

Michael Wagner

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318
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52,849
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#	Paper	IF	Citations
318	The domain-specific probe EUB338 is insufficient for the detection of all Bacteria: development and evaluation of a more comprehensive probe set. <i>Systematic and Applied Microbiology</i> , 1999 , 22, 434-442	4.2	1815
317	Phylogenetic Oligodeoxynucleotide Probes for the Major Subclasses of Proteobacteria: Problems and Solutions. <i>Systematic and Applied Microbiology</i> , 1992 , 15, 593-600	4.2	1628
316	Complete nitrification by Nitrospira bacteria. <i>Nature</i> , 2015 , 528, 504-9	50.4	1148
315	Sponge-associated microorganisms: evolution, ecology, and biotechnological potential. <i>Microbiology and Molecular Biology Reviews</i> , 2007 , 71, 295-347	13.2	931
314	Phylogeny of all recognized species of ammonia oxidizers based on comparative 16S rRNA and amoA sequence analysis: implications for molecular diversity surveys. <i>Applied and Environmental Microbiology</i> , 2000 , 66, 5368-82	4.8	872
313	Deciphering the evolution and metabolism of an anammox bacterium from a community genome. <i>Nature</i> , 2006 , 440, 790-4	50.4	861
312	Nitrososphaera viennensis, an ammonia oxidizing archaeon from soil. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, 8420-5	11.5	644
311	Phylogenetic probes for analyzing abundance and spatial organization of nitrifying bacteria. <i>Applied and Environmental Microbiology</i> , 1996 , 62, 2156-62	4.8	624
310	In situ characterization of Nitrospira-like nitrite-oxidizing bacteria active in wastewater treatment plants. <i>Applied and Environmental Microbiology</i> , 2001 , 67, 5273-84	4.8	615
309	Combined molecular and conventional analyses of nitrifying bacterium diversity in activated sludge: Nitrosococcus mobilis and Nitrospira-like bacteria as dominant populations. <i>Applied and Environmental Microbiology</i> , 1998 , 64, 3042-51	4.8	601
308	Phylogeny of dissimilatory sulfite reductases supports an early origin of sulfate respiration. <i>Journal of Bacteriology</i> , 1998 , 180, 2975-82	3.5	557
307	Molecular evidence for genus level diversity of bacteria capable of catalyzing anaerobic ammonium oxidation. <i>Systematic and Applied Microbiology</i> , 2000 , 23, 93-106	4.2	550
306	A moderately thermophilic ammonia-oxidizing crenarchaeote from a hot spring. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 2134-9	11.5	548
305	Combination of fluorescent in situ hybridization and microautoradiography-a new tool for structure-function analyses in microbial ecology. <i>Applied and Environmental Microbiology</i> , 1999 , 65, 1289-97	4.8	547
304	Oligonucleotide microarray for 16S rRNA gene-based detection of all recognized lineages of sulfate-reducing prokaryotes in the environment. <i>Applied and Environmental Microbiology</i> , 2002 , 68, 5064-81	4.8	541
303	Molecular evidence for a uniform microbial community in sponges from different oceans. <i>Applied and Environmental Microbiology</i> , 2002 , 68, 4431-40	4.8	531
302	Probing activated sludge with oligonucleotides specific for proteobacteria: inadequacy of culture-dependent methods for describing microbial community structure. <i>Applied and Environmental Microbiology</i> , 1993 , 59, 1520-5	4.8	508

301	A <i>Nitrospira</i> metagenome illuminates the physiology and evolution of globally important nitrite-oxidizing bacteria. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 13479-84	11.5	488
300	In situ probing of gram-positive bacteria with high DNA G + C content using 23S rRNA-targeted oligonucleotides. <i>Microbiology (United Kingdom)</i> , 1994 , 140 (Pt 10), 2849-58	2.9	463
299	daime, a novel image analysis program for microbial ecology and biofilm research. <i>Environmental Microbiology</i> , 2006 , 8, 200-13	5.2	454
298	Microbiology and application of the anaerobic ammonium oxidation (Anammox) process. <i>Current Opinion in Biotechnology</i> , 2001 , 12, 283-8	11.4	443
297	Bacterial community composition and function in sewage treatment systems. <i>Current Opinion in Biotechnology</i> , 2002 , 13, 218-27	11.4	435
296	Microbial diversity and the genetic nature of microbial species. <i>Nature Reviews Microbiology</i> , 2008 , 6, 431-40	22.2	429
295	The Thaumarchaeota: an emerging view of their phylogeny and ecophysiology. <i>Current Opinion in Microbiology</i> , 2011 , 14, 300-6	7.9	403
294	amoA-based consensus phylogeny of ammonia-oxidizing archaea and deep sequencing of amoA genes from soils of four different geographic regions. <i>Environmental Microbiology</i> , 2012 , 14, 525-39	5.2	402
293	In situ Identification of Ammonia-oxidizing Bacteria. <i>Systematic and Applied Microbiology</i> , 1995 , 18, 251-264	11.4	402
292	High-fat diet alters gut microbiota physiology in mice. <i>ISME Journal</i> , 2014 , 8, 295-308	11.9	393
291	Distinct gene set in two different lineages of ammonia-oxidizing archaea supports the phylum Thaumarchaeota. <i>Trends in Microbiology</i> , 2010 , 18, 331-40	12.4	390
290	Zero-valent sulphur is a key intermediate in marine methane oxidation. <i>Nature</i> , 2012 , 491, 541-6	50.4	389
289	Identification and activities in situ of <i>Nitrosospira</i> and <i>Nitrospira</i> spp. as dominant populations in a nitrifying fluidized bed reactor. <i>Applied and Environmental Microbiology</i> , 1998 , 64, 3480-5	4.8	384
288	Amoebae as training grounds for intracellular bacterial pathogens. <i>Applied and Environmental Microbiology</i> , 2005 , 71, 20-8	4.8	379
287	Barcoded primers used in multiplex amplicon pyrosequencing bias amplification. <i>Applied and Environmental Microbiology</i> , 2011 , 77, 7846-9	4.8	377
286	probeBase--an online resource for rRNA-targeted oligonucleotide probes: new features 2007. <i>Nucleic Acids Research</i> , 2007 , 35, D800-4	20.1	373
285	Development of an rRNA-targeted oligonucleotide probe specific for the genus <i>Acinetobacter</i> and its application for in situ monitoring in activated sludge. <i>Applied and Environmental Microbiology</i> , 1994 , 60, 792-800	4.8	364
284	A New Perspective on Microbes Formerly Known as Nitrite-Oxidizing Bacteria. <i>Trends in Microbiology</i> , 2016 , 24, 699-712	12.4	362

