Graeme William Nicol

List of Publications by Year
in descending order

79	16,058	49	78
papers	citations	h-index	g-index
		41323	66879

88	88	88	11868
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ammonia-oxidizing archaea possess a wide range of cellular ammonia affinities. ISME Journal, 2022, 16, 272-283.	4.4	96
2	Soil pH influences the structure of virus communities at local and global scales. Soil Biology and Biochemistry, 2022, 166, 108569.	4.2	17
3	Microbial community structure is stratified at the millimeter-scale across the soilâ€“water interface. ISME Communications, 2022, 2, .	1.7	8
4	Genetic loci regulating cadmium content in rice grains. Euphytica, 2021, 217, 35.	0.6	7
5	Functional trait relationships demonstrate life strategies in terrestrial prokaryotes. FEMS Microbiology Ecology, 2021, 97, .	1.3	12
6	Use and abuse of potential rates in soil microbiology. Soil Biology and Biochemistry, 2021, 157, 108242.	4.2	26
7	Methane-derived carbon flows into hostâ€“virus networks at different trophic levels in soil. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	38
8	Glacier forelands reveal fundamental plant and microbial controls on shortâ€term ecosystem nitrogen retention. Journal of Ecology, 2021, 109, 3710-3723.	1.9	9
9	Cropping systems impact changes in soil fungal, but not prokaryote, alpha-diversity and community composition stability over a growing season in a long-term field trial. FEMS Microbiology Ecology, 2021, 97, .	1.3	4
10	Effects of the nitrification inhibitor 3,4-dimethylpyrazole phosphate (DMPP) on the activity and diversity of the soil microbial community under contrasting soil pH. Biology and Fertility of Soils, 2021, 57, 1117-1135.	2.3	14
11	Comment onâ€œA Critical Review on Nitrous Oxide Production by Ammonia-Oxidizing Archaeaâ€•by Lan Wu, Xueming Chen, Wei Wei, Yiwen Liu, Dongbo Wang, and Bing-Jie Ni. Environmental Science & Technology, 2021, 55, 797-798.	4.6	6
12	Nitrous oxide production by ammonia oxidizers: Physiological diversity, niche differentiation and potential mitigation strategies. Global Change Biology, 2020, 26, 103-118.	4.2	227
13	Experimental testing of hypotheses for temperatureâ€•and <scp>pH</scp>â€based niche specialization of ammonia oxidizing archaea and bacteria. Environmental Microbiology, 2020, 22, 4032-4045.	1.8	21
14	Biological nitrification inhibition in the rhizosphere: determining interactions and impact on microbially mediated processes and potential applications. FEMS Microbiology Reviews, 2020, 44, 874-908.	3.9	73
15	Comparison of Novel and Established Nitrification Inhibitors Relevant to Agriculture on Soil Ammonia- and Nitrite-Oxidizing Isolates. Frontiers in Microbiology, 2020, 11, 581283.	1.5	21
16	Comammox Nitrospira clade B contributes to nitrification in soil. Soil Biology and Biochemistry, 2019, 135, 392-395.	4.2	116
17	Genome Sequence of â€œ <i>Candidatus</i> Nitrosocosmicus franklandusâ€•C13, a Terrestrial Ammonia-Oxidizing Archaeon. Microbiology Resource Announcements, 2019, 8, .	0.3	11
18	The consequences of niche and physiological differentiation of archaeal and bacterial ammonia oxidisers for nitrous oxide emissions. ISME Journal, 2018, 12, 1084-1093.	4.4	274

