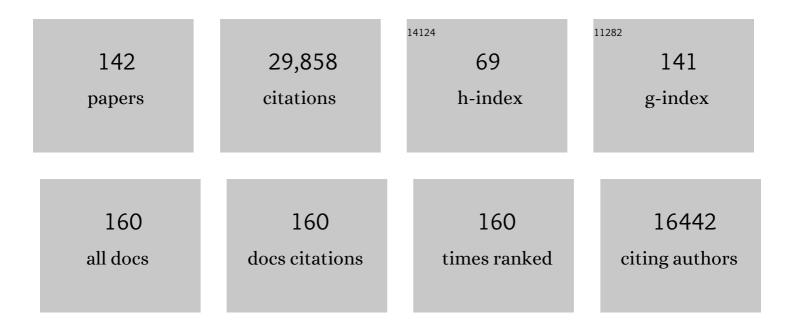
## **Marc Strous**

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Denitrification and dissimilatory nitrate reduction to ammonia in long-term lake sediment microcosms with iron(II). Science of the Total Environment, 2022, 807, 150835.	3.9	20
2	Ecological Interactions of Cyanobacteria and Heterotrophs Enhances the Robustness of Cyanobacterial Consortium for Carbon Sequestration. Frontiers in Microbiology, 2022, 13, 780346.	1.5	14
3	Microbial Functional Diversity Correlates with Species Diversity along a Temperature Gradient. MSystems, 2022, 7, e0099121.	1.7	14
4	Pilot-scale outdoor trial of a cyanobacterial consortium at pH 11 in a photobioreactor at high latitude. Bioresource Technology, 2022, 354, 127173.	4.8	14
5	Distinct oxygen isotope fractionations driven by different electron donors during microbial nitrate reduction in lake sediments. Environmental Microbiology Reports, 2022, 14, 812-821.	1.0	3
6	Light manipulation using organic semiconducting materials for enhanced photosynthesis. Cell Reports Physical Science, 2021, 2, 100390.	2.8	9
7	Degradation of biological macromolecules supports uncultured microbial populations in Guaymas Basin hydrothermal sediments. ISME Journal, 2021, 15, 3480-3497.	4.4	22
8	Methane-dependent selenate reduction by a bacterial consortium. ISME Journal, 2021, 15, 3683-3692.	4.4	17
9	Proteome and strain analysis of cyanobacterium Candidatus "Phormidium alkaliphilum―reveals traits for success in biotechnology. IScience, 2021, 24, 103405.	1.9	13
10	CANT-HYD: A Curated Database of Phylogeny-Derived Hidden Markov Models for Annotation of Marker Genes Involved in Hydrocarbon Degradation. Frontiers in Microbiology, 2021, 12, 764058.	1.5	21
11	Methane oxidation and methylotroph population dynamics in groundwater mesocosms. Environmental Microbiology, 2020, 22, 1222-1237.	1.8	18
12	Computational approaches in viral ecology. Computational and Structural Biotechnology Journal, 2020, 18, 1605-1612.	1.9	17
13	Wenzhouxiangella Strain AB-CW3, a Proteolytic Bacterium From Hypersaline Soda Lakes That Preys on Cells of Gram-Positive Bacteria. Frontiers in Microbiology, 2020, 11, 597686.	1.5	15
14	Can fossil fuel energy be recovered and used without any CO2 emissions to the atmosphere?. Reviews in Environmental Science and Biotechnology, 2020, 19, 217-240.	3.9	8
15	Worm expulsion is independent of alterations in composition of the colonic bacteria that occur during experimental <i>Hymenolepis diminuta</i> -infection in mice. Gut Microbes, 2020, 11, 497-510.	4.3	11
16	An Integrated Pipeline for Annotation and Visualization of Metagenomic Contigs. Frontiers in Genetics, 2019, 10, 999.	1.1	92
17	A shared core microbiome in soda lakes separated by large distances. Nature Communications, 2019, 10, 4230.	5.8	75
18	The Effect of Dissimilatory Manganese Reduction on Lactate Fermentation and Microbial Community Assembly. Frontiers in Microbiology, 2019, 10, 1007.	1.5	15

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19	Prokaryotic Dynamics in the Meromictic Coastal Lake Faro (Sicily, Italy). Diversity, 2019, 11, 37.	0.7	7
20	Direct capture and conversion of CO <sub>2</sub> from air by growing a cyanobacterial consortium at pH up to 11.2. Biotechnology and Bioengineering, 2019, 116, 1604-1611.	1.7	34
21	More Is Not Always Better: Evaluation of 1D and 2D-LC-MS/MS Methods for Metaproteomics. Frontiers in Microbiology, 2019, 10, 238.	1.5	55
22	The rates and players of denitrification, dissimilatory nitrate reduction to ammonia (DNRA) and anaerobic ammonia oxidation (anammox) in mangrove soils. Anais Da Academia Brasileira De Ciencias, 2019, 91, e20180373.	0.3	18