283	The Planctomycetes, Verrucomicrobia, Chlamydiae and sister phyla comprise a superphylum with biotechnological and medical relevance. <i>Current Opinion in Biotechnology</i> , 2006 , 17, 241-9	11.4	351
282	Kinetic analysis of a complete nitrifier reveals an oligotrophic lifestyle. <i>Nature</i> , 2017 , 549, 269-272	50.4	349
281	Illuminating the evolutionary history of chlamydiae. <i>Science</i> , 2004 , 304, 728-30	33.3	333
280	In situ analysis of nitrifying bacteria in sewage treatment plants. <i>Water Science and Technology</i> , 1996 , 34, 237-244	2.2	333
279	The microbial community composition of a nitrifying-denitrifying activated sludge from an industrial sewage treatment plant analyzed by the full-cycle rRNA approach. <i>Systematic and Applied Microbiology</i> , 2002 , 25, 84-99	4.2	310
278	probeBase: an online resource for rRNA-targeted oligonucleotide probes. <i>Nucleic Acids Research</i> , 2003 , 31, 514-6	20.1	302
277	Deep sequencing reveals exceptional diversity and modes of transmission for bacterial sponge symbionts. <i>Environmental Microbiology</i> , 2010 , 12, 2070-82	5.2	298
276	Fluorescence in situ hybridisation for the identification and characterisation of prokaryotes. <i>Current Opinion in Microbiology</i> , 2003 , 6, 302-9	7.9	298
275	Biomarkers for in situ detection of anaerobic ammonium-oxidizing (anammox) bacteria. <i>Applied and Environmental Microbiology</i> , 2005 , 71, 1677-84	4.8	294
274	Microbial community composition and function in wastewater treatment plants. <i>Antonie Van Leeuwenhoek</i> , 2002 , 81, 665-80	2.1	287
273	Multiple lateral transfers of dissimilatory sulfite reductase genes between major lineages of sulfate-reducing prokaryotes. <i>Journal of Bacteriology</i> , 2001 , 183, 6028-35	3.5	280
272	Microbiome definition re-visited: old concepts and new challenges. <i>Microbiome</i> , 2020 , 8, 103	16.6	271
271	Expanded metabolic versatility of ubiquitous nitrite-oxidizing bacteria from the genus Nitrospira. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 11371-6	11.5	265
270	Community structure and activity dynamics of nitrifying bacteria in a phosphate-removing biofilm. <i>Applied and Environmental Microbiology</i> , 2001 , 67, 1351-62	4.8	264
269	Isolation and phylogenetic analysis of bacteria with antimicrobial activities from the Mediterranean sponges <i>Aplysina aerophoba</i> and <i>Aplysina cavernicola</i> . <i>FEMS Microbiology Ecology</i> , 2001 , 35, 305-312	4.3	262
268	Raman-FISH: combining stable-isotope Raman spectroscopy and fluorescence in situ hybridization for the single cell analysis of identity and function. <i>Environmental Microbiology</i> , 2007 , 9, 1878-89	5.2	257
267	Global diversity and biogeography of bacterial communities in wastewater treatment plants. <i>Nature Microbiology</i> , 2019 , 4, 1183-1195	26.6	248
266	Tracking heavy water (D2O) incorporation for identifying and sorting active microbial cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, E194-203	11.5	244

265	In situ visualization of high genetic diversity in a natural microbial community. <i>Journal of Bacteriology</i> , 1996 , 178, 3496-500	3.5	241
264	The genome of the ammonia-oxidizing <i>Candidatus Nitrososphaera gargensis</i> : insights into metabolic versatility and environmental adaptations. <i>Environmental Microbiology</i> , 2012 , 14, 3122-45	5.2	239
263	Thaumarchaeotes abundant in refinery nitrifying sludges express amoA but are not obligate autotrophic ammonia oxidizers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, 16771-6	11.5	239
262	Discovery of the novel candidate phylum "Poribacteria" in marine sponges. <i>Applied and Environmental Microbiology</i> , 2004 , 70, 3724-32	4.8	238
261	16S rRNA and amoA-based phylogeny of 12 novel betaproteobacterial ammonia-oxidizing isolates: extension of the dataset and proposal of a new lineage within the nitrosomonads. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 2003 , 53, 1485-1494	2.2	231
260	Ecological study of a bioaugmentation failure. <i>Environmental Microbiology</i> , 2000 , 2, 179-90	5.2	231
259	Single-cell ecophysiology of microbes as revealed by Raman microspectroscopy or secondary ion mass spectrometry imaging. <i>Annual Review of Microbiology</i> , 2009 , 63, 411-29	17.5	227
258	Identification and in situ Detection of Gram-negative Filamentous Bacteria in Activated Sludge. <i>Systematic and Applied Microbiology</i> , 1994 , 17, 405-417	4.2	219
257	Nitrification expanded: discovery, physiology and genomics of a nitrite-oxidizing bacterium from the phylum Chloroflexi. <i>ISME Journal</i> , 2012 , 6, 2245-56	11.9	216
256	-Targeted Polymerase Chain Reaction Primers for the Specific Detection and Quantification of Comammox in the Environment. <i>Frontiers in Microbiology</i> , 2017 , 8, 1508	5.7	210
255	Who eats what, where and when? Isotope-labelling experiments are coming of age. <i>ISME Journal</i> , 2007 , 1, 103-10	11.9	210
254	16S rRNA gene-based oligonucleotide microarray for environmental monitoring of the betaproteobacterial order "Rhodocyclales". <i>Applied and Environmental Microbiology</i> , 2005 , 71, 1373-86	4.8	209
253	Phylotype-level 16S rRNA analysis reveals new bacterial indicators of health state in acute murine colitis. <i>ISME Journal</i> , 2012 , 6, 2091-106	11.9	208
252	A Rare biosphere microorganism contributes to sulfate reduction in a peatland. <i>ISME Journal</i> , 2010 , 4, 1591-602	11.9	208
251	16S-23S rDNA intergenic spacer and 23S rDNA of anaerobic ammonium-oxidizing bacteria: implications for phylogeny and in situ detection. <i>Environmental Microbiology</i> , 2001 , 3, 450-9	5.2	205
250	Proposal to reclassify the proteobacterial classes α and β , and the phylum γ into four phyla reflecting major functional capabilities. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 2020 , 70, 5972-6016	2.2	205
249	The isotope array, a new tool that employs substrate-mediated labeling of rRNA for determination of microbial community structure and function. <i>Applied and Environmental Microbiology</i> , 2003 , 69, 6875-87	4.8	197
248	Cohn β Crenothrix is a filamentous methane oxidizer with an unusual methane monooxygenase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006 , 103, 2363-7	11.5	196

247	NxrB encoding the beta subunit of nitrite oxidoreductase as functional and phylogenetic marker for nitrite-oxidizing Nitrospira. <i>Environmental Microbiology</i> , 2014 , 16, 3055-71	5.2	193
246	Diversity and abundance of sulfate-reducing microorganisms in the sulfate and methane zones of a marine sediment, Black Sea. <i>Environmental Microbiology</i> , 2007 , 9, 131-42	5.2	193
245	Use of stable-isotope probing, full-cycle rRNA analysis, and fluorescence in situ hybridization-microautoradiography to study a methanol-fed denitrifying microbial community. <i>Applied and Environmental Microbiology</i> , 2004 , 70, 588-96	4.8	192
244	Nitrifying and heterotrophic population dynamics in biofilm reactors: effects of hydraulic retention time and the presence of organic carbon. <i>Water Research</i> , 2002 , 36, 469-81	12.5	184
243	New insights into metabolic properties of marine bacteria encoding proteorhodopsins. <i>PLoS Biology</i> , 2005 , 3, e273	9.7	180
242	Sulfate-reducing microorganisms in wetlands - fameless actors in carbon cycling and climate change. <i>Frontiers in Microbiology</i> , 2012 , 3, 72	5.7	174
241	Wastewater treatment: a model system for microbial ecology. <i>Trends in Biotechnology</i> , 2006 , 24, 483-9	15.1	174
240	Nitrite concentration influences the population structure of Nitrospira-like bacteria. <i>Environmental Microbiology</i> , 2006 , 8, 1487-95	5.2	171
239	Identification of some of the major groups of bacteria in efficient and nonefficient biological phosphorus removal activated sludge systems. <i>Applied and Environmental Microbiology</i> , 1999 , 65, 4077-84	4.8	168
238	Microarray and functional gene analyses of sulfate-reducing prokaryotes in low-sulfate, acidic fens reveal cooccurrence of recognized genera and novel lineages. <i>Applied and Environmental Microbiology</i> , 2004 , 70, 6998-7009	4.8	164
237	Cyanate as an energy source for nitrifiers. <i>Nature</i> , 2015 , 524, 105-8	50.4	160
236	Endosymbiotic sulphate-reducing and sulphide-oxidizing bacteria in an oligochaete worm. <i>Nature</i> , 2001 , 411, 298-302	50.4	159
235	Diversity of sulfate-reducing bacteria in oxic and anoxic regions of a microbial mat characterized by comparative analysis of dissimilatory sulfite reductase genes. <i>Applied and Environmental Microbiology</i> , 1999 , 65, 4666-71	4.8	157
234	In situ characterization of the microbial consortia active in two wastewater treatment plants. <i>Water Research</i> , 1994 , 28, 1715-1723	12.5	157
233	probeCheck--a central resource for evaluating oligonucleotide probe coverage and specificity. <i>Environmental Microbiology</i> , 2008 , 10, 2894-8	5.2	154
232	Giant viruses with an expanded complement of translation system components. <i>Science</i> , 2017 , 356, 82-85	33.3	148
231	Novel bacterial endosymbionts of Acanthamoeba spp. related to the Paramecium caudatum symbiont Caedibacter caryophilus. <i>Environmental Microbiology</i> , 1999 , 1, 357-67	5.2	148
230	Host-compound foraging by intestinal microbiota revealed by single-cell stable isotope probing. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 4720-5	11.5	147

