

# Sara Hallin

## List of Publications by Year in Descending Order

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**Version:** 2024-04-09

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

110 papers	8,989 citations	45 h-index	94 g-index
127 ext. papers	11,176 ext. citations	6.8 avg, IF	6.33 L-index

#	Paper	IF	Citations
110	Land-use intensification differentially affects bacterial, fungal and protist communities and decreases microbiome network complexity.. <i>Environmental Microbiomes</i> , <b>2022</b> , 17, 1	5.6	0
109	Loss in soil microbial diversity constrains microbiome selection and alters the abundance of N-cycling guilds in barley rhizosphere. <i>Applied Soil Ecology</i> , <b>2022</b> , 169, 104224	5	2
108	Reactive nitrogen restructures and weakens microbial controls of soil NO emissions.. <i>Communications Biology</i> , <b>2022</b> , 5, 273	6.7	1
107	Nitrous oxide emissions and microbial communities during the transition to conservation agriculture using N-enhanced efficiency fertilisers in a semiarid climate. <i>Soil Biology and Biochemistry</i> , <b>2022</b> , 170, 108687	7.5	0
106	Minimizing tillage modifies fungal denitrifier communities, increases denitrification rates and enhances the genetic potential for fungal, relative to bacterial, denitrification. <i>Soil Biology and Biochemistry</i> , <b>2022</b> , 108718	7.5	0
105	Diversity of archaea and niche preferences among putative ammonia-oxidizing Nitrososphaeria dominating across European arable soils. <i>Environmental Microbiology</i> , <b>2021</b> ,	5.2	1
104	Shaping of soil microbial communities by plants does not translate into specific legacy effects on organic carbon mineralization. <i>Soil Biology and Biochemistry</i> , <b>2021</b> , 163, 108449	7.5	0
103	A tipping point in carbon storage when forest expands into tundra is related to mycorrhizal recycling of nitrogen. <i>Ecology Letters</i> , <b>2021</b> , 24, 1193-1204	10	21
102	Type of organic fertilizer rather than organic amendment per se increases abundance of soil biota. <i>PeerJ</i> , <b>2021</b> , 9, e11204	3.1	0
101	Plant-microbe interactions in response to grassland herbivory and nitrogen eutrophication. <i>Soil Biology and Biochemistry</i> , <b>2021</b> , 156, 108208	7.5	2
100	Unraveling negative biotic interactions determining soil microbial community assembly and functioning. <i>ISME Journal</i> , <b>2021</b> ,	11.9	9
99	nir gene-based co-occurrence patterns reveal assembly mechanisms of soil denitrifiers in response to fire. <i>Environmental Microbiology</i> , <b>2021</b> , 23, 239-251	5.2	4
98	Substrate type determines microbial activity and community composition in bioreactors for nitrate removal by denitrification at low temperature. <i>Science of the Total Environment</i> , <b>2021</b> , 755, 143023	10.2	10
97	Combined removal of organic micropollutants and ammonium in reactive barriers developed for managed aquifer recharge. <i>Water Research</i> , <b>2021</b> , 190, 116669	12.5	7
96	Microbial controls on net production of nitrous oxide in a denitrifying woodchip bioreactor. <i>Journal of Environmental Quality</i> , <b>2021</b> , 50, 228-240	3.4	2
95	Crop cover is more important than rotational diversity for soil multifunctionality and cereal yields in European cropping systems. <i>Nature Food</i> , <b>2021</b> , 2, 28-37	14.4	30
94	Agricultural diversification promotes multiple ecosystem services without compromising yield. <i>Science Advances</i> , <b>2020</b> , 6,	14.3	127

