

# Alberto Guadagnini

## List of Publications by Year in descending order

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196  
papers

5,353  
citations

76326

40  
h-index

123424

61  
g-index

202  
all docs

202  
docs citations

202  
times ranked

3075  
citing authors

#	ARTICLE	IF	CITATIONS
1	Representative hydraulic conductivities in saturated groundwater flow. <i>Reviews of Geophysics</i> , 2006, 44, .	23.0	235
2	A procedure for the solution of multicomponent reactive transport problems. <i>Water Resources Research</i> , 2005, 41, .	4.2	156
3	A comparison of seven methods for the inverse modelling of groundwater flow. Application to the characterisation of well catchments. <i>Advances in Water Resources</i> , 2009, 32, 851-872.	3.8	154
4	Nonlocal and localized analyses of conditional mean steady state flow in bounded, randomly nonuniform domains: 1. Theory and computational approach. <i>Water Resources Research</i> , 1999, 35, 2999-3018.	4.2	145
5	Convergence assessment of numerical Monte Carlo simulations in groundwater hydrology. <i>Water Resources Research</i> , 2004, 40, .	4.2	133
6	Origins of anomalous transport in heterogeneous media: Structural and dynamic controls. <i>Water Resources Research</i> , 2014, 50, 1490-1505.	4.2	128
7	Automatic method for estimation of in situ effective contact angle from X-ray micro tomography images of two-phase flow in porous media. <i>Journal of Colloid and Interface Science</i> , 2017, 496, 51-59.	9.4	123
8	Nonlocal and localized analyses of conditional mean steady state flow in bounded, randomly nonuniform domains: 2. Computational examples. <i>Water Resources Research</i> , 1999, 35, 3019-3039.	4.2	93
9	Non-local and localized analyses of non-reactive solute transport in bounded randomly heterogeneous porous media: Theoretical framework. <i>Advances in Water Resources</i> , 2006, 29, 1238-1255.	3.8	88
10	Moment Differential Equations for Flow in Highly Heterogeneous Porous Media. <i>Surveys in Geophysics</i> , 2003, 24, 81-106.	4.6	83
11	Relative importance of geostatistical and transport models in describing heavily tailed breakthrough curves at the Lauswiesen site. <i>Journal of Contaminant Hydrology</i> , 2008, 101, 1-13.	3.3	83
12	Interpretation of column experiments of transport of solutes undergoing an irreversible bimolecular reaction using a continuum approximation. <i>Water Resources Research</i> , 2010, 46, .	4.2	74
13	Polynomial chaos expansion for global sensitivity analysis applied to a model of radionuclide migration in a randomly heterogeneous aquifer. <i>Stochastic Environmental Research and Risk Assessment</i> , 2013, 27, 945-954.	4.0	74
14	Use of global sensitivity analysis and polynomial chaos expansion for interpretation of nonreactive transport experiments in laboratory-scale porous media. <i>Water Resources Research</i> , 2011, 47, .	4.2	72
15	Global sensitivity analysis through polynomial chaos expansion of a basin-scale geochemical compaction model. <i>Computational Geosciences</i> , 2013, 17, 25-42.	2.4	71
16	Inverse stochastic moment analysis of steady state flow in randomly heterogeneous media. <i>Water Resources Research</i> , 2006, 42, .	4.2	67
17	Natural background levels and threshold values of chemical species in three large-scale groundwater bodies in Northern Italy. <i>Science of the Total Environment</i> , 2012, 425, 9-19.	8.0	67
18	Probabilistic study of well capture zones distribution at the Lauswiesen field site. <i>Journal of Contaminant Hydrology</i> , 2006, 88, 92-118.	3.3	65

