Felipe P J De Barros

List of Publications by Year
in descending order

39	879	471509 17	501196 28
papers	citations	h-index	g-index

39	39	39	684
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Flow topology and scalar mixing in spatially heterogeneous flow fields. Geophysical Research Letters, 2012, 39, .	4.0	100
2	Stochastic fluxâ€related analysis of transverse mixing in twoâ€dimensional heterogeneous porous media. Water Resources Research, 2011, 47, .	4.2	66
3	The concept of comparative information yield curves and its application to riskâ€based site characterization. Water Resources Research, 2009, 45, .	4.2	58
4	Stochastic evaluation of mixing-controlled steady-state plume lengths in two-dimensional heterogeneous domains. Journal of Contaminant Hydrology, 2012, 138-139, 22-39.	3.3	45
5	A hypothesisâ€driven approach to optimize field campaigns. Water Resources Research, 2012, 48, .	4.2	44
6	Probabilistic human health risk assessment of degradationâ€related chemical mixtures in heterogeneous aquifers: Risk statistics, hot spots, and preferential channels. Water Resources Research, 2015, 51, 4086-4108.	4.2	40
7	Minimum Hydraulic Resistance and Least Resistance Path in Heterogeneous Porous Media. Water Resources Research, 2017, 53, 8596-8613.	4.2	39
8	On the link between contaminant source release conditions and plume prediction uncertainty. Journal of Contaminant Hydrology, 2010, 116, 24-34.	3.3	38
9	Vertical dispersion in vegetated shear flows. Water Resources Research, 2016, 52, 8066-8080.	4.2	37
10	Modelling of block-scale macrodispersion as a random function. Journal of Fluid Mechanics, 2011, 676, 514-545.	3.4	35
11	An indirect assessment on the impact of connectivity of conductivity classes upon longitudinal asymptotic macrodispersivity. Water Resources Research, 2010, 46, .	4.2	31
12	A divide and conquer approach to cope with uncertainty, human health risk, and decision making in contaminant hydrology. Water Resources Research, 2011, 47, .	4.2	29
13	Mixing-scale dependent dispersion for transport in heterogeneous flows. Journal of Fluid Mechanics, 2015, 777, 178-195.	3.4	28
14	Coupled continuous-time random walks for fluid stretching in two-dimensional heterogeneous media. Physical Review E, 2016, 94, 061102.	2.1	22
15	Hydraulic fracturing and the environment: risk assessment for groundwater contamination from well casing failure. Stochastic Environmental Research and Risk Assessment, 2017, 31, 1527-1542.	4.0	21
16	Improving the Efficiency of 3â€D Hydrogeological Mixers: Dilution Enhancement Via Coupled Engineeringâ€induced Transient Flows and Spatial Heterogeneity. Water Resources Research, 2018, 54, 2095-2111.	4.2	20
17	Probability density function of steady state concentration in twoâ€dimensional heterogeneous porous media. Water Resources Research, 2011, 47, .	4.2	19
18	Effects of the hydraulic conductivity microstructure on macrodispersivity. Water Resources Research, 2016, 52, 6818-6832.	4.2	17

#	Article	IF	Citations
19	Climate change impact on residual contaminants under sustainable remediation. Journal of Contaminant Hydrology, 2019, 226, 103518.	3.3	17
20	Scaling forms of particle densities for LÃ©vy walks and strong anomalous diffusion. Physical Review E, 2015, 92, 032128.	2.1	15
21	Uncertainty quantification of environmental performance metrics in heterogeneous aquifers with long-range correlations. Journal of Contaminant Hydrology, 2017, 196, 21-29.	3.3	15
22	Dilution enhancement in hierarchical and multiscale heterogeneous sediments. Journal of Hydrology, 2020, 587, 125025.	5.4	15
23	Dispersion variance for transport in heterogeneous porous media. Water Resources Research, 2013, 49, 3443-3461.	4.2	13
24	Transport analysis in deformable porous media through integral transforms. International Journal for Numerical and Analytical Methods in Geomechanics, 2021, 45, 307-324.	3.3	11
25	Solute concentration at a well in non-Gaussian aquifers under constant and time-varying pumping schedule. Journal of Contaminant Hydrology, 2017, 205, 37-46.	3.3	10
26	Estimating Dispersion Coefficient in Flow Through Heterogeneous Porous Media by a Deep Convolutional Neural Network. Geophysical Research Letters, 2021, 48, e2021GL094443.	4.0	9
27	Characterizing the Influence of Multiple Uncertainties on Predictions of Contaminant Discharge in Groundwater Within a Lagrangian Stochastic Formulation. Water Resources Research, 2020, 56, e2020WR027867.	4.2	9
28	Spatiotemporal Dynamics of Nitrous Oxide Emission Hotspots in Heterogeneous Riparian Sediments. Water Resources Research, 2021, 57, e2021WR030496.	4.2	9
29	Radial solute transport in highly heterogeneous aquifers: Modeling and experimental comparison. Water Resources Research, 2017, 53, 5725-5741.	4.2	8
30	Adaptive POD model reduction for solute transport in heterogeneous porous media. Computational Geosciences, 2018, 22, 297-308.	2.4	8
31	Fluid deformation in random steady three-dimensional flow. Journal of Fluid Mechanics, 2018, 855, 770-803.	3.4	8
32	Application of genetic programming for model-free identification of nonlinear multi-physics systems. Nonlinear Dynamics, 2021, 104, 1781-1800.	5.2	8
33	Minimum Hydraulic Resistance Uncertainty and the Development of a Connectivityâ€Based Iterative Sampling Strategy. Water Resources Research, 2019, 55, 5593-5611.	4.2	7
34	Temporal flow variations interact with spatial physical heterogeneity to impact solute transport in managed river corridors. Journal of Contaminant Hydrology, 2020, 235, 103713.	3.3	7
35	Resilience of groundwater systems in the presence of Bisphenol A under uncertainty. Science of the Total Environment, 2020, 727, 138363.	8.0	6
36	Improving the computational efficiency of first arrival time uncertainty estimation using a connectivity-based ranking Monte Carlo method. Stochastic Environmental Research and Risk Assessment, 2021, 35, 1039-1049.	4.0	5

#	Article	IF	Citations
37	On the Maximum Concentration of Contaminants in Natural Aquifers. Transport in Porous Media, 2021, 140, 273-290.	2.6	5
38	Assessing the Groundwater Contamination Potential from a Well in a Hydraulic Fracturing Operation. Journal of Sustainable Energy Engineering, 2015, 3, 66-79.	0.3	4
39	VisU-HydRA: A Computational Toolbox for Groundwater Contaminant Transport to Support Risk-Based Decision Making. Frontiers in Earth Science, 0, 10, .	1.8	1