93	Denitrification rates in lake sediments of mountains affected by high atmospheric nitrogen deposition. <i>Scientific Reports</i> , <b>2020</b> , 10, 3003	4.9	5
92	Habitat diversity and type govern potential nitrogen loss by denitrification in coastal sediments and differences in ecosystem-level diversities of disparate N <sub>2</sub> O reducing communities. <i>FEMS Microbiology Ecology</i> , <b>2020</b> , 96,	4.3	3
91	Carbon and nitrogen cycling in Yedoma permafrost controlled by microbial functional limitations. <i>Nature Geoscience</i> , <b>2020</b> , 13, 794-798	18.3	8
90	External carbon addition for enhancing denitrification modifies bacterial community composition and affects CH and NO production in sub-arctic mining pond sediments. <i>Water Research</i> , <b>2019</b> , 158, 22-33	12.5	15
89	Lucerne ( <i>Medicago sativa</i> ) alters N <sub>2</sub> O-reducing communities associated with cocksfoot ( <i>Dactylis glomerata</i> ) roots and promotes N <sub>2</sub> O production in intercropping in a greenhouse experiment. <i>Soil Biology and Biochemistry</i> , <b>2019</b> , 137, 107547	7.5	14
88	The DNRA-Denitrification Dichotomy Differentiates Nitrogen Transformation Pathways in Mountain Lake Benthic Habitats. <i>Frontiers in Microbiology</i> , <b>2019</b> , 10, 1229	5.7	25
87	Importance of plant species for nitrogen removal using constructed floating wetlands in a cold climate. <i>Ecological Engineering</i> , <b>2019</b> , 138, 126-132	3.9	12
86	Geospatial variation in co-occurrence networks of nitrifying microbial guilds. <i>Molecular Ecology</i> , <b>2019</b> , 28, 293-306	5.7	28
85	Growth yield and selection of nosZ clade II types in a continuous enrichment culture of N O respiring bacteria. <i>Environmental Microbiology Reports</i> , <b>2018</b> , 10, 239-244	3.7	19
84	Exploiting ecosystem services in agriculture for increased food security. <i>Global Food Security</i> , <b>2018</b> , 17, 57-63	8.3	52
83	Life on NO: deciphering the ecophysiology of NO respiring bacterial communities in a continuous culture. <i>ISME Journal</i> , <b>2018</b> , 12, 1142-1153	11.9	44
82	Soil bacterial networks are less stable under drought than fungal networks. <i>Nature Communications</i> , <b>2018</b> , 9, 3033	17.4	381
81	Expression of nirK and nirS genes in two strains of <i>Pseudomonas stutzeri</i> harbouring both types of NO-forming nitrite reductases. <i>Research in Microbiology</i> , <b>2018</b> , 169, 343-347	4	21
80	Mixtures of macrophyte growth forms promote nitrogen cycling in wetlands. <i>Science of the Total Environment</i> , <b>2018</b> , 635, 1436-1443	10.2	18
79	Genomics and Ecology of Novel NO-Reducing Microorganisms. <i>Trends in Microbiology</i> , <b>2018</b> , 26, 43-55	12.4	212
78	Catch Crop Residues Stimulate NO Emissions During Spring, Without Affecting the Genetic Potential for Nitrite and NO Reduction. <i>Frontiers in Microbiology</i> , <b>2018</b> , 9, 2629	5.7	14
77	Relative abundance of denitrifying and DNRA bacteria and their activity determine nitrogen retention or loss in agricultural soil. <i>Soil Biology and Biochemistry</i> , <b>2018</b> , 123, 97-104	7.5	46
76	Habitat diversity and ecosystem multifunctionality-The importance of direct and indirect effects. <i>Science Advances</i> , <b>2017</b> , 3, e1601475	14.3	49

