

# laurent Philippot

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8837876/publications.pdf>

Version: 2024-02-01

159  
papers

21,297  
citations

14614

66  
h-index

10127

140  
g-index

165  
all docs

165  
docs citations

165  
times ranked

17241  
citing authors

#	ARTICLE	IF	CITATIONS
1	Going back to the roots: the microbial ecology of the rhizosphere. <i>Nature Reviews Microbiology</i> , 2013, 11, 789-799.	13.6	2,669
2	Quantitative Detection of the nosZ Gene, Encoding Nitrous Oxide Reductase, and Comparison of the Abundances of 16S rRNA, narG, nirK, and nosZ Genes in Soils. <i>Applied and Environmental Microbiology</i> , 2006, 72, 5181-5189.	1.4	828
3	Insights into the resistance and resilience of the soil microbial community. <i>FEMS Microbiology Reviews</i> , 2013, 37, 112-129.	3.9	754
4	DNA Extraction from Soils: Old Bias for New Microbial Diversity Analysis Methods. <i>Applied and Environmental Microbiology</i> , 2001, 67, 2354-2359.	1.4	604
5	Loss in microbial diversity affects nitrogen cycling in soil. <i>ISME Journal</i> , 2013, 7, 1609-1619.	4.4	603
6	The ecological coherence of high bacterial taxonomic ranks. <i>Nature Reviews Microbiology</i> , 2010, 8, 523-529.	13.6	562
7	Quantification of denitrifying bacteria in soils by nirK gene targeted real-time PCR. <i>Journal of Microbiological Methods</i> , 2004, 59, 327-335.	0.7	560
8	The unaccounted yet abundant nitrous oxide-reducing microbial community: a potential nitrous oxide sink. <i>ISME Journal</i> , 2013, 7, 417-426.	4.4	529
9	Abundance of narG, nirS, nirK, and nosZ Genes of Denitrifying Bacteria during Primary Successions of a Glacier Foreland. <i>Applied and Environmental Microbiology</i> , 2006, 72, 5957-5962.	1.4	524
10	Microbes as Engines of Ecosystem Function: When Does Community Structure Enhance Predictions of Ecosystem Processes?. <i>Frontiers in Microbiology</i> , 2016, 7, 214.	1.5	479
11	Relationship between N-cycling communities and ecosystem functioning in a 50-year-old fertilization experiment. <i>ISME Journal</i> , 2009, 3, 597-605.	4.4	478
12	Denitrifying genes in bacterial and Archaeal genomes. <i>Biochimica Et Biophysica Acta Gene Regulatory Mechanisms</i> , 2002, 1577, 355-376.	2.4	415
13	Genomics and Ecology of Novel N <sub>2</sub> O-Reducing Microorganisms. <i>Trends in Microbiology</i> , 2018, 26, 43-55.	3.5	388
14	Insights into the Effect of Soil pH on N <sub>2</sub> O and N <sub>2</sub> Emissions and Denitrifier Community Size and Activity. <i>Applied and Environmental Microbiology</i> , 2010, 76, 1870-1878.	1.4	367
15	Quantification of a novel group of nitrate-reducing bacteria in the environment by real-time PCR. <i>Journal of Microbiological Methods</i> , 2004, 57, 399-407.	0.7	365
16	Recently identified microbial guild mediates soil N <sub>2</sub> O sink capacity. <i>Nature Climate Change</i> , 2014, 4, 801-805.	8.1	364
17	Determinants of the distribution of nitrogen-cycling microbial communities at the landscape scale. <i>ISME Journal</i> , 2011, 5, 532-542.	4.4	336
18	Ecology of Denitrifying Prokaryotes in Agricultural Soil. <i>Advances in Agronomy</i> , 2007, 96, 249-305.	2.4	330

