Gary M King

List of Publications by Year
in descending order

73 papers	5,402 citations	117625 34 h-index	91884 69 g-index
75 all docs	75 docs citations	75 times ranked	4806 citing authors

#	Article	IF	Citations
1	Genome sequence of Silicibacter pomeroyi reveals adaptations to the marine environment. Nature, 2004, 432, 910-913.	27.8	415
2	Distribution, diversity and ecology of aerobic CO-oxidizing bacteria. Nature Reviews Microbiology, 2007, 5, 107-118.	28.6	368
3	Efficacy of Phospholipid Analysis in Determining Microbial Biomass in Sediments. Applied and Environmental Microbiology, 1989, 55, 2888-2893.	3.1	360
4	Mechanistic Analysis of Ammonium Inhibition of Atmospheric Methane Consumption in Forest Soils. Applied and Environmental Microbiology, 1994, 60, 3514-3521.	3.1	252
5	Analysis of Stomach and Gut Microbiomes of the Eastern Oyster (Crassostrea virginica) from Coastal Louisiana, USA. PLoS ONE, 2012, 7, e51475.	2.5	242
6	Ecological Aspects of Methane Oxidation, a Key Determinant of Global Methane Dynamics. Advances in Microbial Ecology, 1992, , 431-468.	0.1	214
7	Effect of increasing atmospheric methane concentration on ammonium inhibition of soil methane consumption. Nature, 1994, 370, 282-284.	27.8	202
8	Metabolism of Acetate, Methanol, and Methylated Amines in Intertidal Sediments of Lowes Cove, Maine. Applied and Environmental Microbiology, 1983, 45, 1848-1853.	3.1	189
9	Distribution and Rate of Methane Oxidation in Sediments of the Florida Everglades. Applied and Environmental Microbiology, 1990, 56, 2902-2911.	3.1	181
10	Ammonium and Nitrite Inhibition of Methane Oxidation by <i>Methylobacter albus</i> BG8 and <i>Methylosinus trichosporium</i> OB3b at Low Methane Concentrations. Applied and Environmental Microbiology, 1994, 60, 3508-3513.	3.1	168
11	Metabolism of Trimethylamine, Choline, and Glycine Betaine by Sulfate-Reducing and Methanogenic Bacteria in Marine Sediments. Applied and Environmental Microbiology, 1984, 48, 719-725.	3.1	163
12	Carbon flow through oxygen and sulfate reduction pathways in salt marsh sediments1. Limnology and Oceanography, 1984, 29, 1037-1051.	3.1	155
13	Utilization of hydrogen, acetate, and â€œnoncompetitiveâ€ substrates by methanogenic bacteria in marine sediments. Geomicrobiology Journal, 1984, 3, 275-306.	2.0	145
14	Molecular andCulture-Based Analyses of Aerobic Carbon Monoxide OxidizerDiversityâ€. Applied and Environmental Microbiology, 2003, 69, 7257-7265.	3.1	145
15	Characterization of Î²-Glucosidase Activity in Intertidal Marine Sediments. Applied and Environmental Microbiology, 1986, 51, 373-380.	3.1	135
16	Atmospheric carbon monoxide oxidation is a widespread mechanism supporting microbial survival. ISME Journal, 2019, 13, 2868-2881.	9.8	133
17	Regulation by light of methane emissions from a wetland. Nature, 1990, 345, 513-515.	27.8	126
18	Methane release from soils of a Georgia salt marsh. Geochimica Et Cosmochimica Acta, 1978, 42, 343-348.	3.9	123

