## Christa Schleper

List of Publications by Year in descending order

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Version: 2024-02-01

130	18,952	68 h-index	128
papers	citations		g-index
149	149	149	14816
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	The influence of soil pH on the diversity, abundance and transcriptional activity of ammonia oxidizing archaea and bacteria. Environmental Microbiology, 2008, 10, 2966-2978.	1.8	1,104
2	Complex archaea that bridge the gap between prokaryotes and eukaryotes. Nature, 2015, 521, 173-179.	13.7	995
3	<i>Nitrososphaera viennensis</i> , an ammonia oxidizing archaeon from soil. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 8420-8425.	3.3	810
4	Novel genes for nitrite reductase and Amo-related proteins indicate a role of uncultivated mesophilic crenarchaeota in nitrogen cycling. Environmental Microbiology, 2005, 7, 1985-1995.	1.8	758
5	Simultaneous Assessment of Soil Microbial Community Structure and Function through Analysis of the Meta-Transcriptome. PLoS ONE, 2008, 3, e2527.	1.1	667
6	Pathways of Carbon Assimilation and Ammonia Oxidation Suggested by Environmental Genomic Analyses of Marine Crenarchaeota. PLoS Biology, 2006, 4, e95.	2.6	554
7	Genomic studies of uncultivated archaea. Nature Reviews Microbiology, 2005, 3, 479-488.	13.6	531
8	The Thaumarchaeota: an emerging view of their phylogeny and ecophysiology. Current Opinion in Microbiology, 2011, 14, 300-306.	2.3	511
9	Diversity and abundance of Crenarchaeota in terrestrial habitats studied by 16S RNA surveys and real time PCR. Environmental Microbiology, 2003, 5, 787-797.	1.8	431
10	Distinct gene set in two different lineages of ammonia-oxidizing archaea supports the phylum Thaumarchaeota. Trends in Microbiology, 2010, 18, 331-340.	3.5	431
11	Genomic analysis of the uncultivated marine crenarchaeote Cenarchaeum symbiosum. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 18296-18301.	3.3	420
12	Archaea in Biogeochemical Cycles. Annual Review of Microbiology, 2013, 67, 437-457.	2.9	393
13	The genome of the ammoniaâ€oxidizing <i><scp>C</scp>andidatus</i> <scp>N</scp> itrososphaera gargensis: insights into metabolic versatility and environmental adaptations. Environmental Microbiology, 2012, 14, 3122-3145.	1.8	332
14	Methylotrophic methanogenic Thermoplasmata implicated in reduced methane emissions from bovine rumen. Nature Communications, 2013, 4, 1428.	5.8	328
15	Ammonia-oxidising Crenarchaeota: important players in the nitrogen cycle?. Trends in Microbiology, 2006, 14, 207-212.	3.5	315
16	Phylotype-level 16S rRNA analysis reveals new bacterial indicators of health state in acute murine colitis. ISME Journal, 2012, 6, 2091-2106.	4.4	291
17	Complex nitrogen cycling in the sponge <i>Geodia barretti</i> . Environmental Microbiology, 2009, 11, 2228-2243.	1.8	286
18	Correlating microbial community profiles with geochemical data in highly stratified sediments from the Arctic Mid-Ocean Ridge. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E2846-55.	3.3	282

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19	Pathways and key intermediates required for obligate aerobic ammonia-dependent chemolithotrophy in bacteria and Thaumarchaeota. ISME Journal, 2016, 10, 1836-1845.	4.4	281
20	Dynamics and functional relevance of ammoniaâ€oxidizing archaea in two agricultural soils. Environmental Microbiology, 2009, 11, 446-456.	1.8	276
21	Aerobic nitrous oxide production through N-nitrosating hybrid formation in ammonia-oxidizing archaea. ISME Journal, 2014, 8, 1135-1146.	4.4	270
