

CITATION REPORT

List of articles citing

Nitrous oxide emissions from soils: how well do we understand the processes and their controls?

DOI: 10.1098/rstb.2013.0122

Philosophical Transactions of the Royal Society B: Biological Sciences, 2013, 368, 20130122.

Source: <https://exaly.com/paper-pdf/56092094/citation-report.pdf>

Version: 2024-04-27

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

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

#	Paper	IF	Citations
1537	Modeling soil moisture and oxygen effects on soil biogeochemical cycles including dissimilatory nitrate reduction to ammonium (DNRA). 2013 , 62, 106-124		55
1536	The global nitrogen cycle in the twenty-first century. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2013 , 368, 20130164	5.8	727
1535	The global nitrogen cycle in the twenty-first century: introduction. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2013 , 368, 20130165	5.8	67
1534	Increased methane uptake but unchanged nitrous oxide flux in montane grasslands under simulated climate change conditions. 2013 , 64, 586-596		24
1533	Soil Bulk Density and Moisture Content Influence Relative Gas Diffusivity and the Reduction of Nitrogen-15 Nitrous Oxide. 2014 , 13, vzj2014.07.0089		18
1532	Pulse increase of soil N ₂ O emission in response to N addition in a temperate forest on Mt Changbai, northeast China. 2014 , 9, e102765		30
1531	Nitrogen mineralization and gaseous nitrogen losses from waterlogged and drained organic soils in a black alder (<i>Alnus glutinosa</i> (L.) Gaertn.) forest. 2014 , 11, 2961-2976		31
1530	Short-term effects of biogas digestate and cattle slurry application on greenhouse gas emissions affected by N availability from grasslands on drained fen peatlands and associated organic soils. 2014 , 11, 6187-6207		23
1529	N ₂ O, NO, and CO ₂ emissions from tropical savanna and grassland of northern Australia: an incubation experiment with intact soil cores. 2014 , 11, 6047-6065		17
1528	Measuring and modeling nitrous oxide and methane emissions from beef cattle feedlot manure management: First assessments under Brazilian condition. 2014 , 49, 696-711		9
1527	Reducing nitrous oxide emissions from the global food system. 2014 , 9-10, 55-64		27
1526	Nitrous oxide emissions during the non-rice growing seasons of two subtropical rice-based rotation systems in southwest China. 2014 , 383, 401-414		14
1525	The challenge of modelling nitrogen management at the field scale: simulation and sensitivity analysis of N ₂ O fluxes across nine experimental sites using DailyDayCent. 2014 , 9, 095003		25
1524	Nitrous oxide fluxes in undisturbed riparian wetlands located in agricultural catchments: Emission, uptake and controlling factors. 2014 , 68, 291-299		52
1523	Oxygen and substrate availability interactively control the temperature sensitivity of CO ₂ and N ₂ O emission from soil. 2014 , 50, 775-783		40
1522	Topography as a key factor driving atmospheric nitrogen exchanges in arctic terrestrial ecosystems. 2014 , 70, 96-112		57
1521	Denitrifier community size, structure and activity along a gradient of pasture to riparian soils. 2014 , 71, 48-60		52

