

Henning Prommer

List of Publications by Year in descending order

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124
papers

4,495
citations

94269

37
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123241

61
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126
all docs

126
docs citations

126
times ranked

3400
citing authors

#	ARTICLE	IF	CITATIONS
1	MODFLOW/MT3DMS-Based Reactive Multicomponent Transport Modeling. <i>Ground Water</i> , 2003, 41, 247-257.	0.7	256
2	Analytical approximations for real values of the Lambert W-function. <i>Mathematics and Computers in Simulation</i> , 2000, 53, 95-103.	2.4	198
3	Modelling the fate of oxidisable organic contaminants in groundwater. <i>Advances in Water Resources</i> , 2002, 25, 945-983.	1.7	157
4	Tide-induced recirculation across the aquifer-ocean interface. <i>Water Resources Research</i> , 2007, 43, .	1.7	156
5	Identification of Temperature-Dependent Water Quality Changes during a Deep Well Injection Experiment in a Pyritic Aquifer. <i>Environmental Science & Technology</i> , 2005, 39, 2200-2209.	4.6	129
6	Modeling Seasonal Redox Dynamics and the Corresponding Fate of the Pharmaceutical Residue Phenazone During Artificial Recharge of Groundwater. <i>Environmental Science & Technology</i> , 2006, 40, 6615-6621.	4.6	124
7	Colloid release and clogging in porous media: Effects of solution ionic strength and flow velocity. <i>Journal of Contaminant Hydrology</i> , 2015, 181, 161-171.	1.6	124
8	The river-groundwater interface as a hotspot for arsenic release. <i>Nature Geoscience</i> , 2020, 13, 288-295.	5.4	104
9	The impact of variably saturated conditions on hydrogeochemical changes during artificial recharge of groundwater. <i>Applied Geochemistry</i> , 2005, 20, 1409-1426.	1.4	97
10	Identifying and Quantifying the Intermediate Processes during Nitrate-Dependent Iron(II) Oxidation. <i>Environmental Science & Technology</i> , 2018, 52, 5771-5781.	4.6	95
11	Three-dimensional model for multi-component reactive transport with variable density groundwater flow. <i>Environmental Modelling and Software</i> , 2006, 21, 615-628.	1.9	94
12	Modelling of physical and reactive processes during biodegradation of a hydrocarbon plume under transient groundwater flow conditions. <i>Journal of Contaminant Hydrology</i> , 2002, 59, 113-131.	1.6	93
13	Geochemical evolution of groundwater in carbonate aquifers in Taiyuan, northern China. <i>Applied Geochemistry</i> , 2011, 26, 884-897.	1.4	91
14	Biogeochemical and Isotopic Gradients in a BTEX/PAH Contaminant Plume: Model-Based Interpretation of a High-Resolution Field Data Set. <i>Environmental Science & Technology</i> , 2009, 43, 8206-8212.	4.6	90
15	Process-Based Reactive Transport Model To Quantify Arsenic Mobility during Aquifer Storage and Recovery of Potable Water. <i>Environmental Science & Technology</i> , 2011, 45, 6924-6931.	4.6	90
16	Beyond the Rayleigh Equation: Reactive Transport Modeling of Isotope Fractionation Effects to Improve Quantification of Biodegradation. <i>Environmental Science & Technology</i> , 2008, 42, 2457-2463.	4.6	89
17	Fringe-Controlled Natural Attenuation of Phenoxy Acids in a Landfill Plume: Integration of Field-Scale Processes by Reactive Transport Modeling. <i>Environmental Science & Technology</i> , 2006, 40, 4732-4738.	4.6	81
18	Elucidating temperature effects on seasonal variations of biogeochemical turnover rates during riverbank filtration. <i>Journal of Hydrology</i> , 2012, 428-429, 104-115.	2.3	75