23	Designer microbiomes for environmental, energy and health biotechnology. Current Opinion in Microbiology, 2018, 43, 117-123.	2.3	16
24	Role of Extracellular Carbonic Anhydrase in Dissolved Inorganic Carbon Uptake in Alkaliphilic Phototrophic Biofilm. Frontiers in Microbiology, 2018, 9, 2490.	1.5	10
25	Metaproteomics method to determine carbon sources and assimilation pathways of species in microbial communities. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E5576-E5584.	3.3	55
26	Comparative Proteomics of Three Species of Ammonia-Oxidizing Bacteria. Frontiers in Microbiology, 2018, 9, 938.	1.5	47
27	Metabolic specialization of denitrifiers in permeable sediments controls N <sub>2</sub> O emissions. Environmental Microbiology, 2018, 20, 4486-4502.	1.8	27
28	Impacts of chemical gradients on microbial community structure. ISME Journal, 2017, 11, 920-931.	4.4	82
29	Syntrophic linkage between predatory <i>Carpediemonas</i> and specific prokaryotic populations. ISME Journal, 2017, 11, 1205-1217.	4.4	21
30	Robust, high-productivity phototrophic carbon capture at high pH and alkalinity using natural microbial communities. Biotechnology for Biofuels, 2017, 10, 84.	6.2	44
31	Mobility and persistence of methane in groundwater in a controlled-release fieldÂexperiment. Nature Geoscience, 2017, 10, 289-294.	5.4	106
32	Critical Assessment of Metagenome Interpretation—a benchmark of metagenomics software. Nature Methods, 2017, 14, 1063-1071.	9.0	635
33	Transient exposure to oxygen or nitrate reveals ecophysiology of fermentative and sulfateâ€reducing benthic microbial populations. Environmental Microbiology, 2017, 19, 4866-4881.	1.8	26
34	Assessing species biomass contributions in microbial communities via metaproteomics. Nature Communications, 2017, 8, 1558.	5.8	211
35	Biofilm-based photobioreactors: their design and improving productivity through efficient supply of dissolved inorganic carbon. FEMS Microbiology Letters, 2017, 364, .	0.7	33
36	Fast and Simple Analysis of MiSeq Amplicon Sequencing Data with MetaAmp. Frontiers in Microbiology, 2017, 8, 1461.	1.5	82

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37	Metagenomic Analysis Indicates Epsilonproteobacteria as a Potential Cause of Microbial Corrosion in Pipelines Injected with Bisulfite. Frontiers in Microbiology, 2016, 7, 28.	1.5	27
38	Environmental Breviatea harbour mutualistic Arcobacter epibionts. Nature, 2016, 534, 254-258.	13.7	68
39	Haloalkaline Bioconversions for Methane Production from Microalgae Grown on Sunlight. Trends in Biotechnology, 2016, 34, 450-457.	4.9	13
40	Use of highly alkaline conditions to improve cost-effectiveness of algal biotechnology. Applied Microbiology and Biotechnology, 2016, 100, 1611-1622.	1.7	27
41	Metagenome from a Spirulina digesting biogas reactor: analysis via binning of contigs and classification of short reads. BMC Microbiology, 2015, 15, 277.	1.3	32
42	Anaerobic digestion of the microalga Spirulina at extreme alkaline conditions: biogas production, metagenome, and metatranscriptome. Frontiers in Microbiology, 2015, 6, 597.	1.5	68
43	Selective Pressure of Temperature on Competition and Cross-Feeding within Denitrifying and Fermentative Microbial Communities. Frontiers in Microbiology, 2015, 6, 1461.	1.5	17
44	Rapid Recovery of Cyanobacterial Pigments in Desiccated Biological Soil Crusts following Addition of Water. PLoS ONE, 2014, 9, e112372.	1.1	28
45	An improved medium for the anaerobic growth of Paracoccus denitrificans Pd1222. Frontiers in Microbiology, 2014, 5, 18.	1.5	27
46	Recoding of the stop codon UGA to glycine by a BD1-5/SN-2 bacterium and niche partitioning between Alpha- and Gammaproteobacteria in a tidal sediment microbial community naturally selected in a laboratory chemostat. Frontiers in Microbiology, 2014, 5, 231.	1.5	38
