Alberto Guadagnini

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/9076977/publications.pdf

Version: 2024-02-01

196 papers 5,353 citations

76326 40 h-index 61 g-index

202 all docs 202 docs citations

times ranked

202

3075 citing authors

| # | Article | lF | CITATIONS |
|----|--|--------------|-----------|
| 1 | Sensitivity Analysis and Quantification of the Role of Governing Transport Mechanisms and Parameters in a Gas Flow Model for Low-Permeability Porous Media. Transport in Porous Media, 2022, 142, 509-530. | 2.6 | 3 |
| 2 | Pore-scale computational analyses of non-Darcy flow through highly porous structures with various degrees of geometrical complexity. Sustainable Energy Technologies and Assessments, 2022, 52, 102048. | 2.7 | 5 |
| 3 | Assessment of Hydrological Processes in an Ungauged Catchment in Eritrea. Hydrology, 2022, 9, 68. | 3.0 | 3 |
| 4 | Probabilistic identification of Preferential Groundwater Networks. Journal of Hydrology, 2022, 610, 127906. | 5 . 4 | 10 |
| 5 | Macrodispersion in generalized sub-Gaussian randomly heterogeneous porous media. International Journal of Heat and Mass Transfer, 2022, 195, 123117. | 4.8 | 1 |
| 6 | Natural springs protection and probabilistic risk assessment under uncertain conditions. Science of the Total Environment, 2021, 751, 141430. | 8.0 | 2 |
| 7 | Solute transport in bounded porous media characterized by generalized sub-Gaussian log-conductivity distributions. Advances in Water Resources, 2021, 147, 103812. | 3 . 8 | 5 |
| 8 | Data assimilation with multiple types of observation boreholes via the ensemble Kalman filter embedded within stochastic moment equations. Hydrology and Earth System Sciences, 2021, 25, 1689-1709. | 4.9 | 4 |
| 9 | Uncertainty Analysis and Identification of Key Parameters Controlling Bacteria Transport Within a Riverbank Filtration Scenario. Water Resources Research, 2021, 57, e2020WR027911. | 4.2 | 12 |
| 10 | Analysis of the performance of a crude-oil desalting system based on historical data. Fuel, 2021, 291, 120046. | 6.4 | 21 |
| 11 | Statistical Characterization of Heterogeneous Dissolution Rates of Calcite from In situ and Real-Time AFM Imaging. Transport in Porous Media, 2021, 140, 291-312. | 2.6 | 6 |
| 12 | Object oriented spatial analysis of natural concentration levels of chemical species in regional-scale aquifers. Spatial Statistics, 2021, 43, 100494. | 1.9 | 4 |
| 13 | Probabilistic modeling of field-scale CO ₂ generation by carbonate–clay reactions in sedimentary basins. Hydrology and Earth System Sciences, 2021, 25, 3539-3553. | 4.9 | 2 |
| 14 | Impact of multiple uncertainties on gravimetric variations across randomly heterogeneous aquifers during pumping. Advances in Water Resources, 2021, 154, 103978. | 3.8 | 3 |
| 15 | Formulation and probabilistic assessment of reversible biodegradation pathway of Diclofenac in groundwater. Water Research, 2021, 204, 117466. | 11.3 | 9 |
| 16 | Modeling solute transport and mixing in heterogeneous porous media under turbulent flow conditions. Physics of Fluids, 2021, 33, 106604. | 4.0 | 3 |
| 17 | Statistical Description of Calcite Surface Roughness Resulting from Dissolution at Close-to-Equilibrium Conditions. ACS Earth and Space Chemistry, 2021, 5, 3115-3129. | 2.7 | 4 |
| 18 | Stochastic Inverse Modeling and Parametric Uncertainty of Sediment Deposition Processes Across Geologic Time Scales. Mathematical Geosciences, 2021, 53, 1101-1124. | 2.4 | 7 |

