

# Olaf A Cirpka

## List of Publications by Year in descending order

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202  
papers

7,788  
citations

34105  
52  
h-index

71685  
76  
g-index

230  
all docs

230  
docs citations

230  
times ranked

5240  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Organic Matter Degradation in Energy-Limited Subsurface Environmentsâ€”A Bioenergetics-Informed Modeling Approach. Geomicrobiology Journal, 2022, 39, 1-16.  | 2.0  | 3         |
| 2  | Revealing vertical aquifer heterogeneity and hydraulic anisotropy by pumping partially penetrating wells. Hydrogeology Journal, 2022, 30, 463-477.   | 2.1  | 6         |
| 3  | Toward Improved Bioremediation Strategies: Response of BAM-Degradation Activity to Concentration and Flow Changes in an Inoculated Bench-Scale Sediment Tank. Environmental Science & Technology, 2022, 56, 4050-4061.     | 10.0 | 1         |
| 4  | Spatial Variability of Radon Production Rates in an Alluvial Aquifer Affects Travel Time Estimates of Groundwater Originating From a Losing Stream. Water Resources Research, 2022, 58, .                                  | 4.2  | 5         |
| 5  | Spatial Markov Model for the Prediction of Travelâ€”Timeâ€”Based Solute Dispersion in Threeâ€”Dimensional Heterogeneous Media. Water Resources Research, 2022, 58, .   | 4.2  | 2         |
| 6  | Toward catchment hydroâ€”biogeochemical theories. Wiley Interdisciplinary Reviews: Water, 2021, 8, e1495.  | 6.5  | 65        |
| 7  | Magnitude of Diffusion- and Transverse Dispersion-Induced Isotope Fractionation of Organic Compounds in Aqueous Systems. Environmental Science & Technology, 2021, 55, 4772-4782.  | 10.0 | 7         |
| 8  | Mass-Transfer-Limited Biodegradation at Low Concentrationsâ€”Evidence from Reactive Transport Modeling of Isotope Profiles in a Bench-Scale Aquifer. Environmental Science & Technology, 2021, 55, 7386-7397.              | 10.0 | 18        |
| 9  | Does It Pay Off to Explicitly Link Functional Gene Expression to Denitrification Rates in Reaction Models?. Frontiers in Microbiology, 2021, 12, 684146.   | 3.5  | 5         |
| 10 | Finite-volume flux reconstruction and semi-analytical particle tracking on triangular prisms for finite-element-type models of variably-saturated flow. Advances in Water Resources, 2021, 154, 103944.                    | 3.8  | 1         |
| 11 | Systematic Evaluation of Geometryâ€”Driven Lateral Riverâ€”Groundwater Exchange in Floodplains. Water Resources Research, 2021, 57, e2021WR030239.   | 4.2  | 1         |
| 12 | Chromium (VI) removal kinetics by magnetite-coated sand: Small-scale flow-through column experiments. Journal of Hazardous Materials, 2021, 415, 125648.   | 12.4 | 9         |
| 13 | Presentation and discussion of the high-resolution atmosphereâ€”land-surfaceâ€”subsurface simulation dataset of the simulated Neckar catchment for the period 2007â€”2015. Earth System Science Data, 2021, 13, 4437-4464. | 9.9  | 4         |
| 14 | Surface Transient Storage Under Lowâ€”Flow Conditions in Streams With Rough Bathymetry. Water Resources Research, 2021, 57, e2021WR029899.   | 4.2  | 8         |
| 15 | Unraveling biogeochemical complexity through better integration of experiments and modeling. Environmental Sciences: Processes and Impacts, 2021, 23, 1825-1833.   | 3.5  | 8         |
| 16 | Combining implicit geological modeling, field surveys, and hydrogeological modeling to describe groundwater flow in a karst aquifer. Hydrogeology Journal, 2020, 28, 2779-2802.  | 2.1  | 22        |
| 17 | Process-based modeling of arsenic(III) oxidation by manganese oxides under circumneutral pH conditions. Water Research, 2020, 185, 116195.   | 11.3 | 13        |
| 18 | Joint Optimization of Measurement and Modeling Strategies With Application to Radial Flow in Stratified Aquifers. Water Resources Research, 2020, 56, e2019WR026872.   | 4.2  | 2         |