229	Non-sulfate-reducing, syntrophic bacteria affiliated with desulfotomaculum cluster I are widely distributed in methanogenic environments. <i>Applied and Environmental Microbiology</i> , 2006 , 72, 2080-91	4.8	147
228	Cultivation-independent, semiautomatic determination of absolute bacterial cell numbers in environmental samples by fluorescence in situ hybridization. <i>Applied and Environmental Microbiology</i> , 2001 , 67, 5810-8	4.8	147
227	Genomic encyclopedia of bacteria and archaea: sequencing a myriad of type strains. <i>PLoS Biology</i> , 2014 , 12, e1001920	9.7	146
226	Linking microbial community structure with function: fluorescence in situ hybridization-microautoradiography and isotope arrays. <i>Current Opinion in Biotechnology</i> , 2006 , 17, 83-91	11.4	146
225	Anaerobic ammonium oxidation by marine and freshwater planctomycete-like bacteria. <i>Applied Microbiology and Biotechnology</i> , 2003 , 63, 107-14	5.7	143
224	Crenarchaeol dominates the membrane lipids of Candidatus Nitrososphaera gargensis, a thermophilic group I.1b Archaeon. <i>ISME Journal</i> , 2010 , 4, 542-52	11.9	136
223	ATP/ADP translocases: a common feature of obligate intracellular amoebal symbionts related to Chlamydiae and Rickettsiae. <i>Journal of Bacteriology</i> , 2004 , 186, 683-91	3.5	135
222	Lateral gene transfer of dissimilatory (bi)sulfite reductase revisited. <i>Journal of Bacteriology</i> , 2005 , 187, 2203-8	3.5	132
221	Biodegradation of synthetic polymers in soils: Tracking carbon into CO and microbial biomass. <i>Science Advances</i> , 2018 , 4, eaas9024	14.3	130
220	Characterization of Bacterial Communities from Activated Sludge: Culture-Dependent Numerical Identification Versus In Situ Identification Using Group- and Genus-Specific rRNA-Targeted Oligonucleotide Probes. <i>Microbial Ecology</i> , 1996 , 32, 101-21	4.4	130
219	In situ detection of novel bacterial endosymbionts of Acanthamoeba spp. phylogenetically related to members of the order Rickettsiales. <i>Applied and Environmental Microbiology</i> , 1999 , 65, 206-12	4.8	128
218	Bacterial endosymbionts of free-living amoebae. <i>Journal of Eukaryotic Microbiology</i> , 2004 , 51, 509-14	3.6	126
217	Single cell stable isotope probing in microbiology using Raman microspectroscopy. <i>Current Opinion in Biotechnology</i> , 2016 , 41, 34-42	11.4	126
216	Fluorescence in situ hybridization shows spatial distribution of as yet uncultured treponemes in biopsies from digital dermatitis lesions. <i>Microbiology (United Kingdom)</i> , 1998 , 144 (Pt 9), 2459-2467	2.9	123
215	Neochlamydia hartmannellae gen. nov., sp. nov. (Parachlamydiaceae), an endoparasite of the amoeba Hartmannella vermiformis. <i>Microbiology (United Kingdom)</i> , 2000 , 146 (Pt 5), 1231-1239	2.9	123
214	Towards a nondestructive chemical characterization of biofilm matrix by Raman microscopy. <i>Analytical and Bioanalytical Chemistry</i> , 2009 , 393, 197-206	4.4	122
213	Longitudinal study of murine microbiota activity and interactions with the host during acute inflammation and recovery. <i>ISME Journal</i> , 2014 , 8, 1101-14	11.9	121
212	Double labeling of oligonucleotide probes for fluorescence in situ hybridization (DOPE-FISH) improves signal intensity and increases rRNA accessibility. <i>Applied and Environmental Microbiology</i> , 2010 , 76, 922-6	4.8	121

211	Structure and activity of multiple nitrifying bacterial populations co-existing in a biofilm. <i>Environmental Microbiology</i> , 2003 , 5, 355-69	5.2	121
210	Cultivation and characterization of <i>Candidatus Nitrosocosmicus exaquare</i> , an ammonia-oxidizing archaeon from a municipal wastewater treatment system. <i>ISME Journal</i> , 2017 , 11, 1142-1157	11.9	119
209	Phylogenetic diversity among geographically dispersed Chlamydiales endosymbionts recovered from clinical and environmental isolates of <i>Acanthamoeba</i> spp. <i>Applied and Environmental Microbiology</i> , 2000 , 66, 2613-9	4.8	119
208	Community analysis of ammonia and nitrite oxidizers during start-up of nitrification reactors. <i>Applied and Environmental Microbiology</i> , 2003 , 69, 3213-22	4.8	116
207	The genome of the amoeba symbiont " <i>Candidatus Amoebophilus asiaticus</i> " reveals common mechanisms for host cell interaction among amoeba-associated bacteria. <i>Journal of Bacteriology</i> , 2010 , 192, 1045-57	3.5	113
206	Functionally relevant diversity of closely related <i>Nitrospira</i> in activated sludge. <i>ISME Journal</i> , 2015 , 9, 643-55	11.9	112
205	Reverse dissimilatory sulfite reductase as phylogenetic marker for a subgroup of sulfur-oxidizing prokaryotes. <i>Environmental Microbiology</i> , 2009 , 11, 289-99	5.2	111
204	Selective enrichment and molecular characterization of a previously uncultured <i>Nitrospira</i> -like bacterium from activated sludge. <i>Environmental Microbiology</i> , 2006 , 8, 405-15	5.2	111
203	Automated confocal laser scanning microscopy and semiautomated image processing for analysis of biofilms. <i>Applied and Environmental Microbiology</i> , 1998 , 64, 4115-27	4.8	111
202	On the occurrence of anoxic microniches, denitrification, and sulfate reduction in aerated activated sludge. <i>Applied and Environmental Microbiology</i> , 1999 , 65, 4189-96	4.8	110
201	The Lithoautotrophic Ammonia-Oxidizing Bacteria 2006 , 778-811		107
200	An automated Raman-based platform for the sorting of live cells by functional properties. <i>Nature Microbiology</i> , 2019 , 4, 1035-1048	26.6	104
199	Quantification of target molecules needed to detect microorganisms by fluorescence in situ hybridization (FISH) and catalyzed reporter deposition-FISH. <i>Applied and Environmental Microbiology</i> , 2008 , 74, 5068-77	4.8	104
198	Phylogenetic analysis of and oligonucleotide probe development for eikelboom type 021N filamentous bacteria isolated from bulking activated sludge. <i>Applied and Environmental Microbiology</i> , 2000 , 66, 5043-52	4.8	104
197	A vista for microbial ecology and environmental biotechnology. <i>Environmental Science & Technology</i> , 2006 , 40, 1096-103	10.3	103
196	Filamentous "Epsilonproteobacteria" dominate microbial mats from sulfidic cave springs. <i>Applied and Environmental Microbiology</i> , 2003 , 69, 5503-11	4.8	103
195	Diversity and mode of transmission of ammonia-oxidizing archaea in marine sponges. <i>Environmental Microbiology</i> , 2008 , 10, 1087-94	5.2	102
194	Monitoring the community structure of wastewater treatment plants: a comparison of old and new techniques. <i>FEMS Microbiology Ecology</i> , 1998 , 25, 205-215	4.3	100