#	ARTICLE	IF	CITATIONS
19	Trait-based approaches for understanding microbial biodiversity and ecosystem functioning. <i>Frontiers in Microbiology</i> , 2014, 5, 251.	1.5	323
20	Importance of denitrifiers lacking the genes encoding the nitrous oxide reductase for N <sub>2</sub> O emissions from soil. <i>Global Change Biology</i> , 2011, 17, 1497-1504.	4.2	300
21	A plant perspective on nitrogen cycling in the rhizosphere. <i>Functional Ecology</i> , 2019, 33, 540-552.	1.7	292
22	Activity and Composition of the Denitrifying Bacterial Community Respond Differently to Long-Term Fertilization. <i>Applied and Environmental Microbiology</i> , 2005, 71, 8335-8343.	1.4	286
23	Disentangling the rhizosphere effect on nitrate reducers and denitrifiers: insight into the role of root exudates. <i>Environmental Microbiology</i> , 2008, 10, 3082-3092.	1.8	263
24	Mapping field-scale spatial patterns of size and activity of the denitrifier community. <i>Environmental Microbiology</i> , 2009, 11, 1518-1526.	1.8	259
25	Quantification of the Detrimental Effect of a Single Primer-Template Mismatch by Real-Time PCR Using the 16S rRNA Gene as an Example. <i>Applied and Environmental Microbiology</i> , 2008, 74, 1660-1663.	1.4	237
26	Soil environmental conditions rather than denitrifier abundance and diversity drive potential denitrification after changes in land uses. <i>Global Change Biology</i> , 2011, 17, 1975-1989.	4.2	236
27	Relative Abundances of Proteobacterial Membrane-Bound and Periplasmic Nitrate Reductases in Selected Environments. <i>Applied and Environmental Microbiology</i> , 2007, 73, 5971-5974.	1.4	220
28	EFFECTS OF GRAZING ON MICROBIAL FUNCTIONAL GROUPS INVOLVED IN SOIL N DYNAMICS. <i>Ecological Monographs</i> , 2005, 75, 65-80.	2.4	201
29	TerraGenome: a consortium for the sequencing of a soil metagenome. <i>Nature Reviews Microbiology</i> , 2009, 7, 252-252.	13.6	199
30	Effects of management regime and plant species on the enzyme activity and genetic structure of N-fixing, denitrifying and nitrifying bacterial communities in grassland soils. <i>Environmental Microbiology</i> , 2006, 8, 1005-1016.	1.8	196
31	Biochemical cycling in the rhizosphere having an impact on global change. <i>Plant and Soil</i> , 2009, 321, 61-81.	1.8	196
32	N <sub>2</sub> O production, a widespread trait in fungi. <i>Scientific Reports</i> , 2015, 5, 9697.	1.6	190
33	Finding the missing link between diversity and activity using denitrifying bacteria as a model functional community. <i>Current Opinion in Microbiology</i> , 2005, 8, 234-239.	2.3	189
34	Molecular Analysis of the Nitrate-Reducing Community from Unplanted and Maize-Planted Soils. <i>Applied and Environmental Microbiology</i> , 2002, 68, 6121-6128.	1.4	187
35	Ecological network analysis reveals the inter-connection between soil biodiversity and ecosystem function as affected by land use across Europe. <i>Applied Soil Ecology</i> , 2016, 97, 112-124.	2.1	184
36	Soil carbon quality and nitrogen fertilization structure bacterial communities with predictable responses of major bacterial phyla. <i>Applied Soil Ecology</i> , 2014, 84, 62-68.	2.1	162