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 19 | Comparison of Two Ensemble-Kalman Filter Based Methods for Estimating Aquifer Parameters from Real 3-D Hydraulic and Tracer Tomographic Tests. <i>Geosciences (Switzerland)</i> , 2020, 10, 462.                        | 2.2  | 3         |
| 20 | Comparison of Two Ensemble Kalman-Based Methods for Estimating Aquifer Parameters from Virtual 2-D Hydraulic and Tracer Tomographic Tests. <i>Geosciences (Switzerland)</i> , 2020, 10, 276.                            | 2.2  | 7         |
| 21 | Postprocessing of standard finite element velocity fields for accurate particle tracking applied to groundwater flow. <i>Computational Geosciences</i> , 2020, 24, 1605-1624.   | 2.4  | 1         |
| 22 | Sampling behavioral model parameters for ensemble-based sensitivity analysis using Gaussian process emulation and active subspaces. <i>Stochastic Environmental Research and Risk Assessment</i> , 2020, 34, 1813-1830. | 4.0  | 7         |
| 23 | Structural controls on the hydrogeological functioning of a floodplain. <i>Hydrogeology Journal</i> , 2020, 28, 2675-2696.  | 2.1  | 14        |
| 24 | Direct Push Color Logging Images Spatial Heterogeneity of Organic Carbon in Floodplain Sediments. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2020, 125, e2020JG005887.                                  | 3.0  | 5         |
| 25 | Strategies for Simplifying Reactive Transport Models: A Bayesian Model Comparison. <i>Water Resources Research</i> , 2020, 56, e2020WR028100.   | 4.2  | 3         |
| 26 | Modeling the Fate of Pharmaceuticals in a Fourth-Order River Under Competing Assumptions of Transient Storage. <i>Water Resources Research</i> , 2020, 56, e2019WR026100.   | 4.2  | 10        |
| 27 | AQDS and Redox-Active NOM Enables Microbial Fe(III)-Mineral Reduction at cm-Scales. <i>Environmental Science &amp; Technology</i> , 2020, 54, 4131-4139.  | 10.0 | 49        |
| 28 | Managing collaborative research data for integrated, interdisciplinary environmental research. <i>Earth Science Informatics</i> , 2020, 13, 641-654.  | 3.2  | 3         |
| 29 | Spatial and temporal evolution of groundwater arsenic contamination in the Red River delta, Vietnam: Interplay of mobilisation and retardation processes. <i>Science of the Total Environment</i> , 2020, 717, 137143.  | 8.0  | 61        |
| 30 | Anomaly effect-driven optimization of direct-current geoelectric mapping surveys in large areas. <i>Journal of Applied Geophysics</i> , 2020, 176, 104002.  | 2.1  | 5         |
| 31 | Technical Note: Improved sampling of behavioral subsurface flow model parameters using active subspaces. <i>Hydrology and Earth System Sciences</i> , 2020, 24, 4567-4574.  | 4.9  | 4         |
| 32 | An Open, Object-Based Framework for Generating Anisotropy in Sedimentary Subsurface Models. <i>Ground Water</i> , 2019, 57, 420-429.  | 1.3  | 4         |
| 33 | Mass Transfer Limitation during Slow Anaerobic Biodegradation of 2-Methylnaphthalene. <i>Environmental Science &amp; Technology</i> , 2019, 53, 9481-9490.  | 10.0 | 18        |
| 34 | Global sensitivity analysis and adaptive stochastic sampling of a subsurface-flow model using active subspaces. <i>Hydrology and Earth System Sciences</i> , 2019, 23, 3787-3805.                                       | 4.9  | 17        |
| 35 | The value of simplified models for spin up of complex models with an application to subsurface hydrology. <i>Computers and Geosciences</i> , 2019, 126, 62-72.  | 4.2  | 3         |
| 36 | An Electron-Balance Based Approach to Predict the Decreasing Denitrification Potential of an Aquifer. <i>Ground Water</i> , 2019, 57, 925-939.  | 1.3  | 4         |