1520	Abundance and gene expression in nitrifier and denitrifier communities associated with a field scale spring thaw N ₂ O flux event. 2014 , 73, 1-9	66
1519	Recently identified microbial guild mediates soil N ₂ O sink capacity. 2014 , 4, 801-805	245
1518	Monitoring of nitrate leaching during flush flooding events in a coarse-textured floodplain soil. 2014 , 146, 218-227	15
1517	Predicting nitrous oxide emissions from N-fertilized grassland soils in the UK from three soil variables, using the B-LINE 2 model. 2014 , 98, 309-326	5
1516	A new high-resolution N ₂ O emission inventory for China in 2008. 2014 , 48, 8538-47	57
1515	N ₂ O emission from cropland field soil through fungal denitrification after surface applications of organic fertilizer. 2014 , 69, 157-167	70
1514	Effect of litter layer on soil-atmosphere N ₂ O flux of a subtropical pine plantation in China. 2014 , 82, 106-112	16
1513	Tillage and nitrogen fertilization effects on nitrous oxide yield-scaled emissions in a rainfed Mediterranean area. 2014 , 189, 43-52	71
1512	Biochar's role in mitigating soil nitrous oxide emissions: A review and meta-analysis. 2014 , 191, 5-16	564
1511	Mitigating nitrous oxide emissions from corn cropping systems in the Midwestern U.S.: potential and data gaps. 2014 , 48, 4247-56	71
1510	A highly sensitive method for the determination of hydroxylamine in soils. 2014 , 232-234, 117-122	37
1509	The impact of excretal returns from yak and Tibetan sheep dung on nitrous oxide emissions in an alpine steppe on the Qinghai-Tibetan Plateau. 2014 , 76, 90-99	31
1508	TransCom N ₂ O model inter-comparison [Part 2: Atmospheric inversion estimates of N ₂ O emissions. 2014 , 14, 6177-6194	37
1507	Lowering N ₂ O emissions from soils using eucalypt biochar: the importance of redox reactions. 2015 , 5, 16773	52
1506	Sampling frequency affects estimates of annual nitrous oxide fluxes. 2015 , 5, 15912	93
1505	Nitrous oxide and methane emissions from cryptogamic covers. 2015 , 21, 3889-900	75
1504	Effects of global change during the 21st century on the nitrogen cycle. 2015 , 15, 13849-13893	112
1503	First on-line isotopic characterization of N ₂ O above intensively managed grassland. 2015 , 12, 2517-2531	38

1502	Simulation of atmospheric N ₂ O with GEOS-Chem and its adjoint: evaluation of observational constraints. 2015 , 8, 3179-3198	13
1501	Global soil nitrous oxide emissions in a dynamic carbon-nitrogen model. 2015 , 12, 6405-6427	20
1500	N ₂ O fluxes from the littoral zone of a Chinese reservoir. 2015 , 12, 4711-4723	6
1499	The greenhouse gas balance of a drained fen peatland is mainly controlled by land-use rather than soil organic carbon content. 2015 , 12, 5161-5184	29
1498	Does Diapirism Influence Greenhouse Gas Production on Patterned Ground in the High Arctic?. 2015 , 79, 889-895	3
1497	Reviews and syntheses: Soil N ₂ O and NO emissions from land use and land-use change in the tropics and subtropics: a meta-analysis. 2015 , 12, 7299-7313	70
1496	Specific microbial gene abundances and soil parameters contribute to C, N, and greenhouse gas process rates after land use change in Southern Amazonian Soils. 2015 , 6, 1057	63
1495	Using X-ray Computed Tomography to Describe the Dynamics of Nitrous Oxide Emissions during Soil Drying. 2015 , 14, vj2014.12.0177	14
1494	Parameter-Induced Uncertainty Quantification of Regional N ₂ O Emissions and NO ₃ Leaching using the Biogeochemical Model LandscapeDNDC. 2015 , 149-171	2
1493	Nitrous Oxide Emission from Uplands in Northern China. 2015 , 1-20	2
1492	Spatial variability and hotspots of soil N ₂ O fluxes from intensively grazed grassland. 2015 , 12, 1585-1596	48
1491	Mitigating N ₂ O emissions from agriculture: A review of the current knowledge on soil system modelling, environmental factors and management practices influencing emissions. 2015 , 6, 178-186	5
1490	Eddy covariance for quantifying trace gas fluxes from soils. 2015 , 1, 187-205	43
1489	Mitigating N ₂ O emissions from soil: from patching leaks to transformative action. 2015 , 1, 687-694	61
1488	Molecular techniques and stable isotope ratios at natural abundance give complementary inferences about N ₂ O production pathways in an agricultural soil following a rainfall event. 2015 , 88, 197-213	41
1487	Simulation of nitrous oxide emissions at field scale using the SPACSYS model. 2015 , 530-531, 76-86	29
1486	Nitrogenous Gas Emissions from Soils and Greenhouse Gas Effects. 2015 , 132, 39-74	23
1485	Hydration and diffusion processes shape microbial community organization and function in model soil aggregates. 2015 , 51, 9804-9827	72

