

# Peter Grathwohl

## List of Publications by Year in descending order

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169  
papers

8,383  
citations

34105

52  
h-index

54911

84  
g-index

190  
all docs

190  
docs citations

190  
times ranked

6589  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Influence of organic matter from soils and sediments from various origins on the sorption of some chlorinated aliphatic hydrocarbons: implications on Koc correlations. <i>Environmental Science &amp; Technology</i> , 1990, 24, 1687-1693. | 10.0 | 428       |
| 2  | New modeling paradigms for the sorption of hydrophobic organic chemicals to heterogeneous carbonaceous matter in soils, sediments, and rocks. <i>Advances in Water Resources</i> , 2002, 25, 985-1016.                                       | 3.8  | 332       |
| 3  | Tracer diffusion coefficients in sedimentary rocks: correlation to porosity and hydraulic conductivity. <i>Journal of Contaminant Hydrology</i> , 2001, 53, 85-100.  | 3.3  | 312       |
| 4  | Diffusion in Natural Porous Media: Contaminant Transport, Sorption/Desorption and Dissolution Kinetics. <i>Topics in Environmental Fluid Mechanics</i> , 1998, , .   | 0.5  | 233       |
| 5  | Solubility-Normalized Combined Adsorption-Partitioning Sorption Isotherms for Organic Pollutants. <i>Environmental Science &amp; Technology</i> , 2002, 36, 4689-4697.   | 10.0 | 216       |
| 6  | Organic Matter Facies and Equilibrium Sorption of Phenanthrene. <i>Environmental Science &amp; Technology</i> , 1999, 33, 1637-1644.   | 10.0 | 209       |
| 7  | Impacts of Heterogeneous Organic Matter on Phenanthrene Sorption: Equilibrium and Kinetic Studies with Aquifer Material. <i>Environmental Science &amp; Technology</i> , 2000, 34, 406-414.  | 10.0 | 185       |
| 8  | Transitory microbial habitat in the hyperarid Atacama Desert. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 2670-2675.   | 7.1  | 172       |
| 9  | 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       |
| 10 | Managing the effects of multiple stressors on aquatic ecosystems under water scarcity. The GLOBAQUA project. <i>Science of the Total Environment</i> , 2015, 503-504, 3-9.   | 8.0  | 161       |
| 11 | Desorption of trichloroethylene in aquifer material: rate limitation at the grain scale. <i>Environmental Science &amp; Technology</i> , 1993, 27, 2360-2366.  | 10.0 | 149       |
| 12 | Enhanced mixing and reaction through flow focusing in heterogeneous porous media. <i>Water Resources Research</i> , 2006, 42, .  | 4.2  | 137       |
| 13 | Turbidity as a proxy for total suspended solids (TSS) and particle facilitated pollutant transport in catchments. <i>Environmental Earth Sciences</i> , 2013, 69, 373-380.   | 2.7  | 128       |
| 14 | Time scales of organic contaminant dissolution from complex source zones: coal tar pools vs. blobs. <i>Journal of Contaminant Hydrology</i> , 2002, 59, 45-66.   | 3.3  | 127       |
| 15 | Transverse vertical dispersion in groundwater and the capillary fringe. <i>Journal of Contaminant Hydrology</i> , 2002, 58, 111-128.   | 3.3  | 120       |
| 16 | Long Term Sorption Kinetics of Phenanthrene in Aquifer Materials. <i>Environmental Science &amp; Technology</i> , 1999, 33, 1645-1651.   | 10.0 | 118       |
| 17 | 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       |
| 18 | Comparison of percolation to batch and sequential leaching tests: Theory and data. <i>Waste Management</i> , 2009, 29, 2681-2688.  | 7.4  | 117       |

