

# Timothy M Vogel

## List of Publications by Year in descending order

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129  
papers

8,152  
citations

38742

50  
h-index

51608

86  
g-index

135  
all docs

135  
docs citations

135  
times ranked

8436  
citing authors

#	ARTICLE	IF	CITATIONS
1	ES&T Critical Reviews: Transformations of halogenated aliphatic compounds. <i>Environmental Science &amp; Technology</i> , 1987, 21, 722-736.	10.0	935
2	Accessing the Soil Metagenome for Studies of Microbial Diversity. <i>Applied and Environmental Microbiology</i> , 2011, 77, 1315-1324.	3.1	269
3	Bioaugmentation as a soil bioremediation approach. <i>Current Opinion in Biotechnology</i> , 1996, 7, 311-316.	6.6	262
4	Large-Scale Metagenomic-Based Study of Antibiotic Resistance in the Environment. <i>Current Biology</i> , 2014, 24, 1096-1100.	3.9	246
5	Extraction of DNA from soil. <i>European Journal of Soil Biology</i> , 2003, 39, 183-190.	3.2	241
6	Incorporation of Oxygen from Water into Toluene and Benzene during Anaerobic Fermentative Transformation. <i>Applied and Environmental Microbiology</i> , 1986, 52, 200-202.	3.1	238
7	Structure, fluctuation and magnitude of a natural grassland soil metagenome. <i>ISME Journal</i> , 2012, 6, 1677-1687.	9.8	206
8	TerraGenome: a consortium for the sequencing of a soil metagenome. <i>Nature Reviews Microbiology</i> , 2009, 7, 252-252.	28.6	199
9	In Situ Transfer of Antibiotic Resistance Genes from Transgenic (Transplastomic) Tobacco Plants to Bacteria. <i>Applied and Environmental Microbiology</i> , 2002, 68, 3345-3351.	3.1	182
10	Modeling transport and biodegradation of benzene and toluene in sandy aquifer material: Comparisons With experimental measurements. <i>Water Resources Research</i> , 1992, 28, 1833-1847.	4.2	149
11	Abiotic and biotic transformations of 1,1,1-trichloroethane under methanogenic conditions. <i>Environmental Science &amp; Technology</i> , 1987, 21, 1208-1213.	10.0	147
12	Antibiotic-resistant soil bacteria in transgenic plant fields. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 3957-3962.	7.1	143
13	Kinetics of aerobic biodegradation of benzene and toluene in sandy aquifer material. <i>Biodegradation</i> , 1991, 2, 43-51.	3.0	131
14	Phylogenetic Analysis of Polyketide Synthase I Domains from Soil Metagenomic Libraries Allows Selection of Promising Clones. <i>Applied and Environmental Microbiology</i> , 2004, 70, 5522-5527.	3.1	127
15	Effects of Organic Substrates on Dechlorination of Aroclor 1242 in Anaerobic Sediments. <i>Applied and Environmental Microbiology</i> , 1990, 56, 2612-2617.	3.1	122
16	Back to the Future of Soil Metagenomics. <i>Frontiers in Microbiology</i> , 2016, 7, 73.	3.5	120
17	Human Pathogens Abundant in the Bacterial Metagenome of Cigarettes. <i>Environmental Health Perspectives</i> , 2010, 118, 351-356.	6.0	118
18	Is resistance futile? Changing external resistance does not improve microbial fuel cell performance. <i>Bioelectrochemistry</i> , 2010, 78, 2-7.	4.6	115

