

# Daniel M Tartakovsky

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1926062/publications.pdf>

Version: 2024-02-01

217  
papers

5,629  
citations

71102

41  
h-index

110387

64  
g-index

228  
all docs

228  
docs citations

228  
times ranked

3600  
citing authors

#	ARTICLE	IF	CITATIONS
1	Perspective on theories of non-Fickian transport in heterogeneous media. <i>Advances in Water Resources</i> , 2009, 32, 670-680.	3.8	329
2	Applicability regimes for macroscopic models of reactive transport in porous media. <i>Journal of Contaminant Hydrology</i> , 2011, 120-121, 18-26.	3.3	163
3	Assessment and management of risk in subsurface hydrology: A review and perspective. <i>Advances in Water Resources</i> , 2013, 51, 247-260.	3.8	139
4	On breakdown of macroscopic models of mixing-controlled heterogeneous reactions in porous media. <i>Advances in Water Resources</i> , 2009, 32, 1664-1673.	3.8	133
5	Numerical Methods for Differential Equations in Random Domains. <i>SIAM Journal of Scientific Computing</i> , 2006, 28, 1167-1185.	2.8	120
6	Hybrid models of reactive transport in porous and fractured media. <i>Advances in Water Resources</i> , 2011, 34, 1140-1150.	3.8	119
7	Anomalous Diffusion of Single Particles in Cytoplasm. <i>Biophysical Journal</i> , 2013, 104, 1652-1660.	0.5	111
8	Transient flow in bounded randomly heterogeneous domains: 1. Exact conditional moment equations and recursive approximations. <i>Water Resources Research</i> , 1998, 34, 1-12.	4.2	98
9	Semi-analytical solutions for solute transport and exchange in fractured porous media. <i>Water Resources Research</i> , 2012, 48, .	4.2	88
10	Shear-Induced Nitric Oxide Production by Endothelial Cells. <i>Biophysical Journal</i> , 2016, 111, 208-221.	0.5	85
11	Groundwater flow in heterogeneous composite aquifers. <i>Water Resources Research</i> , 2002, 38, 23-1-23-11.	4.2	83
12	Moment Differential Equations for Flow in Highly Heterogeneous Porous Media. <i>Surveys in Geophysics</i> , 2003, 24, 81-106.	4.6	83
13	Probabilistic risk analysis in subsurface hydrology. <i>Geophysical Research Letters</i> , 2007, 34, .	4.0	83
14	Stochastic Langevin Model for Flow and Transport in Porous Media. <i>Physical Review Letters</i> , 2008, 101, 044502.	7.8	81
15	PDF equations for advective reactive transport in heterogeneous porous media with uncertain properties. <i>Journal of Contaminant Hydrology</i> , 2011, 120-121, 129-140.	3.3	80
16	Stochastic analysis of transport in tubes with rough walls. <i>Journal of Computational Physics</i> , 2006, 217, 248-259.	3.8	75
17	Hybrid Simulations of Reaction-Diffusion Systems in Porous Media. <i>SIAM Journal of Scientific Computing</i> , 2008, 30, 2799-2816.	2.8	74
18	Abrupt-Interface Solution for Carbon Dioxide Injection into Porous Media. <i>Transport in Porous Media</i> , 2009, 79, 15-27.	2.6	73