22	Nitrososphaera viennensis gen. nov., sp. nov., an aerobic and mesophilic, ammonia-oxidizing archaeon from soil and a member of the archaeal phylum Thaumarchaeota. International Journal of Systematic and Evolutionary Microbiology, 2014, 64, 2738-2752.	0.8	256
23	Unifying the global phylogeny and environmental distribution of ammonia-oxidising archaea based on amoA genes. Nature Communications, 2018, 9, 1517.	5.8	256
24	Ammonia-Oxidising Archaea $\hat{a}\in$ Physiology, Ecology and Evolution. Advances in Microbial Physiology, 2010, 57, 1-41.	1.0	244
25	Acidobacteria form a coherent but highly diverse group within the bacterial domain: evidence from environmental genomics. Molecular Microbiology, 2003, 50, 563-575.	1.2	231
26	Biochar Decelerates Soil Organic Nitrogen Cycling but Stimulates Soil Nitrification in a Temperate Arable Field Trial. PLoS ONE, 2014, 9, e86388.	1.1	231
27	Screening for Sulfolobales, their Plasmids and their Viruses in Icelandic Solfataras. Systematic and Applied Microbiology, 1993, 16, 609-628.	1.2	205
28	Ammonia oxidation: different niches for bacteria and archaea?. ISME Journal, 2010, 4, 1092-1094.	4.4	180
29	Proteomics and comparative genomics of <i>Nitrososphaera viennensis</i> reveal the core genome and adaptations of archaeal ammonia oxidizers. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E7937-E7946.	3.3	178
30	Longitudinal study of murine microbiota activity and interactions with the host during acute inflammation and recovery. ISME Journal, 2014, 8, 1101-1114.	4.4	174
31	Nitrification in terrestrial hot springs of Iceland and Kamchatka. FEMS Microbiology Ecology, 2008, 64, 167-174.	1.3	173
32	Responses of the terrestrial ammonia-oxidizing archaeon <i>Ca</i> . Nitrososphaera viennensis and the ammonia-oxidizing bacterium <i>Nitrosospira multiformis</i> to nitrification inhibitors. FEMS Microbiology Letters, 2013, 344, 121-129.	0.7	172
33	Complete nucleotide sequence of the virus SSV1 of the archaebacterium Sulfolobus shibatae. Virology, 1991, 185, 242-250.	1.1	166
34	Nitrification rates in Arctic soils are associated with functionally distinct populations of ammonia-oxidizing archaea. ISME Journal, 2013, 7, 1620-1631.	4.4	163
35	First insight into the genome of an uncultivated crenarchaeote from soil. Environmental Microbiology, 2002, 4, 603-611.	1.8	161
36	Viruses, plasmids and other genetic elements of thermophilic and hyperthermophilicArchaea. FEMS Microbiology Reviews, 1996, 18, 225-236.	3.9	160

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37	Physiological and genomic characterization of two novel marine thaumarchaeal strains indicates niche differentiation. ISME Journal, 2016, 10, 1051-1063.	4.4	160
38	Intact Polar and Core Glycerol Dibiphytanyl Glycerol Tetraether Lipids of Group I.1a and I.1b Thaumarchaeota in Soil. Applied and Environmental Microbiology, 2012, 78, 6866-6874.	1.4	156
39	Dibiphytanyl Ether Lipids in Nonthermophilic Crenarchaeotes. Applied and Environmental Microbiology, 1998, 64, 1133-1138.	1.4	151
40	UVâ€inducible cellular aggregation of the hyperthermophilic archaeon <i>Sulfolobus solfataricus</i> is mediated by pili formation. Molecular Microbiology, 2008, 70, 938-952.	1.2	137
41	Homologues of nitrite reductases in ammoniaâ€oxidizing archaea: diversity and genomic context. Environmental Microbiology, 2010, 12, 1075-1088.	1.8	137
42	Distinct microbial communities associated with buried soils in the Siberian tundra. ISME Journal, 2014, 8, 841-853.	4.4	137