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| 19 | Feedback mechanisms between precipitation and dissolution reactions across randomly heterogeneous conductivity fields. Hydrology and Earth System Sciences, 2021, 25, 5905-5915. | 4.9 | 2 |
| 20 | Features of transport in non-Gaussian random porous systems. International Journal of Heat and Mass Transfer, 2021, 184, 122244. | 4.8 | 2 |
| 21 | Implementation of Three-Phase Black-Oil Reservoir Models Assisted by Micro-Scale Analyses. , 2020, , . | | 0 |
| 22 | Copula density-driven metrics for sensitivity analysis: Theory and application to flow and transport in porous media. Advances in Water Resources, 2020, 145, 103714. | 3.8 | 4 |
| 23 | Assessment of turbulence effects on effective solute diffusivity close to a sediment-free fluid interface. Stochastic Environmental Research and Risk Assessment, 2020, 34, 2211-2228. | 4.0 | 4 |
| 24 | Quantification of the information content of Darcy fluxes associated with hydraulic conductivity fields evaluated at diverse scales. Advances in Water Resources, 2020, 145, 103730. | 3.8 | 2 |
| 25 | 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 |
| 26 | Random walk evaluation of Green's functions for groundwater flow in heterogeneous aquifers. Journal of Hydrology, 2020, 588, 125029. | 5.4 | 3 |
| 27 | Integration of moment equations in a reduced-order modeling strategy for Monte Carlo simulations of groundwater flow. Journal of Hydrology, 2020, 590, 125257. | 5.4 | 5 |
| 28 | Generalized Subâ€Gaussian Processes: Theory and Application to Hydrogeological and Geochemical Data. Water Resources Research, 2020, 56, e2020WR027436. | 4.2 | 10 |
| 29 | Global Sensitivity Analysis for Multiple Interpretive Models With Uncertain Parameters. Water Resources Research, 2020, 56, e2019WR025754. | 4.2 | 17 |
| 30 | Combining Two- and Three-Phase Coreflooding Experiments for Reservoir Simulation Under WAG Practices. , 2020, , . | | 2 |
| 31 | Interpretation of multi-scale permeability data through an information theory perspective. Hydrology and Earth System Sciences, 2020, 24, 3097-3109. | 4.9 | 2 |
| 32 | Grid convergence for numerical solutions of stochastic moment equations of groundwater flow. Stochastic Environmental Research and Risk Assessment, 2019, 33, 1565-1579. | 4.0 | 4 |
| 33 | Stochastic inverse modeling and global sensitivity analysis to assist interpretation of drilling mud losses in fractured formations. Stochastic Environmental Research and Risk Assessment, 2019, 33, 1681-1697. | 4.0 | 10 |
| 34 | Global sensitivity analyses of multiple conceptual models with uncertain parameters driving groundwater flow in a regional-scale sedimentary aquifer. Journal of Hydrology, 2019, 574, 544-556. | 5 . 4 | 37 |
| 35 | Identification of Channeling in Poreâ€Scale Flows. Geophysical Research Letters, 2019, 46, 3270-3278. | 4.0 | 11 |
| 36 | Solute transport in random composite media with uncertain dispersivities. Advances in Water Resources, 2019, 128, 48-58. | 3.8 | 5 |