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19	Effects of hydrodynamic dispersion on plume lengths for instantaneous bimolecular reactions. <i>Advances in Water Resources</i> , 2004, 27, 803-813.	1.7	72
20	Modeling of carbon cycling and biogeochemical changes during injection and recovery of reclaimed water at Bolivar, South Australia. <i>Water Resources Research</i> , 2005, 41, .	1.7	67
21	A field-scale reactive transport model for U(VI) migration influenced by coupled multirate mass transfer and surface complexation reactions. <i>Water Resources Research</i> , 2010, 46, .	1.7	66
22	Evaluation of Conceptual and Numerical Models for Arsenic Mobilization and Attenuation during Managed Aquifer Recharge. <i>Environmental Science & Technology</i> , 2010, 44, 5035-5041.	4.6	63
23	Numerical Modeling of Arsenic Mobility during Reductive Iron-Mineral Transformations. <i>Environmental Science & Technology</i> , 2016, 50, 2459-2467.	4.6	62
24	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.	3.9	61
25	Model-Based Analysis of Arsenic Immobilization via Iron Mineral Transformation under Advective Flows. <i>Environmental Science & Technology</i> , 2018, 52, 9243-9253.	4.6	57
26	Contribution of anaerobic microbial activity to natural attenuation of benzene in groundwater. <i>Engineering Geology</i> , 2003, 70, 343-349.	2.9	55
27	Okavango Delta Islands: Interaction between density-driven flow and geochemical reactions under evapo-concentration. <i>Journal of Hydrology</i> , 2007, 335, 389-405.	2.3	55
28	Multicomponent reactive transport simulation of the Elder problem: Effects of chemical reactions on salt plume development. <i>Water Resources Research</i> , 2007, 43, .	1.7	53
29	Geochemical controls on sediment reactivity and buffering processes in a heterogeneous aquifer. <i>Applied Geochemistry</i> , 2010, 25, 261-275.	1.4	49
30	Suitability of temperature, hydraulic heads, and acesulfame to quantify wastewater-related fluxes in the hyporheic and riparian zone. <i>Water Resources Research</i> , 2013, 49, 426-440.	1.7	49
31	Mobilization of Arsenic and Other Naturally Occurring Contaminants during Managed Aquifer Recharge: A Critical Review. <i>Environmental Science & Technology</i> , 2021, 55, 2208-2223.	4.6	46
32	A critical evaluation of combined engineered and aquifer treatment systems in water recycling. <i>Water Science and Technology</i> , 2008, 57, 753-762.	1.2	44
33	Geochemical reconstruction of the provenance, weathering and deposition of detrital-dominated sediments in the Perth Basin: The Cretaceous Leederville Formation, south-west Australia. <i>Sedimentary Geology</i> , 2011, 236, 62-76.	1.0	43
34	Processes governing arsenic retardation on Pleistocene sediments: Adsorption experiments and model-based analysis. <i>Water Resources Research</i> , 2017, 53, 4344-4360.	1.7	42
35	Aerobic Biodegradation of Chlorinated Ethenes in a Fractured Bedrock Aquifer: Quantitative Assessment by Compound-Specific Isotope Analysis (CSIA) and Reactive Transport Modeling. <i>Environmental Science & Technology</i> , 2009, 43, 7458-7464.	4.6	41
36	A one-dimensional reactive multi-component transport model for biodegradation of petroleum hydrocarbons in groundwater. <i>Environmental Modelling and Software</i> , 1998, 14, 213-223.	1.9	39