1484	New model for capturing the variations of fertilizer-induced emission factors of N ₂ O. 2015 , 29, 885-897	35
1483	Nitrous Oxide and Methane Fluxes Following Ammonium Sulfate and Vinasse Application on Sugar Cane Soil. 2015 , 49, 11209-17	22
1482	Biological soil crusts accelerate the nitrogen cycle through large NO and HONO emissions in drylands. 2015 , 112, 15384-9	109
1481	Modeling nitrous oxide emissions from organic and conventional cereal-based cropping systems under different management, soil and climate factors. 2015 , 66, 8-20	11
1480	Cropland soil-plant systems control production and consumption of methane and nitrous oxide and their emissions to the atmosphere. 2015 , 61, 2-33	27
1479	In-field management of corn cob and residue mix: Effect on soil greenhouse gas emissions. 2015 , 89, 59-68	7
1478	A new LandscapeDNDC biogeochemical module to predict CH ₄ and N ₂ O emissions from lowland rice and upland cropping systems. 2015 , 386, 125-149	38
1477	Modeling nitrous oxide production and reduction in soil through explicit representation of denitrification enzyme kinetics. 2015 , 49, 2132-9	14
1476	Spatial abundance of microbial nitrogen-transforming genes and inorganic nitrogen in biocrusts along a transect of an arid sand dune in the Negev Desert. 2015 , 83, 150-159	28
1475	Ammonia-oxidation as an engine to generate nitrous oxide in an intensively managed calcareous fluvo-aquic soil. 2014 , 4, 3950	97
1474	Nitrous oxide and methane emissions from a subtropical rice-rapeseed rotation system in China: A 3-year field case study. 2015 , 212, 297-309	55
1473	Effects of cattle-slurry treatment by acidification and separation on nitrogen dynamics and global warming potential after surface application to an acidic soil. 2015 , 162, 1-8	17
1472	Plant growth improvement mediated by nitrate capture in co-composted biochar. 2015 , 5, 11080	200
1471	Cover crop and tillage systems effect on soil CO ₂ and N ₂ O fluxes in contrasting topographic positions. 2015 , 154, 64-74	39
1470	Regulation of CO ₂ and N ₂ O fluxes by coupled carbon and nitrogen availability. 2015 , 10, 034008	42
1469	Microbial regulation of terrestrial nitrous oxide formation: understanding the biological pathways for prediction of emission rates. 2015 , 39, 729-49	341
1468	The application of ecological stoichiometry to plant-microbial-soil organic matter transformations. 2015 , 85, 133-155	431
1467	Heterogeneity of O ₂ dynamics in soil amended with animal manure and implications for greenhouse gas emissions. 2015 , 84, 96-106	35

1466	Nitrogen and phosphorus addition impact soil NO emission in a secondary tropical forest of South China. 2014 , 4, 5615	58
1465	Reducing nitrous oxide emissions and nitrogen leaching losses from irrigated arable cropping in Australia through optimized irrigation scheduling. 2015 , 208, 32-39	30
1464	Nitrite behavior accounts for the nitrous oxide peaks following fertilization in a fluvo-aquic soil. 2015 , 51, 563-572	49
1463	Relationships between denitrification gene expression, dissimilatory nitrate reduction to ammonium and nitrous oxide and dinitrogen production in montane grassland soils. 2015 , 87, 67-77	41
1462	Effects of global change during the 21st century on the nitrogen cycle. 2015 ,	12
1461	Heterotrophic nitrification of organic N and its contribution to nitrous oxide emissions in soils. 2015 , 84, 199-209	126
1460	The genetic potential of N_2 emission via denitrification and ANAMMOX from the soils and sediments of a created riverine treatment wetland complex. 2015 , 80, 181-190	32
1459	The role of arbuscular mycorrhizas in reducing soil nutrient loss. 2015 , 20, 283-290	160
1458	Comparison of the DNDC, LandscapeDNDC and IAP-N-GAS models for simulating nitrous oxide and nitric oxide emissions from the winter wheat/summer maize rotation system. 2015 , 140, 1-10	29
1457	Nitrous oxide emissions along a gradient of tropical forest disturbance on mineral soils in Sumatra. 2015 , 214, 107-117	22
1456	Application effects of coated urea and urease and nitrification inhibitors on ammonia and greenhouse gas emissions from a subtropical cotton field of the Mississippi delta region. 2015 , 533, 329-38	68
1455	Relative Magnitude and Controls of in Situ N_2 and N_2O Fluxes due to Denitrification in Natural and Seminalteral Terrestrial Ecosystems Using (^{15}N) Tracers. 2015 , 49, 14110-9	18
1454	Bioenergy driven land use change impacts on soil greenhouse gas regulation under Short Rotation Forestry. 2015 , 82, 40-48	13
1453	N_2O and CH_4 emissions from a fallow-wheat rotation with low N input in conservation and conventional tillage under a Mediterranean agroecosystem. 2015 , 508, 85-94	46
1452	Gaseous emissions from management of solid waste: a systematic review. 2015 , 21, 1313-27	73
1451	Complex controls of denitrification at ecosystem, landscape and regional scales in northern hardwood forests. 2015 , 298, 39-52	21
1450	Response of alpine grassland to elevated nitrogen deposition and water supply in China. 2015 , 177, 65-72	31
1449	A review of soil NO transformation: Associated processes and possible physiological significance on organisms. 2015 , 80, 92-117	131

