Daniel M Tartakovsky

List of Publications by Citations

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	Perspective on theories of non-Fickian transport in heterogeneous media. *Advances in Water Resources*, **2009**, 32, 670-680	4.7	280
209	Applicability regimes for macroscopic models of reactive transport in porous media. *Journal of Contaminant Hydrology*, **2011**, 120-121, 18-26	3.9	132
208	On breakdown of macroscopic models of mixing-controlled heterogeneous reactions in porous media. *Advances in Water Resources*, **2009**, 32, 1664-1673	4.7	119
207	Assessment and management of risk in subsurface hydrology: A review and perspective. *Advances in Water Resources*, **2013**, 51, 247-260	4.7	118
206	Numerical Methods for Differential Equations in Random Domains. *SIAM Journal of Scientific Computing*, **2006**, 28, 1167-1185	2.6	102
205	Hybrid models of reactive transport in porous and fractured media. *Advances in Water Resources*, **2011**, 34, 1140-1150	4.7	94
204	Anomalous diffusion of single particles in cytoplasm. *Biophysical Journal*, **2013**, 104, 1652-60	2.9	82
203	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
202	Stochastic langevin model for flow and transport in porous media. *Physical Review Letters*, **2008**, 101, 044502	7.4	75
201	Probabilistic risk analysis in subsurface hydrology. *Geophysical Research Letters*, **2007**, 34,	4.9	75
200	Moment Differential Equations for Flow in Highly Heterogeneous Porous Media. *Surveys in Geophysics*, **2003**, 24, 81-106	7.6	75
199	Groundwater flow in heterogeneous composite aquifers. *Water Resources Research*, **2002**, 38, 23-1-23-11	5.4	70
198	Stochastic analysis of transport in tubes with rough walls. *Journal of Computational Physics*, **2006**, 217, 248-259	4.1	68
197	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
196	Abrupt-Interface Solution for Carbon Dioxide Injection into Porous Media. *Transport in Porous Media*, **2009**, 79, 15-27	3.1	67
195	Semi-analytical solutions for solute transport and exchange in fractured porous media. *Water Resources Research*, **2012**, 48,	5.4	66
194	Probabilistic risk analysis of groundwater remediation strategies. *Water Resources Research*, **2009**, 45,	5.4	66

193	Hybrid Simulations of Reaction-Diffusion Systems in Porous Media. *SIAM Journal of Scientific Computing*, **2008**, 30, 2799-2816	2.6	65
192	Probability density functions for advective-reactive transport with uncertain reaction rates. *Water Resources Research*, **2009**, 45,	5.4	58
191	Mean Flow in composite porous media. *Geophysical Research Letters*, **2000**, 27, 1759-1762	4.9	55
190	Exact PDF equations and closure approximations for advective-reactive transport. *Journal of Computational Physics*, **2013**, 243, 323-343	4.1	54
189	Variable-density flow in porous media. *Journal of Fluid Mechanics*, **2006**, 561, 209	3.7	53
188	Stochastic analysis of effective rate constant for heterogeneous reactions. *Stochastic Environmental Research and Risk Assessment*, **2003**, 17, 419-429	3.5	52
187	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
186	Subsurface characterization with support vector machines. *IEEE Transactions on Geoscience and Remote Sensing*, **2006**, 44, 47-57	8.1	50
185	Conditional stochastic averaging of steady state unsaturated flow by means of Kirchhoff Transformation. *Water Resources Research*, **1999**, 35, 731-745	5.4	50
184	Non-Newtonian flow of blood in arterioles: consequences for wall shear stress measurements. *Microcirculation*, **2014**, 21, 628-39	2.9	49
183	Type curve interpretation of late-time pumping test data in randomly heterogeneous aquifers. *Water Resources Research*, **2007**, 43,	5.4	49
182	Algorithm Refinement for Stochastic Partial Differential Equations. *Journal of Computational Physics*, **2002**, 182, 47-66	4.1	48
181	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
180	Shear-Induced Nitric Oxide Production by Endothelial Cells. *Biophysical Journal*, **2016**, 111, 208-21	2.9	46
179	Stochastic averaging of nonlinear flows in heterogeneous porous media. *Journal of Fluid Mechanics*, **2003**, 492, 47-62	3.7	46
178	Uncertainty quantification via random domain decomposition and probabilistic collocation on sparse grids. *Journal of Computational Physics*, **2010**, 229, 6995-7012	4.1	44
177	Probabilistic analysis of groundwater-related risks at subsurface excavation sites. *Engineering Geology*, **2012**, 125, 35-44	6	43
176	Theoretical interpretation of a pronounced permeability scale effect in unsaturated fractured tuff. *Water Resources Research*, **2002**, 38, 28-1-28-8	5.4	41