#	ARTICLE	IF	CITATIONS
37	Do we need to understand microbial communities to predict ecosystem function? A comparison of statistical models of nitrogen cycling processes. <i>Soil Biology and Biochemistry</i> , 2014, 68, 279-282.	4.2	143
38	Effectiveness of ecological rescue for altered soil microbial communities and functions. <i>ISME Journal</i> , 2017, 11, 272-283.	4.4	135
39	Integration of biodiversity in soil quality monitoring: Baselines for microbial and soil fauna parameters for different land-use types. <i>European Journal of Soil Biology</i> , 2012, 49, 63-72.	1.4	134
40	Spatial distribution of ammonia-oxidizing bacteria and archaea across a 44-hectare farm related to ecosystem functioning. <i>ISME Journal</i> , 2011, 5, 1213-1225.	4.4	130
41	Spatial patterns of bacterial taxa in nature reflect ecological traits of deep branches of the 16S rRNA bacterial tree. <i>Environmental Microbiology</i> , 2009, 11, 3096-3104.	1.8	127
42	Differential responses of bacterial and archaeal groups at high taxonomical ranks to soil management. <i>Soil Biology and Biochemistry</i> , 2010, 42, 1759-1765.	4.2	127
43	Crop cover is more important than rotational diversity for soil multifunctionality and cereal yields in European cropping systems. <i>Nature Food</i> , 2021, 2, 28-37.	6.2	120
44	A closer look at the functions behind ecosystem multifunctionality: A review. <i>Journal of Ecology</i> , 2021, 109, 600-613.	1.9	115
45	The diversity of the N <sub>2</sub> O reducers matters for the N <sub>2</sub> O:N <sub>2</sub> denitrification end-product ratio across an annual and a perennial cropping system. <i>Frontiers in Microbiology</i> , 2015, 6, 971.	1.5	114
46	Plant traits related to nitrogen uptake influence plant-microbe competition. <i>Ecology</i> , 2015, 96, 2300-2310.	1.5	114
47	16S rDNA analysis for characterization of denitrifying bacteria isolated from three agricultural soils. <i>FEMS Microbiology Ecology</i> , 2000, 34, 121-128.	1.3	113
48	Peaks of in situ N <sub>2</sub> O emissions are influenced by N <sub>2</sub> O-producing and reducing microbial communities across arable soils. <i>Global Change Biology</i> , 2018, 24, 360-370.	4.2	109
49	Influence of maize mucilage on the diversity and activity of the denitrifying community. <i>Environmental Microbiology</i> , 2004, 6, 301-312.	1.8	108
50	Metagenomic and functional analyses of the consequences of reduction of bacterial diversity on soil functions and bioremediation in diesel-contaminated microcosms. <i>Scientific Reports</i> , 2016, 6, 23012.	1.6	103
51	Structure and activity of the denitrifying community in a maize-cropped field fertilized with composted pig manure or ammonium nitrate. <i>FEMS Microbiology Ecology</i> , 2006, 56, 119-131.	1.3	101
52	Dissimilatory nitrate reductases in bacteria. <i>Biochimica Et Biophysica Acta Gene Regulatory Mechanisms</i> , 1999, 1446, 1-23.	2.4	99
53	Inter-laboratory evaluation of the ISO standard 11063 "Soil quality" Method to directly extract DNA from soil samples. <i>Journal of Microbiological Methods</i> , 2011, 84, 454-460.	0.7	97
54	Non-denitrifying nitrous oxide-reducing bacteria - An effective N <sub>2</sub> O sink in soil. <i>Soil Biology and Biochemistry</i> , 2016, 103, 376-379.	4.2	97

