Zhongjun Jia

List of Publications by Year
in descending order

130	6,179	76326	79698
papers	citations	40 h-index	73 g-index

135	135	135	5768
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Bacteria rather than Archaea dominate microbial ammonia oxidation in an agricultural soil. Environmental Microbiology, 2009, 11, 1658-1671.	3.8	813
2	Autotrophic growth of nitrifying community in an agricultural soil. ISME Journal, 2011, 5, 1226-1236.	9.8	366
3	Change in deep soil microbial communities due to long-term fertilization. Soil Biology and Biochemistry, 2014, 75, 264-272.	8.8	232
4	Ecology of viruses in soils: Past, present and future perspectives. Soil Science and Plant Nutrition, 2008, 54, 1-32.	1.9	209
5	Conventional methanotrophs are responsible for atmospheric methane oxidation in paddy soils. Nature Communications, 2016, 7, 11728.	12.8	209
6	Differential contributions of ammonia oxidizers and nitrite oxidizers to nitrification in four paddy soils. ISME Journal, 2015, 9, 1062-1075.	9.8	185
7	pH regulates key players of nitrification in paddy soils. Soil Biology and Biochemistry, 2015, 81, 9-16.	8.8	164
8	Nitrification of archaeal ammonia oxidizers in acid soils is supported by hydrolysis of urea. ISME Journal, 2012, 6, 1978-1984.	9.8	140
9	Biodegradation of the veterinary antibiotics enrofloxacin and ceftiofur and associated microbial community dynamics. Science of the Total Environment, 2017, 581-582, 359-368.	8.0	130
10	Longâ€Term Field Fertilization Significantly Alters Community Structure of Ammoniaâ€Oxidizing Bacteria rather than Archaea in a Paddy Soil. Soil Science Society of America Journal, 2011, 75, 1431-1439.	2.2	121
11	Interactions between Thaumarchaea, Nitrospira and methanotrophs modulate autotrophic nitrification in volcanic grassland soil. ISME Journal, 2014, 8, 2397-2410.	9.8	121
12	Long-term nitrogen fertilization of paddy soil shifts iron-reducing microbial community revealed by RNA-13C-acetate probing coupled with pyrosequencing. ISME Journal, 2015, 9, 721-734.	9.8	118
13	Urease geneâ€containing <scp>A</scp>rchaea dominate autotrophic ammonia oxidation in two acid soils. Environmental Microbiology, 2013, 15, 1795-1809.	3.8	117
14	Comammox Nitrospira clade B contributes to nitrification in soil. Soil Biology and Biochemistry, 2019, 135, 392-395.	8.8	116
15	Effects of 44 years of chronic nitrogen fertilization on the soil nitrifying community of permanent grassland. Soil Biology and Biochemistry, 2015, 91, 76-83.	8.8	98
16	Biotic Interactions in Microbial Communities as Modulators of Biogeochemical Processes: Methanotrophy as a Model System. Frontiers in Microbiology, 2016, 7, 1285.	3.5	95
17	Soil microbial community structure and diversity are largely influenced by soil pH and nutrient quality in 78-year-old tree plantations. Biogeosciences, 2017, 14, 2101-2111.	3.3	94
18	Relation between methanogenic archaea and methane production potential in selected natural wetland ecosystems across China. Biogeosciences, 2011, 8, 329-338.	3.3	82

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19	Ecological restoration alters microbial communities in mine tailings profiles. Scientific Reports, 2016, 6, 25193.	3.3	75
20	Autotrophic Growth of Bacterial and Archaeal Ammonia Oxidizers in Freshwater Sediment Microcosms Incubated at Different Temperatures. Applied and Environmental Microbiology, 2013, 79, 3076-3084.	3.1	73
21	High pH-enhanced soil nitrification was associated with ammonia-oxidizing bacteria rather than archaea in acidic soils. Applied Soil Ecology, 2015, 85, 21-29.	4.3	71
