## Paul L Bodelier

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Nitrogen as a regulatory factor of methane oxidation in soils and sediments. FEMS Microbiology Ecology, 2004, 47, 265-277.	1.3	639
2	Methane oxidation by an extremely acidophilic bacterium of the phylum Verrucomicrobia. Nature, 2007, 450, 879-882.	13.7	526
3	Stimulation by ammonium-based fertilizers of methane oxidation in soil around rice roots. Nature, 2000, 403, 421-424.	13.7	461
4	Revisiting life strategy concepts in environmental microbial ecology. FEMS Microbiology Ecology, 2017, 93, fix006.	1.3	416
5	Shifting carbon flow from roots into associated microbial communities in response to elevated atmospheric CO <sub>2</sub> . Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 10938-10942.	3.3	390
6	Trait-based approaches for understanding microbial biodiversity and ecosystem functioning. Frontiers in Microbiology, 2014, 5, 251.	1.5	323
7	The impact of climate change on lakes in the Netherlands: a review. Aquatic Ecology, 2005, 39, 381-400.	0.7	281
8	Conceptualizing functional traits and ecological characteristics of methaneâ€oxidizing bacteria as life strategies. Environmental Microbiology Reports, 2013, 5, 335-345.	1.0	225
9	Differential Effects of Nitrogenous Fertilizers on Methane-Consuming Microbes in Rice Field and Forest Soils. Applied and Environmental Microbiology, 2006, 72, 1346-1354.	1.4	209
10	Conventional methanotrophs are responsible for atmospheric methane oxidation in paddy soils. Nature Communications, 2016, 7, 11728.	5.8	209
11	Dynamics of nitrification and denitrification in root-oxygenated sediments and adaptation of ammonia-oxidizing bacteria to low-oxygen or anoxic habitats. Applied and Environmental Microbiology, 1996, 62, 4100-4107.	1.4	194
12	Interactions between nitrogenous fertilizers and methane cycling in wetland and upland soils. Current Opinion in Environmental Sustainability, 2011, 3, 379-388.	3.1	159
13	Community analysis of ammonia-oxidising bacteria, in relation to oxygen availability in soils and root-oxygenated sediments, using PCR, DGGE and oligonucleotide probe hybridisation. FEMS Microbiology Ecology, 1998, 27, 339-350.	1.3	149
14	Title is missing!. Biogeochemistry, 2000, 51, 225-257.	1.7	127
15	Effect of temperature on composition of the methanotrophic community in rice field and forest soil. FEMS Microbiology Ecology, 2007, 62, 24-31.	1.3	125
16	Oxygen consumption kinetics of Nitrosomonas europaea and Nitrobacter hamburgensis grown in mixed continuous cultures at different oxygen concentrations. Archives of Microbiology, 1994, 161, 156-162.	1.0	124
17	Methylocystis heyeri sp. nov., a novel type II methanotrophic bacterium possessing â€~signature' fatty acids of type I methanotrophs. International Journal of Systematic and Evolutionary Microbiology, 2007, 57, 472-479.	0.8	123
18	Effects of Grazing by the Free-Living Soil Amoebae <i>Acanthamoeba castellanii, Acanthamoeba polyphaga</i> , and <i>Hartmannella vermiformis</i> on Various Bacteria. Applied and Environmental Microbiology, 1993, 59, 2317-2319.	1.4	123

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19	Toward Understanding, Managing, and Protecting Microbial Ecosystems. Frontiers in Microbiology, 2011, 2, 80.	1.5	121
20	Interactions between Thaumarchaea, <i>Nitrospira</i> and methanotrophs modulate autotrophic nitrification in volcanic grassland soil. ISME Journal, 2014, 8, 2397-2410.	4.4	121
21	Contribution of Methanotrophic and Nitrifying Bacteria to CH <sub>4</sub> and NH <sub>4</sub> <sup>+</sup> Oxidation in the Rhizosphere of Rice Plants as Determined by New Methods of Discrimination. Applied and Environmental Microbiology, 1999, 65, 1826-1833.	1.4	118