#	ARTICLE	IF	CITATIONS
55	A methodological framework to embrace soil biodiversity. <i>Soil Biology and Biochemistry</i> , 2019, 136, 107536.	4.2	88
56	Microbial Community Resilience across Ecosystems and Multiple Disturbances. <i>Microbiology and Molecular Biology Reviews</i> , 2021, 85, .	2.9	87
57	Impact of phages on soil bacterial communities and nitrogen availability under different assembly scenarios. <i>Microbiome</i> , 2020, 8, 52.	4.9	82
58	Characterization and transcriptional analysis of <i>Pseudomonas fluorescens</i> denitrifying clusters containing the nar, nir, nor and nos genes. <i>Biochimica Et Biophysica Acta Gene Regulatory Mechanisms</i> , 2001, 1517, 436-440.	2.4	81
59	Selecting cost effective and policy-relevant biological indicators for European monitoring of soil biodiversity and ecosystem function. <i>Ecological Indicators</i> , 2016, 69, 213-223.	2.6	80
60	Spatial and temporal dynamics of nitrogen fixing, nitrifying and denitrifying microbes in an unfertilized grassland soil. <i>Soil Biology and Biochemistry</i> , 2017, 109, 214-226.	4.2	80
61	Unraveling negative biotic interactions determining soil microbial community assembly and functioning. <i>ISME Journal</i> , 2022, 16, 296-306.	4.4	80
62	Soil Environmental Conditions and Microbial Build-Up Mediate the Effect of Plant Diversity on Soil Nitrifying and Denitrifying Enzyme Activities in Temperate Grasslands. <i>PLoS ONE</i> , 2013, 8, e61069.	1.1	78
63	Fitness in soil and rhizosphere of <i>Pseudomonas fluorescens</i> C7R12 compared with a C7R12 mutant affected in pyoverdine synthesis and uptake. <i>FEMS Microbiology Ecology</i> , 2000, 34, 35-44.	1.3	74
64	Additions of maize root mucilage to soil changed the structure of the bacterial community. <i>Soil Biology and Biochemistry</i> , 2007, 39, 1230-1233.	4.2	74
65	Structure and activity of the nitrate-reducing community in the rhizosphere of <i>Lolium perenne</i> and <i>Trifolium repens</i> under long-term elevated atmospheric pCO <sub>2</sub> . <i>FEMS Microbiology Ecology</i> , 2004, 49, 445-454.	1.3	73
66	Denitrifying bacteria in bulk and maize-rhizospheric soil: diversity and N <sub>2</sub> O-reducing abilities. <i>Canadian Journal of Microbiology</i> , 2004, 50, 469-474.	0.8	72
67	Influence of land-use intensity on the spatial distribution of N-cycling microorganisms in grassland soils. <i>FEMS Microbiology Ecology</i> , 2011, 77, 95-106.	1.3	70
68	Distribution of High Bacterial Taxa Across the Chronosequence of Two Alpine Glacier Forelands. <i>Microbial Ecology</i> , 2011, 61, 303-312.	1.4	69
69	Can differences in microbial abundances help explain enhanced N <sub>2</sub> O emissions in a permanent grassland under elevated atmospheric CO <sub>2</sub> ? <i>Global Change Biology</i> , 2011, 17, 3176-3186.	4.2	68
70	Relative Contribution of <i>nirK</i> and <i>nirS</i> Bacterial Denitrifiers as Well as Fungal Denitrifiers to Nitrous Oxide Production from Dairy Manure Compost. <i>Environmental Science &amp; Technology</i> , 2017, 51, 14083-14091.	4.6	68
71	Exotic invasive plants increase productivity, abundance of ammonia-oxidizing bacteria and nitrogen availability in intermountain grasslands. <i>Journal of Ecology</i> , 2016, 104, 994-1002.	1.9	66
72	Cover Crop Management Practices Rather Than Composition of Cover Crop Mixtures Affect Bacterial Communities in No-Till Agroecosystems. <i>Frontiers in Microbiology</i> , 2019, 10, 1618.	1.5	64

