

# Christian Griebler

## List of Publications by Year in descending order

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Version: 2024-02-01

103  
papers

5,244  
citations

81743

39  
h-index

91712

69  
g-index

108  
all docs

108  
docs citations

108  
times ranked

4451  
citing authors

#	ARTICLE	IF	CITATIONS
1	Dynamics of pathogens and fecal indicators during riverbank filtration in times of high and low river levels. <i>Water Research</i> , 2022, 209, 117961.	5.3	11
2	Microbial Biodiversity in Groundwater Ecosystems. , 2022, , 397-411.		3
3	Knowledge Gaps, Obstacles, and Research Frontiers in Groundwater Microbial Ecology. , 2022, , 611-624.		2
4	Attachment, re-mobilization, and inactivation of bacteriophage MS2 during bank filtration following simulation of a high virus load and an extreme rain event. <i>Journal of Contaminant Hydrology</i> , 2022, 246, 103960.	1.6	3
5	Brazilian cave heritage under siege. <i>Science</i> , 2022, 375, 1238-1239.	6.0	32
6	Toward Improved Bioremediation Strategies: Response of BAM-Degradation Activity to Concentration and Flow Changes in an Inoculated Bench-Scale Sediment Tank. <i>Environmental Science &amp; Technology</i> , 2022, 56, 4050-4061.	4.6	1
7	Towards evidence-based conservation of subterranean ecosystems. <i>Biological Reviews</i> , 2022, 97, 1476-1510.	4.7	39
8	Small rain events during drought alter sediment dissolved organic carbon leaching and respiration in intermittent stream sediments. <i>Biogeochemistry</i> , 2022, 159, 159-178.	1.7	6
9	Heavy rainfall following a summer drought stimulates soil redox dynamics and facilitates rapid and deep translocation of glyphosate in floodplain soils. <i>Environmental Sciences: Processes and Impacts</i> , 2022, , .	1.7	2
10	Groundwater fauna downtown – Drivers, impacts and implications for subsurface ecosystems in urban areas. <i>Journal of Contaminant Hydrology</i> , 2022, 248, 104021.	1.6	16
11	Making waves: Pulling the plug – Climate change effects will turn gaining into losing streams with detrimental effects on groundwater quality. <i>Water Research</i> , 2022, 220, 118649.	5.3	11
12	Aquifer recharge viewed through the lens of microbial community ecology: Initial disturbance response, and impacts of species sorting versus mass effects on microbial community assembly in groundwater during riverbank filtration. <i>Water Research</i> , 2021, 189, 116631.	5.3	36
13	Rainfall as a trigger of ecological cascade effects in an Australian groundwater ecosystem. <i>Scientific Reports</i> , 2021, 11, 3694.	1.6	20
14	Experimental desiccation indicates high moisture content maintains hyporheic biofilm processes during drought in temperate intermittent streams. <i>Aquatic Sciences</i> , 2021, 83, 1.	0.6	4
15	Mass-Transfer-Limited Biodegradation at Low Concentrations – Evidence from Reactive Transport Modeling of Isotope Profiles in a Bench-Scale Aquifer. <i>Environmental Science &amp; Technology</i> , 2021, 55, 7386-7397.	4.6	18
16	Disentangling multiple chemical and non-chemical stressors in a lotic ecosystem using a longitudinal approach. <i>Science of the Total Environment</i> , 2021, 769, 144324.	3.9	24
17	A conservation roadmap for the subterranean biome. <i>Conservation Letters</i> , 2021, 14, e12834.	2.8	31
18	Application of the D-A(C) index as a simple tool for microbial-ecological characterization and assessment of groundwater ecosystems – a case study of the Mur River Valley, Austria. <i>Osterreichische Wasser- Und Abfallwirtschaft</i> , 2021, 73, 455-467.	0.3	4