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19	High molecular weight DNA recovery from soils prerequisite for biotechnological metagenomic library construction. <i>Journal of Microbiological Methods</i> , 2005, 62, 1-11.	1.6	113
20	Metagenomic comparison of direct and indirect soil DNA extraction approaches. <i>Journal of Microbiological Methods</i> , 2011, 86, 397-400.	1.6	113
21	Potential of a 16S rRNA-Based Taxonomic Microarray for Analyzing the Rhizosphere Effects of Maize on <i>Agrobacterium</i> spp. and Bacterial Communities. <i>Applied and Environmental Microbiology</i> , 2006, 72, 4302-4312.	3.1	111
22	Microbial sequences retrieved from environmental samples from seasonal Arctic snow and meltwater from Svalbard, Norway. <i>Extremophiles</i> , 2010, 14, 205-212.	2.3	100
23	The metagenomics of disease-suppressive soils – experiences from the METACONTROL project. <i>Trends in Biotechnology</i> , 2008, 26, 591-601.	9.3	99
24	Soil Bacterial Community Shifts after Chitin Enrichment: An Integrative Metagenomic Approach. <i>PLoS ONE</i> , 2013, 8, e79699.	2.5	99
25	Microbial fuel cell anodic microbial population dynamics during MFC start-up. <i>Biosensors and Bioelectronics</i> , 2017, 92, 357-363.	10.1	98
26	Degradation and Transformability of DNA from Transgenic Leaves. <i>Applied and Environmental Microbiology</i> , 2003, 69, 673-678.	3.1	92
27	Reduction dechlorination of carbon tetrachloride by cobalamin(II) in the presence of dithiothreitol: mechanistic study, effect of redox potential and pH. <i>Environmental Science &amp; Technology</i> , 1994, 28, 246-252.	10.0	91
28	Development and validation of a prototype 16S rRNA-based taxonomic microarray for Alphaproteobacteria. <i>Environmental Microbiology</i> , 2006, 8, 289-307.	3.8	89
29	Metagenomic mining for microbiologists. <i>ISME Journal</i> , 2011, 5, 1837-1843.	9.8	89
30	Reconstructing rare soil microbial genomes using in situ enrichments and metagenomics. <i>Frontiers in Microbiology</i> , 2015, 6, 358.	3.5	88
31	Metagenomic exploration of antibiotic resistance in soil. <i>Current Opinion in Microbiology</i> , 2011, 14, 229-235.	5.1	86
32	Characterization of a soil bacterial consortium capable of degrading diesel fuel. <i>International Biodeterioration and Biodegradation</i> , 1999, 44, 93-100.	3.9	78
33	Fate and transport of antibiotic resistance genes in saturated soil columns. <i>European Journal of Soil Biology</i> , 2003, 39, 65-71.	3.2	75
34	Comparison of substrate utilization and growth kinetics between immobilized and suspended <i>Pseudomonas</i> cells. <i>Biotechnology and Bioengineering</i> , 1993, 41, 370-379.	3.3	74
35	Visual Evidence of Horizontal Gene Transfer between Plants and Bacteria in the Phytosphere of Transplastomic Tobacco. <i>Applied and Environmental Microbiology</i> , 2009, 75, 3314-3322.	3.1	73
36	Type I Polyketide Synthases May Have Evolved Through Horizontal Gene Transfer. <i>Journal of Molecular Evolution</i> , 2005, 60, 716-725.	1.8	72