22	The active methanotrophic community in hydromorphic soils changes in response to changing methane concentration. Environmental Microbiology, 2006, 8, 321-333.	1.8	115
23	Singulisphaera acidiphila gen. nov., sp. nov., a non-filamentous, Isosphaera-like planctomycete from acidic northern wetlands. International Journal of Systematic and Evolutionary Microbiology, 2008, 58, 1186-1193.	0.8	110
24	A reanalysis of phospholipid fatty acids as ecological biomarkers for methanotrophic bacteria. ISME Journal, 2009, 3, 606-617.	4.4	110
25	Soil type links microbial colonization of rice roots to methane emission. Global Change Biology, 2008, 14, 657-669.	4.2	109
26	Acetate utilization as a survival strategy of peatâ€inhabiting <i>Methylocystis</i> spp Environmental Microbiology Reports, 2011, 3, 36-46.	1.0	109
27	Biotic Interactions in Microbial Communities as Modulators of Biogeochemical Processes: Methanotrophy as a Model System. Frontiers in Microbiology, 2016, 7, 1285.	1.5	95
28	Schlesneria paludicola gen. nov., sp. nov., the first acidophilic member of the order Planctomycetales, from Sphagnum-dominated boreal wetlands. International Journal of Systematic and Evolutionary Microbiology, 2007, 57, 2680-2687.	0.8	93
29	Microbial minorities modulate methane consumption through niche partitioning. ISME Journal, 2013, 7, 2214-2228.	4.4	91
30	Peatland vascular plant functional types affect methane dynamics by altering microbial community structure. Journal of Ecology, 2015, 103, 925-934.	1.9	90
31	Interactions between methane and the nitrogen cycle in light of climate change. Current Opinion in Environmental Sustainability, 2014, 9-10, 26-36.	3.1	89
32	Beyond nitrogen: The importance of phosphorus for CH 4 oxidation in soils and sediments. Geoderma, 2015, 259-260, 337-346.	2.3	88
33	Community analysis of methanogenic archaea within a riparian flooding gradient. Environmental Microbiology, 2004, 6, 449-461.	1.8	84
34	Zavarzinella formosa gen. nov., sp. nov., a novel stalked, Gemmata-like planctomycete from a Siberian peat bog. International Journal of Systematic and Evolutionary Microbiology, 2009, 59, 357-364.	0.8	80
35	Methane-derived carbon flows through methane-oxidizing bacteria to higher trophic levels in aquatic systems. Environmental Microbiology, 2007, 9, 1126-1134.	1.8	76
36	Competitive interactions between methane- and ammonia-oxidizing bacteria modulate carbon and nitrogen cycling in paddy soil. Biogeosciences, 2014, 11, 3353-3368.	1.3	75

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37	Methylocystis bryophila sp. nov., a facultatively methanotrophic bacterium from acidic Sphagnum peat, and emended description of the genus Methylocystis (ex Whittenbury et al. 1970) Bowman et al. 1993. International Journal of Systematic and Evolutionary Microbiology, 2013, 63, 1096-1104.	0.8	74
38	Diversity of iron oxidizers in wetland soils revealed by novel 16S rRNA primers targeting <i>Gallionella-</i> related bacteria. ISME Journal, 2009, 3, 715-725.	4.4	73
39	Biphasic kinetics of  a methanotrophic community is a combination of growth and increased activity per cell. FEMS Microbiology Ecology, 2010, 71, 12-22.	1.3	72
40	Hydrology is reflected in the functioning and community composition of methanotrophs in the littoral wetland of a boreal lake. FEMS Microbiology Ecology, 2011, 75, 430-445.	1.3	69
41	Combined effects of carbon, nitrogen and phosphorus on CH 4 production and denitrification in wetland sediments. Geoderma, 2015, 259-260, 354-361.	2.3	64
42	Decomposition of mixtures of cover crop residues increases microbial functional diversity. Geoderma, 2020, 361, 114060.	2.3	64
43	Phosphatases relieve carbon limitation of microbial activity in Baltic Sea sediments along a redoxâ€gradient. Limnology and Oceanography, 2011, 56, 2018-2026.	1.6	63