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|----|---|------|-----------|
| 19 | Quantification of mass fluxes and natural attenuation rates at an industrial site with a limited monitoring network: a case study. <i>Journal of Contaminant Hydrology</i> , 2003, 60, 97-121.                          | 3.3  | 109       |
| 20 | Comparison of Sedimentary PAHs in the Rivers of Ammer (Germany) and Liangtan (China): Differences between Early- and Newly-Industrialized Countries. <i>Environmental Science &amp; Technology</i> , 2013, 47, 701-709. | 10.0 | 107       |
| 21 | A combined experimental and modeling study to evaluate pH-dependent sorption of polar and non-polar compounds to polyethylene and polystyrene microplastics. <i>Environmental Sciences Europe</i> , 2018, 30, 30.       | 5.5  | 106       |
| 22 | 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       |
| 23 | Experimental Investigation and Pore-Scale Modeling Interpretation of Compound-Specific Transverse Dispersion in Porous Media. <i>Transport in Porous Media</i> , 2012, 93, 347-362.                                     | 2.6  | 101       |
| 24 | Enhanced biodegradation by hydraulic heterogeneities in petroleum hydrocarbon plumes. <i>Journal of Contaminant Hydrology</i> , 2009, 105, 56-68.   | 3.3  | 94        |
| 25 | Determination of Transverse Dispersion Coefficients from Reactive Plume Lengths. <i>Ground Water</i> , 2006, 44, 212-221.   | 1.3  | 91        |
| 26 | Importance of heterocyclic aromatic compounds in monitored natural attenuation for coal tar contaminated aquifers: A review. <i>Journal of Contaminant Hydrology</i> , 2011, 126, 181-194.                              | 3.3  | 82        |
| 27 | Using total suspended solids (TSS) and turbidity as proxies for evaluation of metal transport in river water. <i>Applied Geochemistry</i> , 2016, 68, 1-9.  | 3.0  | 80        |
| 28 | Occurrence of coal and coal-derived particle-bound polycyclic aromatic hydrocarbons (PAHs) in a river floodplain soil. <i>Environmental Pollution</i> , 2008, 151, 121-129.   | 7.5  | 78        |
| 29 | Isotopic Fractionation by Transverse Dispersion: Flow-through Microcosms and Reactive Transport Modeling Study. <i>Environmental Science &amp; Technology</i> , 2010, 44, 6167-6173.                                    | 10.0 | 78        |
| 30 | Particle bound pollutants in rivers: Results from suspended sediment sampling in Globaqua River Basins. <i>Science of the Total Environment</i> , 2019, 647, 645-652.   | 8.0  | 77        |
| 31 | Occurrence and attenuation of specific organic compounds in the groundwater plume at a former gasworks site. <i>Journal of Contaminant Hydrology</i> , 2001, 53, 407-427.   | 3.3  | 76        |
| 32 | Soil carbon, multiple benefits. <i>Environmental Development</i> , 2015, 13, 33-38.   | 4.1  | 75        |
| 33 | Field Trial of Contaminant Groundwater Monitoring: Comparing Time-Integrating Ceramic Dosimeters and Conventional Water Sampling. <i>Environmental Science &amp; Technology</i> , 2003, 37, 1360-1364.                  | 10.0 | 71        |
| 34 | Catchments as reactors: a comprehensive approach for water fluxes and solute turnover. <i>Environmental Earth Sciences</i> , 2013, 69, 317-333.   | 2.7  | 71        |
| 35 | Transport of polycyclic aromatic hydrocarbons in highly vulnerable karst systems. <i>Environmental Pollution</i> , 2011, 159, 133-139.  | 7.5  | 69        |
| 36 | Long-term atmospheric bulk deposition of polycyclic aromatic hydrocarbons (PAHs) in rural areas of Southern Germany. <i>Atmospheric Environment</i> , 2007, 41, 1315-1327.  | 4.1  | 66        |