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37	Biodegradation of monoaromatic hydrocarbons in aquifer columns amended with hydrogen peroxide and nitrate. <i>Water Research</i> , 1993, 27, 685-691.	11.3	64
38	Snow and ice ecosystems: not so extreme. <i>Research in Microbiology</i> , 2015, 166, 782-795.	2.1	64
39	Effects of electron acceptors and donors on transformation of tetrachloromethane by <i>Shewanella putrefaciens</i> MR-1. <i>FEMS Microbiology Letters</i> , 1994, 121, 357-363.	1.8	61
40	Distribution and location of polycyclic aromatic hydrocarbons (PAHs) and PAH-degrading bacteria within polluted soil aggregates. <i>Biodegradation</i> , 2001, 12, 49-57.	3.0	61
41	Laboratory-Scale Evidence for Lightning-Mediated Gene Transfer in Soil. <i>Applied and Environmental Microbiology</i> , 2001, 67, 3440-3444.	3.1	61
42	Plasmid-encoded $\gamma$ -hexachlorocyclohexane degradation genes and insertion sequences in <i>Sphingobium francense</i> (ex- <i>Sphingomonas paucimobilis</i> Sp+). <i>FEMS Microbiology Letters</i> , 2006, 257, 243-252.	1.8	60
43	Potential drivers of microbial community structure and function in Arctic spring snow. <i>Frontiers in Microbiology</i> , 2014, 5, 413.	3.5	58
44	Characterization of Denitrification Gene Clusters of Soil Bacteria via a Metagenomic Approach. <i>Applied and Environmental Microbiology</i> , 2009, 75, 534-537.	3.1	57
45	Combined iron and sulfate reduction biostimulation as a novel approach to enhance BTEX and PAH source-zone biodegradation in biodiesel blend-contaminated groundwater. <i>Journal of Hazardous Materials</i> , 2017, 326, 229-236.	12.4	57
46	Low-temperature formation of hydrocarbon gases in San Francisco Bay sediment (California, U.S.A.). <i>Chemical Geology</i> , 1982, 37, 289-298.	3.3	56
47	A novel method for characterizing the microscale 3D spatial distribution of bacteria in soil. <i>Soil Biology and Biochemistry</i> , 2003, 35, 1537-1546.	8.8	56
48	Global airborne microbial communities controlled by surrounding landscapes and wind conditions. <i>Scientific Reports</i> , 2019, 9, 14441.	3.3	56
49	Horizontal Gene Transfer Regulation in Bacteria as a <i>Span</i> of DNA Repair Mechanisms. <i>PLoS ONE</i> , 2007, 2, e1055.	2.5	54
50	The Dynamic Arctic Snow Pack: An Unexplored Environment for Microbial Diversity and Activity. <i>Biology</i> , 2013, 2, 317-330.	2.8	54
51	Rate of abiotic formation of 1,1-dichloroethylene from 1,1,1-trichloroethane in groundwater. <i>Journal of Contaminant Hydrology</i> , 1987, 1, 299-308.	3.3	53
52	Microbial community development and unseemingly diversity recovery in inoculated sterile soil. <i>Biology and Fertility of Soils</i> , 2014, 50, 1069-1076.	4.3	53
53	<i>In situ</i> TCE degradation mediated by complex dehalorespiring communities during biostimulation processes. <i>Microbial Biotechnology</i> , 2012, 5, 642-653.	4.2	52
54	Drugs from hidden bugs: their discovery via untapped resources. <i>Research in Microbiology</i> , 2008, 159, 153-161.	2.1	51

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55	Interactions between Snow Chemistry, Mercury Inputs and Microbial Population Dynamics in an Arctic Snowpack. PLoS ONE, 2013, 8, e79972.	2.5	50
56	Methods to Investigate the Global Atmospheric Microbiome. Frontiers in Microbiology, 2019, 10, 243.	3.5	50
57	Development of metagenomic DNA shuffling for the construction of a xenobiotic gene. Gene, 2006, 375, 87-94.	2.2	48
58	Seasonal shift in airborne microbial communities. Science of the Total Environment, 2020, 716, 137129.	8.0	48
59	Isolation of Lightning-Competent Soil Bacteria. Applied and Environmental Microbiology, 2004, 70, 6342-6346.	3.1	45
60	Life on Human Surfaces: Skin Metagenomics. PLoS ONE, 2013, 8, e65288.	2.5	44
61	Microbial nitrogen cycling in Arctic snowpacks. Environmental Research Letters, 2013, 8, 035004.	5.2	43
62	Cytochromes P450-mediated degradation of fuel oxygenates by environmental isolates. FEMS Microbiology Ecology, 2010, 72, 289-296.	2.7	42
63	Describing microbial communities and performing global comparisons in the omic era. ISME Journal, 2012, 6, 1625-1628.	9.8	42
64	Sources and selection of snow-specific microbial communities in a Greenlandic sea ice snow cover. Scientific Reports, 2019, 9, 2290.	3.3	42
65	Microbial composition in seasonal time series of free tropospheric air and precipitation reveals community separation. Aerobiologia, 2019, 35, 671-701.	1.7	41
66	Strategy for In Situ Detection of Natural Transformation-Based Horizontal Gene Transfer Events. Applied and Environmental Microbiology, 2008, 74, 1250-1254.	3.1	40
67	Evaluation of Soil Organic Matter Polarity by Pyrene Fluorescence Spectrum Variations. Environmental Science & Technology, 1997, 31, 2701-2706.	10.0	39
68	Reaction products and rates of disappearance of simple bromoalkanes, 1,2-dibromopropane, and 1,2-dibromoethane in water. Environmental Science & Technology, 1986, 20, 992-997.	10.0	37
69	Fate of transgenic plant DNA in the environment. Environmental Biosafety Research, 2007, 6, 15-35.	1.1	37
70	Functional Basis of Microorganism Classification. PLoS Computational Biology, 2015, 11, e1004472.	3.2	37
71	Hydrocarbon biostimulation and bioaugmentation in organic carbon and clay-rich soils. Soil Biology and Biochemistry, 2016, 99, 66-74.	8.8	36
72	Advantages of the metagenomic approach for soil exploration: reply from Vogel et al.. Nature Reviews Microbiology, 2009, 7, 756-757.	28.6	35