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19	Groundwater Microbial Communities in Times of Climate Change. <i>Current Issues in Molecular Biology</i> , 2021, 41, 509-538.	1.0	21
20	Spatial and Annual Variation in Microbial Abundance, Community Composition, and Diversity Associated With Alpine Surface Snow. <i>Frontiers in Microbiology</i> , 2021, 12, 781904.	1.5	1
21	Presence and Role of Prokaryotic Viruses in Groundwater Environments. , 2021, , .		0
22	Linkage Between Dissolved Organic Matter Transformation, Bacterial Carbon Production, and Diversity in a Shallow Oligotrophic Aquifer: Results From Flow-Through Sediment Microcosm Experiments. <i>Frontiers in Microbiology</i> , 2020, 11, 543567.	1.5	26
23	Fundamental research questions in subterranean biology. <i>Biological Reviews</i> , 2020, 95, 1855-1872.	4.7	86
24	Tracking down carbon inputs underground from an arid zone Australian calcrete. <i>PLoS ONE</i> , 2020, 15, e0237730.	1.1	14
25	Substrate-dependent CO <sub>2</sub> fixation in heterotrophic bacteria revealed by stable isotope labelling. <i>FEMS Microbiology Ecology</i> , 2020, 96, .	1.3	14
26	Phenotypic heterogeneity as key factor for growth and survival under oligotrophic conditions. <i>Environmental Microbiology</i> , 2020, 22, 3339-3356.	1.8	20
27	Tracking down carbon inputs underground from an arid zone Australian calcrete. , 2020, 15, e0237730.		0
28	Tracking down carbon inputs underground from an arid zone Australian calcrete. , 2020, 15, e0237730.		0
29	Tracking down carbon inputs underground from an arid zone Australian calcrete. , 2020, 15, e0237730.		0
30	Tracking down carbon inputs underground from an arid zone Australian calcrete. , 2020, 15, e0237730.		0
31	The D-A-(C) index: A practical approach towards the microbiological-ecological monitoring of groundwater ecosystems. <i>Water Research</i> , 2019, 163, 114902.	5.3	24
32	Molecular change of dissolved organic matter and patterns of bacterial activity in a stream along a land-use gradient. <i>Water Research</i> , 2019, 164, 114919.	5.3	50
33	Selection imposed by local environmental conditions drives differences in microbial community composition across geographically distinct groundwater aquifers. <i>FEMS Microbiology Ecology</i> , 2019, 95, .	1.3	27
34	Scientists' Warning on the Conservation of Subterranean Ecosystems. <i>BioScience</i> , 2019, 69, 641-650.	2.2	170
35	Defining lower limits of biodegradation: atrazine degradation regulated by mass transfer and maintenance demand in <i>Arthrobacter aurescens</i> TC1. <i>ISME Journal</i> , 2019, 13, 2236-2251.	4.4	43
36	New light in the dark - a proposed multidisciplinary framework for studying functional ecology of groundwater fauna. <i>Science of the Total Environment</i> , 2019, 662, 963-977.	3.9	47