43	Genomic Analysis Reveals Chromosomal Variation in Natural Populations of the Uncultured Psychrophilic Archaeon <i>Cenarchaeum symbiosum </i> Journal of Bacteriology, 1998, 180, 5003-5009.	1.0	137
44	Ammoniaâ€oxidizing archaea as main drivers of nitrification in coldâ€water sponges. Environmental Microbiology, 2012, 14, 909-923.	1.8	135
45	A reporter gene system for the hyperthermophilic archaeon Sulfolobus solfataricus based on a selectable and integrative shuttle vector. Molecular Microbiology, 2003, 48, 1241-1252.	1.2	132
46	Response of the Hyperthermophilic Archaeon <i>Sulfolobus solfataricus </i> to UV Damage. Journal of Bacteriology, 2007, 189, 8708-8718.	1.0	128
47	Metatranscriptomics of the marine sponge <i>Geodia barretti</i> : tackling phylogeny and function of its microbial community. Environmental Microbiology, 2012, 14, 1308-1324.	1.8	124
48	Back to the Future of Soil Metagenomics. Frontiers in Microbiology, 2016, 7, 73.	1.5	120
49	Life at extremely low pH. Nature, 1995, 375, 741-742.	13.7	117
50	Chemotaxonomic characterisation of the thaumarchaeal lipidome. Environmental Microbiology, 2017, 19, 2681-2700.	1.8	117
51	High Spontaneous Mutation Rate in the Hyperthermophilic Archaeon Sulfolobus solfataricus Is Mediated by Transposable Elements. Journal of Bacteriology, 2000, 182, 2574-2581.	1.0	116
52	UV-inducible DNA exchange in hyperthermophilic archaea mediated by type IV pili. Molecular Microbiology, 2011, 82, 807-817.	1.2	113
53	Diversity of Archaea in hypersaline environments characterized by molecular-phylogenetic and cultivation studies. Extremophiles, 2002, 6, 267-274.	0.9	110
54	Phylogenetic and genomic analysis of <i>Methanomassiliicoccales </i> in wetlands and animal intestinal tracts reveals clade-specific habitat preferences. FEMS Microbiology Ecology, 2016, 92, fiv149.	1.3	110

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55	Microbial community structure and functioning in marine sediments associated with diffuse hydrothermal venting assessed by integrated metaâ€omics. Environmental Microbiology, 2014, 16, 2699-2710.	1.8	109
56	Intestinal Microbiota Signatures Associated with Inflammation History in Mice Experiencing Recurring Colitis. Frontiers in Microbiology, 2015, 6, 1408.	1.5	106
57	Characterization of large-insert DNA libraries from soil for environmental genomic studies of Archaea. Environmental Microbiology, 2004, 6, 970-980.	1.8	101
58	A plant–microbe interaction framework explaining nutrient effects on primary production. Nature Ecology and Evolution, 2018, 2, 1588-1596.	3.4	100
59	CRISPR-mediated targeted mRNA degradation in the archaeon Sulfolobus solfataricus. Nucleic Acids Research, 2014, 42, 5280-5288.	6.5	93
60	Biological methane production under putative Enceladus-like conditions. Nature Communications, 2018, 9, 748.	5.8	91
61	<i>In vivo</i> activity of CRISPRâ€mediated virus defence in a hyperthermophilic archaeon. Molecular Microbiology, 2011, 80, 481-491.	1.2	89
62	A hydrophobic ammoniaâ€oxidizing archaeon of the <i>Nitrosocosmicus</i> clade isolated from coal tarâ€contaminated sediment. Environmental Microbiology Reports, 2016, 8, 983-992.	1.0	89
63	Plant-derived compounds stimulate the decomposition of organic matter in arctic permafrost soils. Scientific Reports, 2016, 6, 25607.	1.6	87
64	Candidatus Nitrosocaldus cavascurensis, an Ammonia Oxidizing, Extremely Thermophilic Archaeon with a Highly Mobile Genome. Frontiers in Microbiology, 2018, 9, 28.	1.5	86
65	Genetic Requirements for the Function of the Archaeal Virus SSV1 in Sulfolobus solfataricus: Construction and Testing of Viral Shuttle Vectors. Genetics, 1999, 152, 1397-1405.	1.2	86