1448	Quantifying nitrogen losses in oil palm plantations: models and challenges. 2016 , 13, 5433-5452	7
1447	The influence of tillage on N ₂ O fluxes from an intensively managed grazed grassland in Scotland. 2016 , 13, 4811-4821	17
1446	Application of the ¹⁵ N gas-flux method for measuring in situ N ₂ and N ₂ O fluxes due to denitrification in natural and semi-natural terrestrial ecosystems and comparison with the acetylene inhibition technique. 2016 , 13, 1821-1835	23
1445	Long-term elevation of temperature affects organic N turnover and associated N ₂ O emissions in a permanent grassland soil. 2016 , 2, 601-614	11
1444	Nitrification Is a Primary Driver of Nitrous Oxide Production in Laboratory Microcosms from Different Land-Use Soils. 2016 , 7, 1373	35
1443	Role of Plant Growth Promoting Rhizobacteria in Agricultural Sustainability-A Review. 2016 , 21,	520
1442	Transient Accumulation of NO ₂ - and N ₂ O during Denitrification Explained by Assuming Cell Diversification by Stochastic Transcription of Denitrification Genes. 2016 , 12, e1004621	24
1441	Chinese Milk Vetch as Green Manure Mitigates Nitrous Oxide Emission from Monocropped Rice System in South China. 2016 , 11, e0168134	5
1440	Clays Can Decrease Gaseous Nutrient Losses from Soil-Applied Livestock Manures. 2016 , 45, 638-45	7
1439	The Use of Stable Isotopes in Understanding the Impact of Biochar on the Nitrogen Cycle. 351-367	
1438	Soil denitrifier community size changes with land use change to perennial bioenergy cropping systems. 2016 , 2, 523-535	10
1437	Sustaining crop productivity while reducing environmental nitrogen losses in the subtropical wheat-maize cropping systems: A comprehensive case study of nitrogen cycling and balance. 2016 , 231, 1-14	61
1436	Greenhouse gas fluxes from agricultural soils of Kenya and Tanzania. 2016 , 121, 1568-1580	38
1435	Microbial community dynamics in soil aggregates shape biogeochemical gas fluxes from soil profiles - upscaling an aggregate biophysical model. 2016 , 22, 3141-56	77
1434	Nitrous Oxide Emissions from a Coal Mine Land Reclaimed with Stabilized Manure. 2016 , 27, 427-437	6
1433	Multiyear greenhouse gas balances at a rewetted temperate peatland. 2016 , 22, 4080-4095	46
1432	Disentangling gross NO production and consumption in soil. 2016 , 6, 36517	23
1431	Nitrification rates and associated nitrous oxide emissions from agricultural soils [a synopsis]. 2016 , 54, 469	18