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|----|---|------|-----------|
| 37 | Impact of major organophosphate pesticides used in agriculture to surface water and sediment quality (Southern Caspian Sea basin, Haraz River). <i>Environmental Earth Sciences</i> , 2011, 63, 873-883.              | 2.7  | 66        |
| 38 | Transverse dispersion of non-reactive tracers in porous media: A new nonlinear relationship to predict dispersion coefficients. <i>Journal of Contaminant Hydrology</i> , 2007, 92, 149-161.                          | 3.3  | 64        |
| 39 | LFERs for Soil Organic Carbon <sup>n</sup> Water Distribution Coefficients ( $K_{d,OC}$ ) at Environmentally Relevant Sorbate Concentrations. <i>Environmental Science &amp; Technology</i> , 2009, 43, 3094-3100.    | 10.0 | 64        |
| 40 | Desorption Kinetics of Phenanthrene in Aquifer Material Lacks Hysteresis. <i>Environmental Science &amp; Technology</i> , 2004, 38, 4169-4175.  | 10.0 | 63        |
| 41 | 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        |
| 42 | Effects of compound-specific transverse mixing on steady-state reactive plumes: Insights from pore-scale simulations and Darcy-scale experiments. <i>Advances in Water Resources</i> , 2013, 54, 1-10.                | 3.8  | 63        |
| 43 | Oxygen Transfer in a Fluctuating Capillary Fringe. <i>Vadose Zone Journal</i> , 2012, 11, vzt2011.0056.   | 2.2  | 62        |
| 44 | Finiteness of steady state plumes. <i>Water Resources Research</i> , 2005, 41, .  | 4.2  | 61        |
| 45 | Deposition, persistence and turnover of pollutants: First results from the EU project AquaTerra for selected river basins and aquifers. <i>Science of the Total Environment</i> , 2007, 376, 40-50.                   | 8.0  | 59        |
| 46 | Integrated monitoring of particle associated transport of PAHs in contrasting catchments. <i>Environmental Pollution</i> , 2013, 172, 155-162.  | 7.5  | 59        |
| 47 | Numerical experiments and field results on the size of steady state plumes. <i>Journal of Contaminant Hydrology</i> , 2006, 85, 33-52.  | 3.3  | 58        |
| 48 | Bioremediation of benzene-, MTBE- and ammonia-contaminated groundwater with pilot-scale constructed wetlands. <i>Environmental Pollution</i> , 2011, 159, 3769-3776.  | 7.5  | 56        |
| 49 | Coulombic effects in advection-dominated transport of electrolytes in porous media: Multicomponent ionic dispersion. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 120, 195-205.                                     | 3.9  | 56        |
| 50 | Review of Field Methods for the Determination of the Tortuosity and Effective Gas-Phase Diffusivity in the Vadose Zone. <i>Vadose Zone Journal</i> , 2004, 3, 1240-1248.  | 2.2  | 55        |
| 51 | Flow-through experiments on water-rock interactions in a sandstone caused by CO <sub>2</sub> injection at pressures and temperatures mimicking reservoir conditions. <i>Applied Geochemistry</i> , 2015, 58, 136-146. | 3.0  | 55        |
| 52 | Impact of grain scale heterogeneity on slow sorption kinetics. <i>Environmental Toxicology and Chemistry</i> , 1999, 18, 1673-1678.   | 4.3  | 54        |
| 53 | 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        |
| 54 | 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        |