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37	Dynamics of Hydrology and Anaerobic Hydrocarbon Degradation Communities in a Tar-Oil Contaminated Aquifer. <i>Microorganisms</i> , 2019, 7, 46.	1.6	19
38	Non-random processes determine the colonization of groundwater sediments by microbial communities in a pristine porous aquifer. <i>Environmental Microbiology</i> , 2019, 21, 327-342.	1.8	32
39	Groundwater Ecosystems and Their Services: Current Status and Potential Risks. , 2019, , 197-203.		16
40	Contaminant concentration versus flow velocity: drivers of biodegradation and microbial growth in groundwater model systems. <i>Biodegradation</i> , 2018, 29, 211-232.	1.5	22
41	The Human Virome Protein Cluster Database (HVPC): A Human Viral Metagenomic Database for Diversity and Function Annotation. <i>Frontiers in Microbiology</i> , 2018, 9, 1110.	1.5	20
42	Response and recovery of a pristine groundwater ecosystem impacted by toluene contamination – A meso-scale indoor aquifer experiment. <i>Journal of Contaminant Hydrology</i> , 2017, 207, 17-30.	1.6	22
43	Antagonistic Microbial Interactions: Contributions and Potential Applications for Controlling Pathogens in the Aquatic Systems. <i>Frontiers in Microbiology</i> , 2017, 8, 2192.	1.5	48
44	Long-distance electron transfer by cable bacteria in aquifer sediments. <i>ISME Journal</i> , 2016, 10, 2010-2019.	4.4	107
45	Geochemistry of Dissolved Organic Matter in a Spatially Highly Resolved Groundwater Petroleum Hydrocarbon Plume Cross-Section. <i>Environmental Science &amp; Technology</i> , 2016, 50, 5536-5546.	4.6	55
46	Mini Sediment Columns and Two-Dimensional Sediment Flow-Through Microcosms: Versatile Experimental Systems for Studying Biodegradation of Organic Contaminants in Groundwater Ecosystems. <i>Springer Protocols</i> , 2016, , 153-172.	0.1	3
47	Potential impacts of geothermal energy use and storage of heat on groundwater quality, biodiversity, and ecosystem processes. <i>Environmental Earth Sciences</i> , 2016, 75, 1.	1.3	66
48	Microbial and viral pathogens in freshwater: current research aspects studied in Germany. <i>Environmental Earth Sciences</i> , 2016, 75, 1.	1.3	16
49	Quantification of aquatic sediment prokaryotes – A multiple-steps optimization testing sands from pristine and contaminated aquifers. <i>Limnologia</i> , 2016, 56, 6-13.	0.7	20
50	Evaluating the performance of water purification in a vegetated groundwater recharge basin maintained by short-term pulsed infiltration events. <i>Water Science and Technology</i> , 2015, 72, 1912-1922.	1.2	5
51	Biodegradation: Updating the Concepts of Control for Microbial Cleanup in Contaminated Aquifers. <i>Environmental Science &amp; Technology</i> , 2015, 49, 7073-7081.	4.6	211
52	Dynamics of Suspended and Attached Aerobic Toluene Degradation in Small-Scale Flow-through Sediment Systems under Growth and Starvation Conditions. <i>Environmental Science &amp; Technology</i> , 2015, 49, 7161-7169.	4.6	26
53	Spatial distributions of sulphur species and sulphate-reducing bacteria provide insights into sulphur redox cycling and biodegradation hot-spots in a hydrocarbon-contaminated aquifer. <i>Geochimica Et Cosmochimica Acta</i> , 2015, 156, 207-221.	1.6	26
54	Groundwater ecosystem services: a review. <i>Freshwater Science</i> , 2015, 34, 355-367.	0.9	272