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37	Geochemical changes during biodegradation of petroleum hydrocarbons: field investigations and biogeochemical modelling. <i>Organic Geochemistry</i> , 1999, 30, 423-435.	0.9	39
38	Electrokinetic in situ oxidation remediation: Assessment of parameter sensitivities and the influence of aquifer heterogeneity on remediation efficiency. <i>Journal of Contaminant Hydrology</i> , 2012, 136-137, 72-85.	1.6	34
39	Controlling Arsenic Mobilization during Managed Aquifer Recharge: The Role of Sediment Heterogeneity. <i>Environmental Science & Technology</i> , 2020, 54, 8728-8738.	4.6	33
40	Numerical modelling for design and evaluation of groundwater remediation schemes. <i>Ecological Modelling</i> , 2000, 128, 181-195.	1.2	32
41	Evaluation of saline tracer performance during electrical conductivity groundwater monitoring. <i>Journal of Contaminant Hydrology</i> , 2011, 123, 157-166.	1.6	32
42	Comparison of split-operator methods for solving coupled chemical non-equilibrium reaction/groundwater transport models. <i>Mathematics and Computers in Simulation</i> , 2000, 53, 113-127.	2.4	31
43	Modelling of iron cycling and its impact on the electron balance at a petroleum hydrocarbon contaminated site in Hnevice, Czech Republic. <i>Journal of Contaminant Hydrology</i> , 2007, 89, 270-294.	1.6	31
44	Comparison of parameter sensitivities between a laboratory and field-scale model of uranium transport in a dual domain, distributed rate reactive system. <i>Water Resources Research</i> , 2010, 46, .	1.7	31
45	Identification and quantification of redox and pH buffering processes in a heterogeneous, low carbonate aquifer during managed aquifer recharge. <i>Water Resources Research</i> , 2016, 52, 4003-4025.	1.7	30
46	Influence of calcite on uranium(VI) reactive transport in the groundwater-river mixing zone. <i>Journal of Contaminant Hydrology</i> , 2014, 156, 27-37.	1.6	29
47	Quantifying Reactive Transport Processes Governing Arsenic Mobility after Injection of Reactive Organic Carbon into a Bengal Delta Aquifer. <i>Environmental Science & Technology</i> , 2017, 51, 8471-8480.	4.6	29
48	Modelling of geochemical and isotopic changes in a column experiment for degradation of TCE by zero-valent iron. <i>Journal of Contaminant Hydrology</i> , 2008, 97, 13-26.	1.6	28
49	Enhancing Roxarsone Degradation and <i>In Situ</i> Arsenic Immobilization Using a Sulfate-Mediated Bioelectrochemical System. <i>Environmental Science & Technology</i> , 2021, 55, 393-401.	4.6	26
50	Feasibility of electrokinetic in situ leaching of gold. <i>Hydrometallurgy</i> , 2018, 175, 70-78.	1.8	25
51	Toward a more sustainable mining future with electrokinetic in situ leaching. <i>Science Advances</i> , 2021, 7, .	4.7	25
52	Kinetic Reaction Modeling Framework for Identifying and Quantifying Reductant Reactivity in Heterogeneous Aquifer Sediments. <i>Environmental Science & Technology</i> , 2010, 44, 6698-6705.	4.6	24
53	Heat and mass transport during a groundwater replenishment trial in a highly heterogeneous aquifer. <i>Water Resources Research</i> , 2014, 50, 9463-9483.	1.7	24
54	Deoxygenation Prevents Arsenic Mobilization during Deepwell Injection into Sulfide-Bearing Aquifers. <i>Environmental Science & Technology</i> , 2018, 52, 13801-13810.	4.6	24