75	Spatial and phyloecological analyses of nosZ genes underscore niche differentiation amongst terrestrial N <sub>2</sub> O reducing communities. <i>Soil Biology and Biochemistry</i> , <b>2017</b> , 115, 82-91	7.5	34
74	Intercropping affects genetic potential for inorganic nitrogen cycling by root-associated microorganisms in <i>Medicago sativa</i> and <i>Dactylis glomerata</i> . <i>Applied Soil Ecology</i> , <b>2017</b> , 119, 260-266	5	25
73	Two-stage anaerobic digestion for reduced hydrogen sulphide production. <i>Journal of Chemical Technology and Biotechnology</i> , <b>2016</b> , 91, 1055-1062	3.5	17
72	Habitat generalists and specialists in microbial communities across a terrestrial-freshwater gradient. <i>Scientific Reports</i> , <b>2016</b> , 6, 37719	4.9	58
71	Soil type overrides plant effect on genetic and enzymatic N <sub>2</sub> O production potential in arable soils. <i>Soil Biology and Biochemistry</i> , <b>2016</b> , 100, 125-128	7.5	34
70	Microbes as Engines of Ecosystem Function: When Does Community Structure Enhance Predictions of Ecosystem Processes?. <i>Frontiers in Microbiology</i> , <b>2016</b> , 7, 214	5.7	321
69	Habitat partitioning of marine benthic denitrifier communities in response to oxygen availability. <i>Environmental Microbiology Reports</i> , <b>2016</b> , 8, 486-92	3.7	27
68	Design and evaluation of primers targeting genes encoding NO-forming nitrite reductases: implications for ecological inference of denitrifying communities. <i>Scientific Reports</i> , <b>2016</b> , 6, 39208	4.9	27
67	Control of <i>Microthrix parvicella</i> and sludge bulking by ozone in a full-scale WWTP. <i>Water Science and Technology</i> , <b>2016</b> , 73, 866-72	2.2	9
66	Non-denitrifying nitrous oxide-reducing bacteria - An effective N <sub>2</sub> O sink in soil. <i>Soil Biology and Biochemistry</i> , <b>2016</b> , 103, 376-379	7.5	61
65	Microbial functional diversity enhances predictive models linking environmental parameters to ecosystem properties. <i>Ecology</i> , <b>2015</b> , 96, 1985-93	4.6	54
64	Potential denitrification rates are spatially linked to colonization patterns of nosZ genotypes in an alluvial wetland. <i>Ecological Engineering</i> , <b>2015</b> , 80, 191-197	3.9	13
63	Brassicaceae cover crops reduce <i>Aphanomyces</i> pea root rot without suppressing genetic potential of microbial nitrogen cycling. <i>Plant and Soil</i> , <b>2015</b> , 392, 227-238	4.2	9
62	Influence of genetically modified organisms on agro-ecosystem processes. <i>Agriculture, Ecosystems and Environment</i> , <b>2015</b> , 214, 96-106	5.7	16
61	Relative importance of plant uptake and plant associated denitrification for removal of nitrogen from mine drainage in sub-arctic wetlands. <i>Water Research</i> , <b>2015</b> , 85, 377-83	12.5	38
60	Archaeal Ammonia Oxidizers Dominate in Numbers, but Bacteria Drive Gross Nitrification in N-amended Grassland Soil. <i>Frontiers in Microbiology</i> , <b>2015</b> , 6, 1350	5.7	60
59	Recently identified microbial guild mediates soil N <sub>2</sub> O sink capacity. <i>Nature Climate Change</i> , <b>2014</b> , 4, 801-805	8.05	245
58	Soil carbon quality and nitrogen fertilization structure bacterial communities with predictable responses of major bacterial phyla. <i>Applied Soil Ecology</i> , <b>2014</b> , 84, 62-68	5	124

57	Nitrogen fixation in shallow-water sediments: Spatial distribution and controlling factors. <i>Limnology and Oceanography</i> , <b>2014</b> , 59, 1932-1944	4.8	25
56	Nitrogen removal and spatial distribution of denitrifier and anammox communities in a bioreactor for mine drainage treatment. <i>Water Research</i> , <b>2014</b> , 66, 350-360	12.5	43
55	Intergenomic comparisons highlight modularity of the denitrification pathway and underpin the importance of community structure for N <sub>2</sub> O emissions. <i>PLoS ONE</i> , <b>2014</b> , 9, e114118	3.7	238
54	Abundance, activity and structure of denitrifier communities in phototrophic river biofilms (River Garonne, France). <i>Hydrobiologia</i> , <b>2013</b> , 716, 177-187	2.4	9
53	The unaccounted yet abundant nitrous oxide-reducing microbial community: a potential nitrous oxide sink. <i>ISME Journal</i> , <b>2013</b> , 7, 417-26	11.9	369
52	Standardisation of methods in soil microbiology: progress and challenges. <i>FEMS Microbiology Ecology</i> , <b>2012</b> , 82, 1-10	4.3	51
51	Response of induced perturbation on replicating $\beta$ -proteobacterial ammonia-oxidizing populations in soil. <i>Microbial Ecology</i> , <b>2012</b> , 63, 701-9	4.4	4
50	Temporal Changes in Methane Oxidizing and Denitrifying Communities and Their Activities in a Drained Peat Soil. <i>Wetlands</i> , <b>2012</b> , 32, 1047-1055	1.7	13
49	Abundance and composition of epiphytic bacterial and archaeal ammonia oxidizers of marine red and brown macroalgae. <i>Applied and Environmental Microbiology</i> , <b>2012</b> , 78, 318-25	4.8	37
48	Soil functional operating range linked to microbial biodiversity and community composition using denitrifiers as model guild. <i>PLoS ONE</i> , <b>2012</b> , 7, e51962	3.7	17
47	Ammonia oxidizing bacterial community composition and process performance in wastewater treatment plants under low temperature conditions. <i>Water Science and Technology</i> , <b>2012</b> , 65, 197-204	2.2	30
46	Emergent macrophytes act selectively on ammonia-oxidizing bacteria and archaea. <i>Applied and Environmental Microbiology</i> , <b>2012</b> , 78, 6352-6	4.8	38
45	The role of plant type and salinity in the selection for the denitrifying community structure in the rhizosphere of wetland vegetation. <i>International Microbiology</i> , <b>2012</b> , 15, 89-99	3	38
44	Abundance of archaeal and bacterial ammonia oxidizers [Possible bioindicator for soil monitoring. <i>Ecological Indicators</i> , <b>2011</b> , 11, 1696-1698	5.8	57
43	Inter-laboratory evaluation of the ISO standard 11063 "Soil quality - Method to directly extract DNA from soil samples". <i>Journal of Microbiological Methods</i> , <b>2011</b> , 84, 454-60	2.8	86
42	Survey of bromodeoxyuridine uptake among environmental bacteria and variation in uptake rates in a taxonomically diverse set of bacterial isolates. <i>Journal of Microbiological Methods</i> , <b>2011</b> , 86, 376-8	2.8	8
41	Genetic potential for N <sub>2</sub> O emissions from the sediment of a free water surface constructed wetland. <i>Water Research</i> , <b>2011</b> , 45, 5621-32	12.5	94
40	Towards food, feed and energy crops mitigating climate change. <i>Trends in Plant Science</i> , <b>2011</b> , 16, 476-80	3.1	33