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19	Variable-density flow in porous media. <i>Journal of Fluid Mechanics</i> , 2006, 561, 209.	3.4	63
20	Interactions between a rectangular cylinder and a free-surface flow. <i>Journal of Fluids and Structures</i> , 2007, 23, 1137-1148.	3.4	63
21	Probabilistic estimation of well catchments in heterogeneous aquifers. <i>Journal of Hydrology</i> , 1996, 174, 149-171.	5.4	61
22	Radial Flow in a Bounded Randomly Heterogeneous Aquifer. <i>Transport in Porous Media</i> , 2001, 45, 139-193.	2.6	60
23	Conditioning mean steady state flow on hydraulic head and conductivity through geostatistical inversion. <i>Stochastic Environmental Research and Risk Assessment</i> , 2003, 17, 329-338.	4.0	59
24	Type-curve estimation of statistical heterogeneity. <i>Water Resources Research</i> , 2004, 40, .	4.2	59
25	A kriging approach based on Aitchison geometry for the characterization of particle-size curves in heterogeneous aquifers. <i>Stochastic Environmental Research and Risk Assessment</i> , 2014, 28, 1835-1851.	4.0	58
26	Time-Related Capture Zones for Contaminants in Randomly Heterogeneous Formations. <i>Ground Water</i> , 1999, 37, 253-260.	1.3	56
27	Subsurface characterization with support vector machines. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2006, 44, 47-57.	6.3	56
28	Type curve interpretation of late-time pumping test data in randomly heterogeneous aquifers. <i>Water Resources Research</i> , 2007, 43, .	4.2	56
29	Experimental and modeling investigation of multicomponent reactive transport in porous media. <i>Journal of Contaminant Hydrology</i> , 2011, 120-121, 27-44.	3.3	56
30	Moment-based metrics for global sensitivity analysis of hydrological systems. <i>Hydrology and Earth System Sciences</i> , 2017, 21, 6219-6234.	4.9	55
31	Upscaling solute transport in porous media in the presence of an irreversible bimolecular reaction. <i>Advances in Water Resources</i> , 2012, 35, 151-162.	3.8	54
32	Relationship between pore size and velocity probability distributions in stochastically generated porous media. <i>Physical Review E</i> , 2014, 89, 013018.	2.1	53
33	Stochastic averaging of nonlinear flows in heterogeneous porous media. <i>Journal of Fluid Mechanics</i> , 2003, 492, 47-62.	3.4	49
34	Anti-correlated Porosity-Permeability Changes During the Dissolution of Carbonate Rocks: Experimental Evidences and Modeling. <i>Transport in Porous Media</i> , 2015, 107, 595-621.	2.6	48
35	Nonlocal and localized analyses of nonreactive solute transport in bounded randomly heterogeneous porous media: Computational analysis. <i>Advances in Water Resources</i> , 2006, 29, 1399-1418.	3.8	47
36	Numerical investigation of pore and continuum scale formulations of bimolecular reactive transport in porous media. <i>Advances in Water Resources</i> , 2013, 62, 243-253.	3.8	46

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37	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
38	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
39	Arsenic release from deep natural solid matrices under experimentally controlled redox conditions. <i>Science of the Total Environment</i> , 2013, 444, 231-240.	8.0	43
40	On the geostatistical characterization of hierarchical media. <i>Water Resources Research</i> , 2008, 44, .	4.2	42
41	Probabilistic reconstruction of geologic facies. <i>Journal of Hydrology</i> , 2004, 294, 57-67.	5.4	41
42	Data assimilation and parameter estimation via ensemble Kalman filter coupled with stochastic moment equations of transient groundwater flow. <i>Water Resources Research</i> , 2013, 49, 1334-1344.	4.2	41
43	Three-dimensional steady state flow to a well in a randomly heterogeneous bounded aquifer. <i>Water Resources Research</i> , 2003, 39, .	4.2	40
44	Unsaturated flow in heterogeneous soils with spatially distributed uncertain hydraulic parameters. <i>Journal of Hydrology</i> , 2003, 275, 182-193.	5.4	38
45	Multimodel Bayesian analysis of groundwater data worth. <i>Water Resources Research</i> , 2014, 50, 8481-8496.	4.2	38
46	Global sensitivity analyses of multiple conceptual models with uncertain parameters driving groundwater flow in a regional-scale sedimentary aquifer. <i>Journal of Hydrology</i> , 2019, 574, 544-556.	5.4	37
47	Conditional Probability Density Functions of Concentrations for Mixing-Controlled Reactive Transport in Heterogeneous Aquifers. <i>Mathematical Geosciences</i> , 2009, 41, 323-351.	2.4	36
48	Sub-Gaussian model of processes with heavy-tailed distributions applied to air permeabilities of fractured tuff. <i>Stochastic Environmental Research and Risk Assessment</i> , 2013, 27, 195-207.	4.0	35
49	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
50	Reaction rates and effective parameters in stratified aquifers. <i>Advances in Water Resources</i> , 2008, 31, 1364-1376.	3.8	33
51	Continuum-scale characterization of solute transport based on pore-scale velocity distributions. <i>Geophysical Research Letters</i> , 2015, 42, 7537-7545.	4.0	33
52	Geostatistical multimodel approach for the assessment of the spatial distribution of natural background concentrations in large-scale groundwater bodies. <i>Water Research</i> , 2019, 149, 522-532.	11.3	33
53	Inverse analysis of stochastic moment equations for transient flow in randomly heterogeneous media. <i>Advances in Water Resources</i> , 2009, 32, 1495-1507.	3.8	32
54	Data-worth analysis through probabilistic collocation-based Ensemble Kalman Filter. <i>Journal of Hydrology</i> , 2016, 540, 488-503.	5.4	32