175	Random walk particle tracking simulations of non-Fickian transport in heterogeneous media. *Journal of Computational Physics*, **2010**, 229, 4304-4314	4.1	40
174	Nonlocal and localized analyses of conditional mean transient flow in bounded, randomly heterogeneous porous media. *Water Resources Research*, **2004**, 40,	5.4	39
173	Probability density functions for passive scalars dispersed in random velocity fields. *Geophysical Research Letters*, **2010**, 37, n/a-n/a	4.9	38
172	Stream Depletion by Groundwater Pumping in Leaky Aquifers. *Journal of Hydrologic Engineering - ASCE*, **2008**, 13, 43-50	1.8	38
171	Numerical solutions of moment equations for flow in heterogeneous composite aquifers. *Water Resources Research*, **2002**, 38, 13-1-13-8	5.4	37
170	Elastic response of carbon nanotube forests to aerodynamic stresses. *Physical Review Letters*, **2010**, 105, 144504	7.4	36
169	Probabilistic reconstruction of geologic facies. *Journal of Hydrology*, **2004**, 294, 57-67	6	36
168	The effect of small changes in hematocrit on nitric oxide transport in arterioles. *Antioxidants and Redox Signaling*, **2011**, 14, 175-85	8.4	35
167	Analytical models of heat conduction in fractured rocks. *Journal of Geophysical Research: Solid Earth* , **2014**, 119, 83-98	3.6	33
166	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
165	Analytical models of contaminant transport in coastal aquifers. *Advances in Water Resources*, **2007**, 30, 1962-1972	4.7	32
164	Diffusion in Porous Media: Phenomena and Mechanisms. *Transport in Porous Media*, **2019**, 130, 105-127	3.1	30
163	The method of distributions for dispersive transport in porous media with uncertain hydraulic properties. *Water Resources Research*, **2016**, 52, 4700-4712	5.4	30
162	Uncertain Future of Hydrogeology. *Journal of Hydrologic Engineering - ASCE*, **2008**, 13, 37-39	1.8	29
161	Unsaturated hydraulic conductivity function based on a soil fragmentation process. *Water Resources Research*, **2001**, 37, 1309-1312	5.4	29
160	Particle-tracking simulations of anomalous transport in hierarchically fractured rocks. *Computers and Geosciences*, **2013**, 50, 52-58	4.5	28
159	Multivariate sensitivity analysis of saturated flow through simulated highly heterogeneous groundwater aquifers. *Journal of Computational Physics*, **2006**, 217, 166-175	4.1	28
158	Unsaturated flow in heterogeneous soils with spatially distributed uncertain hydraulic parameters. *Journal of Hydrology*, **2003**, 275, 182-193	6	28

157	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
156	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
155	Quantification of uncertainty in geochemical reactions. *Water Resources Research*, **2007**, 43,	5.4	24
154	Delay mechanisms of non-Fickian transport in heterogeneous media. *Geophysical Research Letters*, **2006**, 33,	4.9	24
153	Asymptotic analysis of cross-hole hydraulic tests in fractured granite. *Ground Water*, **2006**, 44, 555-63	2.4	24
152	Random domain decomposition for flow in heterogeneous stratified aquifers. *Stochastic Environmental Research and Risk Assessment*, **2003**, 17, 394-407	3.5	23
151	Algorithm refinement for stochastic partial differential equations: II. Correlated systems. *Journal of Computational Physics*, **2005**, 207, 769-787	4.1	23
150	Probability density function method for Langevin equations with colored noise. *Physical Review Letters*, **2013**, 110, 140602	7.4	22
149	Uncertainty quantification in kinematic-wave models. *Journal of Computational Physics*, **2012**, 231, 7868-7880	4.1	22
148	A Two-Scale Nonperturbative Approach to Uncertainty Analysis of Diffusion in Random Composites. *Multiscale Modeling and Simulation*, **2004**, 2, 662-674	1.8	22
147	Effective Ion Diffusion in Charged Nanoporous Materials. *Journal of the Electrochemical Society*, **2017**, 164, E53-E61	3.9	21
146	Probabilistic analysis of maintenance and operation of artificial recharge ponds. *Advances in Water Resources*, **2012**, 36, 23-35	4.7	21
145	CDF Solutions of Buckley--Leverett Equation with Uncertain Parameters. *Multiscale Modeling and Simulation*, **2013**, 11, 118-133	1.8	21
144	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
143	Self-consistent four-point closure for transport in steady random flows. *Physical Review E*, **2008**, 77, 066307	2.7	21
142	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
141	Probability density functions for advective-reactive transport in radial flow. *Stochastic Environmental Research and Risk Assessment*, **2010**, 24, 985-992	3.5	20
140	A reduced complexity model for probabilistic risk assessment of groundwater contamination. *Water Resources Research*, **2008**, 44,	5.4	20