47	Responses of the coastal bacterial community to viral infection of the algae <i>Phaeocystis globosa </i> . ISME Journal, 2014, 8, 212-225.	4.4	68
48	Rapid succession of uncultured marine bacterial and archaeal populations in a denitrifying continuous culture. Environmental Microbiology, 2014, 16, 3275-3286.	1.8	22
49	The environmental controls that govern the end product of bacterial nitrate respiration. Science, 2014, 345, 676-679.	6.0	391
50	Factors influencing the density of aerobic granular sludge. Applied Microbiology and Biotechnology, 2013, 97, 7459-7468.	1.7	65
51	Denitrification and aerobic respiration, hybrid electron transport chains and co-evolution. Biochimica Et Biophysica Acta - Bioenergetics, 2013, 1827, 136-144.	0.5	319
52	Ultrastructure of the Denitrifying Methanotroph "Candidatus Methylomirabilis oxyfera,―a Novel Polygon-Shaped Bacterium. Journal of Bacteriology, 2012, 194, 284-291.	1.0	56
53	Activity and diversity of haloalkaliphilic methanogens in Central Asian soda lakes. Journal of Biotechnology, 2012, 161, 167-173.	1.9	36
54	Optimizing Membrane Protein Overexpression in the Escherichia coli strain Lemo21(DE3). Journal of Molecular Biology, 2012, 423, 648-659.	2.0	132

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55	The Binning of Metagenomic Contigs for Microbial Physiology of Mixed Cultures. Frontiers in Microbiology, 2012, 3, 410.	1.5	201
56	Co-localization of particulate methane monooxygenase and cd1 nitrite reductase in the denitrifying methanotroph â€~Candidatus Methylomirabilis oxyfera'. FEMS Microbiology Letters, 2012, 334, 49-56.	0.7	27
5 <b>7</b>	Effect of oxygen on the anaerobic methanotroph â€~ <i>Candidatus</i> Methylomirabilis oxyfera': kinetic and transcriptional analysis. Environmental Microbiology, 2012, 14, 1024-1034.	1.8	142
58	FACIL: Fast and Accurate Genetic Code Inference and Logo. Bioinformatics, 2011, 27, 1929-1933.	1.8	42
59	A new intra-aerobic metabolism in the nitrite-dependent anaerobic methane-oxidizing bacterium <i>Candidatus</i> â€~Methylomirabilis oxyfera'. Biochemical Society Transactions, 2011, 39, 243-248.	1.6	153
60	Molecular mechanism of anaerobic ammonium oxidation. Nature, 2011, 479, 127-130.	13.7	707
61	A multiâ€proxy study of anaerobic ammonium oxidation in marine sediments of the Gullmar Fjord, Sweden. Environmental Microbiology Reports, 2011, 3, 360-366.	1.0	63
62	Predicting microbial nitrogen pathways from basic principles. Environmental Microbiology, 2011, 13, 1477-1487.	1.8	43
63	Diversity and enrichment of nitrite-dependent anaerobic methane oxidizing bacteria from wastewater sludge. Applied Microbiology and Biotechnology, 2011, 92, 845-854.	1.7	157
64	Microbial nitrate respiration $\hat{a} \in$ Genes, enzymes and environmental distribution. Journal of Biotechnology, 2011, 155, 104-117.	1.9	357
65	Continuous Cultivation and Thermodynamic Aspects of Niche Definition in the Nitrogen Cycle. Methods in Enzymology, 2011, 486, 33-52.	0.4	1
66	Physiological role of the respiratory quinol oxidase in the anaerobic nitrite-reducing methanotroph †Candidatus Methylomirabilis oxyfera'. Microbiology (United Kingdom), 2011, 157, 890-898.	0.7	40
67	An intracellular pH gradient in the anammox bacterium Kuenenia stuttgartiensis as evaluated by 31P NMR. Applied Microbiology and Biotechnology, 2010, 86, 311-317.	1.7	53
68	A predicted physicochemically distinct sub-proteome associated with the intracellular organelle of the anammox bacterium Kuenenia stuttgartiensis. BMC Genomics, 2010, 11, 299.	1.2	26