22	Biodegradation of oxytetracycline and enrofloxacin by autochthonous microbial communities from estuarine sediments. Science of the Total Environment, 2019, 648, 962-972.	8.0	65
23	Effect of rice plants on CH4 production, transport, oxidation and emission in rice paddy soil. Plant and Soil, 2001, 230, 211-221.	3.7	64
24	Phylogenetically distinct methanotrophs modulate methane oxidation in rice paddies across Taiwan. Soil Biology and Biochemistry, 2018, 124, 59-69.	8.8	63
25	Composition and activity of rhizosphere microbial communities associated with healthy and diseased greenhouse tomatoes. Plant and Soil, 2014, 380, 337-347.	3.7	62
26	Inhibition of methane oxidation by nitrogenous fertilizers in a paddy soil. Frontiers in Microbiology, 2012, 3, 246.	3.5	59
27	Response of phyllosphere bacterial communities to elevated CO2 during rice growing season. Applied Microbiology and Biotechnology, 2014, 98, 9459-9471.	3.6	59
28	Expansion of Thaumarchaeota habitat range is correlated with horizontal transfer of ATPase operons. ISME Journal, 2019, 13, 3067-3079.	9.8	59
29	Response of soil, leaf endosphere and phyllosphere bacterial communities to elevated CO2 and soil temperature in a rice paddy. Plant and Soil, 2015, 392, 27-44.	3.7	58
30	Declined soil suppressiveness to Fusarium oxysporum by rhizosphere microflora of cotton in soil sickness. Biology and Fertility of Soils, 2015, 51, 935-946.	4.3	58
31	Effect of benzoic acid on soil microbial communities associated with soilborne peanut diseases. Applied Soil Ecology, 2017, 110, 34-42.	4.3	58
32	Multiple long-term observations reveal a strategy for soil pH-dependent fertilization and fungal communities in support of agricultural production. Agriculture, Ecosystems and Environment, 2020, 293, 106837.	5.3	57
33	Archaea and bacteria respectively dominate nitrification in lightly and heavily grazed soil in a grassland system. Biology and Fertility of Soils, 2018, 54, 41-54.	4.3	52
34	Active Ammonia Oxidizers in an Acidic Soil Are Phylogenetically Closely Related to Neutrophilic Archaeon. Applied and Environmental Microbiology, 2014, 80, 1684-1691.	3.1	49
35	Simazine application inhibits nitrification and changes the ammonia-oxidizing bacterial communities in a fertilized agricultural soil. FEMS Microbiology Ecology, 2011, 78, 511-519.	2.7	48
36	Contrasting effects of inorganic and organic fertilisation regimes on shifts in Fe redox bacterial communities in red soils. Soil Biology and Biochemistry, 2018, 117, 56-67.	8.8	48

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37	Molecular characterization of T4-type bacteriophages in a rice field. Environmental Microbiology, 2007, 9, 1091-1096.	3.8	45
38	Identification of microbial strategies for labile substrate utilization at phylogenetic classification using a microcosm approach. Soil Biology and Biochemistry, 2021, 153, 107970.	8.8	45
39	Methyl-Î²-cyclodextrin enhanced biodegradation of polycyclic aromatic hydrocarbons and associated microbial activity in contaminated soil. Journal of Environmental Sciences, 2012, 24, 926-933.	6.1	44
40	Bacterial communities predominant in the degradation of 13C4-4,5,9,10-pyrene during composting. Bioresource Technology, 2013, 143, 608-614.	9.6	44
41	Remediation of polycyclic aromatic hydrocarbon and metal-contaminated soil by successive methyl-Î²-cyclodextrin-enhanced soil washingâ€“microbial augmentation: a laboratory evaluation. Environmental Science and Pollution Research, 2013, 20, 976-986.	5.3	41
42	The impact of dissolved organic carbon on the spatial variability of methanogenic archaea communities in natural wetland ecosystems across China. Applied Microbiology and Biotechnology, 2012, 96, 253-263.	3.6	40
