of analytical solutions to design pumping tests in leaky aquifers connected to a stream. *Journal of Hydrology*, **2010**, 381, 341-351	6	6
79	Random walk particle tracking simulations of non-Fickian transport in heterogeneous media. *Journal of Computational Physics*, **2010**, 229, 4304-4314	4.1	40
78	Closure to Stream Depletion by Groundwater Pumping in Leaky Aquifers by Vitaly A. Zlotnik and Daniel M. Tartakovsky. *Journal of Hydrologic Engineering - ASCE*, **2009**, 14, 889-891	1.8	1
77	Optimal design of pumping tests in leaky aquifers for stream depletion analysis. *Journal of Hydrology*, **2009**, 375, 554-565	6	8
76	Delineation of geological facies from poorly differentiated data. *Advances in Water Resources*, **2009**, 32, 225-230	4.7	5
75	Abrupt-Interface Solution for Carbon Dioxide Injection into Porous Media. *Transport in Porous Media*, **2009**, 79, 15-27	3.1	67
74	Response to Comments on Abrupt-Interface Solution for Carbon Dioxide Injection into Porous Media by Dentz and Tartakovsky (2008) by Lu et al.. *Transport in Porous Media*, **2009**, 79, 39-41	3.1	9
73	Perspective on theories of non-Fickian transport in heterogeneous media. *Advances in Water Resources*, **2009**, 32, 670-680	4.7	280
72	On breakdown of macroscopic models of mixing-controlled heterogeneous reactions in porous media. *Advances in Water Resources*, **2009**, 32, 1664-1673	4.7	119
71	Effects of spatio-temporal variability of precipitation on contaminant migration in the vadose zone. *Geophysical Research Letters*, **2009**, 36,	4.9	7
70	Probability density functions for advective-reactive transport with uncertain reaction rates. *Water Resources Research*, **2009**, 45,	5.4	58
69	Probabilistic risk analysis of groundwater remediation strategies. *Water Resources Research*, **2009**, 45,	5.4	66
68	A reduced complexity model for probabilistic risk assessment of groundwater contamination. *Water Resources Research*, **2008**, 44,	5.4	20

67	Stochastic langevin model for flow and transport in porous media. *Physical Review Letters*, **2008**, 101, 044502	7.4	75
66	Hybrid Simulations of Reaction-Diffusion Systems in Porous Media. *SIAM Journal of Scientific Computing*, **2008**, 30, 2799-2816	2.6	65
65	Stream Depletion by Groundwater Pumping in Leaky Aquifers. *Journal of Hydrologic Engineering - ASCE*, **2008**, 13, 43-50	1.8	38
64	Uncertain Future of Hydrogeology. *Journal of Hydrologic Engineering - ASCE*, **2008**, 13, 37-39	1.8	29
63	Self-consistent four-point closure for transport in steady random flows. *Physical Review E*, **2008**, 77, 066307	3.7	21
62	Nonlinear localization of light in disordered optical fiber arrays. *Physical Review A*, **2008**, 77,	2.6	4
61	Hybrid numerical methods for multiscale simulations of subsurface biogeochemical processes. *Journal of Physics: Conference Series*, **2008**, 125, 012054	0.3	1
60	Hydrogeophysical Approach for Identification of Layered Structures of the Vadose Zone from Electrical Resistivity Data. *Vadose Zone Journal*, **2008**, 7, 1253-1260	2.7	3
59	Probabilistic risk analysis of building contamination. *Indoor Air*, **2008**, 18, 351-64	5.4	4
58	Machine Learning Methods for Inverse Modeling **2008**, 117-125		1
57	Ergodicity of pumping tests. *Water Resources Research*, **2007**, 43,	5.4	11
56	Probabilistic risk analysis in subsurface hydrology. *Geophysical Research Letters*, **2007**, 34,	4.9	75
55	Type curve interpretation of late-time pumping test data in randomly heterogeneous aquifers. *Water Resources Research*, **2007**, 43,	5.4	49
54	Nearest-neighbor classification for facies delineation. *Water Resources Research*, **2007**, 43,	5.4	10