66	Four newly isolated fuselloviruses from extreme geothermal environments reveal unusual morphologies and a possible interviral recombination mechanism. Environmental Microbiology, 2009, 11, 2849-2862.	1.8	85
67	Variability of the transporter gene complement in ammonia-oxidizing archaea. Trends in Microbiology, 2014, 22, 665-675.	3.5	81
68	Holistic Assessment of Rumen Microbiome Dynamics through Quantitative Metatranscriptomics Reveals Multifunctional Redundancy during Key Steps of Anaerobic Feed Degradation. MSystems, 2018, 3, .	1.7	74
69	Metagenome—a challenging source of enzyme discovery. Journal of Molecular Catalysis B: Enzymatic, 2002, 19-20, 13-19.	1.8	73
70	Site- and horizon-specific patterns of microbial community structure and enzyme activities in permafrost-affected soils of Greenland. Frontiers in Microbiology, 2014, 5, 541.	1.5	73
71	Analysis of the first genome fragment from the marine sponge-associated, novel candidate phylum Poribacteria by environmental genomics. Environmental Microbiology, 2006, 8, 612-624.	1.8	68
72	The effect of warming on the vulnerability of subducted organic carbon in arctic soils. Soil Biology and Biochemistry, 2015, 90, 19-29.	4.2	68

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73	Unexpectedly broad target recognition of the CRISPR-mediated virus defence system in the archaeon Sulfolobus solfataricus. Nucleic Acids Research, 2013, 41, 10509-10517.	6.5	66
74	An insertion element of the extremely thermophilic archaeon Sulfolobus solfataricus transposes into the endogenous Î <sup>2</sup> -galactosidase gene. Molecular Genetics and Genomics, 1994, 243, 91-96.	2.4	63
75	Complete Nucleotide Sequence of the Sulfolobus islandicus Multicopy Plasmid pRN1. Plasmid, 1996, 35, 141-144.	0.4	63
76	Diversity and abundance of $\langle i \rangle$ Korarchaeota $\langle i \rangle$ in terrestrial hot springs of Iceland and Kamchatka. ISME Journal, 2010, 4, 346-356.	4.4	61
77	Significance of dark CO2 fixation in arctic soils. Soil Biology and Biochemistry, 2018, 119, 11-21.	4.2	58
78	Elucidating the transcription cycle of the UV-inducible hyperthermophilic archaeal virus SSV1 by DNA microarrays. Virology, 2007, 365, 48-59.	1.1	56
79	Distribution of <i>Crenarchaeota</i> Representatives in Terrestrial Hot Springs of Russia and Iceland. Applied and Environmental Microbiology, 2008, 74, 7620-7628.	1.4	56
80	"Hot standards―for the thermoacidophilic archaeon Sulfolobus solfataricus. Extremophiles, 2010, 14, 119-142.	0.9	55
81	Assessing the Ecophysiology of Methanogens in the Context of Recent Astrobiological and Planetological Studies. Life, 2015, 5, 1652-1686.	1.1	55
82	Diversity of radA Genes from Cultured and Uncultured Archaea: Comparative Analysis of Putative RadA Proteins and Their Use as a Phylogenetic Marker. Journal of Bacteriology, 1999, 181, 907-915.	1.0	54
83	The Phylum Thaumarchaeota. , 2014, , 347-362.		52
84	Ammonia Oxidation by the Arctic Terrestrial Thaumarchaeote Candidatus Nitrosocosmicus arcticus Is Stimulated by Increasing Temperatures. Frontiers in Microbiology, 2019, 10, 1571.	1.5	51
85	A thaumarchaeal provirus testifies for an ancient association of tailed viruses with archaea. Biochemical Society Transactions, 2011, 39, 82-88.	1.6	50
86	Metagenomics of Kamchatkan hot spring filaments reveal two new major (hyper)thermophilic lineages related to Thaumarchaeota. Research in Microbiology, 2013, 164, 425-438.	1.0	46