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| 37 | Hysteresis effects of three-phase relative permeabilities on black-oil reservoir simulation under WAG injection protocols. Journal of Petroleum Science and Engineering, 2019, 176, 1161-1174. | 4.2 | 17 |
| 38 | Geostatistical multimodel approach for the assessment of the spatial distribution of natural background concentrations in large-scale groundwater bodies. Water Research, 2019, 149, 522-532. | 11.3 | 33 |
| 39 | Statistical modeling of gas-permeability spatial variability along a limestone core. Spatial Statistics, 2019, 34, 100249. | 1.9 | 9 |
| 40 | Probabilistic analysis of risk and mitigation of deepwater well blowouts and oil spills. Stochastic Environmental Research and Risk Assessment, 2018, 32, 2647-2666. | 4.0 | 8 |
| 41 | Uncertainty Quantification and Global Sensitivity Analysis of Subsurface Flow Parameters to Gravimetric Variations During Pumping Tests in Unconfined Aquifers. Water Resources Research, 2018, 54, 501-518. | 4.2 | 22 |
| 42 | Benchmarking numerical codes for tracer transport with the aid of laboratory-scale experiments in 2D heterogeneous porous media. Journal of Contaminant Hydrology, 2018, 212, 55-64. | 3.3 | 6 |
| 43 | Space-time mesh adaptation for solute transport in randomly heterogeneous porous media. Journal of Contaminant Hydrology, 2018, 212, 28-40. | 3.3 | 3 |
| 44 | Solute dispersion for stable density-driven flow in randomly heterogeneous porous media. Advances in Water Resources, 2018, 111, 329-345. | 3.8 | 4 |
| 45 | Adaptive POD model reduction for solute transport in heterogeneous porous media. Computational Geosciences, 2018, 22, 297-308. | 2.4 | 8 |
| 46 | Implications of uncertain bioreactive parameters on a complex reaction network of atrazine biodegradation in soil. Advances in Water Resources, 2018, 121, 263-276. | 3.8 | 15 |
| 47 | Recent advances in scalable non-Gaussian geostatistics: The generalized sub-Gaussian model. Journal of Hydrology, 2018, 562, 685-691. | 5.4 | 19 |
| 48 | Assessment of alternative adsorption models and global sensitivity analysis to characterize hexavalent chromium loss from soil to surface runoff. Hydrological Processes, 2018, 32, 3140-3157. | 2.6 | 9 |
| 49 | Local and Global Sensitivity Analysis of <i>Cr (VI)</i> Geogenic Leakage Under Uncertain Environmental Conditions. Water Resources Research, 2018, 54, 5785-5802. | 4.2 | 15 |
| 50 | Data Assimilation in Densityâ€Dependent Subsurface Flows via Localized Iterative Ensemble Kalman Filter. Water Resources Research, 2018, 54, 6259-6281. | 4.2 | 7 |
| 51 | Influence of pumping operational schedule on solute concentrations at a well in randomly heterogeneous aquifers. Journal of Hydrology, 2017, 546, 490-502. | 5.4 | 32 |
| 52 | Automatic method for estimation of in situ effective contact angle from X-ray micro tomography images of two-phase flow in porous media. Journal of Colloid and Interface Science, 2017, 496, 51-59. | 9.4 | 123 |
| 53 | Theoretical analysis of nonâ€ <scp>G</scp> aussian heterogeneity effects on subsurface flow and transport. Water Resources Research, 2017, 53, 2998-3012. | 4.2 | 16 |
| 54 | 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 |

