Richard L Smith

List of Publications by Year
in descending order

59	4,055	87843	143943
papers	citations	38 h-index	57 g-index

65	65	65	4021
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Transport of microspheres and indigenous bacteria through a sandy aquifer: results of natural- and forced-gradient tracer experiments. Environmental Science & Technology, 1989, 23, 51-56.	4.6	307
2	Denitrification in nitrate-contaminated groundwater: Occurrence in steep vertical geochemical gradients. Geochimica Et Cosmochimica Acta, 1991, 55, 1815-1825.	1.6	223
3	Effects of the Antimicrobial Sulfamethoxazole on Groundwater Bacterial Enrichment. Environmental Science & Technology, 2011, 45, 3096-3101.	4.6	175
4	Ammonium transport and reaction in contaminated groundwater: Application of isotope tracers and isotope fractionation studies. Water Resources Research, 2006, 42, .	1.7	158
5	Electron Donors Utilized by Sulfate-Reducing Bacteria in Eutrophic Lake Sediments. Applied and Environmental Microbiology, 1981, 42, 116-121.	1.4	158
6	Denitrification in a Sand and Gravel Aquifer. Applied and Environmental Microbiology, 1988, 54, 1071-1078.	1.4	158
7	Bacterial dissimilatory reduction of arsenate and sulfate in meromictic Mono Lake, California. Geochimica Et Cosmochimica Acta, 2000, 64, 3073-3084.	1.6	147
8	Reduction of Sulfur Compounds in the Sediments of a Eutrophic Lake Basin. Applied and Environmental Microbiology, 1981, 41, 1230-1237.	1.4	125
9	Multi-scale measurements and modeling of denitrification in streams with varying flow and nitrate concentration in the upper Mississippi River basin, USA. Biogeochemistry, 2009, 93, 117-141.	1.7	124
10	Subsurface Microbial Diversity in Deep-Granitic-Fracture Water in Colorado. Applied and Environmental Microbiology, 2008, 74, 143-152.	1.4	122
11	Microbial and chemical factors influencing methane production in laboratory incubations of low-rank subsurface coals. International Journal of Coal Geology, 2008, 76, 46-51.	1.9	118
12	Denitrification in San Francisco Bay Intertidal Sediments. Applied and Environmental Microbiology, 1984, 47, 1106-1112.	1.4	118
13	Aquatic fulvic acids in microbially based ecosystems: Results from two desert lakes in Antarctica. Limnology and Oceanography, 1991, 36, 998-1006.	1.6	116
14	Importance of closely spaced vertical sampling in delineating chemical and microbiological gradients in groundwater studies. Journal of Contaminant Hydrology, 1991, 7, 285-300.	1.6	110
15	Retardation of ammonium and potassium transport through a contaminated sand and gravel aquifer: the role of cation exchange. Environmental Science & Technology, 1989, 23, 1402-1408.	4.6	87
16	Autotrophic, Hydrogen-Oxidizing, Denitrifying Bacteria in Groundwater, Potential Agents for Bioremediation of Nitrate Contamination. Applied and Environmental Microbiology, 1994, 60, 1949-1955.	1.4	84
17	Small-scale, hydrogen-oxidizing-denitrifying bioreactor for treatment of nitrate-contaminated drinking water. Water Research, 2005, 39, 2014-2023.	5.3	83
18	In situ measurement of methane oxidation in groundwater by using natural-gradient tracer tests. Applied and Environmental Microbiology, 1991, 57, 1997-2004.	1.4	80

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19	Role of Anaerobic Ammonium Oxidation (Anammox) in Nitrogen Removal from a Freshwater Aquifer. Environmental Science & Technology, 2015, 49, 12169-12177.	4.6	78
20	In Situ Stimulation of Groundwater Denitrification with Formate To Remediate Nitrate Contamination. Environmental Science & Technology, 2001, 35, 196-203.	4.6	77
21	Hydrologic Controls on Nitrogen Cycling Processes and Functional Gene Abundance in Sediments of a Groundwater Flow-Through Lake. Environmental Science & Technology, 2016, 50, 3649-3657.	4.6	75
22	Anoxic nitrate reduction coupled with iron oxidation and attenuation of dissolved arsenic and phosphate in a sand and gravel aquifer. Geochimica Et Cosmochimica Acta, 2017, 196, 102-120.	1.6	74
23	Denitrification Potential in Stream Sediments Impacted by Acid Mine Drainage: Effects of pH, Various Electron Donors, and Iron. Microbial Ecology, 2006, 51, 232-241.	1.4	72
24	Applicability of tetrazolium salts for the measurement of respiratory activity and viability of groundwater bacteria. Journal of Microbiological Methods, 2003, 52, 47-58.	0.7	71
25	Phytoplankton population dynamics in perennially ice-covered Lake Fryxell, Antarctica. Journal of Plankton Research, 1994, 16, 527-541.	0.8	66
26	Isotopic Analysis of N and O in Nitrite and Nitrate by Sequential Selective Bacterial Reduction to N2O. Analytical Chemistry, 2007, 79, 5888-5895.	3.2	66
27	Ecological distribution and population physiology defined by proteomics in a natural microbial community. Molecular Systems Biology, 2010, 6, 374.	3.2	63
28	Isolation of anaerobic oxalate-degrading bacteria from freshwater lake sediments. Archives of Microbiology, 1985, 141, 8-13.	1.0	59
29	Comparison of Denitrification Activity Measurements in Groundwater Using Cores and Natural-Gradient Tracer Tests. Environmental Science & Technology, 1996, 30, 3448-3456.	4.6	57
30	Linkages between denitrification and dissolved organic matter quality, Boulder Creek watershed, Colorado. Journal of Geophysical Research, 2012, 117, .	3.3	57
31	Constraining the Oxygen Isotopic Composition of Nitrate Produced by Nitrification. Environmental Science & Technology, 2019, 53, 1206-1216.	4.6	57
32	Long-Term Natural Attenuation of Carbon and Nitrogen within a Groundwater Plume after Removal of the Treated Wastewater Source. Environmental Science & Technology, 2006, 40, 1154-1162.	4.6	51
33	Assessment of Nitrification Potential in Ground Water Using Short Term, Single-Well Injection Experiments. Microbial Ecology, 2006, 51, 22-35.	1.4	50
34	Seasonal relationships between planktonic microorganisms and dissolved organic material in an alpine stream. Biogeochemistry, 1993, 21, 39-59.	1.7	49
35	Biodegradation of the Surfactant Linear Alkylbenzenesulfonate in Sewage-Contaminated Groundwater:Â A Comparison of Column Experiments and Field Tracer Tests. Environmental Science & Technology, 1998, 32, 3954-3961.	4.6	48
36	Assessing denitrification in groundwater using natural gradient tracer tests with15N: In situ measurement of a sequential multistep reaction. Water Resources Research, 2004, 40, .	1.7	45