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55	Influence of pumping operational schedule on solute concentrations at a well in randomly heterogeneous aquifers. <i>Journal of Hydrology</i> , 2017, 546, 490-502.	5.4	32
56	Probabilistic assessment of seawater intrusion under multiple sources of uncertainty. <i>Advances in Water Resources</i> , 2015, 75, 93-104.	3.8	31
57	Effects of uncertainty of lithofacies, conductivity and porosity distributions on stochastic interpretations of a field scale tracer test. <i>Stochastic Environmental Research and Risk Assessment</i> , 2010, 24, 955-970.	4.0	29
58	POD-based Monte Carlo approach for the solution of regional scale groundwater flow driven by randomly distributed recharge. <i>Advances in Water Resources</i> , 2011, 34, 1450-1463.	3.8	29
59	Joint inversion of steady-state hydrologic and self-potential data for 3D hydraulic conductivity distribution at the Boise Hydrogeophysical Research Site. <i>Journal of Hydrology</i> , 2011, 407, 115-128.	5.4	29
60	Extended power-law scaling of air permeabilities measured on a block of tuff. <i>Hydrology and Earth System Sciences</i> , 2012, 16, 29-42.	4.9	29
61	Numerical investigation of apparent multifractality of samples from processes subordinated to truncated fBm. <i>Hydrological Processes</i> , 2012, 26, 2894-2908.	2.6	29
62	Comparative analysis of formulations for conservative transport in porous media through sensitivity-based parameter calibration. <i>Water Resources Research</i> , 2013, 49, 5206-5220.	4.2	29
63	Delineation of Source Protection Zones Using Statistical Methods. <i>Water Resources Management</i> , 2005, 19, 163-185.	3.9	28
64	Comparison of Ensemble Kalman Filter groundwater-data assimilation methods based on stochastic moment equations and Monte Carlo simulation. <i>Advances in Water Resources</i> , 2014, 66, 8-18.	3.8	28
65	Upscaling thermal conductivities of sedimentary formations for geothermal exploration. <i>Geothermics</i> , 2015, 58, 49-61.	3.4	28
66	Time-related capture zones for radial flow in two dimensional randomly heterogeneous media. <i>Stochastic Environmental Research and Risk Assessment</i> , 1999, 13, 217-230.	4.0	27
67	Anisotropic statistical scaling of soil and sediment texture in a stratified deep vadose zone near Maricopa, Arizona. <i>Geoderma</i> , 2014, 214-215, 217-227.	5.1	26
68	EnKF coupled with groundwater flow moment equations applied to Lauswiesen aquifer, Germany. <i>Journal of Hydrology</i> , 2015, 521, 205-216.	5.4	26
69	Characterization of two- and three-phase relative permeability of water-wet porous media through X-Ray saturation measurements. <i>Journal of Petroleum Science and Engineering</i> , 2016, 145, 453-463.	4.2	26
70	Anisotropic Scaling of Berea Sandstone Log Air Permeability Statistics. <i>Vadose Zone Journal</i> , 2013, 12, 1-15.	2.2	25
71	New scaling model for variables and increments with heavy-tailed distributions. <i>Water Resources Research</i> , 2015, 51, 4623-4634.	4.2	25
72	A Class-Kriging Predictor for Functional Compositions with Application to Particle-Size Curves in Heterogeneous Aquifers. <i>Mathematical Geosciences</i> , 2016, 48, 463-485.	2.4	25