#	ARTICLE	IF	CITATIONS
19	Probabilistic risk analysis of groundwater remediation strategies. <i>Water Resources Research</i> , 2009, 45, .	4.2	72
20	Diffusion in Porous Media: Phenomena and Mechanisms. <i>Transport in Porous Media</i> , 2019, 130, 105-127.	2.6	72
21	Non-Newtonian Flow of Blood in Arterioles: Consequences for Wall Shear Stress Measurements. <i>Microcirculation</i> , 2014, 21, 628-639.	1.8	70
22	Conditional stochastic averaging of steady state unsaturated flow by means of Kirchhoff Transformation. <i>Water Resources Research</i> , 1999, 35, 731-745.	4.2	67
23	Variable-density flow in porous media. <i>Journal of Fluid Mechanics</i> , 2006, 561, 209.	3.4	63
24	Mean Flow in composite porous media. <i>Geophysical Research Letters</i> , 2000, 27, 1759-1762.	4.0	61
25	From Fluid Flow to Coupled Processes in Fractured Rock: Recent Advances and New Frontiers. <i>Reviews of Geophysics</i> , 2022, 60, e2021RG000744.	23.0	61
26	Transient effective hydraulic conductivities under slowly and rapidly varying mean gradients in bounded three-dimensional random media. <i>Water Resources Research</i> , 1998, 34, 21-32.	4.2	60
27	Probability density functions for advective-reactive transport with uncertain reaction rates. <i>Water Resources Research</i> , 2009, 45, .	4.2	59
28	Anisotropy, lacunarity, and upscaled conductivity and its autocovariance in multiscale random fields with truncated power variograms. <i>Water Resources Research</i> , 1999, 35, 2891-2908.	4.2	58
29	Exact PDF equations and closure approximations for advective-reactive transport. <i>Journal of Computational Physics</i> , 2013, 243, 323-343.	3.8	58
30	Subsurface characterization with support vector machines. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2006, 44, 47-57.	6.3	56
31	Type curve interpretation of late-time pumping test data in randomly heterogeneous aquifers. <i>Water Resources Research</i> , 2007, 43, .	4.2	56
32	Stochastic analysis of effective rate constant for heterogeneous reactions. <i>Stochastic Environmental Research and Risk Assessment</i> , 2003, 17, 419-429.	4.0	55
33	Algorithm Refinement for Stochastic Partial Differential Equations. <i>Journal of Computational Physics</i> , 2002, 182, 47-66.	3.8	53
34	Vegetation Pattern Formation Due to Interactions Between Water Availability and Toxicity in Plant-Soil Feedback. <i>Bulletin of Mathematical Biology</i> , 2014, 76, 2866-2883.	1.9	51
35	Theoretical interpretation of a pronounced permeability scale effect in unsaturated fractured tuff. <i>Water Resources Research</i> , 2002, 38, 28-1-28-8.	4.2	49
36	Stochastic averaging of nonlinear flows in heterogeneous porous media. <i>Journal of Fluid Mechanics</i> , 2003, 492, 47-62.	3.4	49

#	ARTICLE	IF	CITATIONS
37	Probabilistic analysis of groundwater-related risks at subsurface excavation sites. <i>Engineering Geology</i> , 2012, 125, 35-44.	6.3	49
38	Uncertainty quantification via random domain decomposition and probabilistic collocation on sparse grids. <i>Journal of Computational Physics</i> , 2010, 229, 6995-7012.	3.8	48
39	Stream Depletion by Groundwater Pumping in Leaky Aquifers. <i>Journal of Hydrologic Engineering - ASCE</i> , 2008, 13, 43-50.	1.9	46
40	Numerical solutions of moment equations for flow in heterogeneous composite aquifers. <i>Water Resources Research</i> , 2002, 38, 13-1-13-8.	4.2	44
41	Nonlocal and localized analyses of conditional mean transient flow in bounded, randomly heterogeneous porous media. <i>Water Resources Research</i> , 2004, 40, .	4.2	43
42	Probability density functions for passive scalars dispersed in random velocity fields. <i>Geophysical Research Letters</i> , 2010, 37, .	4.0	43
43	Analytical models of heat conduction in fractured rocks. <i>Journal of Geophysical Research: Solid Earth</i> , 2014, 119, 83-98.	3.4	43
44	The Effect of Small Changes in Hematocrit on Nitric Oxide Transport in Arterioles. <i>Antioxidants and Redox Signaling</i> , 2011, 14, 175-185.	5.4	42
45	Probabilistic reconstruction of geologic facies. <i>Journal of Hydrology</i> , 2004, 294, 57-67.	5.4	41
46	Random walk particle tracking simulations of non-Fickian transport in heterogeneous media. <i>Journal of Computational Physics</i> , 2010, 229, 4304-4314.	3.8	41
47	Unsaturated flow in heterogeneous soils with spatially distributed uncertain hydraulic parameters. <i>Journal of Hydrology</i> , 2003, 275, 182-193.	5.4	38
48	Particle-tracking simulations of anomalous transport in hierarchically fractured rocks. <i>Computers and Geosciences</i> , 2013, 50, 52-58.	4.2	38
49	The method of distributions for dispersive transport in porous media with uncertain hydraulic properties. <i>Water Resources Research</i> , 2016, 52, 4700-4712.	4.2	38
50	Analytical models of contaminant transport in coastal aquifers. <i>Advances in Water Resources</i> , 2007, 30, 1962-1972.	3.8	37
51	Elastic Response of Carbon Nanotube Forests to Aerodynamic Stresses. <i>Physical Review Letters</i> , 2010, 105, 144504.	7.8	37
52	Unsaturated hydraulic conductivity function based on a soil fragmentation process. <i>Water Resources Research</i> , 2001, 37, 1309-1312.	4.2	36
53	Transient flow in bounded randomly heterogeneous domains: 2. Localization of conditional mean equations and temporal nonlocality effects. <i>Water Resources Research</i> , 1998, 34, 13-20.	4.2	35
54	Multivariate sensitivity analysis of saturated flow through simulated highly heterogeneous groundwater aquifers. <i>Journal of Computational Physics</i> , 2006, 217, 166-175.	3.8	33