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73	Evolution of Sphingomonad Gene Clusters Related to Pesticide Catabolism Revealed by Genome Sequence and Mobilomics of <i>Sphingobium herbicidovorans</i> MH. <i>Genome Biology and Evolution</i> , 2017, 9, 2477-2490.	2.5	32
74	Vertical advection of extracellular DNA by water capillarity in soil columns. <i>Soil Biology and Biochemistry</i> , 2007, 39, 158-163.	8.8	31
75	Kinetics of Toluene Degradation by Denitrifying Aquifer Microorganisms. <i>Journal of Environmental Engineering, ASCE</i> , 1994, 120, 1327-1336.	1.4	30
76	Identification of the Proton Source for the Microbial Reductive Dechlorination of 2,3,4,5,6-Pentachlorobiphenyl. <i>Applied and Environmental Microbiology</i> , 1991, 57, 2771-2774.	3.1	30
77	Characterization of new bacterial catabolic genes and mobile genetic elements by high throughput genetic screening of a soil metagenomic library. <i>Journal of Biotechnology</i> , 2014, 190, 18-29.	3.8	26
78	Community structure and functional genes in radionuclide contaminated soils in Chernobyl and Fukushima. <i>FEMS Microbiology Letters</i> , 2019, 366, .	1.8	26
79	Detection of potential transgenic plant DNA recipients among soil bacteria. <i>Environmental Biosafety Research</i> , 2007, 6, 71-83.	1.1	26
80	Natural Electrotransformation of Lightning-Competent <i>Pseudomonas</i> sp. Strain N3 in Artificial Soil Microcosms. <i>Applied and Environmental Microbiology</i> , 2006, 72, 2385-2389.	3.1	25
81	Development of pure culture biofilms of <i>P. putida</i> on solid supports. <i>Biotechnology and Bioengineering</i> , 1991, 37, 512-518.	3.3	23
82	The future of skin metagenomics. <i>Research in Microbiology</i> , 2014, 165, 69-76.	2.1	23
83	Linking environmental prokaryotic viruses and their host through CRISPRs. <i>FEMS Microbiology Ecology</i> , 2015, 91, .	2.7	23
84	Geochemical prospecting for hydrocarbons in the outer continental shelf, Southern Bering Sea, Alaska. <i>Journal of Geochemical Exploration</i> , 1981, 14, 209-219.	3.2	22
85	Monitoring of bacterial communities during low temperature thermal treatment of activated sludge combining DNA phylochip and respirometry techniques. <i>Water Research</i> , 2010, 44, 6133-6143.	11.3	22
86	Ethyl tert-butyl ether (ETBE) biodegradation by a syntrophic association of <i>Rhodococcus</i> sp. IFP 2042 and <i>Bradyrhizobium</i> sp. IFP 2049 isolated from a polluted aquifer. <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 10531-10539.	3.6	22
87	Evaluation of functional gene enrichment in a soil metagenomic clone library. <i>Journal of Microbiological Methods</i> , 2009, 76, 105-107.	1.6	21
88	Microbial ecology of chlorinated solvent biodegradation. <i>Environmental Microbiology</i> , 2015, 17, 4835-4850.	3.8	21
89	Do Organic Substrates Drive Microbial Community Interactions in Arctic Snow?. <i>Frontiers in Microbiology</i> , 2019, 10, 2492.	3.5	21
90	Extracellular plant DNA in Geneva groundwater and traditional artesian drinking water fountains. <i>Chemosphere</i> , 2009, 75, 498-504.	8.2	20