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|----|---|------|-----------|
| 37 | Turnover and legacy of sediment-associated PAH in a baseflow-dominated river. <i>Science of the Total Environment</i> , 2019, 671, 754-764.   | 8.0  | 19        |
| 38 | Fate of wastewater contaminants in rivers: Using conservative-tracer based transfer functions to assess reactive transport. <i>Science of the Total Environment</i> , 2019, 656, 1250-1260.   | 8.0  | 37        |
| 39 | Modeling of Contaminant Biodegradation and Compound-Specific Isotope Fractionation in Chemostats at Low Dilution Rates. <i>Environmental Science &amp; Technology</i> , 2019, 53, 1186-1196.  | 10.0 | 11        |
| 40 | In-situ mass spectrometry improves the estimation of stream reaeration from gas-tracer tests. <i>Science of the Total Environment</i> , 2019, 655, 1062-1070.   | 8.0  | 17        |
| 41 | Direct Breakthrough Curve Prediction From Statistics of Heterogeneous Conductivity Fields. <i>Water Resources Research</i> , 2018, 54, 271-285.   | 4.2  | 15        |
| 42 | A mobile-mobile transport model for simulating reactive transport in connected heterogeneous fields. <i>Journal of Hydrology</i> , 2018, 560, 97-108.   | 5.4  | 11        |
| 43 | Contaminant concentration versus flow velocity: drivers of biodegradation and microbial growth in groundwater model systems. <i>Biodegradation</i> , 2018, 29, 211-232.   | 3.0  | 22        |
| 44 | Accounting for the Decreasing Reaction Potential of Heterogeneous Aquifers in a Stochastic Framework of Aquiferâ€scale Reactive Transport. <i>Water Resources Research</i> , 2018, 54, 442-463.  | 4.2  | 14        |
| 45 | A Critical Assessment of Relating Resazurinâ€Resorufin Experiments to Reachâ€scale Metabolism in Lowland Streams. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2018, 123, 3538-3555.  | 3.0  | 9         |
| 46 | Application of Experimental Polystyrene Partition Constants and Diffusion Coefficients to Predict the Sorption of Neutral Organic Chemicals to Multiwell Plates in in Vivo and in Vitro Bioassays. <i>Environmental Science &amp; Technology</i> , 2018, 52, 13511-13522. | 10.0 | 40        |
| 47 | Contributions of catchment and in-stream processes to suspended sediment transport in a dominantly groundwater-fed catchment. <i>Hydrology and Earth System Sciences</i> , 2018, 22, 3903-3921.   | 4.9  | 14        |
| 48 | Efficient geostatistical inversion of transient groundwater flow using preconditioned nonlinear conjugate gradients. <i>Advances in Water Resources</i> , 2017, 102, 161-177.   | 3.8  | 11        |
| 49 | Tracerâ€based characterization of hyporheic exchange and benthic biolayers in streams. <i>Water Resources Research</i> , 2017, 53, 1575-1594.  | 4.2  | 80        |
| 50 | The impact of sedimentary anisotropy on solute mixing in stacked scourâ€pool structures. <i>Water Resources Research</i> , 2017, 53, 2813-2832.  | 4.2  | 12        |
| 51 | Preconditioning an ensemble Kalman filter for groundwater flow using environmental-tracer observations. <i>Journal of Hydrology</i> , 2017, 545, 42-54.   | 5.4  | 9         |
| 52 | Shift in Mass Transfer of Wastewater Contaminants from Microplastics in the Presence of Dissolved Substances. <i>Environmental Science &amp; Technology</i> , 2017, 51, 12254-12263.  | 10.0 | 118       |
| 53 | Mechanisms of distinct activated carbon and biochar amendment effects on petroleum vapour biofiltration in soil. <i>Environmental Sciences: Processes and Impacts</i> , 2017, 19, 1260-1269.  | 3.5  | 10        |
| 54 | Determination of hyporheic travel time distributions and other parameters from concurrent conservative and reactive tracer tests by localâ€inâ€global optimization. <i>Water Resources Research</i> , 2017, 53, 4984-5001.  | 4.2  | 25        |