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55	Modeling the long-term and transient evolution of biogeochemical and isotopic signatures in coal tar-contaminated aquifers. <i>Water Resources Research</i> , 2011, 47, .	1.7	23
56	Using Reactive Transport Models to Quantify and Predict Groundwater Quality. <i>Elements</i> , 2019, 15, 87-92.	0.5	23
57	Numerical evaluation of voltage gradient constraints on electrokinetic injection of amendments. <i>Advances in Water Resources</i> , 2012, 38, 60-69.	1.7	22
58	In situ recovery of gold: Column leaching experiments and reactive transport modeling. <i>Hydrometallurgy</i> , 2012, 125-126, 16-23.	1.8	22
59	Assessment of controlling processes for field-scale uranium reactive transport under highly transient flow conditions. <i>Water Resources Research</i> , 2014, 50, 1006-1024.	1.7	22
60	Multiscale Characterization and Quantification of Arsenic Mobilization and Attenuation During Injection of Treated Coal Seam Gas Coproduced Water into Deep Aquifers. <i>Water Resources Research</i> , 2017, 53, 10779-10801.	1.7	22
61	Carbon and methane cycling in arsenic-contaminated aquifers. <i>Water Research</i> , 2021, 200, 117300.	5.3	22
62	Fluoride and phosphate release from carbonate-rich fluorapatite during managed aquifer recharge. <i>Journal of Hydrology</i> , 2018, 562, 809-820.	2.3	21
63	Reactive Transport of Iomeprol during Stream-Groundwater Interactions. <i>Environmental Science & Technology</i> , 2014, 48, 199-207.	4.6	20
64	Numerical investigation of coupled density-driven flow and hydrogeochemical processes below playas. <i>Water Resources Research</i> , 2015, 51, 9338-9352.	1.7	19
65	Fate of arsenic, phosphate and ammonium plumes in a coastal aquifer affected by saltwater intrusion. <i>Journal of Contaminant Hydrology</i> , 2015, 179, 116-131.	1.6	19
66	Investigation into the microbial communities and associated crude oil-contamination along a Gulf War impacted groundwater system in Kuwait. <i>Water Research</i> , 2020, 170, 115314.	5.3	19
67	Similitude applied to centrifugal scaling of unsaturated flow. <i>Water Resources Research</i> , 2001, 37, 2471-2479.	1.7	18
68	Modelling the fate of styrene in a mixed petroleum hydrocarbon plume. <i>Journal of Contaminant Hydrology</i> , 2009, 105, 38-55.	1.6	18
69	Reactive transport modeling of thorium in a cloud computing environment. <i>Journal of Geochemical Exploration</i> , 2014, 144, 63-73.	1.5	18
70	Modeling of biogeochemical processes in a barrier island freshwater lens (Spiekeroog, Germany). <i>Journal of Hydrology</i> , 2019, 575, 1133-1144.	2.3	18
71	Origin of a Mixed Brominated Ethene Groundwater Plume: Contaminant Degradation Pathways and Reactions. <i>Environmental Science & Technology</i> , 2007, 41, 1352-1358.	4.6	17
72	A process-based reactive hybrid transport model for coupled discrete conduit-continuum systems. <i>Journal of Hydrology</i> , 2007, 347, 23-34.	2.3	17

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73	Simulating adsorption of U(VI) under transient groundwater flow and hydrochemistry: Physical versus chemical nonequilibrium model. <i>Water Resources Research</i> , 2011, 47, .	1.7	16
74	Evolution of carbon isotope signatures during reactive transport of hydrocarbons in heterogeneous aquifers. <i>Journal of Contaminant Hydrology</i> , 2015, 174, 10-27.	1.6	16
75	Validity and slopes of the linear equation of state for natural brines in salt lake systems. <i>Journal of Hydrology</i> , 2015, 523, 190-195.	2.3	16
76	Electrokinetic in situ leaching of gold from intact ore. <i>Hydrometallurgy</i> , 2018, 178, 124-136.	1.8	16
77	Fermentation, methanotrophy and methanogenesis influence sedimentary Fe and As dynamics in As-affected aquifers in Vietnam. <i>Science of the Total Environment</i> , 2021, 779, 146501.	3.9	16
78	Assessment of amenability of sandstone-hosted uranium deposit for in-situ recovery. <i>Hydrometallurgy</i> , 2018, 179, 157-166.	1.8	15
79	Using heuristic multi-objective optimization for quantifying predictive uncertainty associated with groundwater flow and reactive transport models. <i>Journal of Hydrology</i> , 2019, 577, 123999.	2.3	15
80	Model-Based Analysis of Reactive Transport Processes Governing Fluoride and Phosphate Release and Attenuation during Managed Aquifer Recharge. <i>Environmental Science & Technology</i> , 2020, 54, 2800-2811.	4.6	15
81	Effects of Increasing Acidity on Metal(loid) Bioprecipitation in Groundwater:â€‰ Column Studies. <i>Environmental Science & Technology</i> , 2007, 41, 7131-7137.	4.6	14
82	Variable density groundwater flow: from modelling to applications. , 2010, , 87-118.		14
83	Model-based analysis of $\delta^{34}\text{S}$ signatures to trace sedimentary pyrite oxidation during managed aquifer recharge in a heterogeneous aquifer. <i>Journal of Hydrology</i> , 2017, 548, 368-381.	2.3	14
84	Sources of ammonium enriched in groundwater in the central Yangtze River Basin: Anthropogenic or geogenic?. <i>Environmental Pollution</i> , 2022, 306, 119463.	3.7	14
85	Modeling of Microbial Dynamics and Geochemical Changes in a Metal Bioprecipitation Experiment. <i>Environmental Science & Technology</i> , 2007, 41, 8433-8438.	4.6	13
86	Prediction of diffuse sulfate emissions from a former mining district and associated groundwater discharges to surface waters. <i>Journal of Hydrology</i> , 2014, 513, 169-178.	2.3	13
87	Using predictive uncertainty analysis to optimise tracer test design and data acquisition. <i>Journal of Hydrology</i> , 2014, 515, 191-204.	2.3	13
88	Assessing and Managing Largeâ€‰Scale Geochemical Impacts From Groundwater Replenishment With Highly Treated Reclaimed Wastewater. <i>Water Resources Research</i> , 2020, 56, e2020WR028066.	1.7	13
89	Process-based modeling of arsenic(III) oxidation by manganese oxides under circumneutral pH conditions. <i>Water Research</i> , 2020, 185, 116195.	5.3	13
90	Response of anaerobic granular sludge to long-term loading of roxarsone: From macro- to micro-scale perspective. <i>Water Research</i> , 2021, 204, 117599.	5.3	13