#	Article	IF	Citations
19	Survival and Recovery of Methanotrophic Bacteria Starved under Oxic and Anoxic Conditions. Applied and Environmental Microbiology, 1994, 60, 2602-2608.	3.1	123
20	Uptake ofCarbon Monoxide and Hydrogen at Environmentally Relevant Concentrationsby Mycobacteriaâ€. Applied and Environmental Microbiology, 2003, 69, 7266-7272.	3.1	87
21	Regulation of methane oxidation in a freshwater wetland by water table changes and anoxia. FEMS Microbiology Ecology, 1996, 19, 105-115.	2.7	82
22	Volcanic Soils as Sources of Novel CO-Oxidizing Paraburkholderia and Burkholderia: Paraburkholderia hiiakae sp. nov., Paraburkholderia metrosideri sp. nov., Paraburkholderia paradisi sp. nov., Paraburkholderia peleae sp. nov., and Burkholderia alpina sp. nov. a Member of the Burkholderia cepacia Complex. Frontiers in Microbiology, 2017, 8, 207.	3.5	78
23	Methanogenesis from Methylated Amines in a Hypersaline Algal Mat. Applied and Environmental Microbiology, 1988, 54, 130-136.	3.1	76
24	Physiological, Ecological, and Phylogenetic Characterization of Stappia , a Marine CO-Oxidizing Bacterial Genus. Applied and Environmental Microbiology, 2007, 73, 1266-1276.	3.1	75
25	Short-term endproducts of sulfate reduction in a salt marsh: Formation of acid volatile sulfides, elemental sulfur, and pyrite. Geochimica Et Cosmochimica Acta, 1985, 49, 1561-1566.	3.9	73
26	Stability of methane oxidation capacity to variations in methane and nutrient concentrations. FEMS Microbiology Ecology, 1995, 17, 285-294.	2.7	69
27	Carbon monoxide as a metabolic energy source for extremely halophilic microbes: Implications for microbial activity in Mars regolith. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 4465-4470.	7.1	65
28	Molecular Analysis of Carbon Monoxide-Oxidizing Bacteria Associated with Recent Hawaiian Volcanic Deposits. Applied and Environmental Microbiology, 2004, 70, 4242-4248.	3.1	62
29	Effects of added manganic and ferric oxides on sulfate reduction and sulfide oxidation in intertidal sediments. FEMS Microbiology Letters, 1990, 73, 131-138.	1.8	59
30	Characteristics and significance of atmospheric carbon monoxide consumption by soils. Chemosphere, 1999, 1, 53-63.	1.2	45
31	Land use impacts on atmospheric carbon monoxide consumption by soils. Global Biogeochemical Cycles, 2000, 14, 1161-1172.	4.9	43
32	Urban microbiomes and urban ecology: How do microbes in the built environment affect human sustainability in cities?. Journal of Microbiology, 2014, 52, 721-728.	2.8	41
33	Measurement of Acetate Concentrations in Marine Pore Waters by Using an Enzymatic Approach. Applied and Environmental Microbiology, 1991, 57, 3476-3481.	3.1	41
34	Enrichment of High-Affinity CO Oxidizers in Maine Forest Soil. Applied and Environmental Microbiology, 2001, 67, 3671-3676.	3.1	39
35	Tracer Analysis of Methanogenesis in Salt Marsh Soils. Applied and Environmental Microbiology, 1980, 39, 877-881.	3.1	38
36	Impacts of plant roots on soil CO cycling and soil-atmosphere CO exchange. Global Change Biology, 2002, 8, 1085-1093.	9.5	36

#	Article	IF	Citations
37	Interactions between bacterial carbon monoxide and hydrogen consumption and plant development on recent volcanic deposits. ISME Journal, 2008, 2, 195-203.	9.8	36
38	The phylogenetic distribution and ecological role of carbon monoxide oxidation in the genus Burkholderia. FEMS Microbiology Ecology, 2012, 79, 167-175.	2.7	36
39	The effect of soil acidification on atmospheric methane uptake by a Maine forest soil1. FEMS Microbiology Ecology, 2001, 34, 207-212.	2.7	35
40	Atmospheric CO and Hydrogen Uptake and CO Oxidizer Phylogeny for Miyake-jima, Japan Volcanic Deposits. Microbes and Environments, 2008, 23, 299-305.	1.6	35
41	Aspects of the Biogeochemistry of Methane in Mono Lake and the Mono Basin of California. , 1993, , 704-741.		33
42	Response of Atmospheric Methane Consumption by Maine Forest Soils to Exogenous Aluminum Salts. Applied and Environmental Microbiology, 2000, 66, 3674-3679.	3.1	31
43	Dynamics and controls of methane oxidation in a Danish wetland sediment*. FEMS Microbiology Letters, 1990, 74, 309-323.	1.8	30
44	Chemolithotrohic Bacteria: Distributions, Functions and Significance in Volcanic Environments. Microbes and Environments, 2007, 22, 309-319.	1.6	30
45	A comparison of phospholipid and chloroform fumigation analyses for biomass in soil: potentials and limitations. FEMS Microbiology Letters, 1991, 85, 257-268.	1.8	25
46	Microbial carbon monoxide consumption in salt marsh sediments. FEMS Microbiology Ecology, 2007, 59, 2-9.	2.7	22
47	Distribution of Atmospheric Methane Oxidation and Methanotrophic Communities on Hawaiian Volcanic Deposits and Soils. Microbes and Environments, 2008, 23, 326-330.	1.6	22
48	Soil-Atmosphere CO Exchanges and Microbial Biogeochemistry of CO Transformations in a Brazilian Agricultural Ecosystem. Applied and Environmental Microbiology, 2002, 68, 4480-4485.	3.1	20
49	Rubrobacter spartanus sp. nov., a moderately thermophilic oligotrophic bacterium isolated from volcanic soil. International Journal of Systematic and Evolutionary Microbiology, 2017, 67, 3597-3602.	1.7	20
50	Dynamics and controls of methane oxidation in a Danish wetland sediment*. FEMS Microbiology Ecology, 1990, 7, 309-323.	2.7	18
51	Perchlorate-Coupled Carbon Monoxide (CO) Oxidation: Evidence for a Plausible Microbe-Mediated Reaction in Martian Brines. Frontiers in Microbiology, 2017, 8, 2571.	3.5	18
52	Disparate distributions of chemolithotrophs containing form IA or IC large subunit genes for ribulose-1,5-bisphosphate carboxylase/oxygenase in intertidal marine and littoral lake sediments. FEMS Microbiology Ecology, 2007, 60, 113-125.	2.7	17
53	Reconstructing Genomes of Carbon Monoxide Oxidisers in Volcanic Deposits Including Members of the Class Ktedonobacteria. Microorganisms, 2020, 8, 1880.	3.6	15
54	Thermalkalibacillus uzonensis gen. nov. sp. nov, a novel aerobic alkali-tolerant thermophilic bacterium isolated from a hot spring in Uzon Caldera, Kamchatka. Extremophiles, 2006, 10, 337-345.	2.3	12