39	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> , <b>2011</b> , 17, 1497-1504	11.4	237
38	Phenotypic and genotypic heterogeneity among closely related soil-borne N <sub>2</sub> - and N <sub>2</sub> O-producing <i>Bacillus</i> isolates harboring the <i>nosZ</i> gene. <i>FEMS Microbiology Ecology</i> , <b>2011</b> , 76, 541-52	4.3	50
37	Spatial distribution of ammonia-oxidizing bacteria and archaea across a 44-hectare farm related to ecosystem functioning. <i>ISME Journal</i> , <b>2011</b> , 5, 1213-25	11.9	106
36	Knowledge gaps in soil carbon and nitrogen interactions ¶From molecular to global scale. <i>Soil Biology and Biochemistry</i> , <b>2011</b> , 43, 702-717	7.5	167
35	Temporal changes in abundance and composition of ammonia-oxidizing bacterial and archaeal communities in a drained peat soil in relation to N <sub>2</sub> O emissions. <i>Journal of Soils and Sediments</i> , <b>2011</b> , 11, 1399-1407	3.4	22
34	Global phylogeography of chitinase genes in aquatic metagenomes. <i>Applied and Environmental Microbiology</i> , <b>2011</b> , 77, 1101-6	4.8	18
33	Ecological and evolutionary factors underlying global and local assembly of denitrifier communities. <i>ISME Journal</i> , <b>2010</b> , 4, 633-41	11.9	172
32	The ecological coherence of high bacterial taxonomic ranks. <i>Nature Reviews Microbiology</i> , <b>2010</b> , 8, 523-9	22.2	406
31	Soil resources influence spatial patterns of denitrifying communities at scales compatible with land management. <i>Applied and Environmental Microbiology</i> , <b>2010</b> , 76, 2243-50	4.8	167
30	Responses of bacterial and archaeal ammonia oxidizers to soil organic and fertilizer amendments under long-term management. <i>Applied Soil Ecology</i> , <b>2010</b> , 45, 193-200	5	168
29	Bacterial community diversity in paper mills processing recycled paper. <i>Journal of Industrial Microbiology and Biotechnology</i> , <b>2010</b> , 37, 1061-9	4.2	12
28	Differential responses of bacterial and archaeal groups at high taxonomical ranks to soil management. <i>Soil Biology and Biochemistry</i> , <b>2010</b> , 42, 1759-1765	7.5	108
27	Biochemical cycling in the rhizosphere having an impact on global change. <i>Plant and Soil</i> , <b>2009</b> , 321, 61-8	4.2	162
26	Activity and composition of ammonia oxidizing bacterial communities and emission dynamics of NH <sub>3</sub> and N <sub>2</sub> O in a compost reactor treating organic household waste. <i>Journal of Applied Microbiology</i> , <b>2009</b> , 106, 1502-11	4.7	62
25	Relationship between N-cycling communities and ecosystem functioning in a 50-year-old fertilization experiment. <i>ISME Journal</i> , <b>2009</b> , 3, 597-605	11.9	400
24	Structure and function of denitrifying and nitrifying bacterial communities in relation to the plant species in a constructed wetland. <i>FEMS Microbiology Ecology</i> , <b>2009</b> , 67, 308-19	4.3	130
23	Spatial patterns of bacterial taxa in nature reflect ecological traits of deep branches of the 16S rRNA bacterial tree. <i>Environmental Microbiology</i> , <b>2009</b> , 11, 3096-104	5.2	111
22	Comparison of T-RFLP and DGGE techniques to assess denitrifier community composition in soil. <i>Letters in Applied Microbiology</i> , <b>2009</b> , 48, 145-8	2.9	24