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19	Differential responses of soil ammonia-oxidizing archaea and bacteria to temperature and depth under two different land uses. Soil Biology and Biochemistry, 2018, 120, 272-282.	4.2	29
20	Nitrification and nitrifiers in acidic soils. Soil Biology and Biochemistry, 2018, 116, 290-301.	4.2	327
21	Blame It on the Metabolite: 3,5-Dichloroaniline Rather than the Parent Compound Is Responsible for the Decreasing Diversity and Function of Soil Microorganisms. Applied and Environmental Microbiology, 2018, 84, .	1.4	41
22	Archaea produce lower yields of N₂O than bacteria during aerobic ammonia oxidation in soil. Environmental Microbiology, 2017, 19, 4829-4837.	1.8	243
23	Temperature responses of soil ammonia-oxidising archaea depend on pH. Soil Biology and Biochemistry, 2017, 106, 61-68.	4.2	58
24	Chemotaxonomic characterisation of the thaumarchaeal lipidome. Environmental Microbiology, 2017, 19, 2681-2700.	1.8	117
25	A communal catalogue reveals Earthâ€™s multiscale microbial diversity. Nature, 2017, 551, 457-463.	13.7	1,942
26	Kinetics of NH₃â€oxidation, NOâ€turnover, N₂Oâ€production and electron flow during oxygen depletion in model bacterial and archaeal ammonia oxidisers. Environmental Microbiology, 2017, 19, 4882-4896.	1.8	86
27	Ammoniaâ€oxidising archaea living at low pH: Insights from comparative genomics. Environmental Microbiology, 2017, 19, 4939-4952.	1.8	107
28	Links between seawater flooding, soil ammonia oxidiser communities and their response to changes in salinity. FEMS Microbiology Ecology, 2017, 93, .	1.3	8
29	Isolation of â€˜<i>Candidatus</i>Nitrosocosmicus franklandusâ€™, a novel ureolytic soil archaeal ammonia oxidiser with tolerance to high ammonia concentration. FEMS Microbiology Ecology, 2016, 92, fiw057.	1.3	197
30	Identifying Potential Mechanisms Enabling Acidophily in the Ammonia-Oxidizing Archaeon â€œCandidatus Nitrosotalea devanaterraâ€. Applied and Environmental Microbiology, 2016, 82, 2608-2619.	1.4	117
31	Effect of nitrogen fertilizer and/or rice straw amendment on methanogenic archaeal communities and methane production from a rice paddy soil. Applied Microbiology and Biotechnology, 2016, 100, 5989-5998.	1.7	47
32	Phylogenetic congruence and ecological coherence in terrestrial Thaumarchaeota. ISME Journal, 2016, 10, 85-96.	4.4	94
33	pH as a Driver for Ammonia-Oxidizing Archaea in Forest Soils. Microbial Ecology, 2015, 69, 879-883.	1.4	95
34	Exploring links between pH and bacterial community composition in soils from the Craibstone Experimental Farm. FEMS Microbiology Ecology, 2014, 87, 403-415.	1.3	154
35	Characterisation of terrestrial acidophilic archaeal ammonia oxidisers and their inhibition and stimulation by organic compounds. FEMS Microbiology Ecology, 2014, 89, 542-552.	1.3	141
36	Multiâ€factorial drivers of ammonia oxidizer communities: evidence from a national soil survey. Environmental Microbiology, 2013, 15, 2545-2556.	1.8	141

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37	Activity of the ammonia oxidising bacteria is responsible for zinc tolerance development of the ammonia oxidising community in soil: A stable isotope probing study. Soil Biology and Biochemistry, 2013, 58, 244-247.	4.2	21
38	Effect of nitrification inhibitors on the growth and activity of Nitrosotalea devanaterra in culture and soil. Soil Biology and Biochemistry, 2013, 62, 129-133.	4.2	86
39	Resource quality affects carbon cycling in deep-sea sediments. ISME Journal, 2012, 6, 1740-1748.	4.4	46
40	Archaeal and bacterial ammonia-oxidisers in soil: the quest for niche specialisation and differentiation. Trends in Microbiology, 2012, 20, 523-531.	3.5	853
41	Stimulation of thaumarchaeal ammonia oxidation by ammonia derived from organic nitrogen but not added inorganic nitrogen. FEMS Microbiology Ecology, 2012, 80, 114-123.	1.3	160
42	Differential photoinhibition of bacterial and archaeal ammonia oxidation. FEMS Microbiology Letters, 2012, 327, 41-46.	0.7	245
43	Strategies to Determine Diversity, Growth, and Activity of Ammonia-Oxidizing Archaea in Soil. Methods in Enzymology, 2011, 496, 3-34.	0.4	18
44	Community profiling and quantification of putative autotrophic thaumarchaeal communities in environmental samples. Environmental Microbiology Reports, 2011, 3, 245-253.	1.0	18
45	Grand Challenges in Terrestrial Microbiology. Frontiers in Microbiology, 2011, 2, 6.	1.5	18
46	Ammonia concentration determines differential growth of ammonia-oxidising archaea and bacteria in soil microcosms. ISME Journal, 2011, 5, 1067-1071.	4.4	543
47	Cultivation of an obligate acidophilic ammonia oxidizer from a nitrifying acid soil. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 15892-15897.	3.3	464
48	Links between Ammonia Oxidizer Community Structure, Abundance, and Nitrification Potential in Acidic Soils. Applied and Environmental Microbiology, 2011, 77, 4618-4625.	1.4	357
49	Niche specialization of terrestrial archaeal ammonia oxidizers. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 21206-21211.	3.3	402
50	Degradation of metalaxyl-M in contrasting soils is influenced more by differences in physicochemical characteristics than in microbial community composition after re-inoculation of sterilised soils. Soil Biology and Biochemistry, 2010, 42, 1123-1131.	4.2	20
51	Molecular phylogeny of slug-parasitic nematodes inferred from 18S rRNA gene sequences. Molecular Phylogenetics and Evolution, 2010, 55, 738-743.	1.2	61
52	Ammonium supply rate influences archaeal and bacterial ammonia oxidizers in a wetland soil vertical profile. FEMS Microbiology Ecology, 2010, 74, 302-315.	1.3	72
53	Archaea rather than bacteria control nitrification in two agricultural acidic soils. FEMS Microbiology Ecology, 2010, 74, 566-574.	1.3	346
54	Homologues of nitrite reductases in ammoniaâ€oxidizing archaea: diversity and genomic context. Environmental Microbiology, 2010, 12, 1075-1088.	1.8	137