43	Response of soil microbes to a reduction in phosphorus fertilizer in rice-wheat rotation paddy soils with varying soil P levels. Soil and Tillage Research, 2018, 181, 127-135.	5.6	37
44	Molecular analyses reveal stability of bacterial communities in bulk soil of a Japanese paddy field: Estimation by denaturing gradient gel electrophoresis of 16S rRNA genes amplified from DNA accompanied with RNA. Soil Science and Plant Nutrition, 2007, 53, 448-458.	1.9	36
45	Active Autotrophic Ammonia-Oxidizing Bacteria in Biofilm Enrichments from Simulated Creek Ecosystems at Two Ammonium Concentrations Respond to Temperature Manipulation. Applied and Environmental Microbiology, 2011, 77, 7329-7338.	3.1	36
46	Nitrification activity and putative ammonia-oxidizing archaea in acidic red soils. Journal of Soils and Sediments, 2012, 12, 420-428.	3.0	36
47	Phylogenetically Distinct Phylotypes Modulate Nitrification in a Paddy Soil. Applied and Environmental Microbiology, 2015, 81, 3218-3227.	3.1	36
48	Effect of salt stress on aerobic methane oxidation and associated methanotrophs; a microcosm study of a natural community from a non-saline environment. Soil Biology and Biochemistry, 2018, 125, 210-214.	8.8	36
49	Effect of rice cultivar on CH4production potential of rice soil and CH4emission in a pot experiment. Soil Science and Plant Nutrition, 2006, 52, 341-348.	1.9	35
50	Identification of the autotrophic denitrifying community in nitrate removal reactors by DNA-stable isotope probing. Bioresource Technology, 2017, 229, 134-142.	9.6	35
51	Neutrophilic bacteria are responsible for autotrophic ammonia oxidation in an acidic forest soil. Soil Biology and Biochemistry, 2018, 119, 83-89.	8.8	34
52	Soil Organic Carbon in a Changing World. Pedosphere, 2017, 27, 789-791.	4.0	33
53	Longâ€term field fertilization affects soil nitrogen transformations in a riceâ€wheatâ€rotation cropping system. Journal of Plant Nutrition and Soil Science, 2012, 175, 939-946.	1.9	30
54	Community Structure of Active Aerobic Methanotrophs in Red Mangrove (Kandelia obovata) Soils Under Different Frequency of Tides. Microbial Ecology, 2018, 75, 761-770.	2.8	30

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55	The Resilience of Microbial Community under Drying and Rewetting Cycles of Three Forest Soils. Frontiers in Microbiology, 2016, 7, 1101.	3.5	29
56	Canonical ammonia oxidizers, rather than comammox Nitrospira, dominated autotrophic nitrification during the mineralization of organic substances in two paddy soils. Soil Biology and Biochemistry, 2021, 156, 108192.	8.8	28
57	Response of leaf endophytic bacterial community to elevated CO2 at different growth stages of rice plant. Frontiers in Microbiology, 2015, 6, 855.	3.5	26
58	Variance in bacterial communities, potential bacterial carbon sequestration and nitrogen fixation between light and dark conditions under elevated CO2 in mine tailings. Science of the Total Environment, 2019, 652, 234-242.	8.0	26
59	Bacterial community composition and assembly along a natural sodicity/salinity gradient in surface and subsurface soils. Applied Soil Ecology, 2021, 157, 103731.	4.3	26
60	The long-term effects of using nitrite and urea on the enrichment of comammox bacteria. Science of the Total Environment, 2021, 755, 142580.	8.0	25
61	Metabolic flexibility of aerobic methanotrophs under anoxic conditions in Arctic lake sediments. ISME Journal, 2022, 16, 78-90.	9.8	25
62	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.	8.8	24
63	Atmospheric Methane Oxidizers Are Dominated by Upland Soil Cluster Alpha in 20 Forest Soils of China. Microbial Ecology, 2020, 80, 859-871.	2.8	24