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| 55 | Uncertainty Quantification in Scaleâ€Dependent Models of Flow in Porous Media. Water Resources Research, 2017, 53, 9392-9401. | 4.2 | 17 |
| 56 | Identifiability of parameters of three-phase oil relative permeability models under simultaneous water and gas (SWAG) injection. Journal of Petroleum Science and Engineering, 2017, 159, 942-951. | 4.2 | 10 |
| 57 | Quantification of CO2 generation in sedimentary basins through carbonate/clays reactions with uncertain thermodynamic parameters. Geochimica Et Cosmochimica Acta, 2017, 213, 198-215. | 3.9 | 7 |
| 58 | Dimensionality reduction for efficient Bayesian estimation of groundwater flow in strongly heterogeneous aquifers. Stochastic Environmental Research and Risk Assessment, 2017, 31, 2313-2326. | 4.0 | 7 |
| 59 | Uncertainty quantification of overpressure buildup through inverse modeling of compaction processes in sedimentary basins. Hydrogeology Journal, 2017, 25, 385-403. | 2.1 | 7 |
| 60 | Influence of capillary end effects on steady-state relative permeability estimates from direct pore-scale simulations. Physics of Fluids, 2017, 29, . | 4.0 | 17 |
| 61 | Moment-based metrics for global sensitivity analysis of hydrological systems. Hydrology and Earth System Sciences, 2017, 21, 6219-6234. | 4.9 | 55 |
| 62 | Effects of Pore-Scale Geometry and Wettability on Two-Phase Relative Permeabilities within Elementary Cells. Water (Switzerland), 2017, 9, 252. | 2.7 | 8 |
| 63 | Characterization of reciprocity gaps from interference tests in fractured media through a dual porosity model. Water Resources Research, 2016, 52, 1696-1704. | 4.2 | 8 |
| 64 | An Approach Towards a FEP-based Model for Risk Assessment for Hydraulic Fracturing Operations. Energy Procedia, 2016, 97, 387-394. | 1.8 | 8 |
| 65 | Characterization of Bimolecular Reactive Transport in Heterogeneous Porous Media. Transport in Porous Media, 2016, 115, 291-310. | 2.6 | 18 |
| 66 | A Class-Kriging Predictor for Functional Compositions with Application to Particle-Size Curves in Heterogeneous Aquifers. Mathematical Geosciences, 2016, 48, 463-485. | 2.4 | 25 |
| 67 | Characterization of two- and three-phase relative permeability of water-wet porous media through X-Ray saturation measurements. Journal of Petroleum Science and Engineering, 2016, 145, 453-463. | 4.2 | 26 |
| 68 | Data-worth analysis through probabilistic collocation-based Ensemble Kalman Filter. Journal of Hydrology, 2016, 540, 488-503. | 5.4 | 32 |
| 69 | Stochastic simulation of soil particleâ€size curves in heterogeneous aquifer systems through a Bayes space approach. Water Resources Research, 2016, 52, 5708-5726. | 4.2 | 25 |
| 70 | Inverse modeling of unsaturated flow using clusters of soil texture and pedotransfer functions. Water Resources Research, 2016, 52, 7631-7644. | 4.2 | 22 |
| 71 | Comparative assessment of threeâ€phase oil relative permeability models. Water Resources Research, 2016, 52, 5341-5356. | 4.2 | 14 |
| 72 | Theory and generation of conditional, scalable sub-Gaussian random fields. Water Resources Research, 2016, 52, 1746-1761. | 4.2 | 12 |

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| 73 | Identification of groundwater flow parameters using reciprocal data from hydraulic interference tests. Journal of Hydrology, 2016, 539, 88-101. | 5.4 | 9 |
| 74 | A Novel Enhanced-Oil-Recovery Screening Approach Based on Bayesian Clustering and Principal-Component Analysis. SPE Reservoir Evaluation and Engineering, 2016, 19, 382-390. | 1.8 | 25 |
| 75 | Geostatistical Analysis of Functional Compositions: Characterization of Soil Particle-Size Curves through the Aitchison Geometry. , 2016, , 65-69. | | O |
| 76 | Integration of Markov mesh models and data assimilation techniques in complex reservoirs. Computational Geosciences, 2016, 20, 637-653. | 2.4 | 3 |
| 77 | Analytical expressions for three-phase generalized relative permeabilities in water- and oil-wet capillary tubes. Computational Geosciences, 2016, 20, 555-565. | 2.4 | 4 |
| 78 | Continuumâ€scale characterization of solute transport based on poreâ€scale velocity distributions. Geophysical Research Letters, 2015, 42, 7537-7545. | 4.0 | 33 |
| 79 | New scaling model for variables and increments with heavyâ€tailed distributions. Water Resources Research, 2015, 51, 4623-4634. | 4.2 | 25 |
| 80 | Impact of spaceâ€time mesh adaptation on solute transport modeling in porous media. Water Resources Research, 2015, 51, 1315-1332. | 4.2 | 14 |
| 81 | Multimodel framework for characterization of transport in porous media. Water Resources Research, 2015, 51, 3384-3402. | 4.2 | 22 |
| 82 | Laboratory-scale Investigation of Two-phase Relative Permeability. Procedia Environmental Sciences, 2015, 25, 166-174. | 1.4 | 3 |
| 83 | 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 |
| 84 | 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 |
| 85 | Interpretation of two-phase relative permeability curves through multiple formulations and Model Quality criteria. Journal of Petroleum Science and Engineering, 2015, 135, 738-749. | 4.2 | 21 |
| 86 | Detecting the vulnerability of groundwater in semi-confined aquifers using barometric response functions. Journal of Hydrology, 2015, 520, 143-156. | 5.4 | 18 |
| 87 | Anti-correlated Porosity–Permeability Changes During the Dissolution of Carbonate Rocks: Experimental Evidences and Modeling. Transport in Porous Media, 2015, 107, 595-621. | 2.6 | 48 |
| 88 | Simulation and analysis of scalable non-Gaussian statistically anisotropic random functions. Journal of Hydrology, 2015, 531, 88-95. | 5.4 | 13 |
| 89 | Upscaling thermal conductivities of sedimentary formations for geothermal exploration. Geothermics, 2015, 58, 49-61. | 3.4 | 28 |
| 90 | Statistical scaling of geometric characteristics in stochastically generated pore microstructures. Computational Geosciences, 2015, 19, 845-854. | 2.4 | 3 |