139	Dynamics of Free Surfaces in Random Porous Media. *SIAM Journal on Applied Mathematics*, **2001**, 61, 1857-1876	1.8	20
138	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
137	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
136	Localization of Mean Flow and Apparent Transmissivity Tensor for Bounded Randomly Heterogeneous Aquifers. *Transport in Porous Media*, **2002**, 49, 41-58	3.1	18
135	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
134	Hematocrit dispersion in asymmetrically bifurcating vascular networks. *American Journal of Physiology - Heart and Circulatory Physiology*, **2014**, 307, H1576-86	5.2	16
133	Impact of endothelium roughness on blood flow. *Journal of Theoretical Biology*, **2012**, 300, 152-60	2.3	16
132	Stochastic hybrid modeling of intracellular calcium dynamics. *Journal of Chemical Physics*, **2010**, 133, 165101	3.9	16
131	Delineation of geologic facies with statistical learning theory. *Geophysical Research Letters*, **2004**, 31,	4.9	16
130	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
129	Extension of Transient flow in bounded randomly heterogeneous domains: 1, Exact conditional moment equations and recursive approximations *Water Resources Research*, **1999**, 35, 1921-1925	5.4	16
128	A New Physiological Boundary Condition for Hemodynamics. *SIAM Journal on Applied Mathematics*, **2013**, 73, 1203-1223	1.8	15
127	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
126	Transient Flow in a Heterogeneous Vadose Zone with Uncertain Parameters. *Vadose Zone Journal*, **2004**, 3, 154-163	2.7	15
125	Asymptotic analysis of cross-hole pneumatic injection tests in unsaturated fractured tuff. *Advances in Water Resources*, **2005**, 28, 1217-1229	4.7	15
124	Stochastic Collocation Methods for Nonlinear Parabolic Equations with Random Coefficients. *SIAM-ASA Journal on Uncertainty Quantification*, **2016**, 4, 475-494	1.8	15
123	Method of Distributions for Water Hammer Equations With Uncertain Parameters. *Water Resources Research*, **2018**, 54, 9398-9411	5.4	15
122	Particle Methods for Heat Transfer in Fractured Media. *Transport in Porous Media*, **2016**, 115, 311-326	3.1	14