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|----|---|------|-----------|
| 55 | Monitoring of event-based mobilization of hydrophobic pollutants in rivers: Calibration of turbidity as a proxy for particle facilitated transport in field and laboratory. <i>Science of the Total Environment</i> , 2014, 490, 191-198. | 8.0  | 53        |
| 56 | Experimental Evidence of Helical Flow in Porous Media. <i>Physical Review Letters</i> , 2015, 115, 194502.  | 7.8  | 52        |
| 57 | Experimental investigation of compound-specific dilution of solute plumes in saturated porous media: 2-D vs. 3-D flow-through systems. <i>Journal of Contaminant Hydrology</i> , 2015, 172, 33-47.  | 3.3  | 52        |
| 58 | Sorption of alkylphenols on Ebro River sediments: Comparing isotherms with field observations in river water and sediments. <i>Environmental Pollution</i> , 2009, 157, 698-703.  | 7.5  | 49        |
| 59 | Performance evaluation of different horizontal subsurface flow wetland types by characterization of flow behavior, mass removal and depth-dependent contaminant load. <i>Water Research</i> , 2013, 47, 769-780.                          | 11.3 | 48        |
| 60 | Two-dimensional flow-through microcosms – Versatile test systems to study biodegradation processes in porous aquifers. <i>Journal of Hydrology</i> , 2009, 369, 284-295.  | 5.4  | 46        |
| 61 | Multicomponent ionic dispersion during transport of electrolytes in heterogeneous porous media: Experiments and model-based interpretation. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 141, 656-669.                                  | 3.9  | 46        |
| 62 | Enhancement of plume dilution in two-dimensional and three-dimensional porous media by flow focusing in high-permeability inclusions. <i>Water Resources Research</i> , 2015, 51, 5582-5602.  | 4.2  | 46        |
| 63 | Groundwater temperature evolution in the subsurface urban heat island of Cologne, Germany. <i>Hydrological Processes</i> , 2015, 29, 965-978.   | 2.6  | 45        |
| 64 | Quantification of biodegradation for o-xylene and naphthalene using first order decay models, Michaelis-Menten kinetics and stable carbon isotopes. <i>Journal of Contaminant Hydrology</i> , 2009, 105, 118-130.                         | 3.3  | 43        |
| 65 | Sorption of HOC in soils with carbonaceous contamination: Influence of organic-matter composition. <i>Journal of Plant Nutrition and Soil Science</i> , 2005, 168, 293-306.   | 1.9  | 42        |
| 66 | Compound-Specific Factors Influencing Sorption Nonlinearity in Natural Organic Matter. <i>Environmental Science &amp; Technology</i> , 2008, 42, 5897-5903.   | 10.0 | 40        |
| 67 | Model-based prediction of long-term leaching of contaminants from secondary materials in road constructions and noise protection dams. <i>Waste Management</i> , 2009, 29, 839-850.   | 7.4  | 39        |
| 68 | A high-precision sampling scheme to assess persistence and transport characteristics of micropollutants in rivers. <i>Science of the Total Environment</i> , 2016, 540, 444-454.  | 8.0  | 39        |
| 69 | Absorption or Adsorption? Insights from Molecular Probes – Alkanes and Cycloalkanes into Modes of Sorption by Environmental Solid Matrices. <i>Environmental Science &amp; Technology</i> , 2008, 42, 3989-3995.                          | 10.0 | 37        |
| 70 | Predicting organic carbon-water partitioning of hydrophobic organic chemicals in soils and sediments based on water solubility. <i>Water Research</i> , 2008, 42, 3775-3780.  | 11.3 | 37        |
| 71 | Sorption of polycyclic aromatic hydrocarbons (PAHs) to carbonaceous materials in a river floodplain soil. <i>Environmental Pollution</i> , 2008, 156, 1357-1363.  | 7.5  | 37        |
| 72 | The Role of Condensed Carbonaceous Materials on the Sorption of Hydrophobic Organic Contaminants in Subsurface Sediments. <i>Environmental Science &amp; Technology</i> , 2008, 42, 1458-1464.  | 10.0 | 37        |