#	ARTICLE	IF	CITATIONS
73	Tracking nitrate reducers and denitrifiers in the environment. <i>Biochemical Society Transactions</i> , 2005, 33, 200-204.	1.6	63
74	Microbial succession of nitrate-reducing bacteria in the rhizosphere of <i>Poa alpina</i> across a glacier foreland in the Central Alps. <i>Environmental Microbiology</i> , 2006, 8, 1600-1612.	1.8	63
75	Accelerated mineralisation of atrazine in maize rhizosphere soil. <i>Biology and Fertility of Soils</i> , 2002, 36, 434-441.	2.3	62
76	Frequent freeze-thaw cycles yield diminished yet resistant and responsive microbial communities in two temperate soils: a laboratory experiment. <i>FEMS Microbiology Ecology</i> , 2010, 74, 323-335.	1.3	59
77	Standardisation of methods in soil microbiology: progress and challenges. <i>FEMS Microbiology Ecology</i> , 2012, 82, 1-10.	1.3	59
78	The establishment of an introduced community of fluorescent pseudomonads in the soil and in the rhizosphere is affected by the soil type. <i>FEMS Microbiology Ecology</i> , 1999, 30, 163-170.	1.3	58
79	Characterization of Denitrification Gene Clusters of Soil Bacteria via a Metagenomic Approach. <i>Applied and Environmental Microbiology</i> , 2009, 75, 534-537.	1.4	57
80	Evidence for shifts in the structure and abundance of the microbial community in a long-term PCB-contaminated soil under bioremediation. <i>Journal of Hazardous Materials</i> , 2011, 195, 254-260.	6.5	57
81	Involvement of Nitrate Reductase and Pyoverdine in Competitiveness of <i>Pseudomonas fluorescens</i> Strain C7R12 in Soil. <i>Applied and Environmental Microbiology</i> , 2001, 67, 2627-2635.	1.4	54
82	Direct seeding mulch-based cropping increases both the activity and the abundance of denitrifier communities in a tropical soil. <i>Soil Biology and Biochemistry</i> , 2009, 41, 1703-1709.	4.2	54
83	Agricultural management and pesticide use reduce the functioning of beneficial plant symbionts. <i>Nature Ecology and Evolution</i> , 2022, 6, 1145-1154.	3.4	54
84	16S rDNA analysis for characterization of denitrifying bacteria isolated from three agricultural soils. <i>FEMS Microbiology Ecology</i> , 2000, 34, 121-128.	1.3	52
85	Genetic Characterization of the Nitrate Reducing Community Based on narG Nucleotide Sequence Analysis. <i>Microbial Ecology</i> , 2003, 46, 113-121.	1.4	52
86	Resilience of bacteria, archaea, fungi and N-cycling microbial guilds under plough and conservation tillage, to agricultural drought. <i>Soil Biology and Biochemistry</i> , 2018, 120, 233-245.	4.2	52
87	Response of total and nitrate-dissimilating bacteria to reduced N deposition in a spruce forest soil profile. <i>FEMS Microbiology Ecology</i> , 2009, 67, 444-454.	1.3	51
88	Role of Respiratory Nitrate Reductase in Ability of <i>Pseudomonas fluorescens</i> YT101 To Colonize the Rhizosphere of Maize. <i>Applied and Environmental Microbiology</i> , 2000, 66, 4012-4016.	1.4	50
89	Estimation of atrazine-degrading genetic potential and activity in three French agricultural soils. <i>FEMS Microbiology Ecology</i> , 2004, 48, 425-435.	1.3	48
90	Land-use intensification differentially affects bacterial, fungal and protist communities and decreases microbiome network complexity. <i>Environmental Microbiomes</i> , 2022, 17, 1.	2.2	48