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|----|--|------|-----------|
| 55 | Formation of <i>N</i> -Nitrosodimethylamine during Chloramination of Secondary and Tertiary Amines: Role of Molecular Oxygen and Radical Intermediates. Environmental Science & Technology, 2017, 51, 280-290.       | 10.0 | 58        |
| 56 | Joint inference of groundwaterâ€“recharge and hydraulicâ€“conductivity fields from head data using the ensemble Kalman filter. Hydrology and Earth System Sciences, 2016, 20, 555-569.                               | 4.9  | 39        |
| 57 | Using an integrated hydrological model to estimate the usefulness of meteorological drought indices in a changing climate. Hydrology and Earth System Sciences, 2016, 20, 4159-4175.                                 | 4.9  | 5         |
| 58 | Exposure-time based modeling of nonlinear reactive transport in porous media subject to physical and geochemical heterogeneity. Journal of Contaminant Hydrology, 2016, 192, 35-49.                                  | 3.3  | 25        |
| 59 | A travel timeâ€“based approach to model kinetic sorption in highly heterogeneous porous media via reactive hydrofacies. Water Resources Research, 2016, 52, 9390-9411.   | 4.2  | 10        |
| 60 | Debatesâ€“Stochastic subsurface hydrology from theory to practice: Does stochastic subsurface hydrology help solving practical problems of contaminant hydrogeology?. Water Resources Research, 2016, 52, 9218-9227. | 4.2  | 38        |
| 61 | Compound-Specific Stable Isotope Fractionation of Pesticides and Pharmaceuticals in a Mesoscale Aquifer Model. Environmental Science & Technology, 2016, 50, 5729-5739.  | 10.0 | 21        |
| 62 | Cumulative relative reactivity: A concept for modeling aquifer-scale reactive transport. Water Resources Research, 2016, 52, 8117-8137.  | 4.2  | 21        |
| 63 | Experimental investigation of transverse mixing in porous media under helical flow conditions. Physical Review E, 2016, 94, 013113.  | 2.1  | 13        |
| 64 | Helical Flow and Transient Solute Dilution in Porous Media. Transport in Porous Media, 2016, 111, 591-603.   | 2.6  | 9         |
| 65 | Combining 3D Hydraulic Tomography with Tracer Tests for Improved Transport Characterization. Ground Water, 2016, 54, 498-507.  | 1.3  | 25        |
| 66 | Using travel times to simulate multi-dimensional bioreactive transport in time-periodic flows. Journal of Contaminant Hydrology, 2016, 187, 1-17.  | 3.3  | 15        |
| 67 | Estimating climate-change effects on a Mediterranean catchment under various irrigation conditions. Journal of Hydrology: Regional Studies, 2015, 4, 550-570.  | 2.4  | 12        |
| 68 | Experimental Evidence of Helical Flow in Porous Media. Physical Review Letters, 2015, 115, 194502.   | 7.8  | 52        |
| 69 | Enhancement of plume dilution in twoâ€“dimensional and threeâ€“dimensional porous media by flow focusing in highâ€“permeability inclusions. Water Resources Research, 2015, 51, 5582-5602.                           | 4.2  | 46        |
| 70 | Tracer Tomography: Design Concepts and Field Experiments Using Heat as a Tracer. Ground Water, 2015, 53, 139-148.  | 1.3  | 22        |
| 71 | A field comparison of multiple techniques to quantify groundwaterâ€“surface-water interactions. Freshwater Science, 2015, 34, 139-160.   | 1.8  | 77        |
| 72 | Modulation of oxygen production in Archaean oceans by episodes of Fe(II) toxicity. Nature Geoscience, 2015, 8, 126-130.  | 12.9 | 68        |