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91	Leaching and transformability of transgenic DNA in unsaturated soil columns. <i>Ecotoxicology and Environmental Safety</i> , 2010, 73, 67-72.	6.0	19
92	Aminoglycosides analysis optimization using ion pairing liquid chromatography coupled to tandem mass spectrometry and application on wastewater samples. <i>Journal of Chromatography A</i> , 2021, 1651, 462133.	3.7	19
93	Intergeneric Transfer of Chromosomal and Conjugative Plasmid Genes Between <i>Ralstonia solanacearum</i> and <i>Acinetobacter</i> sp. BD413. <i>Molecular Plant-Microbe Interactions</i> , 2003, 16, 74-82.	2.6	16
94	Effect of carbon and nitrogen input on the bacterial community structure of Neocaledonian nickel mine spoils. <i>FEMS Microbiology Ecology</i> , 2005, 51, 333-340.	2.7	16
95	Comparative phylogenetic microarray analysis of microbial communities in TCE-contaminated soils. <i>Chemosphere</i> , 2010, 80, 600-607.	8.2	16
96	Selective occurrence of <i>hizobiales</i> in frost flowers on the surface of young sea ice near <i>B</i> , <i>A</i> and distribution in the polar marine rare biosphere. <i>Environmental Microbiology Reports</i> , 2013, 5, 575-582.	2.4	14
97	Mastering methodological pitfalls for surviving the metagenomic jungle. <i>BioEssays</i> , 2013, 35, 744-754.	2.5	14
98	A Modified Approach for in Situ Chemical Oxidation Coupled to Biodegradation Enhances Light Nonaqueous Phase Liquid Source-Zone Remediation. <i>Environmental Science &amp; Technology</i> , 2017, 51, 463-472.	10.0	14
99	Dechlorination of 2,3,5,6-tetrachlorobiphenyl by a phototrophic enrichment culture. <i>FEMS Microbiology Letters</i> , 1992, 94, 247-250.	1.8	13
100	Integrity and Biological Activity of DNA after UV Exposure. <i>Astrobiology</i> , 2010, 10, 285-292.	3.0	13
101	Long-term persistence and bacterial transformation potential of transplastomic plant DNA in soil. <i>Research in Microbiology</i> , 2010, 161, 326-334.	2.1	12
102	Functional trait relationships demonstrate life strategies in terrestrial prokaryotes. <i>FEMS Microbiology Ecology</i> , 2021, 97, .	2.7	12
103	Microbial functional signature in the atmospheric boundary layer. <i>Biogeosciences</i> , 2020, 17, 6081-6095.	3.3	12
104	Bacterial Competition for the Anode Colonization under Different External Resistances in Microbial Fuel Cells. <i>Catalysts</i> , 2022, 12, 176.	3.5	12
105	Effect of hydrogen peroxide on the biodegradation of PCBs in anaerobically dechlorinated river sediments. <i>Biodegradation</i> , 1994, 4, 241-248.	3.0	11
106	Gentamicin at sub-inhibitory concentrations selects for antibiotic resistance in the environment. <i>ISME Communications</i> , 2022, 2, .	4.2	11
107	Bioaugmentation for Groundwater Remediation: an Overview. , 2013, , 1-37.		10
108	Biodiesel presence in the source zone hinders aromatic hydrocarbons attenuation in a B20-contaminated groundwater. <i>Journal of Contaminant Hydrology</i> , 2016, 193, 48-53.	3.3	10