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91	Simulating MODFLOW-Based Reactive Transport Under Radially Symmetric Flow Conditions. <i>Ground Water</i> , 2013, 51, 398-413.	0.7	12
92	Physical and Chemical Controls on the Simultaneous Occurrence of Young and Old Groundwater Inferred From Multiple Age Tracers. <i>Water Resources Research</i> , 2018, 54, 9514-9532.	1.7	12
93	Redox Dependent Arsenic Occurrence and Partitioning in an Industrial Coastal Aquifer: Evidence from High Spatial Resolution Characterization of Groundwater and Sediments. <i>Water (Switzerland)</i> , 2020, 12, 2932.	1.2	12
94	Effects of divalent heavy metal cations on the synthesis and characteristics of magnetite. <i>Chemical Geology</i> , 2020, 547, 119669.	1.4	12
95	Fluoride release from carbonate-rich fluorapatite during managed aquifer recharge: Model-based development of mitigation strategies. <i>Water Research</i> , 2021, 193, 116880.	5.3	12
96	Reactive transport controls on sandy acid sulfate soils and impacts on shallow groundwater quality. <i>Water Resources Research</i> , 2014, 50, 4924-4952.	1.7	11
97	Zero valent iron remediation of a mixed brominated ethene contaminated groundwater. <i>Journal of Contaminant Hydrology</i> , 2009, 103, 109-118.	1.6	10
98	Model-Based Integration and Analysis of Biogeochemical and Isotopic Dynamics in a Nitrate-Polluted Pyritic Aquifer. <i>Environmental Science & Technology</i> , 2013, 47, 130909083606007.	4.6	10
99	A general reactive transport modeling framework for simulating and interpreting groundwater ¹⁴ C age and ¹³ C. <i>Water Resources Research</i> , 2015, 51, 359-376.	1.7	10
100	Identifying remedial solutions through optimal bioremediation design under real-world field conditions. <i>Journal of Contaminant Hydrology</i> , 2021, 237, 103751.	1.6	10
101	Temperature dependence of nitrate-reducing Fe(II) oxidation by <i>Acidovorax</i> strain BoFeN1 – evaluating the role of enzymatic vs. abiotic Fe(II) oxidation by nitrite. <i>FEMS Microbiology Ecology</i> , 2022, 97, .	1.3	10
102	Biodegradability of legacy crude oil contamination in Gulf War damaged groundwater wells in Northern Kuwait. <i>Biodegradation</i> , 2019, 30, 71-85.	1.5	9
103	Modelling of an enhanced PAH attenuation experiment and associated biogeochemical changes at a former gasworks site in southern Germany. <i>Journal of Contaminant Hydrology</i> , 2011, 119, 99-112.	1.6	8
104	<sc>PHT3D</sc>: A Reactive Transport Model for Variably-Saturated Porous Media. <i>Ground Water</i> , 2016, 54, 23-34.	0.7	8
105	Elucidating the fate of a mixed toluene, DHM, methanol, and i-propanol plume during in situ bioremediation. <i>Journal of Contaminant Hydrology</i> , 2017, 201, 6-18.	1.6	8
106	Reactive Transport Modeling of Swelling Processes in Clay-Sulfate Rocks. <i>Water Resources Research</i> , 2018, 54, 6543-6565.	1.7	8
107	Unraveling biogeochemical complexity through better integration of experiments and modeling. <i>Environmental Sciences: Processes and Impacts</i> , 2021, 23, 1825-1833.	1.7	8
108	Analyzing the heave of an entire city: Modeling of swelling processes in clay-sulfate rocks. <i>Engineering Geology</i> , 2019, 261, 105259.	2.9	7