#	ARTICLE	IF	CITATIONS
55	Autoregulation and mechanotransduction control the arteriolar response to small changes in hematocrit. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2012, 303, H1096-H1106.	3.2	32
56	Uncertain Future of Hydrogeology. <i>Journal of Hydrologic Engineering - ASCE</i> , 2008, 13, 37-39.	1.9	31
57	Prediction Accuracy of Dynamic Mode Decomposition. <i>SIAM Journal of Scientific Computing</i> , 2020, 42, A1639-A1662.	2.8	31
58	Lagrangian dynamic mode decomposition for construction of reduced-order models of advection-dominated phenomena. <i>Journal of Computational Physics</i> , 2020, 407, 109229.	3.8	31
59	Quantification of uncertainty in geochemical reactions. <i>Water Resources Research</i> , 2007, 43, .	4.2	30
60	Markov chain Monte Carlo with neural network surrogates: application to contaminant source identification. <i>Stochastic Environmental Research and Risk Assessment</i> , 2021, 35, 639-651.	4.0	30
61	Delay mechanisms of non-Fickian transport in heterogeneous media. <i>Geophysical Research Letters</i> , 2006, 33, .	4.0	28
62	Asymptotic Analysis of Cross-Hole Hydraulic Tests in Fractured Granite. <i>Ground Water</i> , 2006, 44, 555-563.	1.3	28
63	Posttransfusion Increase of Hematocrit per se Does Not Improve Circulatory Oxygen Delivery due to Increased Blood Viscosity. <i>Anesthesia and Analgesia</i> , 2017, 124, 1547-1554.	2.2	28
64	PEG-albumin supraplasma expansion is due to increased vessel wall shear stress induced by blood viscosity shear thinning. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2012, 302, H2489-H2497.	3.2	26
65	Algorithm refinement for stochastic partial differential equations: II. Correlated systems. <i>Journal of Computational Physics</i> , 2005, 207, 769-787.	3.8	25
66	Cumulative distribution function solutions of advection-reaction equations with uncertain parameters. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2014, 470, 20140189.	2.1	25
67	Effective Ion Diffusion in Charged Nanoporous Materials. <i>Journal of the Electrochemical Society</i> , 2017, 164, E53-E61.	2.9	25
68	Random domain decomposition for flow in heterogeneous stratified aquifers. <i>Stochastic Environmental Research and Risk Assessment</i> , 2003, 17, 394-407.	4.0	24
69	A Two-Scale Nonperturbative Approach to Uncertainty Analysis of Diffusion in Random Composites. <i>Multiscale Modeling and Simulation</i> , 2004, 2, 662-674.	1.6	24
70	Distribution-Based Global Sensitivity Analysis in Hydrology. <i>Water Resources Research</i> , 2019, 55, 8708-8720.	4.2	24
71	Conditional moment analysis of steady state unsaturated flow in bounded, randomly heterogeneous soils. <i>Water Resources Research</i> , 2002, 38, 9-1-9-15.	4.2	23
72	Self-consistent four-point closure for transport in steady random flows. <i>Physical Review E</i> , 2008, 77, 066307.	2.1	23