64	Title is missing!. Nutrient Cycling in Agroecosystems, 2002, 64, 101-110.	2.2	23
65	Effects of temperature on the composition and diversity of bacterial communities in bamboo soils at different elevations. Biogeosciences, 2017, 14, 4879-4889.	3.3	23
66	Contributions of residue-C and -N to plant growth and soil organic matter pools under planted and unplanted conditions. Soil Biology and Biochemistry, 2018, 120, 91-104.	8.8	23
67	High contribution of ammonia-oxidizing archaea (AOA) to ammonia oxidation related to a potential active AOA species in various arable land soils. Journal of Soils and Sediments, 2019, 19, 1077-1087.	3.0	23
68	The pH-based ecological coherence of active canonical methanotrophs in paddy soils. Biogeosciences, 2020, 17, 1451-1462.	3.3	22
69	Molecular analysis of the ammonia oxidizing bacterial community in the surface soil layer of a Japanese paddy field. Soil Science and Plant Nutrition, 2006, 52, 427-431.	1.9	21
70	One-Cell Metabolic Phenotyping and Sequencing of Soil Microbiome by Raman-Activated Gravity-Driven Encapsulation (RAGE). MSystems, 2021, 6, e0018121.	3.8	21
71	Contrasting microbial community responses to salinization and straw amendment in a semiarid bare soil and its wheat rhizosphere. Scientific Reports, 2019, 9, 9795.	3.3	20
72	When the going gets tough: Emergence of a complex methane-driven interaction network during recovery from desiccation-rewetting. Soil Biology and Biochemistry, 2021, 153, 108109.	8.8	20

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73	Salt tolerance-based niche differentiation of soil ammonia oxidizers. ISME Journal, 2022, 16, 412-422.	9.8	20
74	Nitrogen input promotes denitrifying methanotrophsâ€™ abundance and contribution to methane emission reduction in coastal wetland and paddy soil. Environmental Pollution, 2022, 302, 119090.	7.5	20
75	Tenax TA extraction to understand the rate-limiting factors in methyl-Î²-cyclodextrin-enhanced bioremediation of PAH-contaminated soil. Biodegradation, 2013, 24, 365-375.	3.0	19
76	Geographical Distribution of Methanogenic Archaea in Nine Representative Paddy Soils in China. Frontiers in Microbiology, 2016, 7, 1447.	3.5	19
77	Autotrophic archaeal nitrification is preferentially stimulated by rice callus mineralization in a paddy soil. Plant and Soil, 2019, 445, 55-69.	3.7	19
78	Response of a methane-driven interaction network to stressor intensification. FEMS Microbiology Ecology, 2020, 96, .	2.7	19
79	Inhibition of Bacterial Ammonia Oxidation by Organohydrazines in Soil Microcosms. Frontiers in Microbiology, 2012, 3, 10.	3.5	17
80	Soil N mineralization, nitrification and dynamic changes in abundance of ammonia-oxidizing bacteria and archaea along a 2000Âyear chronosequence of rice cultivation. Plant and Soil, 2013, 365, 59-68.	3.7	17
81	Long-term effects of grazing, liming and nutrient fertilization on the nitrifying community of grassland soils. Soil Biology and Biochemistry, 2018, 118, 97-102.	8.8	17
82	Stable isotope probing of active methane oxidizers in rice field soils from cold regions. Biology and Fertility of Soils, 2019, 55, 243-250.	4.3	17
83	Crop rotation suppresses soil-borne Fusarium wilt of banana and alters microbial communities. Archives of Agronomy and Soil Science, 2022, 68, 447-459.	2.6	17
84	Multifunctional Periphytic Biofilms: Polyethylene Degradation and Cd2+ and Pb2+ Bioremediation under High Methane Scenario. International Journal of Molecular Sciences, 2020, 21, 5331.	4.1	17
85	Community shift of microbial ammonia oxidizers in air-dried rice soils after 22Âyears of nitrogen fertilization. Biology and Fertility of Soils, 2019, 55, 419-424.	4.3	16