87	Quantitative and phylogenetic study of the Deep Sea Archaeal Group in sediments of the Arctic mid-ocean spreading ridge. Frontiers in Microbiology, 2013, 4, 299.	1.5	45
88	Regulation of expression of the arabinose and glucose transporter genes in the thermophilic archaeon Sulfolobus solfataricus. Extremophiles, 2006, 10, 383-391.	0.9	43
89	Metagenomic Analysis of Ammonia-Oxidizing Archaea Affiliated with the Soil Group. Frontiers in Microbiology, 2012, 3, 208.	1.5	41
90	Intestinal Epithelial Cell Tyrosine Kinase 2 Transduces IL-22 Signals To Protect from Acute Colitis. Journal of Immunology, 2015, 195, 5011-5024.	0.4	40

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91	Transformation of the extremely thermoacidophilic archaeonSulfolobus solfataricusvia a self-spreading vector. FEMS Microbiology Letters, 1996, 137, 31-35.	0.7	39
92	Type I interferons have opposing effects during the emergence and recovery phases of colitis. European Journal of Immunology, 2014, 44, 2749-2760.	1.6	39
93	Reactions to UV damage in the model archaeon <i>Sulfolobus solfataricus</i> Biochemical Society Transactions, 2009, 37, 36-41.	1.6	36
94	Sulfur-Oxidizing Chemolithotrophic Proteobacteria Dominate the Microbiota in High Arctic Thermal Springs on Svalbard. Astrobiology, 2011, 11, 665-678.	1.5	36
95	Geochemical transition zone powering microbial growth in subsurface sediments. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 32617-32626.	3.3	36
96	CRISPR-mediated gene silencing reveals involvement of the archaeal S-layer in cell division and virus infection. Nature Communications, 2019, 10, 4797.	5.8	35
97	Seasonal and vertical distribution of putative ammonia-oxidizing thaumarchaeotal communities in an oligotrophic lake. FEMS Microbiology Ecology, 2013, 83, 515-526.	1.3	33
98	Archaeal nitrification is a key driver of high nitrous oxide emissions from arctic peatlands. Soil Biology and Biochemistry, 2019, 137, 107539.	4.2	33
99	Genome wide transcriptomic analysis of the soil ammonia oxidizing archaeon <i>Nitrososphaera viennensis</i> upon exposure to copper limitation. ISME Journal, 2020, 14, 2659-2674.	4.4	33
100	Gene expression of lactobacilli in murine forestomach biofilms. Microbial Biotechnology, 2014, 7, 347-359.	2.0	31
101	Intact polar lipid and core lipid inventory of the hydrothermal vent methanogens Methanocaldococcus villosus and Methanothermococcus okinawensis. Organic Geochemistry, 2018, 126, 33-42.	0.9	29
102	Nucleotide sequence, transcription and phylogeny of the gene encoding the superoxide dismutase of Sulfolobus acidocaldarius. Biochimica Et Biophysica Acta Gene Regulatory Mechanisms, 1993, 1174, 95-98.	2.4	28
103	The legacy of Carl Woese and Wolfram Zillig: from phylogeny to landmark discoveries. Nature Reviews Microbiology, 2013, 11, 713-719.	13.6	28
104	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
105	Ancestral Reconstructions Decipher Major Adaptations of Ammonia-Oxidizing Archaea upon Radiation into Moderate Terrestrial and Marine Environments. MBio, 2020, $11$ , .	1.8	27
106	Genomes of Thaumarchaeota from deep sea sediments reveal specific adaptations of three independently evolved lineages. ISME Journal, 2021, 15, 2792-2808.	4.4	27
107	A phylogenetic and proteomic reconstruction of eukaryotic chromatin evolution. Nature Ecology and Evolution, 2022, 6, 1007-1023.	3.4	26
108	SulfoSYS (Sulfolobus Systems Biology): towards a silicon cell model for the central carbohydrate metabolism of the archaeon Sulfolobus solfataricus under temperature variation. Biochemical Society Transactions, 2009, 37, 58-64.	1.6	25