1430	Mitigating effects of ex situ application of rice straw on CH and NO emissions from paddy-upland coexisting system. 2016 , 6, 37402	35
1429	Emissions of nitrous oxide and ammonia after cauliflower harvest are influenced by soil type and crop residue management. 2016 , 106, 217-231	12
1428	Biochar Field Study: Greenhouse Gas Emissions, Productivity, and Nutrients in Two Soils. 2016 , 108, 1805-1815	11
1427	Denitrification in upland of China: Magnitude and influencing factors. 2016 , 121, 3060-3071	17
1426	Assessing soil nitrous oxide emission as affected by phosphorus and nitrogen addition under two moisture levels. 2016 , 15, 2865-2872	10
1425	Understanding of anesthesia - Why consciousness is essential for life and not based on genes. 2016 , 9, e1238118	30
1424	Organic carbon and total nitrogen dynamics of reclaimed soils following intensive agricultural use in eastern China. 2016 , 235, 193-203	25
1423	Methane and Nitrous Oxide Emissions from Cattle Excreta on an East African Grassland. 2016 , 45, 1531-1539	40
1422	Influence of enhanced efficiency fertilisation techniques on nitrous oxide emissions and productivity response from urea in a temperate Australian ryegrass pasture. 2016 , 54, 523	15
1421	Gas entrapment and microbial NO reduction reduce NO emissions from a biochar-amended sandy clay loam soil. 2016 , 6, 39574	52
1420	Limits of agricultural greenhouse gas calculators to predict soil N ₂ O and CH ₄ fluxes in tropical agriculture. 2016 , 6, 26279	22
1419	Chemical formation of hybrid di-nitrogen calls fungal codenitrification into question. 2016 , 6, 39077	16
1418	How well can we assess impacts of agricultural land management changes on the total greenhouse gas balance (CO ₂ , CH ₄ and N ₂ O) of tropical rice-cropping systems with a biogeochemical model?. 2016 , 224, 104-115	17
1417	Predicting nitrous oxide emissions from manure properties and soil moisture: An incubation experiment. 2016 , 97, 112-120	27
1416	Greenhouse gas emissions and global warming potential of traditional and diversified tropical rice rotation systems. 2016 , 22, 432-48	88
1415	Nitrous oxide emissions from stems of ash (<i>Fraxinus angustifolia</i> Vahl) and European beech (<i>Fagus sylvatica</i> L.). 2016 , 398, 35-45	16
1414	Inoculation with nitrous oxide (N ₂ O)-reducing denitrifier strains simultaneously mitigates N ₂ O emission from pasture soil and promotes growth of pasture plants. 2016 , 97, 83-91	13
1413	Environmental factors affecting the presence of Acidimicrobiaceae and ammonium removal under iron-reducing conditions in soil environments. 2016 , 98, 148-158	51

1412	Reducing nitrous oxide emissions by changing N fertiliser use from calcium ammonium nitrate (CAN) to urea based formulations. 2016 , 563-564, 576-86	90
1411	Establishing turf grass increases soil greenhouse gas emissions in peri-urban environments. 2016 , 19, 749-762	14
1410	The contribution of hydroxylamine content to spatial variability of N ₂ O formation in soil of a Norway spruce forest. 2016 , 178, 76-86	14
1409	NO and N ₂ O emissions from agricultural fields in the North China Plain: Origination and mitigation. 2016 , 551-552, 197-204	32
1408	Effect of soil texture and wheat plants on N ₂ O fluxes: A lysimeter study. 2016 , 223, 17-29	22
1407	Estimation of long-term environmental inventory factors associated with land application of sewage sludge. 2016 , 126, 440-450	19
1406	To graze or not to graze? Four years greenhouse gas balances and vegetation composition from a drained and a rewetted organic soil under grassland. 2016 , 222, 156-170	16
1405	Iron oxidation affects nitrous oxide emissions via donating electrons to denitrification in paddy soils. 2016 , 271, 173-180	53
1404	Greenhouse gas emissions from soils: A review. 2016 , 76, 327-352	423
1403	Effects of dicyandiamide and acetylene on NO emissions and ammonia oxidizers in a fluvo-aquic soil applied with urea. 2016 , 23, 23023-23033	8
1402	N use efficiencies and N ₂ O emissions in two contrasting, biochar amended soils under winter wheat/soybean rotation. 2016 , 11, 084013	12
1401	Soil N ₂ O emissions from long-term agroecosystems: Interactive effects of rainfall seasonality and crop rotation in the Brazilian Cerrado. 2016 , 233, 111-120	14
1400	Soil N Losses by Denitrification Evaluated Using the 15N Tracer Method. 2016 , 47, 1709-1719	
1399	Soil microbial communities as potential regulators of in situ N ₂ O fluxes in annual and perennial cropping systems. 2016 , 103, 262-273	32
1398	Nitrate and Nitrogen Oxides: Sources, Health Effects and Their Remediation. 2017 , 242, 183-217	18
1397	Functional Relationships of Soil Acidification, Liming, and Greenhouse Gas Flux. 2016 , 139, 1-71	89
1396	Drainage, no-tillage and crop rotation decreases annual cumulative emissions of methane and nitrous oxide from a rice field in Southwest China. 2016 , 233, 270-281	19
1395	Designing advanced biochar products for maximizing greenhouse gas mitigation potential. 2016 , 46, 1367-1401	69