86	A phototrophy-driven microbial food web in a rice soil. Journal of Soils and Sediments, 2011, 11, 301-311.	3.0	15
87	Evidence for niche differentiation of nitrifying communities in grassland soils after 44 years of different field fertilization scenarios. Pedosphere, 2020, 30, 87-97.	4.0	15
88	Disentangling abiotic and biotic controls of aerobic methane oxidation during re-colonization. Soil Biology and Biochemistry, 2020, 142, 107729.	8.8	15
89	Impact of elevated atmospheric CO 2 on soil bacteria community in a grazed pasture after 12-year enrichment. Geoderma, 2017, 285, 19-26.	5.1	13
90	Long-term effects of grassland management on soil microbial abundance: implications for soil carbon and nitrogen storage. Biogeochemistry, 2018, 141, 213-228.	3.5	13

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91	Succession of bacterial community and methanotrophy during lake shrinkage. Journal of Soils and Sediments, 2020, 20, 1545-1557.	3.0	12
92	Prokaryotic community assembly after 40 years of soda solonetz restoration by natural grassland and reclaimed farmland. European Journal of Soil Biology, 2020, 100, 103213.	3.2	12
93	Niche Differentiation of Active Methane-Oxidizing Bacteria in Estuarine Mangrove Forest Soils in Taiwan. Microorganisms, 2020, 8, 1248.	3.6	12
94	Electron shuttles facilitate anaerobic methane oxidation coupled to nitrous oxide reduction in paddy soil. Soil Biology and Biochemistry, 2021, 153, 108091.	8.8	12
95	Chronic Nitrogen Fertilization Modulates Competitive Interactions Among Microbial Ammonia Oxidizers in a Loess Soil. Pedosphere, 2019, 29, 24-33.	4.0	11
96	Enhanced Adsorptive Bioremediation of Heavy Metals (Cd2+, Cr6+, Pb2+) by Methane-Oxidizing Epipelon. Microorganisms, 2020, 8, 505.	3.6	10
97	Molecular identification of methane oxidizing bacteria in a Japanese rice field soil. Biology and Fertility of Soils, 2007, 44, 121-130.	4.3	9
98	Soil microbial community assemblage and its seasonal variability in alpine treeline ecotone on the eastern Qinghai-Tibet Plateau. Soil Ecology Letters, 2019, 1, 33-41.	4.5	9
99	Exogenous nitrogen addition inhibits sulfate-mediated anaerobic oxidation of methane in estuarine coastal sediments. Ecological Engineering, 2020, 158, 106021.	3.6	9
100	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.	1.7	9
101	Elevated Atmospheric CO2 and Nitrogen Fertilization Affect the Abundance and Community Structure of Rice Root-Associated Nitrogen-Fixing Bacteria. Frontiers in Microbiology, 2021, 12, 628108.	3.5	9
102	Soil aeration rather than methanotrophic community drives methane uptake under drought in a subtropical forest. Science of the Total Environment, 2021, 792, 148292.	8.0	9
103	Biofilm: A strategy for the dominance of comammox Nitrospira. Journal of Cleaner Production, 2022, 363, 132361.	9.3	9
104	DNA-Based Stable Isotope Probing. Methods in Molecular Biology, 2019, 2046, 17-29.	0.9	8
105	Active Soil Nitrifying Communities Revealed by In Situ Transcriptomics and Microcosm-Based Stable-Isotope Probing. Applied and Environmental Microbiology, 2020, 86, .	3.1	8
106	Revealing the community and metabolic potential of active methanotrophs by targeted metagenomics in the Zoige wetland of the Tibetan Plateau. Environmental Microbiology, 2021, 23, 6520-6535.	3.8	8
107	Bioleaching of Heavy Metals from Printed Circuit Boards with an Acidophilic Iron-Oxidizing Microbial Consortium in Stirred Tank Reactors. Bioengineering, 2022, 9, 79.	3.5	8
108	Plant-Mediated Changes in Soil N-Cycling Genes during Revegetation of Copper Mine Tailings. Frontiers in Environmental Science, 2017, 5, .	3.3	7