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109	Efficient CRISPR-Mediated Post-Transcriptional Gene Silencing in a Hyperthermophilic Archaeon Using Multiplexed crRNA Expression. G3: Genes, Genomes, Genetics, 2016, 6, 3161-3168.	0.8	25
110	CRISPR-mediated defense mechanisms in the hyperthermophilic archaeal genus <i><i>Sulfolobus</i><li>RNA Biology, 2013, 10, 671-678.</li></i>	1.5	21
111	Exploring the microbial biotransformation of extraterrestrial material on nanometer scale. Scientific Reports, 2019, 9, 18028.	1.6	21
112	Distribution and Activity of Ammonia-Oxidizing Archaea in Natural Environments., 0,, 157-178.		19
113	Metagenomes from Coastal Marine Sediments Give Insights into the Ecological Role and Cellular Features of $\langle i \rangle$ Loki $\langle i \rangle$ - and $\langle i \rangle$ Thorarchaeota $\langle i \rangle$ . MBio, 2019, 10, .	1.8	16
114	Heavily Armed Ancestors: CRISPR Immunity and Applications in Archaea with a Comparative Analysis of CRISPR Types in Sulfolobales. Biomolecules, 2020, 10, 1523.	1.8	14
115	Preparation of High-Molecular Weight DNA and Metagenomic Libraries from Soils and Hot Springs. Methods in Enzymology, 2011, 496, 319-344.	0.4	12
116	Copper limiting threshold in the terrestrial ammonia oxidizing archaeon Nitrososphaera viennensis. Research in Microbiology, 2020, 171, 134-142.	1.0	12
117	The Impact of Non-cultivated Biodiversity on Enzyme Discovery and Evolution. Biocatalysis and Biotransformation, 2003, 21, 87-91.	1.1	11
118	Indications for a moonlighting function of translation factor aIF5A in the crenarchaeum Sulfolobus solfataricus. RNA Biology, 2019, 16, 675-685.	1.5	11
119	Nitrogen Isotope Fractionation During Archaeal Ammonia Oxidation: Coupled Estimates From Measurements of Residual Ammonium and Accumulated Nitrite. Frontiers in Microbiology, 2020, 11, 1710.	1.5	10
120	Comparative CRISPR type III-based knockdown of essential genes in hyperthermophilic <i>Sulfolobales</i> and the evasion of lethal gene silencing. RNA Biology, 2021, 18, 421-434.	1.5	10
121	Archaea: very diverse, often different but never bad?. Current Opinion in Microbiology, 2011, 14, 271-273.	2.3	9
122	Linking 16S rRNA Gene Classification to <i>amoA</i> Gene Taxonomy Reveals Environmental Distribution of Ammonia-Oxidizing Archaeal Clades in Peatland Soils. MSystems, 2021, 6, e0054621.	1.7	9
123	Metabolism of the deep. Nature, 2008, 456, 712-713.	13.7	8
124	Meet the relatives of our cellular ancestor. Nature, 2020, 577, 478-479.	13.7	8
125	Phylogeny of DNA-Dependent RNA Polymerases: Testimony for the Origin of Eukaryotes., 1991,, 321-332.		8
126	Comment on"A Critical Review on Nitrous Oxide Production by Ammonia-Oxidizing Archaea―by Lan Wu, Xueming Chen, Wei Wei, Yiwen Liu, Dongbo Wang, and Bing-Jie Ni. Environmental Science & Technology, 2021, 55, 797-798.	4.6	6

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127	Microbial diversity of a closed salt lagoon in the Puertecitos area, Upper Gulf of California. Ciencias Marinas, 2018, 44, 71-90.	0.4	5
128	Draft Genome Sequence of the Growth-Promoting Endophyte Paenibacillus sp. P22, Isolated from Populus. Genome Announcements, 2014, 2, .	0.8	4
129	The Microbial Soil Flora: Novel Approaches for Accessing the Phylogenetic and Physiological Diversity of Prokaryotes., 2006,, 407-424.		2
130	Simulating putative Enceladus-like conditions: The possibility of biological methane production on Saturn's icy moon. Proceedings of the International Astronomical Union, 2018, 14, 219-221.	0.0	1