#	ARTICLE	IF	CITATIONS
73	Probability Density Function Method for Langevin Equations with Colored Noise. <i>Physical Review Letters</i> , 2013, 110, 140602.	7.8	23
74	CDF Solutions of Buckley–Leverett Equation with Uncertain Parameters. <i>Multiscale Modeling and Simulation</i> , 2013, 11, 118-133.	1.6	23
75	Lagrangian models of reactive transport in heterogeneous porous media with uncertain properties. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2012, 468, 1154-1174.	2.1	22
76	Probabilistic analysis of maintenance and operation of artificial recharge ponds. <i>Advances in Water Resources</i> , 2012, 36, 23-35.	3.8	22
77	Uncertainty quantification in kinematic-wave models. <i>Journal of Computational Physics</i> , 2012, 231, 7868-7880.	3.8	22
78	Bayesian Update and Method of Distributions: Application to Leak Detection in Transmission Mains. <i>Water Resources Research</i> , 2020, 56, e2019WR025879.	4.2	22
79	Dynamics of Free Surfaces in Random Porous Media. <i>SIAM Journal on Applied Mathematics</i> , 2001, 61, 1857-1876.	1.8	21
80	A reduced complexity model for probabilistic risk assessment of groundwater contamination. <i>Water Resources Research</i> , 2008, 44, .	4.2	21
81	Probability density functions for advective reactive transport in radial flow. <i>Stochastic Environmental Research and Risk Assessment</i> , 2010, 24, 985-992.	4.0	21
82	Hematocrit dispersion in asymmetrically bifurcating vascular networks. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2014, 307, H1576-H1586.	3.2	21
83	Impact of Hydrogeological Uncertainty on Estimation of Environmental Risks Posed by Hydrocarbon Transportation Networks. <i>Water Resources Research</i> , 2017, 53, 8686-8697.	4.2	21
84	Method of Distributions for Water Hammer Equations With Uncertain Parameters. <i>Water Resources Research</i> , 2018, 54, 9398-9411.	4.2	21
85	Extension of “Transient flow in bounded randomly heterogeneous domains: 1, Exact conditional moment equations and recursive approximations”, <i>Water Resources Research</i> , 1999, 35, 1921-1925.	4.2	20
86	Particle Methods for Heat Transfer in Fractured Media. <i>Transport in Porous Media</i> , 2016, 115, 311-326.	2.6	20
87	Estimation of distributions via multilevel Monte Carlo with stratified sampling. <i>Journal of Computational Physics</i> , 2020, 419, 109572.	3.8	20
88	Title is missing!. <i>Transport in Porous Media</i> , 2002, 49, 41-58.	2.6	19
89	Stochastic Collocation Methods for Nonlinear Parabolic Equations with Random Coefficients. <i>SIAM-ASA Journal on Uncertainty Quantification</i> , 2016, 4, 475-494.	2.0	19
90	Integration of cardiovascular regulation by the blood/endothelium cell free layer. <i>Wiley Interdisciplinary Reviews: Systems Biology and Medicine</i> , 2011, 3, 458-470.	6.6	18

#	ARTICLE	IF	CITATIONS
91	A Bayesian approach to integrate temporal data into probabilistic risk analysis of monitored NAPL remediation. <i>Advances in Water Resources</i> , 2012, 36, 108-120.	3.8	18
92	Impact of endothelium roughness on blood flow. <i>Journal of Theoretical Biology</i> , 2012, 300, 152-160.	1.7	18
93	GINNs: Graph-Informed Neural Networks for multiscale physics. <i>Journal of Computational Physics</i> , 2021, 433, 110192.	3.8	18
94	Data-driven discovery of coarse-grained equations. <i>Journal of Computational Physics</i> , 2021, 434, 110219.	3.8	18
95	A New Physiological Boundary Condition for Hemodynamics. <i>SIAM Journal on Applied Mathematics</i> , 2013, 73, 1203-1223.	1.8	17
96	Hybrid modeling of heterogeneous geochemical reactions in fractured porous media. <i>Water Resources Research</i> , 2013, 49, 7945-7956.	4.2	17
97	An analytical solution for two-dimensional contaminant transport during groundwater extraction. <i>Journal of Contaminant Hydrology</i> , 2000, 42, 273-283.	3.3	16
98	Transient Flow in a Heterogeneous Vadose Zone with Uncertain Parameters. <i>Vadose Zone Journal</i> , 2004, 3, 154-163.	2.2	16
99	Delineation of geologic facies with statistical learning theory. <i>Geophysical Research Letters</i> , 2004, 31, .	4.0	16
100	Asymptotic analysis of cross-hole pneumatic injection tests in unsaturated fractured tuff. <i>Advances in Water Resources</i> , 2005, 28, 1217-1229.	3.8	16
101	Stochastic hybrid modeling of intracellular calcium dynamics. <i>Journal of Chemical Physics</i> , 2010, 133, 165101.	3.0	16
102	Reduced complexity models for probabilistic forecasting of infiltration rates. <i>Advances in Water Resources</i> , 2011, 34, 375-382.	3.8	16
103	Temperature fields induced by geothermal devices. <i>Energy</i> , 2015, 93, 1896-1903.	8.8	16
104	Parallel tensor methods for high-dimensional linear PDEs. <i>Journal of Computational Physics</i> , 2018, 375, 519-539.	3.8	16
105	Temperature estimation from current and voltage measurements in lithium-ion battery systems. <i>Journal of Energy Storage</i> , 2021, 34, 102133.	8.1	16
106	Dynamics of wetting fronts in porous media. <i>Physical Review E</i> , 1998, 58, R5245-R5248.	2.1	15
107	Simulating social-ecological systems: the Island Digital Ecosystem Avatars (IDEA) consortium. <i>GigaScience</i> , 2016, 5, 14.	6.4	15
108	Analytical model for gravity segregation of horizontal multiphase flow in porous media. <i>Physics of Fluids</i> , 2020, 32, .	4.0	15