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109	Shifts in the community composition of methane-cycling microorganisms during lake shrinkage. Geoderma, 2018, 311, 9-14.	5.1	7
110	DNA stableâ€isotope probing reveals potential key players for microbial decomposition and degradation of diatomâ€derived marine particulate matter. MicrobiologyOpen, 2020, 9, e1013.	3.0	7
111	Offsetting N2O emissions through nitrifying CO2 fixation in grassland soil. Soil Biology and Biochemistry, 2022, 165, 108528.	8.8	7
112	Methanotrophy-driven accumulation of organic carbon in four paddy soils of Bangladesh. Pedosphere, 2022, 32, 348-358.	4.0	7
113	Identification of Formateâ€Metabolizing Bacteria in Paddy Soil by DNAâ€Based Stable Isotope Probing. Soil Science Society of America Journal, 2012, 76, 121-129.	2.2	6
114	Dependency of biological nitrogen fixation on organic carbon in acidic mine tailings under light and dark conditions. Applied Soil Ecology, 2019, 140, 18-25.	4.3	6
115	Stable-isotope probing of bacterial community for dissolved inorganic carbon utilization in Microcystis aeruginosa-dominated eutrophic water. Journal of Environmental Sciences, 2019, 79, 264-272.	6.1	6
116	Temperature-dependent changes in active nitrifying communities in response to field fertilization legacy. Biology and Fertility of Soils, 2021, 57, 1-14.	4.3	6
117	Sheep grazing impacts on soil methanotrophs and their activity in typical steppe in the Loess Plateau China. Applied Soil Ecology, 2022, 175, 104440.	4.3	6
118	Methanotrophs Contribute to Nitrogen Fixation in Emergent Macrophytes. Frontiers in Microbiology, 2022, 13, 851424.	3.5	6
119	DNA-based stable isotope probing identifies formate-metabolizing methanogenic archaea in paddy soil. Microbiological Research, 2017, 202, 36-42.	5.3	5
120	Grazing weakens competitive interactions between active methanotrophs and nitrifiers modulating greenhouse-gas emissions in grassland soils. ISME Communications, 2021, 1, .	4.2	5
121	Active Methanotrophs in Suboxic Alpine Swamp Soils of the Qinghaiâ€“Tibetan Plateau. Frontiers in Microbiology, 2020, 11, 580866.	3.5	4
122	Rhizospheric Denitrification Potential and Related Microbial Characteristics Affected by Secondary Salinization in a Riparian Soil. Geomicrobiology Journal, 2015, 32, 624-634.	2.0	3
123	Pyrite oxidization accelerates bacterial carbon sequestration in copper mine tailings. Biogeosciences, 2019, 16, 573-583.	3.3	3
124	Sea animal activity controls CO2, CH4 and N2O emission hotspots on South Georgia, sub-Antarctica. Soil Biology and Biochemistry, 2019, 132, 174-186.	8.8	3
125	Heterotrophy-coordinated diazotrophy is associated with significant changes of rare taxa in soil microbiome. Pedosphere, 2022, 32, 402-413.	4.0	3
126	Phylogeny and Metabolic Potential of the Methanotrophic Lineage MO3 in Beijerinckiaceae from the Paddy Soil through Metagenome-Assembled Genome Reconstruction. Microorganisms, 2022, 10, 955.	3.6	3

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127	Bacterial contribution to 17Î²-estradiol mineralization in lake sediment as revealed by 13C-DNA stable isotope probing. Environmental Pollution, 2021, 286, 117505.	7.5	2
128	Effects of agricultural land use on the differentiation of nitrifier communities and functional patterns from natural terrestrial ecosystems. Science of the Total Environment, 2022, 835, 155568.	8.0	2
129	Methanotrophy Alleviates Nitrogen Constraint of Carbon Turnover by Rice Root-Associated Microbiomes. Frontiers in Microbiology, 2022, 13, .	3.5	2
130	Glucose-induced changes in the bacterial communities of mine tailings at different acidification stages. Canadian Journal of Microbiology, 2019, 65, 201-213.	1.7	0