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|----|---|------|-----------|
| 73 | 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        |
| 74 | Long-term behavior of PFAS in contaminated agricultural soils in Germany. <i>Journal of Contaminant Hydrology</i> , 2021, 241, 103812.  | 3.3  | 37        |
| 75 | Sorption/Desorption Reversibility of Phenanthrene in Soils and Carbonaceous Materials. <i>Environmental Science &amp; Technology</i> , 2007, 41, 1186-1193.   | 10.0 | 35        |
| 76 | ACCUMULATION OF POLYCYCLIC AROMATIC HYDROCARBONS IN RURAL SOILS BASED ON MASS BALANCES AT THE CATCHMENT SCALE. <i>Environmental Toxicology and Chemistry</i> , 2007, 26, 591.                             | 4.3  | 35        |
| 77 | Leaching standards for mineral recycling materials – A harmonized regulatory concept for the upcoming German Recycling Decree. <i>Waste Management</i> , 2011, 31, 201-214.                               | 7.4  | 35        |
| 78 | Effect of condensed organic matter on solvent extraction and aqueous leaching of polycyclic aromatic hydrocarbons in soils and sediments. <i>Environmental Pollution</i> , 2007, 148, 529-538.            | 7.5  | 34        |
| 79 | Comparison of steady-state and transient flow conditions on reactive transport of contaminants in the vadose soil zone. <i>Journal of Hydrology</i> , 2009, 369, 225-233.                                 | 5.4  | 33        |
| 80 | Quantitative High-Resolution Mapping of Phenanthrene Sorption to Black Carbon Particles. <i>Environmental Science &amp; Technology</i> , 2011, 45, 7314-7322.   | 10.0 | 31        |
| 81 | Sorption kinetics during macropore transport of organic contaminants in soils: Laboratory experiments and analytical modeling. <i>Water Resources Research</i> , 2004, 40, .                              | 4.2  | 30        |
| 82 | Mixing and transport of water in a karst catchment: a case study from precipitation via seepage to the spring. <i>Hydrology and Earth System Sciences</i> , 2009, 13, 285-292.                            | 4.9  | 30        |
| 83 | Diffusive – Dispersive and Reactive Fronts in Porous Media: Iron(II) Oxidation at the Unsaturated – Saturated Interface. <i>Vadose Zone Journal</i> , 2015, 14, 1-14.                                     | 2.2  | 30        |
| 84 | Review of Field Methods for the Determination of the Tortuosity and Effective Gas-Phase Diffusivity in the Vadose Zone. <i>Vadose Zone Journal</i> , 2004, 3, 1240-1248.                                  | 2.2  | 29        |
| 85 | Microplastic – Contaminant Interactions: Influence of Nonlinearity and Coupled Mass Transfer. <i>Environmental Toxicology and Chemistry</i> , 2019, 38, 1635-1644.  | 4.3  | 29        |
| 86 | Sorption/desorption kinetics of contaminants on mobile particles: Modeling and experimental evidence. <i>Water Resources Research</i> , 2003, 39, .   | 4.2  | 28        |
| 87 | Influence of petrographic composition/organic matter distribution of fluvial aquifer sediments on the sorption of hydrophobic contaminants. <i>Sedimentary Geology</i> , 1999, 129, 311-325.              | 2.1  | 27        |
| 88 | Effects of Native Organic Material and Water on Sorption Properties of Reference Diesel Soot. <i>Environmental Science &amp; Technology</i> , 2009, 43, 3187-3193.  | 10.0 | 27        |
| 89 | Indications for pedogenic formation of perylene in a terrestrial soil profile: Depth distribution and first results from stable carbon isotope ratios. <i>Applied Geochemistry</i> , 2007, 22, 2652-2663. | 3.0  | 26        |
| 90 | Field scale characterization and modeling of contaminant release from a coal tar source zone. <i>Journal of Contaminant Hydrology</i> , 2008, 102, 120-139.   | 3.3  | 26        |