#	ARTICLE	IF	CITATIONS
109	Interface dynamics in randomly heterogeneous porous media. <i>Advances in Water Resources</i> , 2005, 28, 393-403.	3.8	14
110	Ergodicity of pumping tests. <i>Water Resources Research</i> , 2007, 43, .	4.2	14
111	Asymptotic analysis of three-dimensional pressure interference tests: A point source solution. <i>Water Resources Research</i> , 2005, 41, .	4.2	13
112	Hybrid numerical methods for multiscale simulations of subsurface biogeochemical processes. <i>Journal of Physics: Conference Series</i> , 2007, 78, 012063.	0.4	13
113	Stochastic operator-splitting method for reaction-diffusion systems. <i>Journal of Chemical Physics</i> , 2012, 137, 184102.	3.0	13
114	Causality and Bayesian Network PDEs for multiscale representations of porous media. <i>Journal of Computational Physics</i> , 2019, 394, 658-678.	3.8	13
115	Data-Informed Method of Distributions for Hyperbolic Conservation Laws. <i>SIAM Journal of Scientific Computing</i> , 2020, 42, A559-A583.	2.8	13
116	Thermal Experiments for Fractured Rock Characterization: Theoretical Analysis and Inverse Modeling. <i>Water Resources Research</i> , 2021, 57, e2021WR030608.	4.2	13
117	Noise in Algorithm Refinement Methods. <i>Computing in Science and Engineering</i> , 2005, 7, 32-38.	1.2	12
118	Impact of Data Assimilation on Cost-Accuracy Tradeoff in Multifidelity Models. <i>SIAM-ASA Journal on Uncertainty Quantification</i> , 2015, 3, 954-968.	2.0	12
119	Tensor methods for the Boltzmann-BGK equation. <i>Journal of Computational Physics</i> , 2020, 421, 109744.	3.8	12
120	Learning on dynamic statistical manifolds. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2020, 476, 20200213.	2.1	12
121	An Analytical Solution for Contaminant Transport in nonuniform Flow. <i>Transport in Porous Media</i> , 1997, 27, 85-97.	2.6	11
122	Nearest-Neighbor classification for facies delineation. <i>Water Resources Research</i> , 2007, 43, .	4.2	11
123	Stochastic smoothed profile method for modeling random roughness in flow problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2013, 263, 99-112.	6.6	11
124	Information theoretic approach to complex biological network reconstruction: application to cytokine release in RAW 264.7 macrophages. <i>BMC Systems Biology</i> , 2014, 8, 77.	3.0	11
125	Linear functional minimization for inverse modeling. <i>Water Resources Research</i> , 2015, 51, 4516-4531.	4.2	11
126	Accelerated Multilevel Monte Carlo With Kernel-Based Smoothing and Latinized Stratification. <i>Water Resources Research</i> , 2020, 56, e2019WR026984.	4.2	11



#	ARTICLE	IF	CITATIONS
127	Effects of spatio-temporal variability of precipitation on contaminant migration in the vadose zone. <i>Geophysical Research Letters</i> , 2009, 36, .	4.0	10
128	Noise propagation in hybrid models of nonlinear systems: The Ginzburg-Landau equation. <i>Journal of Computational Physics</i> , 2014, 262, 313-324.	3.8	10
129	A boundary-layer solution for flow at the soil-root interface. <i>Journal of Mathematical Biology</i> , 2015, 70, 1645-1668.	1.9	10
130	Method of Distributions for Quantification of Geologic Uncertainty in Flow Simulations. <i>Water Resources Research</i> , 2020, 56, e2020WR027643.	4.2	10
131	Optimal design of pumping tests in leaky aquifers for stream depletion analysis. <i>Journal of Hydrology</i> , 2009, 375, 554-565.	5.4	9
132	Response to "Comments on Abrupt-Interface Solution for Carbon Dioxide Injection into Porous Media by Dentz and Tartakovsky (2008)" by Lu et al.. <i>Transport in Porous Media</i> , 2009, 79, 39-41.	2.6	9
133	PROBABILISTIC PREDICTIONS OF INFILTRATION INTO HETEROGENEOUS MEDIA WITH UNCERTAIN HYDRAULIC PARAMETERS. , 2011, 1, 35-47.		9
134	Introduction to the special issue on uncertainty quantification and risk assessment. <i>Advances in Water Resources</i> , 2012, 36, 1-2.	3.8	9
135	Design of nanoporous materials with optimal sorption capacity. <i>Journal of Applied Physics</i> , 2015, 117, 244304.	2.5	9
136	Global sensitivity analysis of multiscale properties of porous materials. <i>Journal of Applied Physics</i> , 2018, 123, 075103.	2.5	9
137	A Mechanistic Analysis of Possible Blood Transfusion Failure to Increase Circulatory Oxygen Delivery in Anemic Patients. <i>Annals of Biomedical Engineering</i> , 2019, 47, 1094-1105.	2.5	9
138	Predicting vertical connectivity within an aquifer system. <i>Bayesian Analysis</i> , 2010, 5, .	3.0	8
139	On the use of analytical solutions to design pumping tests in leaky aquifers connected to a stream. <i>Journal of Hydrology</i> , 2010, 381, 341-351.	5.4	8
140	Comparison of statistical and optimisation-based methods for data-driven network reconstruction of biochemical systems. <i>IET Systems Biology</i> , 2012, 6, 155-163.	1.5	8
141	Estimation of Intrinsic Length Scales of Flow in Unsaturated Porous Media. <i>Water Resources Research</i> , 2017, 53, 9980-9987.	4.2	8
142	Information-Theoretic Approach to Bidirectional Scaling. <i>Water Resources Research</i> , 2018, 54, 4916-4928.	4.2	8
143	Probabilistic Forecast of Single-Phase Flow in Porous Media With Uncertain Properties. <i>Water Resources Research</i> , 2019, 55, 8631-8645.	4.2	8
144	Efficient gHMC Reconstruction of Contaminant Release History. <i>Frontiers in Environmental Science</i> , 2019, 7, .	3.3	8