69	Intracellular localization of membraneâ€bound ATPases in the compartmentalized anammox bacterium â€~ <i>Candidatus</i> Kuenenia stuttgartiensis'. Molecular Microbiology, 2010, 77, 701-715.	1.2	71
70	Nitrite-driven anaerobic methane oxidation by oxygenic bacteria. Nature, 2010, 464, 543-548.	13.7	1,521
71	Impact of Temperature on Ladderane Lipid Distribution in Anammox Bacteria. Applied and Environmental Microbiology, 2010, 76, 1596-1603.	1.4	53
72	Increasing the coverage of a metapopulation consensus genome by iterative read mapping and assembly. Bioinformatics, 2009, 25, 2878-2881.	1.8	29

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73	Enrichment and Molecular Detection of Denitrifying Methanotrophic Bacteria of the NC10 Phylum. Applied and Environmental Microbiology, 2009, 75, 3656-3662.	1.4	446
74	Cell division ring, a new cell division protein and vertical inheritance of a bacterial organelle in anammox planctomycetes. Molecular Microbiology, 2009, 73, 1009-1019.	1.2	53
75	Presence and activity of anaerobic ammonium-oxidizing bacteria at deep-sea hydrothermal vents. ISME Journal, 2009, 3, 117-123.	4.4	145
76	Carbon isotope-labelling experiments indicate that ladderane lipids of anammox bacteria are synthesized by a previously undescribed, novel pathway. FEMS Microbiology Letters, 2009, 292, 115-122.	0.7	19
77	Biochemistry and molecular biology of anammox bacteria. Critical Reviews in Biochemistry and Molecular Biology, 2009, 44, 65-84.	2.3	441
78	A comparative genomics study of genetic products potentially encoding ladderane lipid biosynthesis. Biology Direct, 2009, 4, 8.	1.9	31
79	Ladderane lipid distribution in four genera of anammox bacteria. Archives of Microbiology, 2008, 190, 51-66.	1.0	92
80	Candidatus â€Â~Brocadia fulgida': an autofluorescent anaerobic ammonium oxidizing bacterium. FEMS Microbiology Ecology, 2008, 63, 46-55.	1.3	388
81	Bacteria associated with iron seeps in a sulfur-rich, neutral pH, freshwater ecosystem. ISME Journal, 2008, 2, 1231-1242.	4.4	86
82	A microdiversity study of anammox bacteria reveals a novel <i>Candidatus</i> Scalindua phylotype in marine oxygen minimum zones. Environmental Microbiology, 2008, 10, 3106-3119.	1.8	250
83	Enrichment and characterization of marine anammox bacteria associated with global nitrogen gas production. Environmental Microbiology, 2008, 10, 3120-3129.	1.8	231
84	Denitrifying bacteria anaerobically oxidize methane in the absence of <i>Archaea</i> . Environmental Microbiology, 2008, 10, 3164-3173.	1.8	404
85	Evolution of an octahaem cytochrome <i>c</i> protein family that is key to aerobic and anaerobic ammonia oxidation by bacteria. Environmental Microbiology, 2008, 10, 3150-3163.	1.8	147
86	Combined structural and chemical analysis of the anammoxosome: A membrane-bounded intracytoplasmic compartment in anammox bacteria. Journal of Structural Biology, 2008, 161, 401-410.	1.3	176
87	Linking Ultrastructure and Function in Four Genera of Anaerobic Ammonium-Oxidizing Bacteria: Cell Plan, Glycogen Storage, and Localization of Cytochrome <i>c</i> Proteins. Journal of Bacteriology, 2008, 190, 708-717.	1.0	163
88	Combined structural and chemical analysis of unique anammox bacteria that contain a prokaryotic organelle. , 2008, , 65-66.		0
89	Startup of reactors for anoxic ammonium oxidation: Experiences from the first full-scale anammox reactor in Rotterdam. Water Research, 2007, 41, 4149-4163.	5.3	983

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91	Full-scale granular sludge Anammox process. Water Science and Technology, 2007, 55, 27-33.	1.2	152
92	Anammox bacteria disguised as denitrifiers: nitrate reduction to dinitrogen gas via nitrite and ammonium. Environmental Microbiology, 2007, 9, 635-642.	1.8	462