#	ARTICLE	IF	CITATIONS
91	Denitrification in pathogenic bacteria: for better or worst?. Trends in Microbiology, 2005, 13, 191-192.	3.5	46
92	Effect of primary mild stresses on resilience and resistance of the nitrate reducer community to a subsequent severe stress. FEMS Microbiology Letters, 2008, 285, 51-57.	0.7	45
93	Local response of bacterial densities and enzyme activities to elevated atmospheric CO <sub>2</sub> and different N supply in the rhizosphere of Phaseolus vulgaris L.. Soil Biology and Biochemistry, 2008, 40, 1225-1234.	4.2	42
94	Spatial distribution of N-cycling microbial communities showed complex patterns in constructed wetland sediments. FEMS Microbiology Ecology, 2013, 83, 340-351.	1.3	42
95	Managing biotic interactions for ecological intensification of agroecosystems. Frontiers in Ecology and Evolution, 2014, 2, .	1.1	42
96	Functional and structural responses of soil N-cycling microbial communities to the herbicide mesotrione: a dose-effect microcosm approach. Environmental Science and Pollution Research, 2016, 23, 4207-4217.	2.7	42
97	Towards food, feed and energy crops mitigating climate change. Trends in Plant Science, 2011, 16, 476-480.	4.3	40
98	Comparative Genetic Diversity of the narG , nosZ , and 16S rRNA Genes in Fluorescent Pseudomonads. Applied and Environmental Microbiology, 2003, 69, 1004-1012.	1.4	39
99	Frequency and Diversity of Nitrate Reductase Genes among Nitrate-Dissimilating Pseudomonas in the Rhizosphere of Perennial Grasses Grown in Field Conditions. Microbial Ecology, 2005, 49, 63-72.	1.4	39
100	Use of functional genes to quantify denitrifiers in the environment. Biochemical Society Transactions, 2006, 34, 101-103.	1.6	39
101	Shifts in size, genetic structure and activity of the soil denitrifier community by nematode grazing. European Journal of Soil Biology, 2010, 46, 112-118.	1.4	38
102	Domestication-driven changes in plant traits associated with changes in the assembly of the rhizosphere microbiota in tetraploid wheat. Scientific Reports, 2020, 10, 12234.	1.6	38
103	Differential Responses of Nitrate Reducer Community Size, Structure, and Activity to Tillage Systems. Applied and Environmental Microbiology, 2009, 75, 3180-3186.	1.4	36
104	Experimental removal and addition of leaf litter inputs reduces nitrate production and loss in a lowland tropical forest. Biogeochemistry, 2013, 113, 629-642.	1.7	36
105	Plant trait-based approaches to improve nitrogen cycling in agroecosystems. Journal of Applied Ecology, 2019, 56, 2454-2466.	1.9	36
106	Advantages of the metagenomic approach for soil exploration: reply from Vogel et al.. Nature Reviews Microbiology, 2009, 7, 756-757.	13.6	35
107	A core microbiota of the plant-earthworm interaction conserved across soils. Soil Biology and Biochemistry, 2020, 144, 107754.	4.2	34
108	The nitrification inhibitor dicyandiamide increases mineralization and immobilization turnover in slurry-amended grassland soil. Journal of Agricultural Science, 2014, 152, 137-149.	0.6	33

#	ARTICLE	IF	CITATIONS
109	Influence of Two Plant Species (Flax and Tomato) on the Distribution of Nitrogen Dissimilative Abilities within Fluorescent <i>Pseudomonas</i> spp. <i>Applied and Environmental Microbiology</i> , 1995, 61, 1745-1749.	1.4	33
110	Impact of the Maize Rhizosphere on the Genetic Structure, the Diversity and the Atrazine-degrading Gene Composition of Cultivable Atrazine-degrading Communities. <i>Plant and Soil</i> , 2006, 282, 99-115.	1.8	32
111	Genetic structure and activity of the nitrate-reducers community in the rhizosphere of different cultivars of maize. <i>Plant and Soil</i> , 2006, 287, 177-186.	1.8	31
112	Monitoring of atrazine treatment on soil bacterial, fungal and atrazine-degrading communities by quantitative competitive PCR. <i>Pest Management Science</i> , 2003, 59, 259-268.	1.7	30
113	Abundance and activity of nitrate reducers in an arable soil are more affected by temporal variation and soil depth than by elevated atmospheric [CO <sub>2</sub> ]. <i>FEMS Microbiology Ecology</i> , 2011, 76, 209-219.	1.3	30
114	Purification of the dissimilative nitrate reductase of <i>pseudomonas fluorescens</i> and the cloning and sequencing of its corresponding genes. <i>Biochimica Et Biophysica Acta Gene Regulatory Mechanisms</i> , 1997, 1350, 272-276.	2.4	29
115	Impact of atmospheric CO <sub>2</sub> and plant life forms on soil microbial activities. <i>Soil Biology and Biochemistry</i> , 2007, 39, 33-42.	4.2	29
116	Distribution of bacteria and nitrogen-cycling microbial communities along constructed Technosol depth-profiles. <i>Journal of Hazardous Materials</i> , 2012, 231-232, 88-97.	6.5	28
117	Positive effects of plant association on rhizosphere microbial communities depend on plant species involved and soil nitrogen level. <i>Soil Biology and Biochemistry</i> , 2017, 114, 1-4.	4.2	28
118	Soil and temperature effects on nitrification and denitrification modified N <sub>2</sub> O mitigation by 3,4-dimethylpyrazole phosphate. <i>Soil Biology and Biochemistry</i> , 2021, 157, 108224.	4.2	28
119	Nickel mine spoils revegetation attempts: effect of pioneer plants on two functional bacterial communities involved in the N-cycle. <i>Environmental Microbiology</i> , 2005, 7, 486-498.	1.8	27
120	Title is missing!. <i>Plant and Soil</i> , 1999, 209, 275-282.	1.8	25
121	Disruption of narG, the Gene Encoding the Catalytic Subunit of Respiratory Nitrate Reductase, Also Affects Nitrite Respiration in <i>Pseudomonas fluorescens</i> YT101. <i>Journal of Bacteriology</i> , 1999, 181, 5099-5102.	1.0	24
122	Role of Plant Residues in Determining Temporal Patterns of the Activity, Size, and Structure of Nitrate Reducer Communities in Soil. <i>Applied and Environmental Microbiology</i> , 2010, 76, 7136-7143.	1.4	23
123	Taxonomic and functional characterization of microbial communities in Technosols constructed for remediation of a contaminated industrial wasteland. <i>Journal of Soils and Sediments</i> , 2012, 12, 1396-1406.	1.5	23
124	Compounded Disturbance Chronology Modulates the Resilience of Soil Microbial Communities and N-Cycle Related Functions. <i>Frontiers in Microbiology</i> , 2018, 9, 2721.	1.5	23
125	Remotely sensed canopy nitrogen correlates with nitrous oxide emissions in a lowland tropical rainforest. <i>Ecology</i> , 2018, 99, 2080-2089.	1.5	23
126	Artificial selection of stable rhizosphere microbiota leads to heritable plant phenotype changes. <i>Ecology Letters</i> , 2022, 25, 189-201.	3.0	20