#	ARTICLE	IF	CITATIONS
145	Prior mapping for nonlinear flows in random environments. <i>Physical Review E</i> , 2001, 64, 035302.	2.1	7
146	Effective Properties of Random Composites. <i>SIAM Journal of Scientific Computing</i> , 2004, 26, 625-635.	2.8	7
147	Nonlinear localization of light in disordered optical fiber arrays. <i>Physical Review A</i> , 2008, 77, .	2.5	7
148	Identifying Transport Behavior of Single-Molecule Trajectories. <i>Biophysical Journal</i> , 2014, 107, 2345-2351.	0.5	7
149	Data-driven models of groundwater salinization in coastal plains. <i>Journal of Hydrology</i> , 2015, 531, 187-197.	5.4	7
150	Nonlocal PDF methods for Langevin equations with colored noise. <i>Journal of Computational Physics</i> , 2018, 367, 87-101.	3.8	7
151	Interpretation of Heatâ€Pulse Tracer Tests for Characterization of Threeâ€Dimensional Velocity Fields in Hyporheic Zone. <i>Water Resources Research</i> , 2018, 54, 4028-4039.	4.2	7
152	Probabilistic Forecasting of Nitrogen Dynamics in Hyporheic Zone. <i>Water Resources Research</i> , 2018, 54, 4417-4431.	4.2	7
153	Lagrangian models of particle-laden flows with stochastic forcing: Monte Carlo, moment equations, and method of distributions analyses. <i>Physics of Fluids</i> , 2021, 33, .	4.0	7
154	Mutual information for explainable deep learning of multiscale systems. <i>Journal of Computational Physics</i> , 2021, 444, 110551.	3.8	7
155	Information geometry of physics-informed statistical manifolds and its use in data assimilation. <i>Journal of Computational Physics</i> , 2022, 467, 111438.	3.8	7
156	Analytical models of axisymmetric reactionâ€diffusion phenomena in composite media. <i>International Journal of Heat and Mass Transfer</i> , 2016, 99, 425-431.	4.8	6
157	Efficient Multiscale Models of Polymer Assembly. <i>Biophysical Journal</i> , 2016, 111, 185-196.	0.5	6
158	Effects of Hydraulic Soil Properties on Vegetation Pattern Formation in Sloping Landscapes. <i>Bulletin of Mathematical Biology</i> , 2017, 79, 2773-2784.	1.9	6
159	A Hybrid Multiscale Model of Miscible Reactive Fronts. <i>Water Resources Research</i> , 2018, 54, 61-71.	4.2	6
160	Hydrodynamic dispersion in a tube with diffusive losses through its walls. <i>Journal of Fluid Mechanics</i> , 2018, 837, 546-561.	3.4	6
161	Transient Flow in a Heterogeneous Vadose Zone with Uncertain Parameters. <i>Vadose Zone Journal</i> , 2004, 3, 154-163.	2.2	6
162	Uncertainty quantification for flow in highly heterogeneous porous media. <i>Developments in Water Science</i> , 2004, , 695-703.	0.1	5