193	Novel Nitrospira-like bacteria as dominant nitrite-oxidizers in biofilms from wastewater treatment plants: diversity and in situ physiology. <i>Water Science and Technology</i> , 2000 , 41, 85-90	2.2	100
192	Growth of nitrite-oxidizing bacteria by aerobic hydrogen oxidation. <i>Science</i> , 2014 , 345, 1052-4	33.3	99
191	In situ detection of a virulence factor mRNA and 16S rRNA in <i>Listeria monocytogenes</i> . <i>FEMS Microbiology Letters</i> , 1998 , 160, 159-68	2.9	98
190	Diversity of sulfate-reducing bacteria from an extreme hypersaline sediment, Great Salt Lake (Utah). <i>FEMS Microbiology Ecology</i> , 2007 , 60, 287-98	4.3	97
189	The genus <i>Caedibacter</i> comprises endosymbionts of <i>Paramecium</i> spp. related to the Rickettsiales (Alphaproteobacteria) and to <i>Francisella tularensis</i> (Gammaproteobacteria). <i>Applied and Environmental Microbiology</i> , 2002 , 68, 6043-50	4.8	96
188	Effect of long-term idle periods on the performance of sequencing batch reactors. <i>Water Science and Technology</i> , 2000 , 41, 105-113	2.2	96
187	Evolutionary history of the genus <i>Listeria</i> and its virulence genes. <i>Systematic and Applied Microbiology</i> , 2005 , 28, 1-18	4.2	95
186	The abundance of <i>Zoogloea ramigera</i> in sewage treatment plants. <i>Applied and Environmental Microbiology</i> , 1995 , 61, 702-7	4.8	95
185	Nitrotoga-like bacteria are previously unrecognized key nitrite oxidizers in full-scale wastewater treatment plants. <i>ISME Journal</i> , 2015 , 9, 708-20	11.9	93
184	Various bacterial pathogens and symbionts infect the amoeba <i>Dictyostelium discoideum</i> . <i>International Journal of Medical Microbiology</i> , 2002 , 291, 615-24	3.7	89
183	Related assemblages of sulphate-reducing bacteria associated with ultradeep gold mines of South Africa and deep basalt aquifers of Washington State. <i>Environmental Microbiology</i> , 2003 , 5, 267-77	5.2	88
182	<i>Crenothrix</i> are major methane consumers in stratified lakes. <i>ISME Journal</i> , 2017 , 11, 2124-2140	11.9	87
181	Improved 16S rRNA-targeted probe set for analysis of sulfate-reducing bacteria by fluorescence in situ hybridization. <i>Journal of Microbiological Methods</i> , 2007 , 69, 523-8	2.8	87
180	Nitrification in sequencing biofilm batch reactors: lessons from molecular approaches. <i>Water Science and Technology</i> , 2001 , 43, 9-18	2.2	87
179	Biology of a widespread uncultivated archaeon that contributes to carbon fixation in the subsurface. <i>Nature Communications</i> , 2014 , 5, 5497	17.4	86
178	Environmental genomics reveals a functional chlorite dismutase in the nitrite-oxidizing bacterium <i>Candidatus Nitrospira defluvii</i> . <i>Environmental Microbiology</i> , 2008 , 10, 3043-56	5.2	86
177	Unravelling microbial communities with DNA-microarrays: challenges and future directions. <i>Microbial Ecology</i> , 2007 , 53, 498-506	4.4	86
176	Abundance and phylogenetic affiliation of iron reducers in activated sludge as assessed by fluorescence in situ hybridization and microautoradiography. <i>Applied and Environmental Microbiology</i> , 2002 , 68, 4629-36	4.8	86

175	A candidate NAD ⁺ transporter in an intracellular bacterial symbiont related to Chlamydiae. <i>Nature</i> , 2004 , 432, 622-5	50.4	85
174	<i>Ottowia thiooxydans</i> gen. nov., sp. nov., a novel facultatively anaerobic, N ₂ O-producing bacterium isolated from activated sludge, and transfer of <i>Aquaspirillum gracile</i> to <i>Hylemonella gracilis</i> gen. nov., comb. nov. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 2004 , 54, 99-106	2.2	84
173	Monitoring microbial diversity and natural product profiles of the sponge <i>Aplysina cavernicola</i> following transplantation. <i>Marine Biology</i> , 2003 , 142, 685-692	2.5	84
172	Characterization of activated sludge flocs by confocal laser scanning microscopy and image analysis. <i>Water Research</i> , 2003 , 37, 2043-52	12.5	82
171	Back to the Future of Soil Metagenomics. <i>Frontiers in Microbiology</i> , 2016 , 7, 73	5.7	82
170	Raman microspectroscopy reveals long-term extracellular activity of Chlamydiae. <i>Molecular Microbiology</i> , 2010 , 77, 687-700	4.1	80
169	Population structure of microbial communities associated with two deep, anaerobic, alkaline aquifers. <i>Applied and Environmental Microbiology</i> , 1997 , 63, 1498-504	4.8	78
168	<i>Nitrospira</i> . <i>Trends in Microbiology</i> , 2018 , 26, 462-463	12.4	77
167	Diversity of bacterial endosymbionts of environmental acanthamoeba isolates. <i>Applied and Environmental Microbiology</i> , 2008 , 74, 5822-31	4.8	77
166	Improved nitrogen removal by application of new nitrogen-cycle bacteria. <i>Reviews in Environmental Science and Biotechnology</i> , 2002 , 1, 51-63	13.9	77
165	The anammox case—a new experimental manifesto for microbiological eco-physiology. <i>Antonie Van Leeuwenhoek</i> , 2002 , 81, 693-702	2.1	77
164	<i>Candidatus Protochlamydia amoebophila</i> —an endosymbiont of <i>Acanthamoeba</i> spp. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 2005 , 55, 1863-1866	2.2	77
163	Members of the Cytophaga-Flavobacterium-Bacteroides phylum as intracellular bacteria of acanthamoebae: proposal of <i>Candidatus Amoebophilus asiaticus</i> . <i>Environmental Microbiology</i> , 2001 , 3, 440-9	5.2	76
162	Widespread soil bacterium that oxidizes atmospheric methane. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 8515-8524	11.5	75
161	Label-free in situ SERS imaging of biofilms. <i>Journal of Physical Chemistry B</i> , 2010 , 114, 10184-94	3.4	75
160	In situ analysis of microbial consortia in activated sludge using fluorescently labelled, rRNA-targeted oligonucleotide probes and confocal scanning laser microscopy. <i>Journal of Microscopy</i> , 1994 , 176, 181-7	1.9	75
159	Isotope array analysis of Rhodocyclales uncovers functional redundancy and versatility in an activated sludge. <i>ISME Journal</i> , 2009 , 3, 1349-64	11.9	74
158	Functional marker genes for identification of sulfate-reducing prokaryotes. <i>Methods in Enzymology</i> , 2005 , 397, 469-89	1.7	74