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109	In situ arsenic immobilisation for coastal aquifers using stimulated iron cycling: Lab-based viability assessment. <i>Applied Geochemistry</i> , 2022, 136, 105155.	1.4	7
110	Suitability of precipitation waters as semi-artificial groundwater tracers. <i>Journal of Hydrology</i> , 2019, 577, 123982.	2.3	6
111	Modeling Bioremediation of Contaminated Groundwater. , 2014, , 108-138.		5
112	A reactive transport benchmark on modeling biogenic uraninite re-oxidation by Fe(III)-(hydr)oxides. <i>Computational Geosciences</i> , 2015, 19, 569-583.	1.2	5
113	Factors controlling iodine enrichment in a coastal plain aquifer in the North Jiangsu Yishusi Plain, China. <i>Journal of Contaminant Hydrology</i> , 2021, 243, 103894.	1.6	5
114	Predictive modelling of dispersion controlled reactive plumes at the laboratory-scale. <i>Journal of Contaminant Hydrology</i> , 2007, 93, 304-315.	1.6	4
115	Noble gas constraints on the fate of arsenic in groundwater. <i>Water Research</i> , 2022, 214, 118199.	5.3	4
116	Singleâ€Rate Dualâ€Domain Mass Transfer Model: Elucidating Temperature Effects. <i>Water Resources Research</i> , 2021, 57, e2020WR029474.	1.7	3
117	Tidal Dynamics of Groundwater Flow and Contaminant Transport in Coastal Aquifers. , 2003, , .		2
118	Geochemical changes under variably saturated conditions during artificial recharge via ponded infiltration â€” A field study. , 2005, , 51-63.		2
119	Ore characterization, hydrometallurgical and reactive transport studies for in-place leaching of oxidized gold deposits. <i>Mining, Metallurgy and Exploration</i> , 2010, 27, 72-80.	0.4	2
120	Australian exemplars of sustainable and economic managed aquifer recharge. <i>Water E-Journal</i> , 2021, 5, 1-19.	0.2	2
121	Process oriented quantification of mine dump pollutant inventories on the large scaleâ€”The case of the lignite mining district Lusatia, Germany. <i>Journal of Geochemical Exploration</i> , 2012, 112, 161-173.	1.5	1
122	Multi-isotope studies investigating recharge and inter-aquifer connectivity in coal seam gas areas (Qld, NSW) and shale gas areas (NT). <i>APPEA Journal</i> , 2020, 60, 335.	0.4	1
123	MODFLOW-Based Tools for Simulation of Variable-Density Groundwater Flow. , 2003, , .		0
124	Numerical modeling of arsenic mobility. <i>Arsenic in the Environment</i> , 2014, , 35-52.	0.0	0