#	Article	IF	Citations
55	Radiotracer assays (35S) of sulfate reduction rates in marine and freshwater sediments. Methods in Microbiology, 2001, 30, 489-500.	0.8	10
56	Temperature responses of carbon monoxide and hydrogen uptake by vegetated and unvegetated volcanic cinders. ISME Journal, 2012, 6, 1558-1565.	9.8	8
57	A comparison of phospholipid and chloroform fumigation analyses for biomass in soil: potentials and limitations. FEMS Microbiology Ecology, 1991, 8, 257-267.	2.7	7
58	Regulation of methane oxidation in a freshwater wetland by water table changes and anoxia. FEMS Microbiology Ecology, 1996, 19, 105-115.	2.7	7
59	Formation of methylmercaptan and dimethylsulfide from methoxylated aromatic compounds in anoxic marine and fresh water sediments. FEMS Microbiology Ecology, 1990, 7, 295-301.	2.7	6
60	Controls of methane oxidation in sediments. SIL Communications 1953-1996, 1996, 25, 25-38.	0.1	6
61	Stability of trifluoromethane in forest soils and methanotrophic cultures. FEMS Microbiology Ecology, 2006, 22, 103-109.	2.7	6
62	Microbiomes of the Enteropneust, Saccoglossus bromophenolosus, and Associated Marine Intertidal Sediments of Cod Cove, Maine. Frontiers in Microbiology, 2018, 9, 3066.	3.5	6
63	Anaerobic Carbon Monoxide Uptake by Microbial Communities in Volcanic Deposits at Different Stages of Successional Development on O-yama Volcano, Miyake-jima, Japan. Microorganisms, 2021, 9, 12.	3.6	6
64	An enzymatic synthesis of specifically radiolabelled derivatives of the common osmolyte, glycine betaine. Journal of Experimental Marine Biology and Ecology, 1987, 107, 145-154.	1.5	5
65	Impacts of Experimental Flooding on Microbial Communities and Methane Fluxes in an Urban Meadow, Baton Rouge, Louisiana. Frontiers in Ecology and Evolution, 2019, 7, .	2.2	5
66	Physiological Limitations of Methanotrophic Activity in situ. , 1996, , 17-32.		5
67	Regulation of methane oxidation: contrasts between anoxic sediments and oxic soils. , 1996, , 318-325.		4
68	Response of methanotrophic activity in forest soil to methane availability. FEMS Microbiology Ecology, 2006, 23, 333-340.	2.7	3
69	Formation of methylmercaptan and dimethylsulfide from methoxylated aromatic compounds in anoxic marine and fresh water sediments. FEMS Microbiology Letters, 1990, 74, 295-301.	1.8	3
70	Effects of added manganic and ferric oxides on sulfate reduction and sulfide oxidation in intertidal sediments. FEMS Microbiology Letters, 1990, 73, 131-138.	1.8	2
71	Short-Term Exposure to Thermophilic Temperatures Facilitates CO Uptake by Thermophiles Maintained under Predominantly Mesophilic Conditions. Microorganisms, 2022, 10, 656.	3.6	2
72	Putative Nickel-Dependent Anaerobic Carbon Monoxide Uptake Occurs Commonly in Soils and Sediments at Ambient Temperature and Might Contribute to Atmospheric and Sub-Atmospheric Carbon Monoxide Uptake During Anoxic Conditions. Frontiers in Microbiology, 2022, 13, 736189.	3.5	2

#	Article	IF	Citations
73	Urban Microbiomes and Urban Agriculture: What Are the Connections and Why Should We Care?. , 2016, , 191-205.		1