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| 91 | Prediction of three-phase oil relative permeability through a sigmoid-based model. Journal of Petroleum Science and Engineering, 2015, 126, 190-200. | 4.2 | 18 |
| 92 | EnKF coupled with groundwater flow moment equations applied to Lauswiesen aquifer, Germany. Journal of Hydrology, 2015, 521, 205-216. | 5.4 | 26 |
| 93 | Probabilistic assessment of seawater intrusion under multiple sources of uncertainty. Advances in Water Resources, 2015, 75, 93-104. | 3.8 | 31 |
| 94 | Three-Phase Permeabilities: Upscaling, Analytical Solutions and Uncertainty Analysis in Elementary Pore Structures. Transport in Porous Media, 2015, 106, 259-283. | 2.6 | 9 |
| 95 | Origins of anomalous transport in heterogeneous media: Structural and dynamic controls. Water Resources Research, 2014, 50, 1490-1505. | 4.2 | 128 |
| 96 | Relationship between pore size and velocity probability distributions in stochastically generated porous media. Physical Review E, 2014, 89, 013018. | 2.1 | 53 |
| 97 | Statistical scaling of pore-scale Lagrangian velocities in natural porous media. Physical Review E, 2014, 90, 023013. | 2.1 | 16 |
| 98 | Impact of two geostatistical hydro-facies simulation strategies on head statistics under non-uniform groundwater flow. Journal of Hydrology, 2014, 508, 343-355. | 5.4 | 16 |
| 99 | A reduced-order model for Monte Carlo simulations of stochastic groundwater flow. Computational Geosciences, 2014, 18, 157-169. | 2.4 | 14 |
| 100 | A kriging approach based on Aitchison geometry for the characterization of particle-size curves in heterogeneous aquifers. Stochastic Environmental Research and Risk Assessment, 2014, 28, 1835-1851. | 4.0 | 58 |
| 101 | Geochemical modeling of arsenic release from a deep natural solid matrix under alternated redox conditions. Environmental Science and Pollution Research, 2014, 21, 1628-1637. | 5.3 | 10 |
| 102 | Statistical Scaling of Geometric Characteristics in Millimeter Scale Natural Porous Media. Transport in Porous Media, 2014, 101, 465-475. | 2.6 | 12 |
| 103 | Comparison of Ensemble Kalman Filter groundwater-data assimilation methods based on stochastic moment equations and Monte Carlo simulation. Advances in Water Resources, 2014, 66, 8-18. | 3.8 | 28 |
| 104 | Anisotropic statistical scaling of soil and sediment texture in a stratified deep vadose zone near Maricopa, Arizona. Geoderma, 2014, 214-215, 217-227. | 5.1 | 26 |
| 105 | Multimodel <scp>B</scp> ayesian analysis of groundwater data worth. Water Resources Research, 2014, 50, 8481-8496. | 4.2 | 38 |
| 106 | Estimation of spatial covariance of log conductivity from particle size data. Water Resources Research, 2014, 50, 5298-5308. | 4.2 | 13 |
| 107 | Polynomial chaos expansion for global sensitivity analysis applied to a model of radionuclide migration in a randomly heterogeneous aquifer. Stochastic Environmental Research and Risk Assessment, 2013, 27, 945-954. | 4.0 | 74 |
| 108 | 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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| 109 | New General Analytical Solution for Infiltration Structures Design. Journal of Hydraulic Engineering, 2013, 139, 637-644. | 1.5 | 3 |
| 110 | Numerical investigation of pore and continuum scale formulations of bimolecular reactive transport in porous media. Advances in Water Resources, 2013, 62, 243-253. | 3.8 | 46 |
| 111 | Reactive transport in disordered media: Role of fluctuations in interpretation of laboratory experiments. Advances in Water Resources, 2013, 51, 86-103. | 3.8 | 23 |
| 112 | Sub-Gaussian model of processes with heavy-tailed distributions applied to air permeabilities of fractured tuff. Stochastic Environmental Research and Risk Assessment, 2013, 27, 195-207. | 4.0 | 35 |
| 113 | Controlling scaling metrics for improved characterization of well-head protection regions. Journal of Hydrology, 2013, 494, 107-115. | 5. 4 | 9 |
| 114 | Arsenic release from deep natural solid matrices under experimentally controlled redox conditions. Science of the Total Environment, 2013, 444, 231-240. | 8.0 | 43 |
| 115 | Upscaling solute transport in porous media from the pore scale to dual―and multicontinuum formulations. Water Resources Research, 2013, 49, 2025-2039. | 4.2 | 20 |
| 116 | Recent Advances in Statistical and Scaling Analysis of Earth and Environmental Variables., 2013,, 1-25. | | 14 |
| 117 | Global sensitivity analysis through polynomial chaos expansion of a basin-scale geochemical compaction model. Computational Geosciences, 2013, 17, 25-42. | 2.4 | 71 |
| 118 | Anisotropic Scaling of Berea Sandstone Log Air Permeability Statistics. Vadose Zone Journal, 2013, 12, 1-15. | 2.2 | 25 |
| 119 | Data assimilation and parameter estimation via ensemble Kalman filter coupled with stochastic moment equations of transient groundwater flow. Water Resources Research, 2013, 49, 1334-1344. | 4.2 | 41 |
| 120 | Comparative analysis of formulations for conservative transport in porous media through sensitivity-based parameter calibration. Water Resources Research, 2013, 49, 5206-5220. | 4.2 | 29 |
| 121 | Anisotropic statistical scaling of vadose zone hydraulic property estimates near Maricopa, Arizona. Water Resources Research, 2013, 49, 8463-8479. | 4.2 | 23 |
| 122 | On the identification of Dragon Kings among extreme-valued outliers. Nonlinear Processes in Geophysics, 2013, 20, 549-561. | 1.3 | 8 |
| 123 | Estimation of Single-Metal and Competitive Sorption Isotherms through Maximum Likelihood and Model Quality Criteria. Soil Science Society of America Journal, 2012, 76, 1229-1245. | 2.2 | 17 |
| 124 | Upscaling solute transport in porous media in the presence of an irreversible bimolecular reaction. Advances in Water Resources, 2012, 35, 151-162. | 3.8 | 54 |
| 125 | On the emergence of reciprocity gaps during interference pumping tests in unconfined aquifers. Advances in Water Resources, 2012, 46, 11-19. | 3.8 | 8 |
| 126 | Extended power-law scaling of air permeabilities measured on a block of tuff. Hydrology and Earth System Sciences, 2012, 16, 29-42. | 4.9 | 29 |