121	Reduced complexity models for probabilistic forecasting of infiltration rates. *Advances in Water Resources*, **2011**, 34, 375-382	4.7	14
120	Distribution-Based Global Sensitivity Analysis in Hydrology. *Water Resources Research*, **2019**, 55, 8708-8720	5.4	13
119	Hybrid modeling of heterogeneous geochemical reactions in fractured porous media. *Water Resources Research*, **2013**, 49, 7945-7956	5.4	13
118	Asymptotic analysis of three-dimensional pressure interference tests: A point source solution. *Water Resources Research*, **2005**, 41,	5.4	13
117	An analytical solution for two-dimensional contaminant transport during groundwater extraction. *Journal of Contaminant Hydrology*, **2000**, 42, 273-283	3.9	13
116	Dynamics of wetting fronts in porous media. *Physical Review E*, **1998**, 58, R5245-R5248	2.4	13
115	Temperature fields induced by geothermal devices. *Energy*, **2015**, 93, 1896-1903	7.9	12
114	Stochastic operator-splitting method for reaction-diffusion systems. *Journal of Chemical Physics*, **2012**, 137, 184102	3.9	12
113	Noise in algorithm refinement methods. *Computing in Science and Engineering*, **2005**, 7, 32-38	1.5	12
112	Interface dynamics in randomly heterogeneous porous media. *Advances in Water Resources*, **2005**, 28, 393-403	4.7	12
111	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
110	Bayesian Update and Method of Distributions: Application to Leak Detection in Transmission Mains. *Water Resources Research*, **2020**, 56, e2019WR025879	5.4	11
109	Lagrangian dynamic mode decomposition for construction of reduced-order models of advection-dominated phenomena. *Journal of Computational Physics*, **2020**, 407, 109229	4.1	11
108	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
107	Ergodicity of pumping tests. *Water Resources Research*, **2007**, 43,	5.4	11
106	Prediction Accuracy of Dynamic Mode Decomposition. *SIAM Journal of Scientific Computing*, **2020**, 42, A1639-A1662	2.6	10
105	Nearest-neighbor classification for facies delineation. *Water Resources Research*, **2007**, 43,	5.4	10
104	Hybrid numerical methods for multiscale simulations of subsurface biogeochemical processes. *Journal of Physics: Conference Series*, **2007**, 78, 012063	0.3	10

103	Estimation of distributions via multilevel Monte Carlo with stratified sampling. *Journal of Computational Physics*, **2020**, 419, 109572	4.1	10
102	A boundary-layer solution for flow at the soil-root interface. *Journal of Mathematical Biology*, **2015**, 70, 1645-68	2	9
101	Impact of Hydrogeological Uncertainty on Estimation of Environmental Risks Posed by Hydrocarbon Transportation Networks. *Water Resources Research*, **2017**, 53, 8686-8697	5.4	9
100	Impact of Data Assimilation on Cost-Accuracy Tradeoff in Multifidelity Models. *SIAM-ASA Journal on Uncertainty Quantification*, **2015**, 3, 954-968	1.8	9
99	Noise propagation in hybrid models of nonlinear systems: The Ginzburg Landau equation. *Journal of Computational Physics*, **2014**, 262, 313-324	4.1	9
98	PROBABILISTIC PREDICTIONS OF INFILTRATION INTO HETEROGENEOUS MEDIA WITH UNCERTAIN HYDRAULIC PARAMETERS **2011**, 1, 35-47		9
97	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
96	Analytical model for gravity segregation of horizontal multiphase flow in porous media. *Physics of Fluids*, **2020**, 32, 046602	4.4	9
95	Data-Informed Method of Distributions for Hyperbolic Conservation Laws. *SIAM Journal of Scientific Computing*, **2020**, 42, A559-A583	2.6	8
94	Causality and Bayesian Network PDEs for multiscale representations of porous media. *Journal of Computational Physics*, **2019**, 394, 658-678	4.1	8
93	Design of nanoporous materials with optimal sorption capacity. *Journal of Applied Physics*, **2015**, 117, 244304	2.5	8
92	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
91	Introduction to the special issue on uncertainty quantification and risk assessment. *Advances in Water Resources*, **2012**, 36, 1-2	4.7	8
90	Optimal design of pumping tests in leaky aquifers for stream depletion analysis. *Journal of Hydrology*, **2009**, 375, 554-565	6	8
89	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
88	Predicting vertical connectivity within an aquifer system. *Bayesian Analysis*, **2010**, 5,	2.3	8
87	An Analytical Solution for Contaminant Transport in nonuniform Flow. *Transport in Porous Media*, **1997**, 27, 85-97	3.1	8
86	Parallel tensor methods for high-dimensional linear PDEs. *Journal of Computational Physics*, **2018**, 375, 519-539	4.1	8