#	ARTICLE	IF	CITATIONS
163	Delineation of geological facies from poorly differentiated data. <i>Advances in Water Resources</i> , 2009, 32, 225-230.	3.8	5
164	Replacing the Transfusion of 1â€²2 Units of Blood with Plasma Expanders that Increase Oxygen Delivery Capacity: Evidence from Experimental Studies. <i>Journal of Functional Biomaterials</i> , 2014, 5, 232-245.	4.4	5
165	Method of Distributions for Uncertainty Quantification. , 2015, , 1-22.		5
166	Critical behavior and magnetocaloric effect of Pr1âˆ²xCaxMnO3. <i>Journal of Applied Physics</i> , 2015, 117, 17D122.	2.5	5
167	Efficient models of polymerization applied to FtsZ ring assembly in <i>Escherichia coli</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 4933-4938.	7.1	5
168	Microstructural heterogeneity drives reaction initiation in granular materials. <i>Applied Physics Letters</i> , 2019, 114, .	3.3	5
169	Advances in uncertainty quantification for water resources applications. <i>Stochastic Environmental Research and Risk Assessment</i> , 2021, 35, 955-957.	4.0	5
170	Method of Distributions for Uncertainty Quantification. , 2017, , 763-783.		5
171	Autonomous learning of nonlocal stochastic neuron dynamics. <i>Cognitive Neurodynamics</i> , 2022, 16, 683-705.	4.0	5
172	Some aspects of headâ€²variance evaluation. <i>Annals of Software Engineering</i> , 1999, 3, 89-92.	0.5	4
173	Probabilistic risk analysis of building contamination. <i>Indoor Air</i> , 2008, 18, 351-364.	4.3	4
174	Hydrogeophysical Approach for Identification of Layered Structures of the Vadose Zone from Electrical Resistivity Data. <i>Vadose Zone Journal</i> , 2008, 7, 1253-1260.	2.2	4
175	Functional optical imaging at the microscopic level. <i>Journal of Biomedical Optics</i> , 2010, 15, 011102.	2.6	4
176	Mean arterial pressure nonlinearity in an elastic circulatory system subjected to different hematocrits. <i>Biomechanics and Modeling in Mechanobiology</i> , 2011, 10, 591-598.	2.8	4
177	Conservative tightly-coupled simulations of stochastic multiscale systems. <i>Journal of Computational Physics</i> , 2016, 313, 400-414.	3.8	4
178	Optimal design of nanoporous materials for electrochemical devices. <i>Applied Physics Letters</i> , 2017, 110, 143103.	3.3	4
179	A tightly-coupled domain-decomposition approach for highly nonlinear stochastic multiphysics systems. <i>Journal of Computational Physics</i> , 2017, 330, 884-901.	3.8	4
180	Stochastic self-tuning hybrid algorithm for reaction-diffusion systems. <i>Journal of Chemical Physics</i> , 2019, 151, 244117.	3.0	4

#	ARTICLE	IF	CITATIONS
181	Solute dispersion in bifurcating networks. <i>Journal of Fluid Mechanics</i> , 2020, 901, .	3.4	4
182	Extended dynamic mode decomposition for inhomogeneous problems. <i>Journal of Computational Physics</i> , 2021, 444, 110550.	3.8	4
183	A model of anemic tissue perfusion after blood transfusion shows critical role of endothelial response to shear stress stimuli. <i>Journal of Applied Physiology</i> , 2021, 131, 1815-1823.	2.5	4
184	Estimation of Evapotranspiration Rates and Root Water Uptake Profiles From Soil Moisture Sensor Array Data. <i>Water Resources Research</i> , 2021, 57, e2021WR030747.	4.2	4
185	Effective Representation of Active Material and Carbon Binder in Porous Electrodes. <i>Journal of the Electrochemical Society</i> , 0, , .	2.9	4
186	Stability-Guided Strategies to Mitigate Dendritic Growth in Lithium-Metal Batteries. <i>Journal of the Electrochemical Society</i> , 2022, 169, 060536.	2.9	4
187	COMPUTING GREEN'S FUNCTIONS FOR FLOW IN HETEROGENEOUS COMPOSITE MEDIA. , 2013, 3, 39-46.		3
188	Coexistence of short- and long-range ferromagnetic order in nanocrystalline Fe <sub>2</sub> Mn <sub>1-x</sub> Cu <sub>x</sub> Al (x=0.0, 0.1) Tj ETQq0 0 0 rgBT /Overlock 10 394, 37-43.	2.3	3
189	On the use of reverse Brownian motion to accelerate hybrid simulations. <i>Journal of Computational Physics</i> , 2017, 334, 68-80.	3.8	3
190	An analytical model for carrier-facilitated solute transport in weakly heterogeneous porous media. <i>Applied Mathematical Modelling</i> , 2017, 44, 261-273.	4.2	3
191	Impact of parametric uncertainty on estimation of the energy deposition into an irradiated brain tumor. <i>Journal of Computational Physics</i> , 2017, 348, 139-150.	3.8	3
192	Modified immersed boundary method for flows over randomly rough surfaces. <i>Journal of Computational Physics</i> , 2020, 406, 109195.	3.8	3
193	Structural and Magnetic Properties Control of Pr <sub>0.7</sub> Ba <sub>0.3</sub> MnO <sub>3</sub> with Sr-Doping. <i>Physics of the Solid State</i> , 2020, 62, 845-850.	0.6	3
194	Hybrid models of chemotaxis with application to leukocyte migration. <i>Journal of Mathematical Biology</i> , 2021, 82, 23.	1.9	3
195	Algorithm Refinement for Stochastic Partial Differential Equations. <i>AIP Conference Proceedings</i> , 2003, , .	0.4	2
196	Impact of stochastic fluctuations in the cell free layer on nitric oxide bioavailability. <i>Frontiers in Computational Neuroscience</i> , 2015, 9, 131.	2.1	2
197	Critical Behavior in Double-Exchange Ferromagnets of Pr <sub>0.6</sub> Sr <sub>0.4</sub> MnO <sub>3</sub> Nanoparticles. <i>IEEE Transactions on Magnetics</i> , 2015, 51, 1-4.	2.1	2
198	Noise-driven interfaces and their macroscopic representation. <i>Physical Review E</i> , 2016, 94, 052802.	2.1	2