157	Abiotic Conversion of Extracellular NHOH Contributes to NO Emission during Ammonia Oxidation. <i>Environmental Science & Technology</i> , 2017 , 51, 13122-13132	10.3	73
156	Quantification of uncultured microorganisms by fluorescence microscopy and digital image analysis. <i>Applied Microbiology and Biotechnology</i> , 2007 , 75, 237-48	5.7	73
155	Advancements in the application of NanoSIMS and Raman microspectroscopy to investigate the activity of microbial cells in soils. <i>FEMS Microbiology Ecology</i> , 2015 , 91,	4.3	72
154	New trends in fluorescence in situ hybridization for identification and functional analyses of microbes. <i>Current Opinion in Biotechnology</i> , 2012 , 23, 96-102	11.4	72
153	NanoSIMS combined with fluorescence microscopy as a tool for subcellular imaging of isotopically labeled platinum-based anticancer drugs. <i>Chemical Science</i> , 2014 , 5, 3135	9.4	71
152	In situ identification of nocardioform actinomycetes in activated sludge using fluorescent rRNA-targeted oligonucleotide probes. <i>Microbiology (United Kingdom)</i> , 1998 , 144 (Pt 1), 249-259	2.9	70
151	Enrichment and genome sequence of the group I.1a ammonia-oxidizing Archaeon "Ca. Nitrosotenuis uzonensis" representing a clade globally distributed in thermal habitats. <i>PLoS ONE</i> , 2013 , 8, e80835	3.7	68
150	Structural and functional characterisation of the chlorite dismutase from the nitrite-oxidizing bacterium "Candidatus Nitrospira defluvii": identification of a catalytically important amino acid residue. <i>Journal of Structural Biology</i> , 2010 , 172, 331-42	3.4	68
149	Interactions of nitrifying bacteria and heterotrophs: identification of a Micavibrio-like putative predator of Nitrospira spp. <i>Applied and Environmental Microbiology</i> , 2013 , 79, 2027-37	4.8	67
148	Intestinal Microbiota Signatures Associated with Inflammation History in Mice Experiencing Recurring Colitis. <i>Frontiers in Microbiology</i> , 2015 , 6, 1408	5.7	67
147	Unexpected diversity of chlorite dismutases: a catalytically efficient dimeric enzyme from Nitrobacter winogradskyi. <i>Journal of Bacteriology</i> , 2011 , 193, 2408-17	3.5	66
146	Chlamydia-like bacteria in respiratory samples of community-acquired pneumonia patients. <i>FEMS Microbiology Letters</i> , 2008 , 281, 198-202	2.9	65
145	Roadmap for naming uncultivated Archaea and Bacteria. <i>Nature Microbiology</i> , 2020 , 5, 987-994	26.6	64
144	Tapping the nucleotide pool of the host: novel nucleotide carrier proteins of Protochlamydia amoebophila. <i>Molecular Microbiology</i> , 2006 , 60, 1534-45	4.1	64
143	Detection and differentiation of chlamydiae by fluorescence in situ hybridization. <i>Applied and Environmental Microbiology</i> , 2002 , 68, 4081-9	4.8	64
142	Grazing of a common species of soil protozoa (Acanthamoeba castellanii) affects rhizosphere bacterial community composition and root architecture of rice (Oryza sativa L.). <i>Soil Biology and Biochemistry</i> , 2006 , 38, 1665-1672	7.5	63
141	Recovery of an environmental Chlamydia strain from activated sludge by co-cultivation with Acanthamoeba sp. <i>Microbiology (United Kingdom)</i> , 2005 , 151, 301-309	2.9	63
140	Low yield and abiotic origin of NO formed by the complete nitrifier Nitrospira inopinata. <i>Nature Communications</i> , 2019 , 10, 1836	17.4	62

139	Resolving the individual contribution of key microbial populations to enhanced biological phosphorus removal with Raman-FISH. <i>ISME Journal</i> , 2019 , 13, 1933-1946	11.9	62
138	Long-distance electron transport in individual, living cable bacteria. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 5786-5791	11.5	62
137	On the evolution and physiology of cable bacteria. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 19116-19125	11.5	61
136	"Candidatus Thiobios zoothamnicoli," an ectosymbiotic bacterium covering the giant marine ciliate <i>Zoothamnium niveum</i> . <i>Applied and Environmental Microbiology</i> , 2006 , 72, 2014-21	4.8	61
135	Malikia granosa gen. nov., sp. nov., a novel polyhydroxyalkanoate- and polyphosphate-accumulating bacterium isolated from activated sludge, and reclassification of <i>Pseudomonas spinosa</i> as <i>Malikia spinosa</i> comb. nov. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 2005 , 55, 621-629	2.2	60
134	Isolation and properties of obligately chemolithoautotrophic and extremely alkali-tolerant ammonia-oxidizing bacteria from Mongolian soda lakes. <i>Archives of Microbiology</i> , 2001 , 176, 170-7	3	60
133	Evidence for additional genus-level diversity of Chlamydiales in the environment. <i>FEMS Microbiology Letters</i> , 2001 , 204, 71-4	2.9	59
132	Characterization of the First " Nitrotoga" Isolate Reveals Metabolic Versatility and Separate Evolution of Widespread Nitrite-Oxidizing Bacteria. <i>MBio</i> , 2018 , 9,	7.8	58
131	Ammonia-oxidising archaea living at low pH: Insights from comparative genomics. <i>Environmental Microbiology</i> , 2017 , 19, 4939-4952	5.2	57
130	Chloroflexi bacteria are more diverse, abundant, and similar in high than in low microbial abundance sponges. <i>FEMS Microbiology Ecology</i> , 2011 , 78, 497-510	4.3	57
129	Paracatenula, an ancient symbiosis between thiotrophic Alphaproteobacteria and catenulid flatworms. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, 12078-83	11.5	57
128	Oxidation of Inorganic Nitrogen Compounds as an Energy Source 2006 , 457-495		57
127	Rational design of a microbial consortium of mucosal sugar utilizers reduces <i>Clostridiodes difficile</i> colonization. <i>Nature Communications</i> , 2020 , 11, 5104	17.4	57
126	Capturing the genetic makeup of the active microbiome in situ. <i>ISME Journal</i> , 2017 , 11, 1949-1963	11.9	55
125	Cyanate and urea are substrates for nitrification by Thaumarchaeota in the marine environment. <i>Nature Microbiology</i> , 2019 , 4, 234-243	26.6	55
124	Origins and diversification of sulfate-respiring microorganisms. <i>Antonie Van Leeuwenhoek</i> , 2002 , 81, 189-95	2.1	54
123	Substrate uptake in extremely halophilic microbial communities revealed by microautoradiography and fluorescence in situ hybridization. <i>Extremophiles</i> , 2003 , 7, 409-13	3	53
122	Modern scientific methods and their potential in wastewater science and technology. <i>Water Research</i> , 2002 , 36, 370-93	12.5	53