85	Estimation of Intrinsic Length Scales of Flow in Unsaturated Porous Media. *Water Resources Research*, **2017**, 53, 9980-9987	5.4	7
84	Linear functional minimization for inverse modeling. *Water Resources Research*, **2015**, 51, 4516-4531	5.4	7
83	Effects of spatio-temporal variability of precipitation on contaminant migration in the vadose zone. *Geophysical Research Letters*, **2009**, 36,	4.9	7
82	Simulating social-ecological systems: the Island Digital Ecosystem Avatars (IDEA) consortium. *GigaScience*, **2016**, 5, 14	7.6	7
81	A Hybrid Multiscale Model of Miscible Reactive Fronts. *Water Resources Research*, **2018**, 54, 61-71	5.4	6
80	Hydrodynamic dispersion in a tube with diffusive losses through its walls. *Journal of Fluid Mechanics* , **2018**, 837, 546-561	3.7	6
79	Information-Theoretic Approach to Bidirectional Scaling. *Water Resources Research*, **2018**, 54, 4916-4928	5.4	6
78	Data-driven models of groundwater salinization in coastal plains. *Journal of Hydrology*, **2015**, 531, 187-197	6	6
77	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
76	Effective Properties of Random Composites. *SIAM Journal of Scientific Computing*, **2004**, 26, 625-635	2.6	6
75	Learning on dynamic statistical manifolds. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2020**, 476, 20200213	2.4	6
74	Tensor methods for the Boltzmann-BGK equation. *Journal of Computational Physics*, **2020**, 421, 109744	4.1	6
73	Accelerated Multilevel Monte Carlo With Kernel-Based Smoothing and Latinized Stratification. *Water Resources Research*, **2020**, 56, e2019WR026984	5.4	6
72	Data-driven discovery of coarse-grained equations. *Journal of Computational Physics*, **2021**, 434, 110219	4.1	6
71	Probabilistic Forecast of Single-Phase Flow in Porous Media With Uncertain Properties. *Water Resources Research*, **2019**, 55, 8631-8645	5.4	6
70	Temperature estimation from current and voltage measurements in lithium-ion battery systems. *Journal of Energy Storage*, **2021**, 34, 102133	7.8	6
69	Method of Distributions for Quantification of Geologic Uncertainty in Flow Simulations. *Water Resources Research*, **2020**, 56, e2020WR027643	5.4	5
68	Nonlocal PDF methods for Langevin equations with colored noise. *Journal of Computational Physics*, **2018**, 367, 87-101	4.1	5

67	Efficient Multiscale Models of Polymer Assembly. *Biophysical Journal*, **2016**, 111, 185-96	2.9	5
66	Identifying transport behavior of single-molecule trajectories. *Biophysical Journal*, **2014**, 107, 2345-51	2.9	5
65	Delineation of geological facies from poorly differentiated data. *Advances in Water Resources*, **2009**, 32, 225-230	4.7	5
64	Prior mapping for nonlinear flows in random environments. *Physical Review E*, **2001**, 64, 035302	2.4	5
63	GINNs: Graph-Informed Neural Networks for multiscale physics. *Journal of Computational Physics*, **2021**, 433, 110192	4.1	5
62	Analytical models of axisymmetric reaction□diffusion phenomena in composite media. *International Journal of Heat and Mass Transfer*, **2016**, 99, 425-431	4.9	5
61	Effects of Hydraulic Soil Properties on Vegetation Pattern Formation in Sloping Landscapes. *Bulletin of Mathematical Biology*, **2017**, 79, 2773-2784	2.1	4
60	Global sensitivity analysis of multiscale properties of porous materials. *Journal of Applied Physics*, **2018**, 123, 075103	2.5	4
59	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
58	Conservative tightly-coupled simulations of stochastic multiscale systems. *Journal of Computational Physics*, **2016**, 313, 400-414	4.1	4
57	Probabilistic Forecasting of Nitrogen Dynamics in Hyporheic Zone. *Water Resources Research*, **2018**, 54, 4417-4431	5.4	4
56	Method of Distributions for Uncertainty Quantification **2015**, 1-22		4
55	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
54	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
53	Functional optical imaging at the microscopic level. *Journal of Biomedical Optics*, **2010**, 15, 011102	3.5	4
52	Nonlinear localization of light in disordered optical fiber arrays. *Physical Review A*, **2008**, 77,	2.6	4
51	Probabilistic risk analysis of building contamination. *Indoor Air*, **2008**, 18, 351-64	5.4	4
50	Uncertainty quantification for flow in highly heterogeneous porous media. *Developments in Water Science*, **2004**, 695-703		4