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|----|---|------|-----------|
| 73 | Transverse mixing in three-dimensional nonstationary anisotropic heterogeneous porous media. Water Resources Research, 2015, 51, 241-260.   | 4.2  | 71        |
| 74 | Impact of non-idealities in gas-tracer tests on the estimation of reaeration, respiration, and photosynthesis rates in streams. Water Research, 2015, 83, 205-216.  | 11.3 | 21        |
| 75 | Dynamics of Suspended and Attached Aerobic Toluene Degraders in Small-Scale Flow-through Sediment Systems under Growth and Starvation Conditions. Environmental Science & Technology, 2015, 49, 7161-7169.    | 10.0 | 26        |
| 76 | Transverse Mixing in Heterogeneous Aquifers. Procedia Environmental Sciences, 2015, 25, 66-73.  | 1.4  | 1         |
| 77 | Flow-through experiments on water-rock interactions in a sandstone caused by CO <sub>2</sub> injection at pressures and temperatures mimicking reservoir conditions. Applied Geochemistry, 2015, 58, 136-146. | 3.0  | 55        |
| 78 | On the validity of travel-time based nonlinear bioreactive transport models in steady-state flow. Journal of Contaminant Hydrology, 2015, 175-176, 26-43.   | 3.3  | 21        |
| 79 | Impact of Heterogeneity on Oxygen Transfer in a Fluctuating Capillary Fringe. Ground Water, 2015, 53, 57-70.  | 1.3  | 22        |
| 80 | Helical flow in three-dimensional nonstationary anisotropic heterogeneous porous media. Water Resources Research, 2015, 51, 261-280.  | 4.2  | 30        |
| 81 | Fringe-controlled biodegradation under dynamic conditions: Quasi 2-D flow-through experiments and reactive-transport modeling. Journal of Contaminant Hydrology, 2015, 172, 100-111.                          | 3.3  | 13        |
| 82 | Experimental investigation of compound-specific dilution of solute plumes in saturated porous media: 2-D vs. 3-D flow-through systems. Journal of Contaminant Hydrology, 2015, 172, 33-47.                    | 3.3  | 52        |
| 83 | Morphological, hydrological, biogeochemical and ecological changes and challenges in river restoration – the Thur River case study. Hydrology and Earth System Sciences, 2014, 18, 2449-2462.                 | 4.9  | 46        |
| 84 | Sorption and transformation of the reactive tracers resazurin and resorufin in natural river sediments. Hydrology and Earth System Sciences, 2014, 18, 3151-3163.   | 4.9  | 20        |
| 85 | Particle-Facilitated Transport of Lindane in Water-Saturated Tropical Lateritic Porous Media. Journal of Environmental Quality, 2014, 43, 1392-1403.  | 2.0  | 6         |
| 86 | Non-stationary nonparametric inference of river-to-groundwater travel-time distributions. Journal of Hydrology, 2014, 519, 3386-3399.   | 5.4  | 15        |
| 87 | Efficient calibration of a distributed pde -based hydrological model using grid coarsening. Journal of Hydrology, 2014, 519, 3290-3304.   | 5.4  | 22        |
| 88 | Experimental Sensitivity Analysis of Oxygen Transfer in the Capillary Fringe. Ground Water, 2014, 52, 37-49.  | 1.3  | 13        |
| 89 | Three-dimensional geostatistical inversion of synthetic tomographic pumping and heat-tracer tests in a nested-cell setup. Advances in Water Resources, 2014, 63, 77-90.                                       | 3.8  | 23        |
| 90 | Helicity and flow topology in three-dimensional anisotropic porous media. Advances in Water Resources, 2014, 73, 134-143.   | 3.8  | 41        |

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|-----|--|------|-----------|
| 91  | Altered transport of lindane caused by the retention of natural particles in saturated porous media. Journal of Contaminant Hydrology, 2014, 162-163, 47-63.   | 3.3  | 5         |
| 92  | Modeling substrate-bacteria-grazer interactions coupled to substrate transport in groundwater. Water Resources Research, 2014, 50, 4149-4162.  | 4.2  | 7         |
| 93  | Tomographic Methods in Hydrogeology. Advanced Technologies in Earth Sciences, 2014, , 157-176.   | 0.9  | 3         |
| 94  | Effect of natural particles on the transport of lindane in saturated porous media: Laboratory experiments and model-based analysis. Journal of Contaminant Hydrology, 2013, 149, 13-26.  | 3.3  | 25        |
| 95  | Catchments as reactors: a comprehensive approach for water fluxes and solute turnover. Environmental Earth Sciences, 2013, 69, 317-333.  | 2.7  | 71        |
| 96  | Delineating subsurface heterogeneity at a loop of River Steinlach using geophysical and hydrogeological methods. Environmental Earth Sciences, 2013, 69, 335-348.  | 2.7  | 32        |
| 97  | On-line fluorometry of multiple reactive and conservative tracers in streams. Environmental Earth Sciences, 2013, 69, 349-358.   | 2.7  | 35        |
| 98  | Assessing hyporheic exchange and associated travel times by hydraulic, chemical, and isotopic monitoring at the Steinlach Test Site, Germany. Environmental Earth Sciences, 2013, 69, 359-372.   | 2.7  | 17        |
| 99  | Modeling the dynamics of oxygen consumption upon riverbank filtration by a stochasticâ€“convective approach. Journal of Hydrology, 2013, 505, 352-363.   | 5.4  | 45        |
| 100 | Concurrent conservative and reactive tracer tests in a stream undergoing hyporheic exchange. Water Resources Research, 2013, 49, 3024-3037.  | 4.2  | 41        |
| 101 | Model Complexity Needed for Quantitative Analysis of High Resolution Isotope and Concentration Data from a Toluene-Pulse Experiment. Environmental Science & Technology, 2013, 47, 6900-6907.  | 10.0 | 24        |
| 102 | Direct Experimental Evidence of Non-first Order Degradation Kinetics and Sorption-Induced Isotopic Fractionation in a Mesoscale Aquifer: $\delta^{13}C/\delta^{12}C$ Analysis of a Transient Toluene Pulse. Environmental Science & Technology, 2013, 47, 6892-6899. | 10.0 | 19        |
| 103 | Optimized Sustainable Groundwater Extraction Management: General Approach and Application to the City of Lucknow, India. Water Resources Management, 2013, 27, 4349-4368.  | 3.9  | 14        |
| 104 | Modeling and inverting reactive stream tracers undergoing two-site sorption and decay in the hyporheic zone. Water Resources Research, 2013, 49, 3406-3422.  | 4.2  | 36        |
| 105 | Absolute/Convective Instability Dichotomy in a Soret-Driven Thermosolutal Convection Induced in a Porous Layer by Inclined Thermal and Vertical Solutal Gradients. Transport in Porous Media, 2012, 95, 425-446.   | 2.6  | 7         |
| 106 | Fully coupled hydrogeophysical inversion of a laboratory salt tracer experiment monitored by electrical resistivity tomography. Water Resources Research, 2012, 48, .  | 4.2  | 76        |
| 107 | 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        |
| 108 | Numerical simulation of isotope fractionation in steady-state bioreactive transport controlled by transverse mixing. Journal of Contaminant Hydrology, 2012, 140-141, 95-106.  | 3.3  | 45        |