44	Methylomonas paludis sp. nov., the first acid-tolerant member of the genus Methylomonas , from an acidic wetland. International Journal of Systematic and Evolutionary Microbiology, 2013, 63, 2282-2289.	0.8	63
45	Microbiology of wetlands. Frontiers in Microbiology, 2013, 4, 79.	1.5	61
46	Living apart together—bacterial volatiles influence methanotrophic growth and activity. ISME Journal, 2018, 12, 1163-1166.	4.4	60
47	Cattle Manure Enhances Methanogens Diversity and Methane Emissions Compared to Swine Manure under Rice Paddy. PLoS ONE, 2014, 9, e113593.	1.1	56
48	Effect of salinity on temporal and spatial dynamics of ammonia-oxidising bacteria from intertidal freshwater sediment. FEMS Microbiology Ecology, 2005, 53, 359-368.	1.3	53
49	Methylovirgula ligni gen. nov., sp. nov., an obligately acidophilic, facultatively methylotrophic bacterium with a highly divergent mxaF gene. International Journal of Systematic and Evolutionary Microbiology, 2009, 59, 2538-2545.	0.8	53
50	A nested PCR approach for improved recovery of archaeal 16S rRNA gene fragments from freshwater samples. FEMS Microbiology Letters, 2009, 298, 193-198.	0.7	51
51	Fossil chironomid Î13C as a proxy for past methanogenic contribution to benthic food webs in lakes?. Journal of Paleolimnology, 2010, 43, 235-245.	0.8	51
52	Title is missing!. Plant and Soil, 1997, 190, 91-103.	1.8	47
53	Improved PCR-DGGE for high resolution diversity screening of complex sulfate-reducing prokaryotic communities in soils and sediments. Journal of Microbiological Methods, 2007, 70, 103-111.	0.7	45
54	Rice straw serves as additional carbon source for rhizosphere microorganisms and reduces root exudate consumption. Soil Biology and Biochemistry, 2019, 135, 235-238.	4.2	44

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55	Organic Residue Amendments to Modulate Greenhouse Gas Emissions From Agricultural Soils. Frontiers in Microbiology, 2018, 9, 3035.	1.5	43
56	Singulisphaera rosea sp. nov., a planctomycete from acidic Sphagnum peat, and emended description of the genus Singulisphaera. International Journal of Systematic and Evolutionary Microbiology, 2012, 62, 118-123.	0.8	42
57	Diazotrophic methanotrophs in peatlands: the missing link?. Plant and Soil, 2015, 389, 419-423.	1.8	42
58	Recurrence and Frequency of Disturbance have Cumulative Effect on Methanotrophic Activity, Abundance, and Community Structure. Frontiers in Microbiology, 2015, 6, 1493.	1.5	42
59	Unexpected role of canonical aerobic methanotrophs in upland agricultural soils. Soil Biology and Biochemistry, 2019, 131, 1-8.	4.2	42
60	Interactions between nitrifying and denitrifying bacteria in gnotobiotic microcosms planted with the emergent macrophyte Glyceria maxima. FEMS Microbiology Ecology, 1998, 25, 63-78.	1.3	40
61	Unexpected stimulation of soil methane uptake as emergent property of agricultural soils following bioâ€based residue application. Global Change Biology, 2015, 21, 3864-3879.	4.2	39
62	Impact of Peat Mining and Restoration on Methane Turnover Potential and Methane-Cycling Microorganisms in a Northern Bog. Applied and Environmental Microbiology, 2018, 84, .	1.4	39
63	New DGGE strategies for the analyses of methanotrophic microbial communities using different combinations of existing 16S rRNA-based primers. FEMS Microbiology Ecology, 2005, 52, 163-174.	1.3	38
64	Predominance of methanogens over methanotrophs in rewetted fens characterized by high methane emissions. Biogeosciences, 2018, 15, 6519-6536.	1.3	38
65	Impacts of Inter- and Intralaboratory Variations on the Reproducibility of Microbial Community Analyses. Applied and Environmental Microbiology, 2010, 76, 7451-7458.	1.4	37