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55	Quantitative Assessment of Ammonia-Oxidizing Bacterial Communities in the Epiphyton of Submerged Macrophytes in Shallow Lakes. Applied and Environmental Microbiology, 2010, 76, 1813-1821.	1.4	24
56	Thaumarchaeal Ammonia Oxidation in an Acidic Forest Peat Soil Is Not Influenced by Ammonium Amendment. Applied and Environmental Microbiology, 2010, 76, 7626-7634.	1.4	180
57	Ammonia-Oxidising Archaea â€" Physiology, Ecology and Evolution. Advances in Microbial Physiology, 2010, 57, 1-41.	1.0	244
58	Influence of soil pH on the abundance and distribution of core and intact polar lipid-derived branched GDGTs in soil. Organic Geochemistry, 2010, 41, 1171-1175.	0.9	105
59	Autotrophic ammonia oxidation by soil thaumarchaea. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 17240-17245.	3.3	305
60	Use of an artificial root to examine the influence of 8-hydroxyquinoline on soil microbial activity and bacterial community structure. Soil Biology and Biochemistry, 2009, 41, 580-585.	4.2	17
61	Environmental and spatial characterisation of bacterial community composition in soil to inform sampling strategies. Soil Biology and Biochemistry, 2009, 41, 2292-2298.	4.2	130
62	Growth of ammonia-oxidizing archaea in soil microcosms is inhibited by acetylene. FEMS Microbiology Ecology, 2009, 70, 99-108.	1.3	235
63	Soil pH regulates the abundance and diversity of Group 1.1c Crenarchaeota. FEMS Microbiology Ecology, 2009, 70, 367-376.	1.3	143
64	Effects of aboveground grazing on coupling among nitrifier activity, abundance and community structure. ISME Journal, 2008, 2, 221-232.	4.4	134
65	Growth, activity and temperature responses of ammoniaâ€oxidizing archaea and bacteria in soil microcosms. Environmental Microbiology, 2008, 10, 1357-1364.	1.8	658
66	The influence of soil pH on the diversity, abundance and transcriptional activity of ammonia oxidizing archaea and bacteria. Environmental Microbiology, 2008, 10, 2966-2978.	1.8	1,104
67	Relative contributions of archaea and bacteria to aerobic ammonia oxidation in the environment. Environmental Microbiology, 2008, 10, 2931-2941.	1.8	531
68	Afforestation of moorland leads to changes in crenarchaeal community structure. FEMS Microbiology Ecology, 2007, 60, 51-59.	1.3	35
69	Ammonia-oxidising Crenarchaeota: important players in the nitrogen cycle?. Trends in Microbiology, 2006, 14, 207-212.	3.5	315
70	Nitrosospira spp. can produce nitrous oxide via a nitrifier denitrification pathway. Environmental Microbiology, 2006, 8, 214-222.	1.8	287
71	Crenarchaeal community assembly and microdiversity in developing soils at two sites associated with deglaciation. Environmental Microbiology, 2006, 8, 1382-1393.	1.8	46
72	Archaea predominate among ammonia-oxidizing prokaryotes in soils. Nature, 2006, 442, 806-809.	13.7	2,144

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73	Primary succession of soil Crenarchaeota across a receding glacier foreland. Environmental Microbiology, 2005, 7, 337-347.	1.8	145
74	Stable isotope probing analysis of the influence of liming on root exudate utilization by soil microorganisms. Environmental Microbiology, 2005, 7, 828-838.	1.8	153
75	Differential response of archaeal and bacterial communities to nitrogen inputs and pH changes in upland pasture rhizosphere soil. Environmental Microbiology, 2004, 6, 861-867.	1.8	44
76	Molecular analysis of methanogenic archaeal communities in managed and natural upland pasture soils. Global Change Biology, 2003, 9, 1451-1457.	4.2	42
77	The impact of grassland management on archaeal community structure in upland pasture rhizosphere soil. Environmental Microbiology, 2003, 5, 152-162.	1.8	96
78	Spatial Analysis of Archaeal Community Structure inGrasslandSoil. Applied and Environmental Microbiology, 2003, 69, 7420-7429.	1.4	91
79	Distribution and Activity of Ammonia-Oxidizing Archaea in Natural Environments. , 0, , 157-178.		19