93	Data storm. Environmental Microbiology, 2007, 9, 10-11.	1.8	5
94	Anaerobic ammonium-oxidizing bacteria in marine environments: widespread occurrence but low diversity. Environmental Microbiology, 2007, 9, 1476-1484.	1.8	307
95	Close relationship of RNase P RNA in Gemmata and anammox planctomycete bacteria. FEMS Microbiology Letters, 2007, 268, 244-253.	0.7	5
96	Candidatus "Anammoxoglobus propionicus―a new propionate oxidizing species of anaerobic ammonium oxidizing bacteria. Systematic and Applied Microbiology, 2007, 30, 39-49.	1.2	511
97	Adaptation of a freshwater anammox population to high salinity wastewater. Journal of Biotechnology, 2006, 126, 546-553.	1.9	233
98	Challenging protein purification from anammox bacteria. International Journal of Biological Macromolecules, 2006, 39, 88-94.	3.6	23
99	Ladderane phospholipids in anammox bacteria comprise phosphocholine and phosphoethanolamine headgroups. FEMS Microbiology Letters, 2006, 258, 297-304.	0.7	82
100	A microbial consortium couples anaerobic methane oxidation to denitrification. Nature, 2006, 440, 918-921.	13.7	1,115
101	Deciphering the evolution and metabolism of an anammox bacterium from a community genome. Nature, 2006, 440, 790-794.	13.7	1,075
102	Anammoxosomes of Anaerobic Ammonium-oxidizing Planctomycetes. Microbiology Monographs, 2006, , 259-283.	0.3	10
103	Archaeal nitrification in the ocean. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 12317-12322.	3.3	999
104	Global impact and application of the anaerobic ammonium-oxidizing (anammox) bacteria. Biochemical Society Transactions, 2006, 34, 174-178.	1.6	77
105	1994–2004: 10Âyears of research on the anaerobic oxidation of ammonium. Biochemical Society Transactions, 2005, 33, 119-123.	1.6	163
106	Complete conversion of nitrate into dinitrogen gas in co-cultures of denitrifying bacteria. Biochemical Society Transactions, 2005, 33, 205-209.	1.6	21
107	Methanotrophic symbionts provide carbon for photosynthesis in peat bogs. Nature, 2005, 436, 1153-1156.	13.7	379
108	Structural identification of ladderane and other membrane lipids of planctomycetes capable of anaerobic ammonium oxidation (anammox). FEBS Journal, 2005, 272, 4270-4283.	2.2	150

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109	Enrichment of Anammox from Activated Sludge and Its Application in the CANON Process. Microbial Ecology, 2005, 49, 236-244.	1.4	136
110	Kinetics, diffusional limitation and microscale distribution of chemistry and organisms in a CANON reactor. FEMS Microbiology Ecology, 2005, 51, 247-256.	1.3	170
111	A new soluble 10 kDa monoheme cytochromec-552 from the anammox bacteriumCandidatus"Kuenenia stuttgartiensis― FEMS Microbiology Letters, 2005, 252, 273-278.	0.7	33
112	Propionate Oxidation by and Methanol Inhibition of Anaerobic Ammonium-Oxidizing Bacteria. Applied and Environmental Microbiology, 2005, 71, 1066-1071.	1.4	353
113	Biomarkers for In Situ Detection of Anaerobic Ammonium-Oxidizing (Anammox) Bacteria. Applied and Environmental Microbiology, 2005, 71, 1677-1684.	1.4	325
114	Anammox Organisms: Enrichment, Cultivation, and Environmental Analysis. Methods in Enzymology, 2005, 397, 34-57.	0.4	57
115	Application, eco-physiology and biodiversity of anaerobic ammonium-oxidizing bacteria. Reviews in Environmental Science and Biotechnology, 2004, 3, 255-264.	3.9	71
116	The anammoxosome: an intracytoplasmic compartment in anammox bacteria. FEMS Microbiology Letters, 2004, 233, 7-13.	0.7	243
117	A mixed ladderane/n-alkyl glycerol diether membrane lipid in an anaerobic ammonium-oxidizing bacterium. Chemical Communications, 2004, , 2590-2591.	2.2	27