66	Distribution and Diversity of <i>Gallionella</i> -Like Neutrophilic Iron Oxidizers in a Tidal Freshwater Marsh. Applied and Environmental Microbiology, 2011, 77, 2337-2344.	1.4	37
67	Biogeography of sulfate-reducing prokaryotes in river floodplains. FEMS Microbiology Ecology, 2008, 64, 395-406.	1.3	36
68	Aquatic herbivores facilitate the emission of methane from wetlands. Ecology, 2011, 92, 1166-1173.	1.5	36
69	Archaeal dominated ammonia-oxidizing communities in Icelandic grassland soils are moderately affected by long-term N fertilization and geothermal heating. Frontiers in Microbiology, 2012, 3, 352.	1.5	36
70	Manure-associated stimulation of soil-borne methanogenic activity in agricultural soils. Biology and Fertility of Soils, 2015, 51, 511-516.	2.3	36
71	Characterization of Methylobacterium strains isolated from the phyllosphere and description of Methylobacterium longum sp. nov. Antonie Van Leeuwenhoek, 2012, 101, 169-183.	0.7	35
72	Effects of bioâ€based residue amendments on greenhouse gas emission from agricultural soil are stronger than effects of soil type with different microbial community composition. GCB Bioenergy, 2017, 9, 1707-1720.	2.5	35

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73	Seasonal and vertical distribution of putative ammonia-oxidizing thaumarchaeotal communities in an oligotrophic lake. FEMS Microbiology Ecology, 2013, 83, 515-526.	1.3	33
74	Fieldâ€scale tracking of active methaneâ€oxidizing communities in a landfill cover soil reveals spatial and seasonal variability. Environmental Microbiology, 2015, 17, 1721-1737.	1.8	33
75	Animal–plant–microbe interactions: direct and indirect effects of swan foraging behaviour modulate methane cycling in temperate shallow wetlands. Oecologia, 2006, 149, 233-244.	0.9	32
76	Spatial Patterns of Iron- and Methane-Oxidizing Bacterial Communities in an Irregularly Flooded, Riparian Wetland. Frontiers in Microbiology, 2012, 3, 64.	1.5	32
77	Structural and functional response of methaneâ€consuming microbial communities to different flooding regimes in riparian soils. Ecology and Evolution, 2012, 2, 106-127.	0.8	32
78	Positive diversityâ€functioning relationships in model communities of methanotrophic bacteria. Ecology, 2018, 99, 714-723.	1.5	30
79	Ammonia-limited conditions cause of Thaumarchaeal dominance in volcanic grassland soil. FEMS Microbiology Ecology, 2015, 91, .	1.3	29
80	Temporal and Spatial Coexistence of Archaeal and Bacterial <i>amoA</i> Genes and Gene Transcripts in Lake Lucerne. Archaea, 2013, 2013, 1-11.	2.3	27
81	Spatial patterns of methanotrophic communities along a hydrological gradient in a riparian wetland. FEMS Microbiology Ecology, 2013, 86, 59-70.	1.3	26
82	Resistance and Recovery of Methane-Oxidizing Communities Depends on Stress Regime and History; A Microcosm Study. Frontiers in Microbiology, 2018, 9, 1714.	1.5	26
83	Bypassing the methane cycle. Nature, 2015, 523, 534-535.	13.7	25
84	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
85	Soil warming and fertilization altered rates of nitrogen transformation processes and selected for adapted ammonia-oxidizing archaea in sub-arctic grassland soil. Soil Biology and Biochemistry, 2017, 107, 114-124.	4.2	24
86	Trophic state changes can affect the importance of methane-derived carbon in aquatic food webs. Proceedings of the Royal Society B: Biological Sciences, 2017, 284, 20170278.	1.2	24
87	Modulation of Litter Decomposition by the Soil Microbial Food Web Under Influence of Land Use Change. Frontiers in Microbiology, 2018, 9, 2860.	1.5	23
88	Ethyl tert-butyl ether (EtBE) degradation by an algal-bacterial culture obtained from contaminated groundwater. Water Research, 2019, 148, 314-323.	5.3	23