53	Quantification of uncertainty in geochemical reactions. *Water Resources Research*, **2007**, 43,	5.4	24
52	Analytical models of contaminant transport in coastal aquifers. *Advances in Water Resources*, **2007**, 30, 1962-1972	4.7	32
51	Hybrid numerical methods for multiscale simulations of subsurface biogeochemical processes. *Journal of Physics: Conference Series*, **2007**, 78, 012063	0.3	10
50	Stochastic analysis of transport in tubes with rough walls. *Journal of Computational Physics*, **2006**, 217, 248-259	4.1	68

#	Reference		
49	Numerical Methods for Differential Equations in Random Domains. *SIAM Journal of Scientific Computing*, **2006**, 28, 1167-1185	2.6	102
48	Delay mechanisms of non-Fickian transport in heterogeneous media. *Geophysical Research Letters*, **2006**, 33,	4.9	24
47	Variable-density flow in porous media. *Journal of Fluid Mechanics*, **2006**, 561, 209	3.7	53
46	Asymptotic analysis of cross-hole hydraulic tests in fractured granite. *Ground Water*, **2006**, 44, 555-63	2.4	24
45	Multivariate sensitivity analysis of saturated flow through simulated highly heterogeneous groundwater aquifers. *Journal of Computational Physics*, **2006**, 217, 166-175	4.1	28
44	Subsurface characterization with support vector machines. *IEEE Transactions on Geoscience and Remote Sensing*, **2006**, 44, 47-57	8.1	50
43	Noise in algorithm refinement methods. *Computing in Science and Engineering*, **2005**, 7, 32-38	1.5	12
42	Asymptotic analysis of three-dimensional pressure interference tests: A point source solution. *Water Resources Research*, **2005**, 41,	5.4	13
41	Algorithm refinement for stochastic partial differential equations: II. Correlated systems. *Journal of Computational Physics*, **2005**, 207, 769-787	4.1	23
40	Interface dynamics in randomly heterogeneous porous media. *Advances in Water Resources*, **2005**, 28, 393-403	4.7	12
39	Asymptotic analysis of cross-hole pneumatic injection tests in unsaturated fractured tuff. *Advances in Water Resources*, **2005**, 28, 1217-1229	4.7	15
38	Transient Flow in a Heterogeneous Vadose Zone with Uncertain Parameters. *Vadose Zone Journal*, **2004**, 3, 154-163	2.7	15
37	Nonlocal and localized analyses of conditional mean transient flow in bounded, randomly heterogeneous porous media. *Water Resources Research*, **2004**, 40,	5.4	39
36	Delineation of geologic facies with statistical learning theory. *Geophysical Research Letters*, **2004**, 31,	4.9	16
35	Probabilistic reconstruction of geologic facies. *Journal of Hydrology*, **2004**, 294, 57-67	6	36
34	Effective Properties of Random Composites. *SIAM Journal of Scientific Computing*, **2004**, 26, 625-635	2.6	6
33	A Two-Scale Nonperturbative Approach to Uncertainty Analysis of Diffusion in Random Composites. *Multiscale Modeling and Simulation*, **2004**, 2, 662-674	1.8	22
32	Uncertainty quantification for flow in highly heterogeneous porous media. *Developments in Water Science*, **2004**, 695-703		4

31	A Geostatistical Model for Distribution of Facies in Highly Heterogeneous Aquifers **2004**, 211-222		
30	Transient Flow in a Heterogeneous Vadose Zone with Uncertain Parameters. *Vadose Zone Journal*, **2004**, 3, 154	2.7	
29	Transient Flow in a Heterogeneous Vadose Zone with Uncertain Parameters. *Vadose Zone Journal*, **2004**, 3, 154-163	2.7	
28	Algorithm Refinement for Stochastic Partial Differential Equations. *AIP Conference Proceedings*, **2003**,	0	2
27	Moment Differential Equations for Flow in Highly Heterogeneous Porous Media. *Surveys in Geophysics*, **2003**, 24, 81-106	7.6	75
26	Random domain decomposition for flow in heterogeneous stratified aquifers. *Stochastic Environmental Research and Risk Assessment*, **2003**, 17, 394-407	3.5	23