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|-----|---|------|-----------|
| 91  | Characterization of Sorbent Properties of Soil Organic Matter and Carbonaceous Geosorbents Using <i>n</i> -Alkanes and Cycloalkanes as Molecular Probes. <i>Environmental Science &amp; Technology</i> , 2009, 43, 393-400. | 10.0 | 26        |
| 92  | Chemical changes in fluid composition due to CO <sub>2</sub> injection in the Altmark gas field: preliminary results from batch experiments. <i>Environmental Earth Sciences</i> , 2012, 67, 385-394.                       | 2.7  | 26        |
| 93  | Bulk metal concentrations versus total suspended solids in rivers: Time-invariant & catchment-specific relationships. <i>PLoS ONE</i> , 2018, 13, e0191314.   | 2.5  | 26        |
| 94  | Effect of natural particles on the transport of lindane in saturated porous media: Laboratory experiments and model-based analysis. <i>Journal of Contaminant Hydrology</i> , 2013, 149, 13-26.                             | 3.3  | 25        |
| 95  | Anaerobic Neutrophilic Pyrite Oxidation by a Chemolithoautotrophic Nitrate-Reducing Iron(II)-Oxidizing Culture Enriched from a Fractured Aquifer. <i>Environmental Science &amp; Technology</i> , 2021, 55, 9876-9884.      | 10.0 | 25        |
| 96  | Volatile Organic Compounds Volatilization from Multicomponent Organic Liquids and Diffusion in Unsaturated Porous Media. <i>Vadose Zone Journal</i> , 2003, 2, 692-701.   | 2.2  | 24        |
| 97  | Partition Behavior of Polycyclic Aromatic Hydrocarbons Between Aged Coal Tar and Water. <i>Environmental Toxicology and Chemistry</i> , 2009, 28, 1578-1584.  | 4.3  | 24        |
| 98  | Microbial activity in biogeochemical gradients - new aspects of research. <i>Geobiology</i> , 2005, 3, 229-233.   | 2.4  | 23        |
| 99  | Modeling the long-term and transient evolution of biogeochemical and isotopic signatures in coal tar-contaminated aquifers. <i>Water Resources Research</i> , 2011, 47, .   | 4.2  | 23        |
| 100 | Sanierungsforschung in regional kontaminierten Aquiferen (SAFIRA) - 1. Information zum Forschungsschwerpunkt am Standort Bitterfeld. <i>Grundwasser</i> , 2001, 6, 113-122.   | 1.4  | 22        |
| 101 | Determination of leaching behaviour of polycyclic aromatic hydrocarbons from contaminated soil by column leaching test. <i>Waste Management and Research</i> , 2010, 28, 913-920.   | 3.9  | 22        |
| 102 | Impact of Heterogeneity on Oxygen Transfer in a Fluctuating Capillary Fringe. <i>Ground Water</i> , 2015, 53, 57-70.  | 1.3  | 22        |
| 103 | Nitrate Removal by a Novel Lithoautotrophic Nitrate-Reducing, Iron(II)-Oxidizing Culture Enriched from a Pyrite-Rich Limestone Aquifer. <i>Applied and Environmental Microbiology</i> , 2021, 87, e0046021.                 | 3.1  | 22        |
| 104 | Experimental Investigations of Oxygenated Gasoline Dissolution. <i>Journal of Environmental Engineering, ASCE</i> , 2001, 127, 208-216.   | 1.4  | 21        |
| 105 | CCD camera image analysis for mapping solute concentrations in saturated porous media. <i>Analytical and Bioanalytical Chemistry</i> , 2009, 395, 1867-1876.  | 3.7  | 21        |
| 106 | On equilibration of pore water in column leaching tests. <i>Waste Management</i> , 2014, 34, 908-918.   | 7.4  | 21        |
| 107 | Atmospheric bulk deposition of polycyclic aromatic hydrocarbons in Shanghai: Temporal and spatial variation, and global comparison. <i>Environmental Pollution</i> , 2017, 230, 639-647.                                    | 7.5  | 21        |
| 108 | Gradients controlling natural attenuation of ammonium. <i>Applied Geochemistry</i> , 2007, 22, 2606-2617.   | 3.0  | 18        |