89	DNA stable-isotope probing highlights the effects of temperature on functionally active methanotrophs in natural wetlands. Soil Biology and Biochemistry, 2020, 149, 107954.	4.2	23
90	Epiphyton as a Niche for Ammonia-Oxidizing Bacteria: Detailed Comparison with Benthic and Pelagic Compartments in Shallow Freshwater Lakes. Applied and Environmental Microbiology, 2008, 74, 1963-1971.	1.4	21

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91	Nitrification in the rhizosphere of a flooding-resistant and a flooding-non-resistantRumexspecies under drained and waterlogged conditions. FEMS Microbiology Letters, 1991, 86, 33-42.	0.7	20
92	Remarkable Recovery and Colonization Behaviour of Methane Oxidizing Bacteria in Soil After Disturbance Is Controlled by Methane Source Only. Microbial Ecology, 2014, 68, 259-270.	1.4	20
93	Bacterial Diversity and Geochemical Profiles in Sediments from Eutrophic Azorean Lakes. Geomicrobiology Journal, 2012, 29, 704-715.	1.0	19
94	Response of a methane-driven interaction network to stressor intensification. FEMS Microbiology Ecology, 2020, 96, .	1.3	19
95	Oxygen uptake kinetics of Pseudomonas chlororaphis grown in glucose- or glutamate-limited continuous cultures. Archives of Microbiology, 1997, 167, 392-395.	1.0	18
96	Strain-specific incorporation of methanotrophic biomass into eukaryotic grazers in a rice field soil revealed by PLFA-SIP. FEMS Microbiology Ecology, 2011, 75, 284-290.	1.3	18
97	Weak phylogenetic signal in physiological traits of methaneâ€oxidizing bacteria. Journal of Evolutionary Biology, 2014, 27, 1240-1247.	0.8	18
98	Does microbial stoichiometry modulate eutrophication of aquatic ecosystems?. Environmental Microbiology, 2013, 15, 1572-1579.	1.8	16
99	Wholeâ€community genome amplification (WCGA) leads to compositional bias in methaneâ€oxidizing communities as assessed by <i>pmoA</i> â€based microarray analyses and QPCR. Environmental Microbiology Reports, 2009, 1, 434-441.	1.0	15
100	Methane as a carbon source for the food web in raised bog pools. Freshwater Science, 2013, 32, 1260-1272.	0.9	15
101	Niche Differentiation of Host-Associated Pelagic Microbes and Their Potential Contribution to Biogeochemical Cycling in Artificially Warmed Lakes. Frontiers in Microbiology, 2020, 11, 582.	1.5	15
102	<i>Methylotetracoccus oryzae</i> Strain C50C1 Is a Novel Type Ib Gammaproteobacterial Methanotroph Adapted to Freshwater Environments. MSphere, 2019, 4, .	1.3	14
103	Trophic and nonâ€ŧrophic effects of fish and macroinvertebrates on carbon emissions. Freshwater Biology, 2021, 66, 1831-1845.	1.2	14
104	Producing organic amendments: Physicochemical changes in biowaste used in anaerobic digestion, composting, and fermentation. Waste Management, 2022, 149, 177-185.	3.7	14
105	Plant community flood resilience in intensively managed grasslands and the role of the plant economic spectrum. Journal of Applied Ecology, 2020, 57, 1524-1534.	1.9	13
106	Steering microbiomes by organic amendments towards climate-smart agricultural soils. Biology and Fertility of Soils, 2021, 57, 1053-1074.	2.3	13
107	Effect of Redox Conditions on Bacterial Community Structure in Baltic Sea Sediments with Contrasting Phosphorus Fluxes. PLoS ONE, 2014, 9, e92401.	1.1	12
108	Environmental legacy contributes to the resilience of methane consumption in a laboratory microcosm system. Scientific Reports, 2018, 8, 8862.	1.6	12

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109	Can flooding-induced greenhouse gas emissions be mitigated by trait-based plant species choice?. Science of the Total Environment, 2020, 727, 138476.	3.9	12
110	Oxygen consumption kinetics of Nitrosomonas europaea and Nitrobacter hamburgensis grown in mixed continuous cultures at different oxygen concentrations. Archives of Microbiology, 1994, 161, 156-162.	1.0	12