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73	Stochastic simulation of soil particle size curves in heterogeneous aquifer systems through a Bayes space approach. <i>Water Resources Research</i> , 2016, 52, 5708-5726.	4.2	25
74	A Novel Enhanced-Oil-Recovery Screening Approach Based on Bayesian Clustering and Principal-Component Analysis. <i>SPE Reservoir Evaluation and Engineering</i> , 2016, 19, 382-390.	1.8	25
75	Random domain decomposition for flow in heterogeneous stratified aquifers. <i>Stochastic Environmental Research and Risk Assessment</i> , 2003, 17, 394-407.	4.0	24
76	Reactive transport in disordered media: Role of fluctuations in interpretation of laboratory experiments. <i>Advances in Water Resources</i> , 2013, 51, 86-103.	3.8	23
77	Anisotropic statistical scaling of vadose zone hydraulic property estimates near Maricopa, Arizona. <i>Water Resources Research</i> , 2013, 49, 8463-8479.	4.2	23
78	Title is missing!. <i>Transport in Porous Media</i> , 2001, 42, 37-67.	2.6	22
79	Multimodel framework for characterization of transport in porous media. <i>Water Resources Research</i> , 2015, 51, 3384-3402.	4.2	22
80	Inverse modeling of unsaturated flow using clusters of soil texture and pedotransfer functions. <i>Water Resources Research</i> , 2016, 52, 7631-7644.	4.2	22
81	Uncertainty Quantification and Global Sensitivity Analysis of Subsurface Flow Parameters to Gravimetric Variations During Pumping Tests in Unconfined Aquifers. <i>Water Resources Research</i> , 2018, 54, 501-518.	4.2	22
82	Characterization of the Hydrogeological Experimental Site of Poitiers (France) by stochastic well testing analysis. <i>Journal of Hydrology</i> , 2009, 369, 154-164.	5.4	21
83	Interpretation of two-phase relative permeability curves through multiple formulations and Model Quality criteria. <i>Journal of Petroleum Science and Engineering</i> , 2015, 135, 738-749.	4.2	21
84	Analysis of the performance of a crude-oil desalting system based on historical data. <i>Fuel</i> , 2021, 291, 120046.	6.4	21
85	Theoretical analysis and field evidence of reciprocity gaps during interference pumping tests. <i>Advances in Water Resources</i> , 2011, 34, 592-606.	3.8	20
86	Upscaling solute transport in porous media from the pore scale to dual and multicontinuum formulations. <i>Water Resources Research</i> , 2013, 49, 2025-2039.	4.2	20
87	Title is missing!. <i>Transport in Porous Media</i> , 2002, 49, 41-58.	2.6	19
88	Travel time and trajectory moments of conservative solutes in two-dimensional convergent flows. <i>Journal of Contaminant Hydrology</i> , 2006, 82, 23-43.	3.3	19
89	Recent advances in scalable non-Gaussian geostatistics: The generalized sub-Gaussian model. <i>Journal of Hydrology</i> , 2018, 562, 685-691.	5.4	19
90	Assessment of uncertainty associated with the estimation of well catchments by moment equations. <i>Advances in Water Resources</i> , 2006, 29, 676-691.	3.8	18