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|-----|--|-----|-----------|
| 109 | Oxygen Transfer in a Fluctuating Capillary Fringe: Impact of Microbial Respiratory Activity. <i>Vadose Zone Journal</i> , 2015, 14, 1-14.  | 2.2 | 18        |
| 110 | A parsimonious approach to estimate PAH concentrations in river sediments of anthropogenically impacted watersheds. <i>Science of the Total Environment</i> , 2017, 601-602, 636-645.  | 8.0 | 17        |
| 111 | Evolution of carbon isotope signatures during reactive transport of hydrocarbons in heterogeneous aquifers. <i>Journal of Contaminant Hydrology</i> , 2015, 174, 10-27.  | 3.3 | 16        |
| 112 | Modeling controls on the chemical weathering of marine mudrocks from the Middle Jurassic in Southern Germany. <i>Chemical Geology</i> , 2017, 459, 1-12.   | 3.3 | 15        |
| 113 | Activation energies of phenanthrene desorption from carbonaceous materials: Column studies. <i>Journal of Hydrology</i> , 2009, 369, 234-240.  | 5.4 | 14        |
| 114 | Modeling long-term uptake and re-volatilization of semi-volatile organic compounds (SVOCs) across the soil-atmosphere interface. <i>Science of the Total Environment</i> , 2015, 538, 789-801.   | 8.0 | 14        |
| 115 | Air-soil diffusive exchange of PAHs in an urban park of Shanghai based on polyethylene passive sampling: Vertical distribution, vegetation influence and diffusive flux. <i>Science of the Total Environment</i> , 2019, 689, 734-742.   | 8.0 | 14        |
| 116 | Impact of trophic levels on partitioning and bioaccumulation of polycyclic aromatic hydrocarbons in particulate organic matter and plankton. <i>Marine Pollution Bulletin</i> , 2020, 160, 111527.   | 5.0 | 14        |
| 117 | Chapter 12 Use of ceramic dosimeters in water monitoring. <i>Comprehensive Analytical Chemistry</i> , 2007, , 279-293.   | 1.3 | 13        |
| 118 | Simple analytical solutions for oxygen transfer into anaerobic groundwater. <i>Water Resources Research</i> , 2010, 46, .  | 4.2 | 13        |
| 119 | Experimental Sensitivity Analysis of Oxygen Transfer in the Capillary Fringe. <i>Ground Water</i> , 2014, 52, 37-49.   | 1.3 | 13        |
| 120 | Experimental investigation of transverse mixing in porous media under helical flow conditions. <i>Physical Review E</i> , 2016, 94, 013113.  | 2.1 | 13        |
| 121 | Enhanced Immobilization of Polycyclic Aromatic Hydrocarbons in Contaminated Soil Using Forest Wood-Derived Biochar and Activated Carbon under Saturated Conditions, and the Importance of Biochar Particle Size. <i>Polish Journal of Environmental Studies</i> , 2016, 25, 427-441. | 1.2 | 13        |
| 122 | Partitioning and pore-filling: Solubility-normalized sorption isotherms of nonionic organic contaminants in soils and sediments. <i>Israel Journal of Chemistry</i> , 2002, 42, 67-75.   | 2.3 | 12        |
| 123 | Sanierungsforschung in regional kontaminierten Aquiferen. <i>Grundwasser</i> , 2002, 7, 133-133.   | 1.4 | 11        |
| 124 | High-resolution aquifer analog of fluvial-aeolian sediments of the Guarani aquifer system. <i>Environmental Earth Sciences</i> , 2014, 71, 3081-3094.  | 2.7 | 11        |
| 125 | Modeling short-term concentration fluctuations of semi-volatile pollutants in the soil-plant-atmosphere system. <i>Science of the Total Environment</i> , 2016, 569-570, 159-167.  | 8.0 | 11        |



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|-----|--|------|-----------|
| 127 | Integral quantification of contaminant mass flow rates in a contaminated aquifer: Conditioning of the numerical inversion of concentration-time series. <i>Journal of Contaminant Hydrology</i> , 2009, 106, 29-38.                | 3.3  | 10        |
| 128 | Long-term solute transport and geochemical equilibria in seepage water and groundwater in a catchment cross section. <i>Environmental Earth Sciences</i> , 2013, 69, 429-441.  | 2.7  | 10        |
| 129 | Determination of the subcooled liquid solubilities of PAHs in partitioning batch experiments. <i>Geoscience Frontiers</i> , 2013, 4, 123-126.  | 8.4  | 10        |
| 130 | A travel time-based approach to model kinetic sorption in highly heterogeneous porous media via reactive hydrofacies. <i>Water Resources Research</i> , 2016, 52, 9390-9411.   | 4.2  | 10        |
| 131 | Volatile Organic Compounds Volatilization from Multicomponent Organic Liquids and Diffusion in Unsaturated Porous Media. <i>Vadose Zone Journal</i> , 2003, 2, 692-701.  | 2.2  | 9         |
| 132 | Impact of pre-equilibration and diffusion limited release kinetics on effluent concentration in column leaching tests: Insights from numerical simulations. <i>Waste Management</i> , 2017, 63, 58-73.                             | 7.4  | 9         |
| 133 | Determination of hydrocarbon sources in major rivers and estuaries of peninsular Malaysia using aliphatic hydrocarbons and hopanes as biomarkers. <i>Environmental Forensics</i> , 2022, 23, 255-268.                              | 2.6  | 9         |
| 134 | First order approximation for coupled film and intraparticle pore diffusion to model sorption/desorption batch experiments. <i>Journal of Hazardous Materials</i> , 2022, 429, 128314.   | 12.4 | 9         |
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