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37	Nitrogen cycling processes and microbial community composition in bed sediments in the Yukon River at Pilot Station. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 2328-2344.	1.3	42
38	The geochemistry of methane in Lake Fryxell, an amictic, permanently ice-covered, antarctic lake. Biogeochemistry, 1993, 21, 95-115.	1.7	40
39	Big Soda Lake (Nevada). 2. Pelagic sulfate reduction. Limnology and Oceanography, 1987, 32, 794-803.	1.6	39
40	Aspects of the Biogeochemistry of Methane in Mono Lake and the Mono Basin of California. , 1993, , 704-741.		33
41	Anaerobic Oxalate Degradation: Widespread Natural Occurrence in Aquatic Sediments. Applied and Environmental Microbiology, 1983, 46, 106-113.	1.4	32
42	Behavior of Pollutant-Degrading Microorganisms in Aquifers: Predictions for Genetically Engineered Organisms. Environmental Science & Technology, 1994, 28, 1134-1138.	4.6	27
43	Modeling Enhanced In Situ Denitrification in Groundwater. Journal of Environmental Engineering, ASCE, 2002, 128, 491-504.	0.7	27
44	Effect of treated-sewage contamination upon bacterial energy charge, adenine nucleotides, and DNA content in a sandy aquifer on Cape Cod. Applied and Environmental Microbiology, 1993, 59, 2304-2310.	1.4	24
45	Nitrification and denitrification in a midwestern stream containing high nitrate: in situ assessment using tracers in dome-shaped incubation chambers. Biogeochemistry, 2009, 96, 189-208.	1.7	19
46	Microbial characterization of nitrification in a shallow, nitrogen-contaminated aquifer, Cape Cod, Massachusetts and detection of a novel cluster associated with nitrifying Betaproteobacteria. Journal of Contaminant Hydrology, 2009, 103, 182-193.	1.6	18
47	Nitrogen and carbon flow from rock to water: Regulation through soil biogeochemical processes, Mokelumne River watershed, California, and Grand Valley, Colorado. Journal of Geophysical Research, 2005, 110, .	3.3	16
48	A model of mercury contamination in a woodland stream. Ecological Modelling, 1982, 15, 1-28.	1.2	15
49	Methane and nitrous oxide temporal and spatial variability in two midwestern USA streams containing high nitrate concentrations. Science of the Total Environment, 2019, 685, 574-588.	3.9	15
50	In situ measurements of microbially-catalyzed nitrification and nitrate reduction rates in an ephemeral drainage channel receiving water from coalbed natural gas discharge, Powder River Basin, Wyoming, USA. Chemical Geology, 2009, 267, 77-84.	1.4	14
51	In situ hydrogen consumption kinetics as an indicator of subsurface microbial activity. FEMS Microbiology Ecology, 2007, 60, 220-228.	1.3	13
52	Occurrence and Turnover of Nitric Oxide in a Nitrogen-Impacted Sand and Gravel Aquifer. Environmental Science & Technology, 2008, 42, 8245-8251.	4.6	12
53	Geochemistry of Inorganic Nitrogen in Waters Released from Coal-Bed Natural Gas Production Wells in the Powder River Basin, Wyoming. Environmental Science & Technology, 2009, 43, 2348-2354.	4.6	11
54	Seasonal and Spatial Variation in the Location and Reactivity of a Nitrateâ€Contaminated Groundwater Discharge Zone in a Lakebed. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 2186-2207.	1.3	10

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55	Long-term groundwater contamination after source removalâ€"The role of sorbed carbon and nitrogen on the rate of reoxygenation of a treated-wastewater plume on Cape Cod, MA, USA. Chemical Geology, 2013, 337-338, 38-47.	1.4	8
56	Microbial and biogeochemical processes in Big Soda Lake, Nevada. Geological Society Special Publication, 1988, 40, 59-75.	0.8	7
57	Flowthrough Reactor Flasks for Study of Microbial Metabolism in Sediments. Applied and Environmental Microbiology, 1987, 53, 371-374.	1.4	2
58	Using Transport Model Interpretations of Tracer Tests to Study Microbial Processes in Groundwater. , 1998, , 94-123.		2
59	Nitrogen biogeochemistry in a boreal headwater stream network in interior Alaska. Science of the Total Environment, 2021, 764, 142906.	3.9	1