121	Revisiting N ₂ fixation in Guerrero Negro intertidal microbial mats with a functional single-cell approach. <i>ISME Journal</i> , 2015 , 9, 485-96	11.9	52
120	Cultivation and Genomic Analysis of "Nitrosocaldus islandicus," an Obligately Thermophilic, Ammonia-Oxidizing Thaumarchaeon from a Hot Spring Biofilm in Graendalur Valley, Iceland. <i>Frontiers in Microbiology</i> , 2018 , 9, 193	5.7	49
119	Microbial nitrogen limitation in the mammalian large intestine. <i>Nature Microbiology</i> , 2018 , 3, 1441-1450	26.6	48
118	Obligate bacterial endosymbionts of <i>Acanthamoeba</i> spp. related to the beta-Proteobacteria: proposal of <i>Candidatus Procabacter acanthamoebae</i> gen. nov., sp. nov. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 2002 , 52, 599-605	2.2	47
117	Biotransformation of Two Pharmaceuticals by the Ammonia-Oxidizing Archaeon <i>Nitrososphaera gargensis</i> . <i>Environmental Science & Technology</i> , 2016 , 50, 4682-92	10.3	47
116	Rapid Transfer of Plant Photosynthates to Soil Bacteria via Ectomycorrhizal Hyphae and Its Interaction With Nitrogen Availability. <i>Frontiers in Microbiology</i> , 2019 , 10, 168	5.7	46
115	Complete genome sequences of <i>Desulfosporosinus orientis</i> DSM765T, <i>Desulfosporosinus youngiae</i> DSM17734T, <i>Desulfosporosinus meridiei</i> DSM13257T, and <i>Desulfosporosinus acidiphilus</i> DSM22704T. <i>Journal of Bacteriology</i> , 2012 , 194, 6300-1	3.5	46
114	Oligonucleotide microarray for identification of <i>Enterococcus</i> species. <i>FEMS Microbiology Letters</i> , 2005 , 246, 133-42	2.9	45
113	A nanoscale secondary ion mass spectrometry study of dinoflagellate functional diversity in reef-building corals. <i>Environmental Microbiology</i> , 2015 , 17, 3570-80	5.2	44
112	Successful and unsuccessful bioaugmentation experiments monitored by fluorescent in situ hybridization. <i>Water Science and Technology</i> , 2000 , 41, 61-68	2.2	44
111	Combining fluorescent in situ hybridization (fish) with cultivation and mathematical modeling to study population structure and function of ammonia-oxidizing bacteria in activated sludge. <i>Water Science and Technology</i> , 1998 , 37, 441-449	2.2	44
110	Cometabolic biotransformation and microbial-mediated abiotic transformation of sulfonamides by three ammonia oxidizers. <i>Water Research</i> , 2019 , 159, 444-453	12.5	42
109	Nucleic acid-based, cultivation-independent detection of <i>Listeria</i> spp and genotypes of <i>L. monocytogenes</i> . <i>FEMS Immunology and Medical Microbiology</i> , 2003 , 35, 215-25		41
108	An <i>Acanthamoeba</i> sp. containing two phylogenetically different bacterial endosymbionts. <i>Environmental Microbiology</i> , 2007 , 9, 1604-9	5.2	40
107	Endosymbionts escape dead hydrothermal vent tubeworms to enrich the free-living population. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 11300-5	11.5	39
106	Raman microscopy and surface-enhanced Raman scattering (SERS) for in situ analysis of biofilms. <i>Journal of Biophotonics</i> , 2010 , 3, 548-56	3.1	38
105	Inhibitory effects of C ₂ to C ₁₀ 1-alkynes on ammonia oxidation in two <i>Nitrososphaera</i> species. <i>Applied and Environmental Microbiology</i> , 2015 , 81, 1942-8	4.8	36
104	Ammonia Monooxygenase-Mediated Cometabolic Biotransformation and Hydroxylamine-Mediated Abiotic Transformation of Micropollutants in an AOB/NOB Coculture. <i>Environmental Science & Technology</i> , 2018 , 52, 9196-9205	10.3	36

103	Microorganisms with novel dissimilatory (bi)sulfite reductase genes are widespread and part of the core microbiota in low-sulfate peatlands. <i>Applied and Environmental Microbiology</i> , 2011 , 77, 1231-42	4.8	35
102	A straightforward DOPE (double labeling of oligonucleotide probes)-FISH (fluorescence in situ hybridization) method for simultaneous multicolor detection of six microbial populations. <i>Applied and Environmental Microbiology</i> , 2012 , 78, 5138-42	4.8	34
101	Lawsonia intracellularis contains a gene encoding a functional rickettsia-like ATP/ADP translocase for host exploitation. <i>Journal of Bacteriology</i> , 2008 , 190, 5746-52	3.5	34
100	Ecophysiology of an uncultivated lineage of Aigarchaeota from an oxic, hot spring filamentous streamer community. <i>ISME Journal</i> , 2016 , 10, 210-24	11.9	33
99	Intestinal Epithelial Cell Tyrosine Kinase 2 Transduces IL-22 Signals To Protect from Acute Colitis. <i>Journal of Immunology</i> , 2015 , 195, 5011-24	5.3	33
98	The inhibitory effects of reject water on nitrifying populations grown at different biofilm thickness. <i>Water Research</i> , 2016 , 104, 292-302	12.5	33
97	Deammonification in biofilm systems: population structure and function. <i>Water Science and Technology</i> , 2002 , 46, 223-231	2.2	33
96	Archaeal nitrification is constrained by copper complexation with organic matter in municipal wastewater treatment plants. <i>ISME Journal</i> , 2020 , 14, 335-346	11.9	33
95	Expansion of Thaumarchaeota habitat range is correlated with horizontal transfer of ATPase operons. <i>ISME Journal</i> , 2019 , 13, 3067-3079	11.9	32
94	Multi-scale imaging of anticancer platinum(IV) compounds in murine tumor and kidney. <i>Chemical Science</i> , 2016 , 7, 3052-3061	9.4	32
93	Specific Micropollutant Biotransformation Pattern by the Comammox Bacterium. <i>Environmental Science & Technology</i> , 2019 , 53, 8695-8705	10.3	31
92	Phylogeny and in situ identification of a morphologically conspicuous bacterium, <i>Candidatus Magnospira bakii</i> , present at very low frequency in activated sludge. <i>Environmental Microbiology</i> , 1999 , 1, 125-35	5.2	30
91	Single cell analyses reveal contrasting life strategies of the two main nitrifiers in the ocean. <i>Nature Communications</i> , 2020 , 11, 767	17.4	29
90	Surface-enhanced Raman spectroscopy of microorganisms: limitations and applicability on the single-cell level. <i>Analyst, The</i> , 2019 , 144, 943-953	5	28
89	Inclusion membrane proteins of <i>Protochlamydia amoebophila</i> UWE25 reveal a conserved mechanism for host cell interaction among the Chlamydiae. <i>Journal of Bacteriology</i> , 2010 , 192, 5093-1023.5	3.5	27
88	Population dynamics in wastewater treatment plants with enhanced biological phosphorus removal operated with and without nitrogen removal. <i>Water Science and Technology</i> , 2002 , 46, 163-170	2.2	27
87	Nitrification performance and nitrifier community composition of a chemostat and a membrane-assisted bioreactor for the nitrification of sludge reject water. <i>Bioprocess and Biosystems Engineering</i> , 2001 , 24, 203-210	3.7	27
86	Nitrogen loss in a nitrifying biofilm system. <i>Water Science and Technology</i> , 1999 , 39, 13-21	2.2	27