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|-----|--|-----|-----------|
| 109 | Investigating riparian groundwater flow close to a losing river using diurnal temperature oscillations at high vertical resolution. <i>Hydrology and Earth System Sciences</i> , 2012, 16, 473-487.                | 4.9 | 39        |
| 110 | Oxygen Transfer in a Fluctuating Capillary Fringe. <i>Vadose Zone Journal</i> , 2012, 11, vzj2011.0056.  | 2.2 | 62        |
| 111 | Efficient parallelization of geostatistical inversion using the quasi-linear approach. <i>Computers and Geosciences</i> , 2012, 44, 78-85.   | 4.2 | 10        |
| 112 | Magnetostratigraphy of deep drilling core SG-1 in the western Qaidam Basin (NE Tibetan Plateau) and its tectonic implications. <i>Quaternary Research</i> , 2012, 78, 139-148.                                     | 1.7 | 82        |
| 113 | Intrinsic Remediation in Natural-Gradient Systems. <i>SERDP and ESTCP Remediation Technology Monograph Series</i> , 2012, , 217-238.   | 0.3 | 0         |
| 114 | How well do mean breakthrough curves predict mixing-controlled reactive transport?. <i>Water Resources Research</i> , 2011, 47, .  | 4.2 | 25        |
| 115 | Transverse mixing of conservative and reactive tracers in porous media: Quantification through the concepts of flux-related and critical dilution indices. <i>Water Resources Research</i> , 2011, 47, .           | 4.2 | 53        |
| 116 | Shape-free inference of hyporheic traveltime distributions from synthetic conservative and "smart" tracer tests in streams. <i>Water Resources Research</i> , 2011, 47, .  | 4.2 | 41        |
| 117 | Relevance of local compound-specific transverse dispersion for conservative and reactive mixing in heterogeneous porous media. <i>Water Resources Research</i> , 2011, 47, .                                       | 4.2 | 53        |
| 118 | Stochastic flux-related analysis of transverse mixing in two-dimensional heterogeneous porous media. <i>Water Resources Research</i> , 2011, 47, .   | 4.2 | 66        |
| 119 | Probability density function of steady state concentration in two-dimensional heterogeneous porous media. <i>Water Resources Research</i> , 2011, 47, .  | 4.2 | 19        |
| 120 | Towards improved instrumentation for assessing river-groundwater interactions in a restored river corridor. <i>Hydrology and Earth System Sciences</i> , 2011, 15, 2531-2549.                                      | 4.9 | 47        |
| 121 | Propagation of Seasonal Temperature Signals into an Aquifer upon Bank Infiltration. <i>Ground Water</i> , 2011, 49, 491-502.   | 1.3 | 47        |
| 122 | A high-resolution non-invasive approach to quantify oxygen transport across the capillary fringe and within the underlying groundwater. <i>Journal of Contaminant Hydrology</i> , 2011, 122, 26-39.                | 3.3 | 63        |
| 123 | Simulating the transition of a semi-arid rainfed catchment towards irrigation agriculture. <i>Journal of Hydrology</i> , 2011, 409, 663-681.   | 5.4 | 27        |
| 124 | Cell-Sorting at the A/P Boundary in the <i>Drosophila</i> Wing Primordium: A Computational Model to Consolidate Observed Non-Local Effects of Hh Signaling. <i>PLoS Computational Biology</i> , 2011, 7, e1002025. | 3.2 | 28        |
| 125 | Stochastic evaluation of mass discharge from pointlike concentration measurements. <i>Journal of Contaminant Hydrology</i> , 2010, 111, 36-47.   | 3.3 | 18        |
| 126 | Estimation of seepage rates in a losing stream by means of fiber-optic high-resolution vertical temperature profiling. <i>Journal of Hydrology</i> , 2010, 380, 154-164.   | 5.4 | 198       |