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| 127 | Extended power-law scaling of heavy-tailed random air-permeability fields in fractured and sedimentary rocks. Hydrology and Earth System Sciences, 2012, 16, 3249-3260. | 4.9 | 15 |
| 128 | An integrated simulation framework for the performance assessment of radioactive waste repositories. Annals of Nuclear Energy, 2012, 39, 1-8. | 1.8 | 7 |
| 129 | Nominal Range Sensitivity Analysis of peak radionuclide concentrations in randomly heterogeneous aquifers. Annals of Nuclear Energy, 2012, 47, 166-172. | 1.8 | 1 |
| 130 | Natural background levels and threshold values of chemical species in three large-scale groundwater bodies in Northern Italy. Science of the Total Environment, 2012, 425, 9-19. | 8.0 | 67 |
| 131 | Interpretation of flowmeter data in heterogeneous layered aquifers. Journal of Hydrology, 2012, 452-453, 76-82. | 5.4 | 7 |
| 132 | Numerical investigation of apparent multifractality of samples from processes subordinated to truncated fBm. Hydrological Processes, 2012, 26, 2894-2908. | 2.6 | 29 |
| 133 | Use of global sensitivity analysis and polynomial chaos expansion for interpretation of nonreactive transport experiments in laboratoryâ€scale porous media. Water Resources Research, 2011, 47, . | 4.2 | 72 |
| 134 | Extended power-law scaling of self-affine signals exhibiting apparent multifractality. Geophysical Research Letters, 2011, 38, n/a-n/a. | 4.0 | 17 |
| 135 | POD-based Monte Carlo approach for the solution of regional scale groundwater flow driven by randomly distributed recharge. Advances in Water Resources, 2011, 34, 1450-1463. | 3.8 | 29 |
| 136 | Experimental and modeling investigation of multicomponent reactive transport in porous media. Journal of Contaminant Hydrology, 2011, 120-121, 27-44. | 3.3 | 56 |
| 137 | Joint inversion of steady-state hydrologic and self-potential data for 3D hydraulic conductivity distribution at the Boise Hydrogeophysical Research Site. Journal of Hydrology, 2011, 407, 115-128. | 5.4 | 29 |
| 138 | Quantitative comparison of impeller-flowmeter and particle-size-distribution techniques for the characterization of hydraulic conductivity variability. Hydrogeology Journal, 2011, 19, 603-612. | 2.1 | 17 |
| 139 | Theoretical analysis and field evidence of reciprocity gaps during interference pumping tests. Advances in Water Resources, 2011, 34, 592-606. | 3.8 | 20 |
| 140 | Predicting vertical connectivity within an aquifer system. Bayesian Analysis, 2010, 5, . | 3.0 | 8 |
| 141 | Uncertainty quantification in modeling flow and transport in porous media. Stochastic Environmental Research and Risk Assessment, 2010, 24, 953-954. | 4.0 | 1 |
| 142 | Effects of uncertainty of lithofacies, conductivity and porosity distributions on stochastic interpretations of a field scale tracer test. Stochastic Environmental Research and Risk Assessment, 2010, 24, 955-970. | 4.0 | 29 |
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| 144 | A solution for multicomponent reactive transport under equilibrium and kinetic reactions. Water Resources Research, 2010, 46, . | 4.2 | 16 |