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91	Detecting the vulnerability of groundwater in semi-confined aquifers using barometric response functions. <i>Journal of Hydrology</i> , 2015, 520, 143-156.	5.4	18
92	Prediction of three-phase oil relative permeability through a sigmoid-based model. <i>Journal of Petroleum Science and Engineering</i> , 2015, 126, 190-200.	4.2	18
93	Characterization of Bimolecular Reactive Transport in Heterogeneous Porous Media. <i>Transport in Porous Media</i> , 2016, 115, 291-310.	2.6	18
94	Extended power-law scaling of self-affine signals exhibiting apparent multifractality. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	4.0	17
95	Quantitative comparison of impeller-flowmeter and particle-size-distribution techniques for the characterization of hydraulic conductivity variability. <i>Hydrogeology Journal</i> , 2011, 19, 603-612.	2.1	17
96	Estimation of Single-Metal and Competitive Sorption Isotherms through Maximum Likelihood and Model Quality Criteria. <i>Soil Science Society of America Journal</i> , 2012, 76, 1229-1245.	2.2	17
97	Uncertainty Quantification in Scale-Dependent Models of Flow in Porous Media. <i>Water Resources Research</i> , 2017, 53, 9392-9401.	4.2	17
98	Influence of capillary end effects on steady-state relative permeability estimates from direct pore-scale simulations. <i>Physics of Fluids</i> , 2017, 29, .	4.0	17
99	Hysteresis effects of three-phase relative permeabilities on black-oil reservoir simulation under WAG injection protocols. <i>Journal of Petroleum Science and Engineering</i> , 2019, 176, 1161-1174.	4.2	17
100	Global Sensitivity Analysis for Multiple Interpretive Models With Uncertain Parameters. <i>Water Resources Research</i> , 2020, 56, e2019WR025754.	4.2	17
101	Travel time and trajectory moments of conservative solutes in three dimensional heterogeneous porous media under mean uniform flow. <i>Advances in Water Resources</i> , 2005, 28, 429-439.	3.8	16
102	A solution for multicomponent reactive transport under equilibrium and kinetic reactions. <i>Water Resources Research</i> , 2010, 46, .	4.2	16
103	Statistical scaling of pore-scale Lagrangian velocities in natural porous media. <i>Physical Review E</i> , 2014, 90, 023013.	2.1	16
104	Impact of two geostatistical hydro-facies simulation strategies on head statistics under non-uniform groundwater flow. <i>Journal of Hydrology</i> , 2014, 508, 343-355.	5.4	16
105	Theoretical analysis of non-Gaussian heterogeneity effects on subsurface flow and transport. <i>Water Resources Research</i> , 2017, 53, 2998-3012.	4.2	16
106	Extended power-law scaling of heavy-tailed random air-permeability fields in fractured and sedimentary rocks. <i>Hydrology and Earth System Sciences</i> , 2012, 16, 3249-3260.	4.9	15
107	Implications of uncertain bioreactive parameters on a complex reaction network of atrazine biodegradation in soil. <i>Advances in Water Resources</i> , 2018, 121, 263-276.	3.8	15
108	Local and Global Sensitivity Analysis of $Cr(VI)$ Geogenic Leakage Under Uncertain Environmental Conditions. <i>Water Resources Research</i> , 2018, 54, 5785-5802.	4.2	15

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109	Recent Advances in Statistical and Scaling Analysis of Earth and Environmental Variables. , 2013, , 1-25.		14
110	A reduced-order model for Monte Carlo simulations of stochastic groundwater flow. Computational Geosciences, 2014, 18, 157-169.	2.4	14
111	Impact of space-time mesh adaptation on solute transport modeling in porous media. Water Resources Research, 2015, 51, 1315-1332.	4.2	14
112	Comparative assessment of three-phase oil relative permeability models. Water Resources Research, 2016, 52, 5341-5356.	4.2	14
113	Estimation of spatial covariance of log conductivity from particle size data. Water Resources Research, 2014, 50, 5298-5308.	4.2	13
114	Scalable statistics of correlated random variables and extremes applied to deep borehole porosities. Hydrology and Earth System Sciences, 2015, 19, 729-745.	4.9	13
115	Simulation and analysis of scalable non-Gaussian statistically anisotropic random functions. Journal of Hydrology, 2015, 531, 88-95.	5.4	13
116	Application of a mixing-ratios based formulation to model mixing-driven dissolution experiments. Advances in Water Resources, 2009, 32, 756-766.	3.8	12
117	Statistical Scaling of Geometric Characteristics in Millimeter Scale Natural Porous Media. Transport in Porous Media, 2014, 101, 465-475.	2.6	12
118	Direct numerical simulation of fully saturated flow in natural porous media at the pore scale: a comparison of three computational systems. Computational Geosciences, 2015, 19, 423-437.	2.4	12
119	Theory and generation of conditional, scalable sub-Gaussian random fields. Water Resources Research, 2016, 52, 1746-1761.	4.2	12
120	Probabilistic assessment of spatial heterogeneity of natural background concentrations in large-scale groundwater bodies through Functional Geostatistics. Science of the Total Environment, 2020, 740, 140139.	8.0	12
121	Uncertainty Analysis and Identification of Key Parameters Controlling Bacteria Transport Within a Riverbank Filtration Scenario. Water Resources Research, 2021, 57, e2020WR027911.	4.2	12
122	Short Note: Effective Hydraulic Conductivity and Transmissivity for Heterogeneous Aquifers. Mathematical Geosciences, 2000, 32, 751-759.	0.9	11
123	Nearest-neighbor classification for facies delineation. Water Resources Research, 2007, 43, .	4.2	11
124	Stochastic characterization of the Montalto Uffugo research site (Italy) by geostatistical inversion of moment equations of groundwater flow. Journal of Hydrology, 2010, 381, 42-51.	5.4	11
125	Identification of Channeling in Pore-scale Flows. Geophysical Research Letters, 2019, 46, 3270-3278.	4.0	11
126	Mobility and Interaction of Heavy Metals in a Natural Soil. Transport in Porous Media, 2013, 97, 295-315.	2.6	10