49	Stochastic self-tuning hybrid algorithm for reaction-diffusion systems. *Journal of Chemical Physics*, **2019**, 151, 244117	3.9	4
48	Efficient gHMC Reconstruction of Contaminant Release History. *Frontiers in Environmental Science*, **2019**, 7,	4.8	4
47	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
46	On the use of reverse Brownian motion to accelerate hybrid simulations. *Journal of Computational Physics*, **2017**, 334, 68-80	4.1	3
45	Optimal design of nanoporous materials for electrochemical devices. *Applied Physics Letters*, **2017**, 110, 143103	3.4	3
44	A tightly-coupled domain-decomposition approach for highly nonlinear stochastic multiphysics systems. *Journal of Computational Physics*, **2017**, 330, 884-901	4.1	3
43	An analytical model for carrier-facilitated solute transport in weakly heterogeneous porous media. *Applied Mathematical Modelling*, **2017**, 44, 261-273	4.5	3
42	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
41	Microstructural heterogeneity drives reaction initiation in granular materials. *Applied Physics Letters*, **2019**, 114, 254101	3.4	3
40	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
39	COMPUTING GREEN'S FUNCTIONS FOR FLOW IN HETEROGENEOUS COMPOSITE MEDIA **2013**, 3, 39-46		3
38	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
37	Method of Distributions for Uncertainty Quantification **2017**, 763-783		3
36	Mutual information for explainable deep learning of multiscale systems. *Journal of Computational Physics*, **2021**, 444, 110551	4.1	3
35	Critical Behavior in Double-Exchange Ferromagnets of Pr0.6Sr0.4MnO3 Nanoparticles. *IEEE Transactions on Magnetics*, **2015**, 51, 1-4	2	2
34	Critical behavior and magnetocaloric effect of Pr1⊠CaxMnO3. *Journal of Applied Physics*, **2015**, 117, 17D122	2.5	2
33	Algorithm Refinement for Stochastic Partial Differential Equations. *AIP Conference Proceedings*, **2003**,	0	2
32	Some aspects of head-variance evaluation. *Annals of Software Engineering*, **1999**, 3, 89-92		2

31	Resource-Constrained Model Selection for Uncertainty Propagation and Data Assimilation. *SIAM-ASA Journal on Uncertainty Quantification*, **2020**, 8, 1118-1138	1.8	2
30	Solute dispersion in bifurcating networks. *Journal of Fluid Mechanics*, **2020**, 901,	3.7	2
29	Hybrid models of chemotaxis with application to leukocyte migration. *Journal of Mathematical Biology*, **2021**, 82, 23	2	2
28	Coexistence of short- and long-range ferromagnetic order in nanocrystalline Fe2Mn1⊡u 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
27	Structural and Magnetic Properties Control of Pr0.7Ba0.3MnO3 with Sr-Doping. *Physics of the Solid State*, **2020**, 62, 845-850	0.8	1
26	The frequency domain approach to analyse field-scale miscible flow transport experiments in the soils. *Biosystems Engineering*, **2018**, 168, 96-104	4.8	1
25	Noise-driven interfaces and their macroscopic representation. *Physical Review E*, **2016**, 94, 052802	2.4	1
24	Impact of stochastic fluctuations in the cell free layer on nitric oxide bioavailability. *Frontiers in Computational Neuroscience*, **2015**, 9, 131	3.5	1
23	Closure to ⬚tream 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
22	Hybrid numerical methods for multiscale simulations of subsurface biogeochemical processes. *Journal of Physics: Conference Series*, **2008**, 125, 012054	0.3	1
21	From fluid flow to coupled processes in fractured rock: recent advances and new frontiers. *Reviews of Geophysics*,e2021RG000744	23.1	1
20	Autonomous learning of nonlocal stochastic neuron dynamics. *Cognitive Neurodynamics*,1	4.2	1
19	Machine Learning Methods for Inverse Modeling **2008**, 117-125		1
18	Thermal Experiments for Fractured Rock Characterization: Theoretical Analysis and Inverse Modeling. *Water Resources Research*, **2021**, 57, e2021WR030608	5.4	1
17	Modified immersed boundary method for flows over randomly rough surfaces. *Journal of Computational Physics*, **2020**, 406, 109195	4.1	1
16	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
15	Estimation of Evapotranspiration Rates and Root Water Uptake Profiles From Soil Moisture Sensor Array Data. *Water Resources Research*, **2021**, 57, e2021WR030747	5.4	0
14	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

List of Publications

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