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|-----|--|------|-----------|
| 127 | Fluctuations of electrical conductivity as a natural tracer for bank filtration in a losing stream. <i>Advances in Water Resources</i> , 2010, 33, 1296-1308.  | 3.8  | 108       |
| 128 | Interpolation of Steady-State Concentration Data by Inverse Modeling. <i>Ground Water</i> , 2010, 48, 569-579.   | 1.3  | 11        |
| 129 | Arsenic release from paddy soils during monsoon-flooding. <i>Nature Geoscience</i> , 2010, 3, 53-59.   | 12.9 | 123       |
| 130 | Evidence of Compound-Dependent Hydrodynamic and Mechanical Transverse Dispersion by Multitracer Laboratory Experiments. <i>Environmental Science &amp; Technology</i> , 2010, 44, 688-693.               | 10.0 | 102       |
| 131 | Fully coupled hydrogeophysical inversion of synthetic salt tracer experiments. <i>Water Resources Research</i> , 2010, 46, .   | 4.2  | 56        |
| 132 | Simplified simulation of steady state bioreactive transport with kinetic solute uptake by the biomass. <i>Water Resources Research</i> , 2010, 46, .   | 4.2  | 10        |
| 133 | Fully Coupled Hydrogeophysical Inversion of Salt Tracer Experiments Monitored by Electrical Resistivity Tomography. , 2010, , .  |      | 0         |
| 134 | Enhancement of dilution and transverse reactive mixing in porous media: Experiments and model-based interpretation. <i>Journal of Contaminant Hydrology</i> , 2009, 110, 130-142.                        | 3.3  | 170       |
| 135 | Reply to comments on "Two-dimensional concentration distribution for mixing-controlled bioreactive transport in steady state" by H. Shao et al.. <i>Advances in Water Resources</i> , 2009, 32, 298-301. | 3.8  | 22        |
| 136 | Use of steady-state concentration measurements in geostatistical inversion. <i>Advances in Water Resources</i> , 2009, 32, 607-619.  | 3.8  | 14        |
| 137 | Influence of Mass-Transfer Limitations on Carbon Isotope Fractionation during Microbial Dechlorination of Trichloroethene. <i>Environmental Science &amp; Technology</i> , 2009, 43, 8813-8820.          | 10.0 | 63        |
| 138 | Iron isotope fractionation and atom exchange during sorption of ferrous iron to mineral surfaces. <i>Geochimica Et Cosmochimica Acta</i> , 2009, 73, 1795-1812.  | 3.9  | 82        |
| 139 | Three-Dimensional Geostatistical Inversion of Flowmeter and Pumping Test Data. <i>Ground Water</i> , 2008, 46, 193-201.  | 1.3  | 81        |
| 140 | Concentration statistics for mixing-controlled reactive transport in random heterogeneous media. <i>Journal of Contaminant Hydrology</i> , 2008, 98, 61-74.  | 3.3  | 62        |
| 141 | Traveltime-based descriptions of transport and mixing in heterogeneous domains. <i>Water Resources Research</i> , 2008, 44, .  | 4.2  | 19        |
| 142 | Temporal moments for transport with mass transfer described by an arbitrary memory function in heterogeneous media. <i>Water Resources Research</i> , 2008, 44, .  | 4.2  | 25        |
| 143 | Comparison of instantaneous and constant-rate stream tracer experiments through non-parametric analysis of residence time distributions. <i>Water Resources Research</i> , 2008, 44, .                   | 4.2  | 46        |
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