118	Implementation of the Anammox Process for Improved Nitrogen Removal. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2004, 39, 1729-1738.	0.9	33
119	Anaerobic Oxidation of Methane and Ammonium. Annual Review of Microbiology, 2004, 58, 99-117.	2.9	285
120	Stable Carbon Isotopic Fractionations Associated with Inorganic Carbon Fixation by Anaerobic Ammonium-Oxidizing Bacteria. Applied and Environmental Microbiology, 2004, 70, 3785-3788.	1.4	151
121	The occurrence of hopanoids in planctomycetes: implications for the sedimentary biomarker record. Organic Geochemistry, 2004, 35, 561-566.	0.9	179
122	Novel Compartmentalistaion in Planctomycete Bacteria. Microscopy and Microanalysis, 2004, 10, 1528-1529.	0.2	0
123	Anaerobic ammonium oxidation by marine and freshwater planctomycete-like bacteria. Applied Microbiology and Biotechnology, 2003, 63, 107-114.	1.7	156
124	Candidatus "Scalindua brodaeâ€, sp. nov., Candidatus "Scalindua wagneriâ€, sp. nov., Two New Species of Anaerobic Ammonium Oxidizing Bacteria. Systematic and Applied Microbiology, 2003, 26, 529-538.	1.2	535
125	New concepts of microbial treatment processes for the nitrogen removal in wastewater. FEMS Microbiology Reviews, 2003, 27, 481-492.	3.9	407
126	Anaerobic ammonium oxidation by anammox bacteria in the Black Sea. Nature, 2003, 422, 608-611.	13.7	1,081

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127	Anaerobic Ammonia Oxidation in the Presence of Nitrogen Oxides (NO x ) by Two Different Lithotrophs. Applied and Environmental Microbiology, 2002, 68, 5351-5357.	1.4	79
128	Completely autotrophic nitrogen removal over nitrite in one single reactor. Water Research, 2002, 36, 2475-2482.	5.3	508
129	Linearly concatenated cyclobutane lipids form a dense bacterial membrane. Nature, 2002, 419, 708-712.	13.7	426
130	Aerobic and anaerobic ammonia oxidizing bacteria – competitors or natural partners?. FEMS Microbiology Ecology, 2002, 39, 175-181.	1.3	130
131	Improved nitrogen removal by application of new nitrogen-cycle bacteria. Reviews in Environmental Science and Biotechnology, 2002, 1, 51-63.	3.9	88
132	The anammox case-a new experimental manifesto for microbiological eco-physiology. Antonie Van Leeuwenhoek, 2002, 81, 693-702.	0.7	89
133	Cell compartmentalisation in planctomycetes: novel types of structural organisation for the bacterial cell. Archives of Microbiology, 2001, 175, 413-429.	1.0	334
134	Microbiology and application of the anaerobic ammonium oxidation (â€~anammox') process. Current Opinion in Biotechnology, 2001, 12, 283-288.	3.3	534
135	Molecular Evidence for Genus Level Diversity of Bacteria Capable of Catalyzing Anaerobic Ammonium Oxidation. Systematic and Applied Microbiology, 2000, 23, 93-106.	1.2	625
136	Key Physiology of Anaerobic Ammonium Oxidation. Applied and Environmental Microbiology, 1999, 65, 3248-3250.	1.4	1,124
137	Missing lithotroph identified as new planctomycete. Nature, 1999, 400, 446-449.	13.7	1,382
138	The anaerobic oxidation of ammonium. FEMS Microbiology Reviews, 1998, 22, 421-437.	3.9	660
139	The sequencing batch reactor as a powerful tool for the study of slowly growing anaerobic ammonium-oxidizing microorganisms. Applied Microbiology and Biotechnology, 1998, 50, 589-596.	1.7	1,857
140	Ammonium removal from concentrated waste streams with the anaerobic ammonium oxidation (Anammox) process in different reactor configurations. Water Research, 1997, 31, 1955-1962.	5.3	456
141	Effects of aerobic and microaerobic conditions on anaerobic ammonium-oxidizing (anammox) sludge. Applied and Environmental Microbiology, 1997, 63, 2446-2448.	1.4	365
142	Methods To Study Consortia and Mixed Cultures. , 0, , 205-219.		4

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