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| 145 | Interpretation of column experiments of transport of solutes undergoing an irreversible bimolecular reaction using a continuum approximation. Water Resources Research, 2010, 46, . | 4.2 | 74 |
| 146 | Characterization of the Hydrogeological Experimental Site of Poitiers (France) by stochastic well testing analysis. Journal of Hydrology, 2009, 369, 154-164. | 5.4 | 21 |
| 147 | Effects of evolving scales of heterogeneity on hydraulic head predictions under convergent flow conditions. Hydrogeology Journal, 2009, 17, 817-825. | 2.1 | 4 |
| 148 | Conditional Probability Density Functions ofÂConcentrations forÂMixing-Controlled ReactiveÂTransport inÂHeterogeneous Aquifers. Mathematical Geosciences, 2009, 41, 323-351. | 2.4 | 36 |
| 149 | Effect of Sorption Heterogeneity on Moments of Solute Residence Time in Convergent Flows. Mathematical Geosciences, 2009, 41, 835-853. | 2.4 | 6 |
| 150 | Application of a mixing-ratios based formulation to model mixing-driven dissolution experiments. Advances in Water Resources, 2009, 32, 756-766. | 3.8 | 12 |
| 151 | A comparison of seven methods for the inverse modelling of groundwater flow. Application to the characterisation of well catchments. Advances in Water Resources, 2009, 32, 851-872. | 3.8 | 154 |
| 152 | Inverse analysis of stochastic moment equations for transient flow in randomly heterogeneous media. Advances in Water Resources, 2009, 32, 1495-1507. | 3.8 | 32 |
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| 154 | Relative importance of geostatistical and transport models in describing heavily tailed breakthrough curves at the Lauswiesen site. Journal of Contaminant Hydrology, 2008, 101, 1-13. | 3.3 | 83 |
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| 156 | Machine Learning Methods for Inverse Modeling. , 2008, , 117-125. | | 1 |
| 157 | Statistical Moments of Reaction Rates in Subsurface Reactive Solute Transport. , 2008, , 127-139. | | 0 |
| 158 | Type curve interpretation of lateâ€time pumping test data in randomly heterogeneous aquifers. Water Resources Research, 2007, 43, . | 4.2 | 56 |
| 159 | Nearestâ€neighbor classification for facies delineation. Water Resources Research, 2007, 43, . | 4.2 | 11 |
| 160 | Interactions between a rectangular cylinder and a free-surface flow. Journal of Fluids and Structures, 2007, 23, 1137-1148. | 3.4 | 63 |
| 161 | Representative hydraulic conductivities in saturated groundwater flow. Reviews of Geophysics, 2006, 44, . | 23.0 | 235 |
| 162 | Inverse stochastic moment analysis of steady state flow in randomly heterogeneous media. Water Resources Research, 2006, 42, . | 4.2 | 67 |