#	ARTICLE	IF	CITATIONS
127	Soil Functional Operating Range Linked to Microbial Biodiversity and Community Composition Using Denitrifiers as Model Guild. <i>PLoS ONE</i> , 2012, 7, e51962.	1.1	19
128	Influence of integrated weed management system on N-cycling microbial communities and N <sub>2</sub> O emissions. <i>Plant and Soil</i> , 2013, 373, 501-514.	1.8	19
129	Responses of <i>Cajanus cajan</i> and rhizospheric N-cycling communities to bioinoculants. <i>Plant and Soil</i> , 2012, 358, 143-154.	1.8	18
130	Cereal-legume intercropping modifies the dynamics of the active rhizospheric bacterial community. <i>Rhizosphere</i> , 2017, 3, 191-195.	1.4	18
131	Physiological significance of pedospheric nitric oxide for root growth, development and organismic interactions. <i>Plant, Cell and Environment</i> , 2020, 43, 2336-2354.	2.8	18
132	Biotic and abiotic predictors of potential N <sub>2</sub> O emissions from denitrification in Irish grasslands soils: A national-scale field study. <i>Soil Biology and Biochemistry</i> , 2022, 168, 108637.	4.2	18
133	Functional stability of the nitrate-reducing community in grassland soils towards high nitrate supply. <i>Soil Biology and Biochemistry</i> , 2006, 38, 2980-2984.	4.2	16
134	Soil microbial diversity: an ISO standard for soil DNA extraction. <i>Journal of Soils and Sediments</i> , 2010, 10, 1344-1345.	1.5	16
135	Loss in soil microbial diversity constrains microbiome selection and alters the abundance of N-cycling guilds in barley rhizosphere. <i>Applied Soil Ecology</i> , 2022, 169, 104224.	2.1	16
136	Relative involvement of nitrate and nitrite reduction in the competitiveness of <i>Pseudomonas fluorescens</i> in the rhizosphere of maize under non-limiting nitrate conditions. <i>FEMS Microbiology Ecology</i> , 2002, 39, 121-127.	1.3	15
137	Leaf-cutter ants engineer large nitrous oxide hot spots in tropical forests. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2019, 286, 20182504.	1.2	15
138	Diversity of archaea and niche preferences among putative ammonia-oxidizing Nitrososphaeria dominating across European arable soils. <i>Environmental Microbiology</i> , 2022, 24, 341-356.	1.8	15
139	Manipulating plant community composition to steer efficient N-cycling in intensively managed grasslands. <i>Journal of Applied Ecology</i> , 2021, 58, 167-180.	1.9	14
140	Abundance, activity and structure of denitrifier communities in phototrophic river biofilms (River Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 2	1.0	13
141	Litter inputs drive patterns of soil nitrogen heterogeneity in a diverse tropical forest: Results from a litter manipulation experiment. <i>Soil Biology and Biochemistry</i> , 2021, 158, 108247.	4.2	13
142	Effects of biosolids application on nitrogen dynamics and microbial structure in a saline-sodic soil of the former Lake Texcoco (Mexico). <i>Bioresource Technology</i> , 2010, 101, 2491-2498.	4.8	12
143	Spatial analysis of the root system coupled to microbial community inoculation shed light on rhizosphere bacterial community assembly. <i>Biology and Fertility of Soils</i> , 2021, 57, 973-989.	2.3	12
144	Ecotoxicological risk assessment of wastewater irrigation on soil microorganisms: Fate and impact of wastewater-borne micropollutants in lettuce-soil system. <i>Ecotoxicology and Environmental Safety</i> , 2021, 223, 112595.	2.9	12