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127	Geochemical modeling of arsenic release from a deep natural solid matrix under alternated redox conditions. <i>Environmental Science and Pollution Research</i> , 2014, 21, 1628-1637.	5.3	10
128	Solute concentration at a well in non-Gaussian aquifers under constant and time-varying pumping schedule. <i>Journal of Contaminant Hydrology</i> , 2017, 205, 37-46.	3.3	10
129	Identifiability of parameters of three-phase oil relative permeability models under simultaneous water and gas (SWAG) injection. <i>Journal of Petroleum Science and Engineering</i> , 2017, 159, 942-951.	4.2	10
130	Stochastic inverse modeling and global sensitivity analysis to assist interpretation of drilling mud losses in fractured formations. <i>Stochastic Environmental Research and Risk Assessment</i> , 2019, 33, 1681-1697.	4.0	10
131	Generalized Sub-Gaussian Processes: Theory and Application to Hydrogeological and Geochemical Data. <i>Water Resources Research</i> , 2020, 56, e2020WR027436.	4.2	10
132	Probabilistic identification of Preferential Groundwater Networks. <i>Journal of Hydrology</i> , 2022, 610, 127906.	5.4	10
133	Controlling scaling metrics for improved characterization of well-head protection regions. <i>Journal of Hydrology</i> , 2013, 494, 107-115.	5.4	9
134	Three-Phase Permeabilities: Upscaling, Analytical Solutions and Uncertainty Analysis in Elementary Pore Structures. <i>Transport in Porous Media</i> , 2015, 106, 259-283.	2.6	9
135	Identification of groundwater flow parameters using reciprocal data from hydraulic interference tests. <i>Journal of Hydrology</i> , 2016, 539, 88-101.	5.4	9
136	Assessment of alternative adsorption models and global sensitivity analysis to characterize hexavalent chromium loss from soil to surface runoff. <i>Hydrological Processes</i> , 2018, 32, 3140-3157.	2.6	9
137	Statistical modeling of gas-permeability spatial variability along a limestone core. <i>Spatial Statistics</i> , 2019, 34, 100249.	1.9	9
138	Formulation and probabilistic assessment of reversible biodegradation pathway of Diclofenac in groundwater. <i>Water Research</i> , 2021, 204, 117466.	11.3	9
139	Predicting vertical connectivity within an aquifer system. <i>Bayesian Analysis</i> , 2010, 5, .	3.0	8
140	On the emergence of reciprocity gaps during interference pumping tests in unconfined aquifers. <i>Advances in Water Resources</i> , 2012, 46, 11-19.	3.8	8
141	On the identification of Dragon Kings among extreme-valued outliers. <i>Nonlinear Processes in Geophysics</i> , 2013, 20, 549-561.	1.3	8
142	Characterization of reciprocity gaps from interference tests in fractured media through a dual porosity model. <i>Water Resources Research</i> , 2016, 52, 1696-1704.	4.2	8
143	An Approach Towards a FEP-based Model for Risk Assessment for Hydraulic Fracturing Operations. <i>Energy Procedia</i> , 2016, 97, 387-394.	1.8	8
144	Effects of Pore-Scale Geometry and Wettability on Two-Phase Relative Permeabilities within Elementary Cells. <i>Water (Switzerland)</i> , 2017, 9, 252.	2.7	8