25	Stochastic analysis of effective rate constant for heterogeneous reactions. *Stochastic Environmental Research and Risk Assessment*, **2003**, 17, 419-429	3.5	52
24	Stochastic averaging of nonlinear flows in heterogeneous porous media. *Journal of Fluid Mechanics*, **2003**, 492, 47-62	3.7	46
23	Unsaturated flow in heterogeneous soils with spatially distributed uncertain hydraulic parameters. *Journal of Hydrology*, **2003**, 275, 182-193	6	28
22	Algorithm Refinement for Stochastic Partial Differential Equations. *Journal of Computational Physics*, **2002**, 182, 47-66	4.1	48
21	Localization of Mean Flow and Apparent Transmissivity Tensor for Bounded Randomly Heterogeneous Aquifers. *Transport in Porous Media*, **2002**, 49, 41-58	3.1	18
20	Numerical solutions of moment equations for flow in heterogeneous composite aquifers. *Water Resources Research*, **2002**, 38, 13-1-13-8	5.4	37
19	Conditional moment analysis of steady state unsaturated flow in bounded, randomly heterogeneous soils. *Water Resources Research*, **2002**, 38, 9-1-9-15	5.4	16
18	Groundwater flow in heterogeneous composite aquifers. *Water Resources Research*, **2002**, 38, 23-1-23-11	5.4	70
17	Theoretical interpretation of a pronounced permeability scale effect in unsaturated fractured tuff. *Water Resources Research*, **2002**, 38, 28-1-28-8	5.4	41
16	Prior mapping for nonlinear flows in random environments. *Physical Review E*, **2001**, 64, 035302	2.4	5
15	Unsaturated hydraulic conductivity function based on a soil fragmentation process. *Water Resources Research*, **2001**, 37, 1309-1312	5.4	29
14	Dynamics of Free Surfaces in Random Porous Media. *SIAM Journal on Applied Mathematics*, **2001**, 61, 1857-1876	1.8	20

13	An analytical solution for two-dimensional contaminant transport during groundwater extraction. *Journal of Contaminant Hydrology*, **2000**, 42, 273-283	3.9	13
12	Mean Flow in composite porous media. *Geophysical Research Letters*, **2000**, 27, 1759-1762	4.9	55
11	Some aspects of head-variance evaluation. *Annals of Software Engineering*, **1999**, 3, 89-92		2
10	Conditional stochastic averaging of steady state unsaturated flow by means of Kirchhoff Transformation. *Water Resources Research*, **1999**, 35, 731-745	5.4	50
9	Extension of ⬛ransient flow in bounded randomly heterogeneous domains: 1, Exact conditional moment equations and recursive approximations⬛*Water Resources Research*, **1999**, 35, 1921-1925	5.4	16
8	Anisotropy, lacunarity, and upscaled conductivity and its autocovariance in multiscale random fields with truncated power variograms. *Water Resources Research*, **1999**, 35, 2891-2908	5.4	52
7	Transient effective hydraulic conductivities under slowly and rapidly varying mean gradients in bounded three-dimensional random media. *Water Resources Research*, **1998**, 34, 21-32	5.4	48
6	Transient flow in bounded randomly heterogeneous domains: 2. Localization of conditional mean equations and temporal nonlocality effects. *Water Resources Research*, **1998**, 34, 13-20	5.4	28
5	Transient flow in bounded randomly heterogeneous domains: 1. Exact conditional moment equations and recursive approximations. *Water Resources Research*, **1998**, 34, 1-12	5.4	81
4	Dynamics of wetting fronts in porous media. *Physical Review E*, **1998**, 58, R5245-R5248	2.4	13
3	An Analytical Solution for Contaminant Transport in nonuniform Flow. *Transport in Porous Media*, **1997**, 27, 85-97	3.1	8
2	From fluid flow to coupled processes in fractured rock: recent advances and new frontiers. *Reviews of Geophysics*, e2021RG000744	23.1	1
1	Autonomous learning of nonlocal stochastic neuron dynamics. *Cognitive Neurodynamics*, 1	4.2	1