#	ARTICLE	IF	CITATIONS
145	Contribution of Bacteria to Initial Input and Cycling of Nitrogen in Soils. , 2005, , 159-176.		11
146	Land use in urban areas impacts the composition of soil bacterial communities involved in nitrogen cycling. A case study from Lefkosa (Nicosia) Cyprus. Scientific Reports, 2021, 11, 8198.	1.6	11
147	Precipitation patterns and N availability alter plant-soil microbial C and N dynamics. Plant and Soil, 2021, 466, 151-163.	1.8	11
148	Impact of maize mucilage on atrazine mineralization and total C abundance. Pest Management Science, 2005, 61, 838-844.	1.7	9
149	Molecular Tools to Assess the Diversity and Density of Denitrifying Bacteria in Their Habitats. , 2007, , 313-330.		9
150	Spatial distribution of the abundance and activity of the sulfate ester-hydrolyzing microbial community in a rape field. Journal of Soils and Sediments, 2012, 12, 1360-1370.	1.5	9
151	Long-term impact of 19 years of farmyard manure or sewage sludge application on the structure, diversity and density of the protocatechuate-degrading bacterial community. Agriculture, Ecosystems and Environment, 2012, 158, 72-82.	2.5	9
152	Assessment of spike-AMP and qPCR-AMP in soil microbiota quantitative research. Soil Biology and Biochemistry, 2022, 166, 108570.	4.2	9
153	Spatio-Temporal Variations in the Abundance and Structure of Denitrifier Communities in Sediments Differing in Nitrate Content. Current Issues in Molecular Biology, 2017, 24, 71-102.	1.0	7
154	Novel virocell metabolic potential revealed in agricultural soils by virus-enriched soil metagenome analysis. Environmental Microbiology Reports, 2021, 13, 348-354.	1.0	5
155	Mixed Effects of Soil Compaction on the Nitrogen Cycle Under Pea and Wheat. Frontiers in Microbiology, 2021, 12, 822487.	1.5	4
156	Structure and activity of the nitrate-reducing community in the rhizosphere of Lolium perenne and Trifolium repens under long-term elevated atmospheric pCO <sub>2</sub> . FEMS Microbiology Ecology, 2004, 49, 445-445.	1.3	3
157	Assessment of the resilience and resistance of remediated soils using denitrification as model process. Journal of Soils and Sediments, 2014, 14, 178-182.	1.5	3
158	Microbial trait-based approaches for agroecosystems. Advances in Agronomy, 2022, , 259-299.	2.4	1
159	Spatio-Temporal Variations in the Abundance and Structure of Denitrifier Communities in Sediments Differing in Nitrate Content. , 2017, , .		0