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| 163 | Variable-density flow in porous media. Journal of Fluid Mechanics, 2006, 561, 209. | 3.4 | 63 |
| 164 | Non-local and localized analyses of non-reactive solute transport in bounded randomly heterogeneous porous media: Theoretical framework. Advances in Water Resources, 2006, 29, 1238-1255. | 3.8 | 88 |
| 165 | Nonlocal and localized analyses of nonreactive solute transport in bounded randomly heterogeneous porous media: Computational analysis. Advances in Water Resources, 2006, 29, 1399-1418. | 3.8 | 47 |
| 166 | Multivariate sensitivity analysis of saturated flow through simulated highly heterogeneous groundwater aquifers. Journal of Computational Physics, 2006, 217, 166-175. | 3.8 | 33 |
| 167 | Subsurface characterization with support vector machines. IEEE Transactions on Geoscience and Remote Sensing, 2006, 44, 47-57. | 6.3 | 56 |
| 168 | Assessment of uncertainty associated with the estimation of well catchments by moment equations. Advances in Water Resources, 2006, 29, 676-691. | 3.8 | 18 |
| 169 | Travel time and trajectory moments of conservative solutes in two-dimensional convergent flows. Journal of Contaminant Hydrology, 2006, 82, 23-43. | 3.3 | 19 |
| 170 | Probabilistic study of well capture zones distribution at the Lauswiesen field site. Journal of Contaminant Hydrology, 2006, 88, 92-118. | 3.3 | 65 |
| 171 | Travel time and trajectory moments of conservative solutes in three dimensional heterogeneous porous media under mean uniform flow. Advances in Water Resources, 2005, 28, 429-439. | 3.8 | 16 |
| 172 | Delineation of Source Protection Zones Using Statistical Methods. Water Resources Management, 2005, 19, 163-185. | 3.9 | 28 |
| 173 | A procedure for the solution of multicomponent reactive transport problems. Water Resources Research, 2005, 41, . | 4.2 | 156 |
| 174 | Nonlocal and localized analyses of conditional mean transient flow in bounded, randomly heterogeneous porous media. Water Resources Research, 2004, 40, . | 4.2 | 43 |
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