Peter DÃ¶rsch

List of Publications by Year
in descending order

78 papers	3,759 citations	172457 29 h-index	133252 59 g-index
92 all docs	92 docs citations	92 times ranked	3695 citing authors

#	Article	IF	Citations
1	Seasonal variation of N2O and CH4fluxes in differently managed arable soils in southern Germany. Journal of Geophysical Research, 1995, 100, 23115.	3.3	260
2	Integrated evaluation of greenhouse gas emissions (CO2, CH4, N2O) from two farming systems in southern Germany. Agriculture, Ecosystems and Environment, 2002, 91, 175-189.	5.3	255
3	Robotized incubation system for monitoring gases (O2, NO, N2O N2) in denitrifying cultures. Journal of Microbiological Methods, 2007, 71, 202-211.	1.6	217
4	Title is missing!. Nutrient Cycling in Agroecosystems, 1998, 52, 77-105.	2.2	214
5	Low temperature control of soil denitrifying communities: kinetics of N2O production and reduction. Soil Biology and Biochemistry, 2002, 34, 1797-1806.	8.8	209
6	The N2O product ratio of nitrification and its dependence on long-term changes in soil pH. Soil Biology and Biochemistry, 2007, 39, 2048-2057.	8.8	191
7	N2O emissions and product ratios of nitrification and denitrification as affected by freezing and thawing. Soil Biology and Biochemistry, 2006, 38, 3411-3420.	8.8	155
8	Production of NO, N2O and N2 by extracted soil bacteria, regulation by NO2Ã¢ÂˆÂ’ and O2 concentrations. FEMS Microbiology Ecology, 2008, 65, 102-112.	2.7	141
9	Comparison of denitrifying communities in organic soils: kinetics of NOâˆ’3 and N2O reduction. Soil Biology and Biochemistry, 2000, 32, 833-843.	8.8	136
10	Effect of Soil pH Increase by Biochar on NO, N2O and N2 Production during Denitrification in Acid Soils. PLoS ONE, 2015, 10, e0138781.	2.5	131
11	Influence of Cattle Wastes on Nitrous Oxide and Methane Fluxes in Pasture Land. Journal of Environmental Quality, 1996, 25, 1366-1370.	2.0	110
12	Sorption of Pure N₂O to Biochars and Other Organic and Inorganic Materials under Anhydrous Conditions. Environmental Science & Technology, 2013, 47, 7704-7712.	10.0	103
13	Spatial variation in soil pH controls off-season N2O emission in an agricultural soil. Soil Biology and Biochemistry, 2016, 99, 36-46.	8.8	94
14	Overwinter greenhouse gas fluxes in two contrasting agricultural habitats. Nutrient Cycling in Agroecosystems, 2004, 70, 117-133.	2.2	81
15	Greenhouse gas metabolism in Nordic boreal lakes. Biogeochemistry, 2015, 126, 211-225.	3.5	77
16	pH-driven shifts in overall and transcriptionally active denitrifiers control gaseous product stoichiometry in growth experiments with extracted bacteria from soil. Frontiers in Microbiology, 2015, 6, 961.	3.5	70
17	Denitrification in Soil Aggregate Analogues-Effect of Aggregate Size and Oxygen Diffusion. Frontiers in Environmental Science, 2018, 6, .	3.3	65
18	Soil acidification by intensified crop production in South Asia results in higher N2O/(N2Â+ÂN2O) product ratios of denitrification. Soil Biology and Biochemistry, 2012, 55, 104-112.	8.8	60