85	Comprehensive in silico prediction and analysis of chlamydial outer membrane proteins reflects evolution and life style of the Chlamydiae. <i>BMC Genomics</i> , 2009 , 10, 634	4.5	26
84	Intracellular vesicles as reproduction elements in cell wall-deficient L-form bacteria. <i>PLoS ONE</i> , 2012 , 7, e38514	3.7	25
83	Ecophysiology and niche differentiation of Nitrospira-like bacteria, the key nitrite oxidizers in wastewater treatment plants. <i>Water Science and Technology</i> , 2006 , 54, 21-7	2.2	25
82	NanoSIMS and tissue autoradiography reveal symbiont carbon fixation and organic carbon transfer to giant ciliate host. <i>ISME Journal</i> , 2018 , 12, 714-727	11.9	24
81	Characterization of a thaumarchaeal symbiont that drives incomplete nitrification in the tropical sponge lanthella basta. <i>Environmental Microbiology</i> , 2019 , 21, 3831-3854	5.2	23
80	Type I interferons have opposing effects during the emergence and recovery phases of colitis. <i>European Journal of Immunology</i> , 2014 , 44, 2749-60	6.1	23
79	Probing Activated Sludge with Fluorescently Labeled rRNA Targeted Oligonucleotides. <i>Water Science and Technology</i> , 1994 , 29, 15-23	2.2	23
78	Nitrification in sequencing biofilm batch reactors: lessons from molecular approaches. <i>Water Science and Technology</i> , 2001 , 43, 9-18	2.2	22
77	Confocal Scanning Laser Microscopy as a Tool for the Determination of 3D Floc Structure. <i>Journal of Colloid and Interface Science</i> , 1999 , 220, 465-467	9.3	21
76	Sulfate is transported at significant rates through the symbiosome membrane and is crucial for nitrogenase biosynthesis. <i>Plant, Cell and Environment</i> , 2019 , 42, 1180-1189	8.4	20
75	Indications for enzymatic denitrification to NO at low pH in an ammonia-oxidizing archaeon. <i>ISME Journal</i> , 2019 , 13, 2633-2638	11.9	18
74	Confocal laser scanning microscopy as a tool to validate the efficiency of membrane cleaning procedures to remove biofilms. <i>Separation and Purification Technology</i> , 2014 , 122, 402-411	8.3	18
73	In situ techniques and digital image analysis methods for quantifying spatial localization patterns of nitrifiers and other microorganisms in biofilm and flocs. <i>Methods in Enzymology</i> , 2011 , 496, 185-215	1.7	18
72	Bacteriocyte-associated gammaproteobacterial symbionts of the Adelges nordmannianae/piceae complex (Hemiptera: Adelgidae). <i>ISME Journal</i> , 2012 , 6, 384-96	11.9	18
71	Evaluating heterotrophic growth in a nitrifying biofilm reactor using fluorescence in situ hybridization and mathematical modeling. <i>Water Science and Technology</i> , 2005 , 52, 135-141	2.2	17
70	Exploring the upper pH limits of nitrite oxidation: diversity, ecophysiology, and adaptive traits of haloalkalitolerant Nitrospira. <i>ISME Journal</i> , 2020 , 14, 2967-2979	11.9	17
69	Interaction with Ribosomal Proteins Accompanies Stress Induction of the Anticancer Metallo drug BOLD-100/KP1339 in the Endoplasmic Reticulum. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 5063-5068	16.4	17
68	Diversity, Environmental Genomics, and Ecophysiology of Nitrite-Oxidizing Bacteria 2014 , 295-322		16

67	Systematic spatial bias in DNA microarray hybridization is caused by probe spot position-dependent variability in lateral diffusion. <i>PLoS ONE</i> , 2011 , 6, e23727	3.7	16
66	High genetic similarity between two geographically distinct strains of the sulfur-oxidizing symbiont <i>Candidatus Thiobios zoothamnicoli</i> . <i>FEMS Microbiology Ecology</i> , 2009 , 67, 229-41	4.3	16
65	Variability of type 021N in activated sludge as determined by in situ substrate uptake pattern and in situ hybridization with fluorescent rRNA targeted probes. <i>Water Science and Technology</i> , 1998 , 37, 423-430	2.2	15
64	Evolution and Ecology of Microbes Dissimilating Sulfur Compounds: Insights from Siroheme Sulfite Reductases 2008 , 46-59		15
63	Ammonia-oxidizing archaea possess a wide range of cellular ammonia affinities. <i>ISME Journal</i> , 2021 ,	11.9	15
62	Use of microautoradiography and fluorescent in situ hybridization for characterization of microbial activity in activated sludge. <i>Water Science and Technology</i> , 1999 , 39, 1-9	2.2	14
61	Composition and activity of nitrifier communities in soil are unresponsive to elevated temperature and CO ₂ , but strongly affected by drought. <i>ISME Journal</i> , 2020 , 14, 3038-3053	11.9	14
60	Prevalence of RT-qPCR-detected SARS-CoV-2 infection at schools: First results from the Austrian School-SARS-CoV-2 prospective cohort study. <i>Lancet Regional Health - Europe</i> , 2021 , 5, 100086		14
59	Membrane Lipid Composition of the Moderately Thermophilic Ammonia-Oxidizing Archaeon "Nitrosotenuis uzonensis" at Different Growth Temperatures. <i>Applied and Environmental Microbiology</i> , 2019 , 85,	4.8	13
58	Optofluidic Raman-activated cell sorting for targeted genome retrieval or cultivation of microbial cells with specific functions. <i>Nature Protocols</i> , 2021 , 16, 634-676	18.8	13
57	Proteomic analysis reveals a virtually complete set of proteins for translation and energy generation in elementary bodies of the amoeba symbiont <i>Protochlamydia amoebophila</i> . <i>Proteomics</i> , 2011 , 11, 1868-92	4.8	12
56	Proteomic analysis of the outer membrane of <i>Protochlamydia amoebophila</i> elementary bodies. <i>Proteomics</i> , 2010 , 10, 4363-76	4.8	12
55	Oxidation of Inorganic Nitrogen Compounds as an Energy Source 2013 , 83-118		11
54	Molecular strategies for studies of natural populations of sulphate-reducing microorganisms 2004 , 39-116		11
53	Chlamydial endocytobionts of free-living amoebae differentially affect the growth rate of their hosts. <i>European Journal of Protistology</i> , 2004 , 40, 57-60	3.6	11
52	Microbiology: Conductive consortia. <i>Nature</i> , 2015 , 526, 513-4	50.4	10
51	Transcriptomic Response of <i>Nitrosomonas europaea</i> Transitioned from Ammonia- to Oxygen-Limited Steady-State Growth. <i>MSystems</i> , 2020 , 5,	7.6	10
50	Modeling formamide denaturation of probe-target hybrids for improved microarray probe design in microbial diagnostics. <i>PLoS ONE</i> , 2012 , 7, e43862	3.7	10