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55	Fringe-controlled biodegradation under dynamic conditions: Quasi 2-D flow-through experiments and reactive-transport modeling. <i>Journal of Contaminant Hydrology</i> , 2015, 172, 100-111.	1.6	13
56	Grazing of heterotrophic flagellates on viruses is driven by feeding behaviour. <i>Environmental Microbiology Reports</i> , 2014, 6, 325-330.	1.0	45
57	Current developments in groundwater ecology“from biodiversity to ecosystem function and services. <i>Current Opinion in Biotechnology</i> , 2014, 27, 159-167.	3.3	123
58	Intrinsic potential for immediate biodegradation of toluene in a pristine, energy-limited aquifer. <i>Biodegradation</i> , 2014, 25, 325-336.	1.5	17
59	Detection of catecholamines in single specimens of groundwater amphipods. <i>Analytical and Bioanalytical Chemistry</i> , 2013, 405, 5571-5582.	1.9	5
60	Vom Leben unter unseren FÄ¼ÄŸen. <i>Grundwasser</i> , 2013, 18, 91-91.	1.4	0
61	A new bioassay for the ecotoxicological testing of VOCs on groundwater invertebrates and the effects of toluene on <i>Niphargus inopinatus</i> . <i>Aquatic Toxicology</i> , 2013, 130-131, 1-8.	1.9	33
62	Catecholamine levels in groundwater and stream amphipods and their response to temperature stress. <i>General and Comparative Endocrinology</i> , 2013, 194, 110-117.	0.8	17
63	Direct Experimental Evidence of Non-first Order Degradation Kinetics and Sorption-Induced Isotopic Fractionation in a Mesoscale Aquifer: <sup>13</sup> C/ <sup>12</sup> C Analysis of a Transient Toluene Pulse. <i>Environmental Science &amp; Technology</i> , 2013, 47, 6892-6899.	4.6	19
64	Stygoregions “a promising approach to a bioregional classification of groundwater systems. <i>Scientific Reports</i> , 2012, 2, 673.	1.6	46
65	Microbial CO <sub>2</sub> fixation potential in a tar-oil-contaminated porous aquifer. <i>FEMS Microbiology Ecology</i> , 2012, 81, 172-187.	1.3	31
66	Spatio-temporal patterns of microbial communities in a hydrologically dynamic pristine aquifer. <i>FEMS Microbiology Ecology</i> , 2012, 81, 230-242.	1.3	91
67	Subsurface microbiology: the life below our feet. <i>FEMS Microbiology Ecology</i> , 2012, 81, 1-1.	1.3	1
68	Metabolites Indicate Hot Spots of Biodegradation and Biogeochemical Gradients in a High-Resolution Monitoring Well. <i>Environmental Science &amp; Technology</i> , 2011, 45, 474-481.	4.6	55
69	Chemotaxis increases vertical migration and apparent transverse dispersion of bacteria in a bench-scale microcosm. <i>Biotechnology and Bioengineering</i> , 2011, 108, 2070-2077.	1.7	20
70	Ecological assessment of groundwater ecosystems “Vision or illusion?. <i>Ecological Engineering</i> , 2010, 36, 1174-1190.	1.6	87
71	Isotopic Fractionation by Transverse Dispersion: Flow-through Microcosms and Reactive Transport Modeling Study. <i>Environmental Science &amp; Technology</i> , 2010, 44, 6167-6173.	4.6	78
72	High Resolution Analysis of Contaminated Aquifer Sediments and Groundwater“What Can be Learned in Terms of Natural Attenuation?. <i>Geomicrobiology Journal</i> , 2010, 27, 130-142.	1.0	85

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73	The potential use of fauna and bacteria as ecological indicators for the assessment of groundwater quality. <i>Journal of Environmental Monitoring</i> , 2010, 12, 242-254.	2.1	93
74	Enhanced viral production and infection of bacterioplankton during an iron-induced phytoplankton bloom in the Southern Ocean. <i>Limnology and Oceanography</i> , 2009, 54, 774-784.	1.6	32
75	Enhanced biodegradation by hydraulic heterogeneities in petroleum hydrocarbon plumes. <i>Journal of Contaminant Hydrology</i> , 2009, 105, 56-68.	1.6	94
76	Two-dimensional flow-through microcosms – Versatile test systems to study biodegradation processes in porous aquifers. <i>Journal of Hydrology</i> , 2009, 369, 284-295.	2.3	46
77	First attempts towards an integrative concept for the ecological assessment of groundwater ecosystems. <i>Hydrogeology Journal</i> , 2009, 17, 23-35.	0.9	92
78	Effects of thermal energy discharge on shallow groundwater ecosystems. <i>FEMS Microbiology Ecology</i> , 2009, 68, 273-286.	1.3	131
79	Biogeochemical and Isotopic Gradients in a BTEX/PAH Contaminant Plume: Model-Based Interpretation of a High-Resolution Field Data Set. <i>Environmental Science &amp; Technology</i> , 2009, 43, 8206-8212.	4.6	90
80	<i>Thiobacillus thiophilus</i> sp. nov., a chemolithoautotrophic, thiosulfate-oxidizing bacterium isolated from contaminated aquifer sediments. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 2009, 59, 583-588.	0.8	76
81	Changing Paradigms in Groundwater Ecology – from the ‘Living Fossils’ Tradition to the ‘New Groundwater Ecology’™. <i>International Review of Hydrobiology</i> , 2008, 93, 565-577.	0.5	39
82	Identification of intermediates formed during anaerobic benzene degradation by an iron-reducing enrichment culture. <i>Environmental Microbiology</i> , 2008, 10, 1703-1712.	1.8	63
83	Mixing-controlled biodegradation in a toluene plume – Results from two-dimensional laboratory experiments. <i>Journal of Contaminant Hydrology</i> , 2008, 96, 150-168.	1.6	81
84	High-resolution monitoring of biogeochemical gradients in a tar oil-contaminated aquifer. <i>Applied Geochemistry</i> , 2008, 23, 1715-1730.	1.4	125
85	Depth-Resolved Quantification of Anaerobic Toluene Degradation and Aquifer Microbial Community Patterns in Distinct Redox Zones of a Tar Oil Contaminant Plume. <i>Applied and Environmental Microbiology</i> , 2008, 74, 792-801.	1.4	183
86	Chapter 11.2. Incorporation of Groundwater Ecology in Environmental Policy. , 2007, , 671-689.		7
87	Anaerobic Cometabolic Transformation of Polycyclic and Heterocyclic Aromatic Hydrocarbons: Evidence from Laboratory and Field Studies. <i>Environmental Science &amp; Technology</i> , 2006, 40, 4165-4173.	4.6	58
88	A Multitracer Test Proving the Reliability of Rayleigh Equation-Based Approach for Assessing Biodegradation in a BTEX Contaminated Aquifer. <i>Environmental Science &amp; Technology</i> , 2006, 40, 4245-4252.	4.6	66
89	Efforts of the European Commission to Improve Communication between Environmental Scientists and Policy-makers. <i>Environmental Science and Pollution Research</i> , 2006, 13, 138-139.	2.7	8
90	Combined application of conservative transport modelling and compound-specific carbon isotope analyses to assess in situ attenuation of benzene, toluene, and o-xylene. <i>Journal of Contaminant Hydrology</i> , 2006, 88, 306-320.	1.6	30