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19	Community-specific pH response of denitrification: experiments with cells extracted from organic soils. FEMS Microbiology Ecology, 2012, 79, 530-541.	2.7	58
20	Genetic characterization of denitrifier communities with contrasting intrinsic functional traits. FEMS Microbiology Ecology, 2012, 79, 542-554.	2.7	56
21	Phenotypic and genotypic heterogeneity among closely related soil-borne N2- and N2O-producing Bacillus isolates harboring the nosZ gene. FEMS Microbiology Ecology, 2011, 76, 541-552.	2.7	53
22	Spatial and temporal variability of N₂O emissions in a subtropical forest catchment in China. Biogeosciences, 2013, 10, 1309-1321.	3.3	50
23	The effect of a biochar temperature series on denitrification: which biochar properties matter?. Soil Biology and Biochemistry, 2019, 135, 173-183.	8.8	49
24	Autoxidation and acetylene-accelerated oxidation of NO in a 2-phase system: Implications for the expression of denitrification in ex situ experiments. Soil Biology and Biochemistry, 2013, 57, 606-614.	8.8	44
25	The importance of denitrification for N2O emissions from an N-saturated forest in SW China: results from in situ 15N labeling experiments. Biogeochemistry, 2013, 116, 103-117.	3.5	43
26	Mechanism leading to N2O production in wastewater treating biofilm systems. Reviews in Environmental Science and Biotechnology, 2016, 15, 355-378.	8.1	40
27	Relative activity of ammonia oxidizing archaea and bacteria determine nitrification-dependent N2O emissions in Oregon forest soils. Soil Biology and Biochemistry, 2019, 139, 107612.	8.8	36
28	Functional traits of denitrification in a subtropical forest catchment in China with high atmogenic N deposition. Soil Biology and Biochemistry, 2013, 57, 577-586.	8.8	33
29	Multiyear dual nitrate isotope signatures suggest that Nâ€saturated subtropical forested catchments can act as robust N sinks. Global Change Biology, 2016, 22, 3662-3674.	9.5	33
30	Modelling soil anaerobiosis from water retention characteristics and soil respiration. Soil Biology and Biochemistry, 2006, 38, 2637-2644.	8.8	32
31	Physical constraints for respiration in microbial hotspots in soil and their importance for denitrification. Biogeosciences, 2019, 16, 3665-3678.	3.3	30
32	Denitrification as a major regional nitrogen sink in subtropical forest catchments: Evidence from multiâ€site dual nitrate isotopes. Global Change Biology, 2019, 25, 1765-1778.	9.5	30
33	Trade-offs in greenhouse gas emissions across a liming-induced gradient of soil pH: Role of microbial structure and functioning. Soil Biology and Biochemistry, 2020, 150, 108006.	8.8	30
34	N₂O emission from organic barley cultivation as affected by green manure management. Biogeosciences, 2012, 9, 2747-2759.	3.3	27
35	Distinct fates of atmogenic NH4 + and NO3 âˆ’ in subtropical, N-saturated forest soils. Biogeochemistry, 2017, 133, 279-294.	3.5	27
36	Effect of legume intercropping on N₂O emissions and CH₄ uptake during maize production in the Great Rift Valley, Ethiopia. Biogeosciences, 2020, 17, 345-359.	3.3	26

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37	The influence of nitrate and ammonium fertilization on N2O release and CH4 uptake of a well-drained topsoil demonstrated by a soil microcosm experiment. Zeitschrift Fur Pflanzenernahrung Und Bodenkunde = Journal of Plant Nutrition and Plant Science, 1996, 159, 499-503.	0.4	25
38	Phosphorus addition mitigates N₂O and CH₄ emissions in N-saturated subtropical forest, SW China. Biogeosciences, 2017, 14, 3097-3109.	3.3	25
39	Contingent Effects of Liming on N2O-Emissions Driven by Autotrophic Nitrification. Frontiers in Environmental Science, 2020, 8, .	3.3	25
40	Soil N2O emission potential falls along a denitrification phenotype gradient linked to differences in microbiome, rainfall and carbon availability. Soil Biology and Biochemistry, 2020, 150, 108004.	8.8	23
41	Seasonal dynamics of soil pH and N transformation as affected by N fertilization in subtropical China: An in situ 15N labeling study. Science of the Total Environment, 2022, 816, 151596.	8.0	22
42	Soil acidification and loss of base cations in a subtropical agricultural watershed. Science of the Total Environment, 2022, 827, 154338.	8.0	22
43	Carbon Dioxide and Methane Formation in Norway Spruce Stems Infected by White-Rot Fungi. Forests, 2015, 6, 3304-3325.	2.1	20
44	Propionic acid bacteria enhance ruminal feed degradation and reduce methane production <i>in vitro</i>. Acta Agriculturae Scandinavica - Section A: Animal Science, 2020, 69, 169-175.	0.2	18
45	The significance of early accumulation of nanomolar concentrations of NO as an inducer of denitrification. FEMS Microbiology Ecology, 2013, 83, 672-684.	2.7	17
46	Effects of tillage practice on soil structure, N2O emissions and economics in cereal production under current socio-economic conditions in central Bosnia and Herzegovina. PLoS ONE, 2017, 12, e0187681.	2.5	17
47	Effects of nitrogen split application on seasonal N2O emissions in southeast Norway. Nutrient Cycling in Agroecosystems, 2019, 115, 41-56.	2.2	17
48	Topographic differences in nitrogen cycling mediate nitrogen retention in a subtropical, N-saturated forest catchment. Soil Biology and Biochemistry, 2021, 159, 108303.	8.8	17
49	Nitrate leaching and N accumulation in a typical subtropical red soil with N fertilization. Geoderma, 2022, 407, 115559.	5.1	17
50	Using metagenomics to reveal landscape scale patterns of denitrifiers in a montane forest ecosystem. Soil Biology and Biochemistry, 2019, 138, 107585.	8.8	16
51	Controlled induction of denitrification in Pseudomonas aureofaciens: A simplified denitrifier method for dual isotope analysis in NO3âˆ'. Science of the Total Environment, 2018, 633, 1370-1378.	8.0	14
52	Simplified preparation for the Î´15N-analysis in soil NO3- by the denitrifier method. Soil Biology and Biochemistry, 2007, 39, 1907-1915.	8.8	13
53	Nitrous oxide emissions from a fertile grassland in Western Norway following the application of inorganic and organic fertilizers. Nutrient Cycling in Agroecosystems, 2014, 98, 71-85.	2.2	13
54	Bradyrhizobial inoculation and P application effects on haricot and mung beans in the Ethiopian Rift Valley. Plant and Soil, 2019, 442, 271-284.	3.7	12