49	Machine-assisted cultivation and analysis of biofilms. <i>Scientific Reports</i> , 2019 , 9, 8933	4.9	9
48	Depletion of unwanted nucleic acid templates by selective cleavage: LNAzymes, catalytically active oligonucleotides containing locked nucleic acids, open a new window for detecting rare microbial community members. <i>Applied and Environmental Microbiology</i> , 2013 , 79, 1534-44	4.8	9
47	Raman-based sorting of microbial cells to link functions to their genes. <i>Microbial Cell</i> , 2020 , 7, 62-65	3.9	9
46	Raman microspectroscopy for microbiology. <i>Nature Reviews Methods Primers</i> , 2021 , 1,		9
45	A refined set of rRNA-targeted oligonucleotide probes for in situ detection and quantification of ammonia-oxidizing bacteria. <i>Water Research</i> , 2020 , 186, 116372	12.5	9
44	Use of Microautoradiography to Study in situ Physiology of Bacteria in Biofilms. <i>Reviews in Environmental Science and Biotechnology</i> , 2003 , 2, 261-268	13.9	8
43	QUANTIFICATION OF BIOFILMS IN MULTI-SPECTRAL DIGITAL VOLUMES FROM CONFOCAL LASER-SCANNING MICROSCOPES. <i>Image Analysis and Stereology</i> , 2000 , 19, 151	1	8
42	Genomic and kinetic analysis of novel Nitrospinae enriched by cell sorting. <i>ISME Journal</i> , 2021 , 15, 732-745.	9	8
41	Albumin-targeting of an oxaliplatin-releasing platinum(IV) prodrug results in pronounced anticancer activity due to endocytotic drug uptake. <i>Chemical Science</i> , 2021 , 12, 12587-12599	9.4	8
40	Functional Expression of the Alkane-Inducible Monooxygenase System of the Yeast: <i>Candida tropicalis</i> IN <i>Saccharomyces cerevisiae</i> . <i>Biocatalysis</i> , 1990 , 4, 19-28		7
39	Draft Genome Sequence of 26-4b1, an Acidotolerant Peatland Alphaproteobacterium Potentially Involved in Sulfur Cycling. <i>Genome Announcements</i> , 2018 , 6,		6
38	Flow-through stable isotope probing (Flow-SIP) minimizes cross-feeding in complex microbial communities. <i>ISME Journal</i> , 2021 , 15, 348-353	11.9	6
37	Crystal ball. The community level: physiology and interactions of prokaryotes in the wilderness. <i>Environmental Microbiology</i> , 2005 , 7, 483-5	5.2	4
36	Assessment of metabolic potential of biofilm-associated bacteria. <i>Methods in Enzymology</i> , 2001 , 336, 265-76	1.7	4
35	Quantification of bacterial populations in complex ecosystems using fluorescent in situ hybridization, confocal laser scanning microscopy and image analysis. <i>Genetics Selection Evolution</i> , 2001 , 33, S307	4.9	4
34	Anaerobic Sulfur Oxidation Underlies Adaptation of a Chemosynthetic Symbiont to Oxic-Anoxic Interfaces. <i>MSystems</i> , 2021 , 6, e0118620	7.6	4
33	Novel <i>Alcaligenes ammonioxydans</i> sp. nov. from wastewater treatment sludge oxidizes ammonia to N ₂ with a previously unknown pathway. <i>Environmental Microbiology</i> , 2021 , 23, 6965-6980	5.2	4
32	Deammonification in biofilm systems: population structure and function. <i>Water Science and Technology</i> , 2002 , 46, 223-31	2.2	4

31	Die Anwendung von in situ-Hybridisierungssonden zur Aufklärung von Struktur und Dynamik der mikrobiellen Biofilmen in der Abwasserreinigung 1996 , 93-110		3
30	Changes in Plasminogen Activator Activity and Plasmin Inhibition in the Pig During Experimental Hypovolaemia. <i>Thrombosis and Haemostasis</i> , 1985 , 53, 130-133	7	3
29	Applications of nucleic acid microarrays in soil microbial ecology. 2006 , 18-41		3
28	Machine-assisted cultivation and analysis of biofilms		3
27	Ammonia-oxidizing archaea possess a wide range of cellular ammonia affinities		3
26	Activated Sludge and Biofilms: Molecular Techniques for Determining Community Composition		3
25	Fish-Microautoradiography and Isotope Arrays for Monitoring the Ecophysiology of Microbes Within Their Natural Environment 2014 , 305-316		2
24	Exploring the upper pH limits of nitrite oxidation: diversity, ecophysiology, and adaptive traits of haloalkalitolerant Nitrospira		2
23	Genomic and kinetic analysis of novel Nitrospinae enriched by cell sorting		2
22	Nano-scale imaging of dual stable isotope labeled oxaliplatin in human colon cancer cells reveals the nucleolus as a putative node for therapeutic effect. <i>Nanoscale Advances</i> , 2021 , 3, 249-262	5.1	2
21	Cyanate is a low abundance but actively cycled nitrogen compound in soil. <i>Communications Earth & Environment</i> , 2021 , 2,	6.1	2
20	Recently photoassimilated carbon and fungus-delivered nitrogen are spatially correlated in the ectomycorrhizal tissue of <i>Fagus sylvatica</i> . <i>New Phytologist</i> , 2021 , 232, 2457-2474	9.8	2
19	The novel genus, <i>Candidatus Phosphoribacter</i> , previously identified as <i>Tetrasphaera</i> , is the dominant polyphosphate accumulating lineage in EBPR wastewater treatment plants worldwide.. <i>ISME Journal</i> , 2022 ,	11.9	2
18	Bakterien, die in Acanthamoeben leben: Dasein im Verborgenen. <i>Biologie in Unserer Zeit</i> , 2001 , 31, 160-168	0.1	1
17	In Situ Detection and Identification of Bacteria Prior to Their Cultivation. <i>Bioscience and Microflora</i> , 1998 , 17, 15-22		1
16	Cultivation and genomic analysis of <i>Candidatus Nitrosocaldus islandicus</i> , a novel obligately thermophilic ammonia-oxidizing Thaumarchaeon		1
15	A novel oxidase from <i>Alcaligenes</i> sp. HO-1 oxidizes hydroxylamine to N ₂		1
14	Anaerobic sulfur oxidation underlies adaptation of a chemosynthetic symbiont to oxic-anoxic interfaces		1

13	Cyanate is a low abundant but actively cycled nitrogen compound in soil		1
12	Resolving the individual contribution of key microbial populations to enhanced biological phosphorus removal with Raman-FISH		1
11	Characterization of a thaumarchaeal symbiont that drives incomplete nitrification in the tropical spongelanthella basta		1
10	Isotopic-labelling methods for deciphering the function of uncultured micro-organisms 1-10		1
9	Genomic insights into diverse bacterial taxa that degrade extracellular DNA in marine sediments. <i>Nature Microbiology</i> , 2021 , 6, 885-898	26.6	1
8	Candidatus Nitrosotenuis 2016 , 1-9		1
7	Candidatus Nitrosotenuaceae 2016 , 1-5		1
6	Nitrogen Kinetic Isotope Effects of Nitrification by the Complete Ammonia Oxidizer Nitrospira inopinata. <i>MSphere</i> , 2021 , e0063421	5	1
5	Enrichment of phosphate-accumulating organisms (PAOs) in a microfluidic model biofilm system by mimicking a typical aerobic granular sludge feast/famine regime.. <i>Applied Microbiology and Biotechnology</i> , 2022 , 106, 1313	5:7	0
4	Die Wechselwirkung mit ribosomalen Proteinen begleitet die Stressinduktion des Wirkstoffkandidaten BOLD-100/KP1339 im endoplasmatischen Retikulum. <i>Angewandte Chemie</i> , 2021 , 133, 5121-5126	3.6	0
3	Wastewater, 2. Aerobic Biological Treatment 2019 , 1-55		
2	Einzelzellanalyse lebender Mikroorganismen. <i>BioSpektrum</i> , 2013 , 19, 631-633	0.1	
1	Innentitelbild: Die Wechselwirkung mit ribosomalen Proteinen begleitet die Stressinduktion des Wirkstoffkandidaten BOLD-100/KP1339 im endoplasmatischen Retikulum (Angew. Chem. 10/2021). <i>Angewandte Chemie</i> , 2021 , 133, 5006-5006	3.6	