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109	Beyond the planetary boundary layer: Bacterial and fungal vertical biogeography at Mount Sonnblick, Austria. <i>Geo: Geography and Environment</i> , 2019, 6, e00069.	0.8	10
110	Spatial analysis of bacteria in brackish lake sediment. <i>International Journal of Sediment Research</i> , 2020, 35, 227-236.	3.5	9
111	A novel and rapid method for synthesizing positive controls and standards for quantitative PCR. <i>Journal of Microbiological Methods</i> , 2008, 73, 73-77.	1.6	8
112	Snow microbiome functional analyses reveal novel aspects of microbial metabolism of complex organic compounds. <i>MicrobiologyOpen</i> , 2020, 9, e1100.	3.0	8
113	Ethyl tert-butyl ether (ETBE)-degrading microbial communities in enrichments from polluted environments. <i>Journal of Hazardous Materials</i> , 2014, 279, 502-510.	12.4	6
114	Effect of Contact Area and Shape of Anode Current Collectors on Bacterial Community Structure in Microbial Fuel Cells. <i>Molecules</i> , 2022, 27, 2245.	3.8	6
115	Bioremediation via In Situ Electrotransformation. <i>Bioremediation Journal</i> , 2010, 14, 109-119.	2.0	5
116	Microbial community networks. <i>FEMS Microbiology Ecology</i> , 2008, 66, 1-2.	2.7	4
117	Microbial Ecology of the Planetary Boundary Layer. <i>Atmosphere</i> , 2020, 11, 1296.	2.3	4
118	Over Winter Microbial Processes in a Svalbard Snow Pack: An Experimental Approach. <i>Frontiers in Microbiology</i> , 2020, 11, 1029.	3.5	4
119	Effects of electron acceptors and donors on transformation of tetrachloromethane by <i>Shewanella putrefaciens</i> MR-1. <i>FEMS Microbiology Letters</i> , 1994, 121, 357-363.	1.8	4
120	Environmental and Anthropogenic Factors Shape the Snow Microbiome and Antibiotic Resistome. <i>Frontiers in Microbiology</i> , 0, 13, .	3.5	4
121	Survey data are still vital to science. <i>Nature</i> , 2011, 469, 162-162.	27.8	3
122	Gentamicin Adsorption onto Soil Particles Prevents Overall Short-Term Effects on the Soil Microbiome and Resistome. <i>Antibiotics</i> , 2021, 10, 191.	3.7	3
123	Sequencing Depth Has a Stronger Effect than DNA Extraction on Soil Bacterial Richness Discovery. <i>Biomolecules</i> , 2022, 12, 364.	4.0	3
124	Reaction products and rates of disappearance of simple bromoalkanes, 1,2-dibromopropane, and 1,2-dibromoethane in water. Reply to comments. <i>Environmental Science &amp; Technology</i> , 1988, 22, 231-231.	10.0	2
125	Factors Controlling the Biodegradation of Chemicals in Soils. , 1999, , 93-117.		2
126	Presentation of the Thematic Issue on Horizontal Gene Transfer. <i>Environmental Biosafety Research</i> , 2007, 6, 1-2.	1.1	1



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127	Microorganisms Floating Through the Air. <i>Frontiers for Young Minds</i> , 0, 10, .	0.8	1
128	Correction. Reaction Products and Rates of Disappearance of Simple Bromoalkanes, 1,2-Dibromopropane, and 1,2-Dibromoethane in Water. <i>Environmental Science &amp; Technology</i> , 1987, 21, 512-512.	10.0	0
129	Gene Flow in the Rhizosphere. <i>Books in Soils, Plants, and the Environment</i> , 2007, , 401-425.	0.1	0