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55	Nitrous oxide emissions in a biofilm loaded with different mixtures of concentrated household wastewater. International Journal of Environmental Science and Technology, 2015, 12, 3405-3416.	3.5	11
56	Spatial and temporal variability of soil nitric oxide emissions in N-saturated subtropical forest. Biogeochemistry, 2017, 134, 337-351.	3.5	11
57	Nitric oxide emission response to soil moisture is linked to transcriptional activity of functional microbial groups. Soil Biology and Biochemistry, 2017, 115, 337-345.	8.8	11
58	Nitrous oxide emissions from oilseed rape cultivation were unaffected by flash pyrolysis biochar of different type, rate and field ageing. Science of the Total Environment, 2020, 724, 138140.	8.0	11
59	Winter N₂O accumulation and emission in sub-boreal grassland soil depend on clover proportion and soil pH. Environmental Research Communications, 2021, 3, 015001.	2.3	11
60	Nitrous Oxide Emission and Global Changes: Modeling Approaches. , 2007, , 381-395.		10
61	Sequential extraction of denitrifying organisms from soils; strongly attached cells produce less N2O than loosely attached cells. Soil Biology and Biochemistry, 2013, 67, 62-69.	8.8	10
62	Nitrate runoff loss and source apportionment in a typical subtropical agricultural watershed. Environmental Science and Pollution Research, 2022, 29, 20186-20199.	5.3	9
63	Topography-related controls on N2O emission and CH4 uptake in a tropical rainforest catchment. Science of the Total Environment, 2021, 775, 145616.	8.0	8
64	Nitrite accumulation and impairment of N2O reduction explains contrasting soil denitrification phenotypes. Soil Biology and Biochemistry, 2022, 166, 108529.	8.8	8
65	Higher N<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si11.gif" display="inline" overflow="scroll"><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:math>O emission by intensified crop production in South Asia. Global Ecology and Conservation, 2015, 4, 176-184.	2.1	7
66	Biological nitrogen fixation and transfer in a high latitude grass-clover grassland under different management practices. Plant and Soil, 2017, 421, 107-122.	3.7	6
67	Fluxes of CH₄, N₂O, and kinetics of denitrification in disturbed and undisturbed forest soil in India. Canadian Journal of Soil Science, 2014, 94, 237-249.	1.2	5
68	Phosphorus Availability Promotes Bacterial DOC-Mineralization, but Not Cumulative CO2-Production. Frontiers in Microbiology, 2020, 11, 569879.	3.5	5
69	Effect of fertilization rate and ploughing time on nitrous oxide emissions in a long-term cereal trail in south east Norway. Biology and Fertility of Soils, 2015, 51, 353-365.	4.3	4
70	Humid Subtropical Forests Constitute a Net Methane Source: A Catchmentâ€Scale Study. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 2927-2942.	3.0	4
71	Nitrification is the primary source for NO in Nâ€saturated subtropical forest soils: Results from in situ 15 N labeling. Rapid Communications in Mass Spectrometry, 2020, 34, e8700.	1.5	4
72	Boreal Headwater Catchment as Hot Spot of Carbon Processing From Headwater to Fjord. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2021JG006359.	3.0	4

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73	Calibration of the EU-Rotate_N model with measured C and N mineralization from potential fertilizers and evaluation of its prediction of crop and soil data from a vegetable field trial. European Journal of Agronomy, 2021, 129, 126336.	4.1	3
74	Clover increases N2O emissions in boreal leys during winter. Soil Biology and Biochemistry, 2021, 163, 108459.	8.8	3
75	Pigeon pea biochar addition in tropical Arenosol under maize increases gross nitrification rate without an effect on nitrous oxide emission. Plant and Soil, 2022, 474, 195-212.	3.7	3
76	Modified Method for Trapping and Analyzing ¹⁵N in NO Released from Soils. Analytical Chemistry, 2017, 89, 4124-4130.	6.5	2
77	Small-scale on-site treatment of fecal matter: comparison of treatments for resource recovery and sanitization. Environmental Science and Pollution Research, 2021, 28, 63945-63964.	5.3	2
78	Automated Laboratory and Field Techniques to Determine Greenhouse Gas Emissions. , 2021, , 109-139.		1