21	Phylogenetic analysis of nitrite, nitric oxide, and nitrous oxide respiratory enzymes reveal a complex evolutionary history for denitrification. <i>Molecular Biology and Evolution</i> , <b>2008</b> , 25, 1955-66	8.3	348
20	Ecology of Denitrifying Prokaryotes in Agricultural Soil. <i>Advances in Agronomy</i> , <b>2007</b> , 96, 249-305	7.7	253
19	Silver (Ag+) reduces denitrification and induces enrichment of novel nirK genotypes in soil. <i>FEMS Microbiology Letters</i> , <b>2007</b> , 270, 189-94	2.9	106
18	Long-term impact of fertilization on activity and composition of bacterial communities and metabolic guilds in agricultural soil. <i>Soil Biology and Biochemistry</i> , <b>2007</b> , 39, 106-115	7.5	159
17	Molecular Tools to Assess the Diversity and Density of Denitrifying Bacteria in Their Habitats <b>2007</b> , 313-330		4
16	Spatial variations in denitrification activity in wetland sediments explained by hydrology and denitrifying community structure. <i>Water Research</i> , <b>2007</b> , 41, 4710-20	12.5	83
15	Ammonia-oxidizing communities in agricultural soil incubated with organic waste residues. <i>Biology and Fertility of Soils</i> , <b>2006</b> , 42, 315-323	6.1	26
14	Metabolic profiles and genetic diversity of denitrifying communities in activated sludge after addition of methanol or ethanol. <i>Applied and Environmental Microbiology</i> , <b>2006</b> , 72, 5445-52	4.8	92
13	Molecular analyses of soil denitrifying bacteria. <b>2006</b> , 146-165		6
12	Finding the missing link between diversity and activity using denitrifying bacteria as a model functional community. <i>Current Opinion in Microbiology</i> , <b>2005</b> , 8, 234-9	7.9	169
11	Community survey of ammonia-oxidizing bacteria in full-scale activated sludge processes with different solids retention time. <i>Journal of Applied Microbiology</i> , <b>2005</b> , 99, 629-40	4.7	62
10	Activity and composition of the denitrifying bacterial community respond differently to long-term fertilization. <i>Applied and Environmental Microbiology</i> , <b>2005</b> , 71, 8335-43	4.8	264
9	Reassessing PCR primers targeting nirS, nirK and nosZ genes for community surveys of denitrifying bacteria with DGGE. <i>FEMS Microbiology Ecology</i> , <b>2004</b> , 49, 401-17	4.3	893
8	PCR detection of genes encoding nitrite reductase in denitrifying bacteria. <i>Applied and Environmental Microbiology</i> , <b>1999</b> , 65, 1652-7	4.8	310
7	Intermittent addition of external carbon to enhance denitrification in activated sludge. <i>Water Science and Technology</i> , <b>1998</b> , 37, 227	2.2	5
6	METABOLIC PROPERTIES OF DENITRIFYING BACTERIA ADAPTING TO METHANOL AND ETHANOL IN ACTIVATED SLUDGE. <i>Water Research</i> , <b>1998</b> , 32, 13-18	12.5	66
5	Adaptation of denitrifying bacteria to acetate and methanol in activated sludge. <i>Water Research</i> , <b>1996</b> , 30, 1445-1450	12.5	37
4	Microbial adaptation, process performance and a suggested control strategy in a pre-denitrifying system with ethanol dosage. <i>Water Science and Technology</i> , <b>1996</b> , 34, 91	2.2	7



3	Acetylene inhibition for measuring denitrification rates in activated sludge. <i>Water Science and Technology</i> , <b>1994</b> , 30, 161-167	2.2	8
2	Disentangling the roles of plant functional diversity and plant traits in regulating plant nitrogen accumulation and denitrification in freshwaters. <i>Functional Ecology</i> ,	5.6	1
1	Site-specific responses of fungal and bacterial abundances to experimental warming in litter and soil across Arctic and alpine tundra. <i>Arctic Science</i> ,1-14	2.2	3