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145	Probabilistic analysis of risk and mitigation of deepwater well blowouts and oil spills. <i>Stochastic Environmental Research and Risk Assessment</i> , 2018, 32, 2647-2666.	4.0	8
146	Adaptive POD model reduction for solute transport in heterogeneous porous media. <i>Computational Geosciences</i> , 2018, 22, 297-308.	2.4	8
147	Effective Properties of Random Composites. <i>SIAM Journal of Scientific Computing</i> , 2004, 26, 625-635.	2.8	7
148	An integrated simulation framework for the performance assessment of radioactive waste repositories. <i>Annals of Nuclear Energy</i> , 2012, 39, 1-8.	1.8	7
149	Interpretation of flowmeter data in heterogeneous layered aquifers. <i>Journal of Hydrology</i> , 2012, 452-453, 76-82.	5.4	7
150	Quantification of CO <sub>2</sub> generation in sedimentary basins through carbonate/clays reactions with uncertain thermodynamic parameters. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 213, 198-215.	3.9	7
151	Dimensionality reduction for efficient Bayesian estimation of groundwater flow in strongly heterogeneous aquifers. <i>Stochastic Environmental Research and Risk Assessment</i> , 2017, 31, 2313-2326.	4.0	7
152	Uncertainty quantification of overpressure buildup through inverse modeling of compaction processes in sedimentary basins. <i>Hydrogeology Journal</i> , 2017, 25, 385-403.	2.1	7
153	Data Assimilation in Density-Dependent Subsurface Flows via Localized Iterative Ensemble Kalman Filter. <i>Water Resources Research</i> , 2018, 54, 6259-6281.	4.2	7
154	Stochastic Inverse Modeling and Parametric Uncertainty of Sediment Deposition Processes Across Geologic Time Scales. <i>Mathematical Geosciences</i> , 2021, 53, 1101-1124.	2.4	7
155	Introduction: Stochastic Models of Flow and Transport in Multiple-scale Heterogeneous Porous Media. <i>Journal of Hydrology</i> , 2004, 294, 1-3.	5.4	6
156	Effect of Sorption Heterogeneity on Moments of Solute Residence Time in Convergent Flows. <i>Mathematical Geosciences</i> , 2009, 41, 835-853.	2.4	6
157	Benchmarking numerical codes for tracer transport with the aid of laboratory-scale experiments in 2D heterogeneous porous media. <i>Journal of Contaminant Hydrology</i> , 2018, 212, 55-64.	3.3	6
158	Statistical Characterization of Heterogeneous Dissolution Rates of Calcite from In situ and Real-Time AFM Imaging. <i>Transport in Porous Media</i> , 2021, 140, 291-312.	2.6	6
159	Solute transport in random composite media with uncertain dispersivities. <i>Advances in Water Resources</i> , 2019, 128, 48-58.	3.8	5
160	Integration of moment equations in a reduced-order modeling strategy for Monte Carlo simulations of groundwater flow. <i>Journal of Hydrology</i> , 2020, 590, 125257.	5.4	5
161	Solute transport in bounded porous media characterized by generalized sub-Gaussian log-conductivity distributions. <i>Advances in Water Resources</i> , 2021, 147, 103812.	3.8	5
162	Pore-scale computational analyses of non-Darcy flow through highly porous structures with various degrees of geometrical complexity. <i>Sustainable Energy Technologies and Assessments</i> , 2022, 52, 102048.	2.7	5

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163	Effects of evolving scales of heterogeneity on hydraulic head predictions under convergent flow conditions. <i>Hydrogeology Journal</i> , 2009, 17, 817-825.	2.1	4
164	Analytical expressions for three-phase generalized relative permeabilities in water- and oil-wet capillary tubes. <i>Computational Geosciences</i> , 2016, 20, 555-565.	2.4	4
165	Solute dispersion for stable density-driven flow in randomly heterogeneous porous media. <i>Advances in Water Resources</i> , 2018, 111, 329-345.	3.8	4
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