111	Greenhouse gas (CO2, CH4, and N2O) emissions after abandonment of agriculture. Biology and Fertility of Soils, 2022, 58, 579-591.	2.3	12
112	Response of the Sulfate-Reducing Community to the Re-establishment of Estuarine Conditions in Two Contrasting Soils: a Mesocosm Approach. Microbial Ecology, 2010, 59, 109-120.	1.4	11
113	USC <i><math>\hat{I}^3</math></i> Dominated Community Composition and Cooccurrence Network of Methanotrophs and Bacteria in Subterranean Karst Caves. Microbiology Spectrum, 2021, 9, e0082021.	1.2	11
114	Discrepancy in exchangeable and soluble ammonium-induced effects on aerobic methane oxidation: a microcosm study of a paddy soil. Biology and Fertility of Soils, 2021, 57, 873-880.	2.3	10
115	Ecological Aspects of Microbes and Microbial Communities Inhabiting the Rhizosphere of Wetland Plants. , 2006, , 205-238.		10
116	Validation of the Correct Start Codon of norX/nxrX and Universality of the norAXB/nxrAXB Gene Cluster in Nitrobacter Species. Current Microbiology, 2006, 53, 255-257.	1.0	9
117	Limitations of the use of group-specific primers in real-time PCR as appear from quantitative analyses of closely related ammonia-oxidising species. Water Research, 2008, 42, 1093-1101.	5.3	9
118	Co-occurrence patterns among prokaryotes across an age gradient in pit mud of Chinese strong-flavor liquor. Canadian Journal of Microbiology, 2020, 66, 495-504.	0.8	9
119	Aquatic herbivores facilitate the emission of methane from wetlands. Ecology, 2011, 92, 1166-1173.	1.5	8
120	Preliminary investigations into the background levels of various metals and boron in the aquatic liverwort Scapania uliginosa (Sw.) Dum Aquatic Botany, 1991, 39, 345-352.	0.8	7
121	Active methane processing microbes and the disproportionate role of NC10 phylum in methane mitigation in Amazonian floodplains. Biogeochemistry, 2021, 156, 293-317.	1.7	7
122	Compositional and functional stability of aerobic methane consuming communities in drained and rewetted peat meadows. FEMS Microbiology Ecology, 2015, 91, fiv119.	1.3	6
123	Abundance and δ13C values of fatty acids in lacustrine surface sediments: Relationships with in-lake methane concentrations. Quaternary Science Reviews, 2018, 191, 337-347.	1.4	6
124	Grand Challenges in Terrestrial Microbiology: Moving on From a Decade of Progress in Microbial Biogeochemistry. Frontiers in Microbiology, 2020, 11, 981.	1.5	6
125	Methanotroph Ecology, Environmental Distribution and Functioning. Microbiology Monographs, 2019, , 1-38.	0.3	6
126	Phylogenetic Characterization of Phosphatase-Expressing Bacterial Communities in Baltic Sea Sediments. Microbes and Environments, 2015, 30, 192-195.	0.7	4

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127	Microbial Ecosystem Functions in Wetlands under Disturbance. , 2017, , 227-274.		3
128	Relief of Phosphate Limitation Stimulates Methane Oxidation. Frontiers in Environmental Science, 2022, 10, .	1.5	3
129	Effect of the aerenchymatous helophyte Glyceria maxima on the sulfate-reducing communities in two contrasting riparian grassland soils. Plant and Soil, 2013, 370, 73-87.	1.8	2
130	Methane-Derived Carbon as a Driver for Cyanobacterial Growth. Frontiers in Microbiology, 2022, 13, 837198.	1.5	2
131	PhyloFunDB: A Pipeline to Create and Update Functional Gene Taxonomic Databases. Microorganisms, 2022, 10, 1093.	1.6	1
132	Microbial trait-based approaches for agroecosystems. Advances in Agronomy, 2022, , 259-299.	2.4	1
133	Complete and Draft Genome Sequences of Aerobic Methanotrophs Isolated from a Riparian Wetland. Microbiology Resource Announcements, 2021, 10, .	0.3	0
134	Microbial Ecosystems, Protection of. , 2012, , 1-9.		0
135	Extraction Methods, Variability Encountered in. , 2014, , 1-9.		0