#	ARTICLE	IF	CITATIONS
199	The frequency domain approach to analyse field-scale miscible flow transport experiments in the soils. <i>Biosystems Engineering</i> , 2018, 168, 96-104.	4.3	2
200	Resource-Constrained Model Selection for Uncertainty Propagation and Data Assimilation. <i>SIAM-ASA Journal on Uncertainty Quantification</i> , 2020, 8, 1118-1138.	2.0	2
201	Dynamics of Data-driven Ambiguity Sets for Hyperbolic Conservation Laws with Uncertain Inputs. <i>SIAM Journal of Scientific Computing</i> , 2021, 43, A2102-A2129.	2.8	2
202	METHOD OF DISTRIBUTIONS FOR SYSTEMS WITH STOCHASTIC FORCING. , 2021, 11, 83-104.		2
203	Polynomial Chaos Expansions for Stiff Random ODEs. <i>SIAM Journal of Scientific Computing</i> , 2022, 44, A1021-A1046.	2.8	2
204	Hybrid numerical methods for multiscale simulations of subsurface biogeochemical processes. <i>Journal of Physics: Conference Series</i> , 2008, 125, 012054.	0.4	1
205	Closure to $\text{H}_2\text{O}$ Stream Depletion by Groundwater Pumping in Leaky Aquifers by Vitaly A. Zlotnik and Daniel M. Tartakovsky. <i>Journal of Hydrologic Engineering - ASCE</i> , 2009, 14, 889-891.	1.9	1
206	Uncertainty quantification in modeling flow and transport in porous media. <i>Stochastic Environmental Research and Risk Assessment</i> , 2010, 24, 953-954.	4.0	1
207	Probabilistic Reconstruction of Hydrofacies With Support Vector Machines. <i>Water Resources Research</i> , 2021, 57, e2021WR029622.	4.2	1
208	A Geostatistical Model for Distribution of Facies in Highly Heterogeneous Aquifers. , 2004, , 211-222.		1
209	Machine Learning Methods for Inverse Modeling. , 2008, , 117-125.		1
210	Stochastic Forecasting of Algae Blooms in Lakes. <i>Springer Proceedings in Mathematics and Statistics</i> , 2013, , 99-108.	0.2	0
211	Doubly Penalized LASSO for Reconstruction of Biological Networks. <i>Proceedings of the IEEE</i> , 2017, 105, 319-329.	21.3	0
212	Micromagnetic simulation of fast GHz gyromotion of magnetic vortex core in Permalloy disk with antidot. <i>AIP Conference Proceedings</i> , 2019, , .	0.4	0
213	Quantification of Predictive Uncertainty in Models of FtsZ ring assembly in <i>Escherichia coli</i> . <i>Journal of Theoretical Biology</i> , 2020, 484, 110006.	1.7	0
214	Reply to Comment by Wang, Che, and Ghidaoui on $\text{H}_2\text{O}$ Bayesian Update and Method of Distributions: Application to Leak Detection in Transmission Mains. <i>Water Resources Research</i> , 2020, 56, e2020WR028605.	4.2	0
215	Exponential time differencing for problems without natural stiffness separation. <i>Computational Geosciences</i> , 2021, 25, 1667-1679.	2.4	0
216	Consensus Equilibrium for Subsurface Delineation. <i>Water Resources Research</i> , 2021, 57, e2021WR030151.	4.2	0

#	ARTICLE	IF	CITATIONS
217	Transient Flow in a Heterogeneous Vadose Zone with Uncertain Parameters. Vadose Zone Journal, 2004, 3, 154.	2.2	0