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91	Incorporating ecological perspectives in European groundwater management policy. <i>Environmental Conservation</i> , 2004, 31, 185-189.	0.7	61
92	Stable isotope fractionation analysis as a tool to monitor biodegradation in contaminated aquifers. <i>Journal of Contaminant Hydrology</i> , 2004, 75, 215-255.	1.6	390
93	Stable carbon isotope fractionation during aerobic and anaerobic transformation of trichlorobenzene. <i>FEMS Microbiology Ecology</i> , 2004, 48, 313-321.	1.3	55
94	Anaerobic degradation of polycyclic aromatic hydrocarbons. <i>FEMS Microbiology Ecology</i> , 2004, 49, 27-36.	1.3	170
95	Combined Application of Stable Carbon Isotope Analysis and Specific Metabolites Determination for Assessing In Situ Degradation of Aromatic Hydrocarbons in a Tar Oil-Contaminated Aquifer. <i>Environmental Science &amp; Technology</i> , 2004, 38, 617-631.	4.6	198
96	Present state and future prospects for groundwater ecosystems. <i>Environmental Conservation</i> , 2003, 30, 104-130.	0.7	278
97	Title is missing!. <i>Water, Air and Soil Pollution</i> , 2002, 2, 137-163.	0.8	21
98	Title is missing!. <i>Water, Air and Soil Pollution</i> , 2002, 2, 33-62.	0.8	8
99	Combining DAPI and SYBR Green II for the Enumeration of Total Bacterial Numbers in Aquatic Sediments. <i>International Review of Hydrobiology</i> , 2001, 86, 453-465.	0.5	45
100	Microbial Activity in Aquatic Environments Measured by Dimethyl Sulfoxide Reduction and Intercomparison with Commonly Used Methods. <i>Applied and Environmental Microbiology</i> , 2001, 67, 100-109.	1.4	30
101	Dimethylsulfoxide (DMSO) reduction: a new approach to determine microbial activity in freshwater sediments. <i>Journal of Microbiological Methods</i> , 1997, 29, 31-40.	0.7	30
102	Groundwater ecosystems: human impacts and future management. , 0, , 30-44.		2
103	Bottom-Up Control of the Groundwater Microbial Food-Web in an Alpine Aquifer. <i>Frontiers in Ecology and Evolution</i> , 0, 10, .	1.1	8