1394	Non-denitrifying nitrous oxide-reducing bacteria - An effective N ₂ O sink in soil. 2016 , 103, 376-379	61
1393	Nonlinear responses of soil nitrous oxide emission to multi-level nitrogen enrichment in a temperate needle-broadleaved mixed forest in Northeast China. 2016 , 147, 556-563	14
1392	The effect of temperature and moisture on trace gas emissions from deciduous and coniferous leaf litter. 2016 , 121, 1339-1351	7
1391	Hydrated Oil Shale Ash Mitigates Greenhouse Gas Emissions from Horizontal Subsurface Flow Filters for Wastewater Treatment. 2016 , 227, 1	7
1390	Soil biochar amendment as a climate change mitigation tool: Key parameters and mechanisms involved. 2016 , 181, 484-497	139
1389	Increased N ₂ O emissions during soil drying after waterlogging and spring thaw in a record wet year. 2016 , 101, 152-164	28
1388	A review of chemical reactions of nitrification intermediates and their role in nitrogen cycling and nitrogen trace gas formation in soil. 2016 , 67, 23-39	136
1387	Physical properties of peat soils under different land use options. 2016 , 32, 400-410	18
1386	Scenario analysis of fertilizer management practices for NO mitigation from corn systems in Canada. 2016 , 573, 356-365	31
1385	Does environmental exposure to the greenhouse gas, NO, contribute to etiological factors in neurodevelopmental disorders? A mini-review of the evidence. 2016 , 47, 6-18	52
1384	Model testing for nitrous oxide (N ₂ O) fluxes from Amazonian cattle pastures. 2016 , 143, 67-78	4
1383	Modelling nitrous oxide emissions from mown-grass and grain-cropping systems: Testing and sensitivity analysis of DailyDayCent using high frequency measurements. 2016 , 572, 955-977	25
1382	Greenhouse gas fluxes from a grazed grassland soil after slurry injections and mineral fertilizer applications under the Atlantic climatic conditions of NW Spain. 2016 , 573, 258-269	6
1381	Incorporating organic matter alters soil greenhouse gas emissions and increases grain yield in a semi-arid climate. 2016 , 231, 320-330	36
1380	Long-term nitrous oxide fluxes in annual and perennial agricultural and unmanaged ecosystems in the upper Midwest USA. 2016 , 22, 3594-3607	41
1379	Land cover changes and greenhouse gas emissions in two different soil covers in the Brazilian Caatinga. 2016 , 571, 1048-57	32
1378	Forest and grassland cover types reduce net greenhouse gas emissions from agricultural soils. 2016 , 571, 1115-27	33
1377	Influence of <i>Lumbricus terrestris</i> and <i>Folsomia candida</i> on N O formation pathways in two different soils - with particular focus on N emissions. 2016 , 30, 2301-2314	9

1376	Gross Nitrogen Turnover of Natural and Managed Tropical Ecosystems at Mt. Kilimanjaro, Tanzania. 2016 , 19, 1271-1288	11
1375	Neglecting diurnal variations leads to uncertainties in terrestrial nitrous oxide emissions. 2016 , 6, 25739	40
1374	Response of NO emissions to biochar amendment in a cultivated sandy loam soil during freeze-thaw cycles. 2016 , 6, 35411	5
1373	Atmospheric emission of nitric oxide and processes involved in its biogeochemical transformation in terrestrial environment. 2016 , 1	5
1372	Stand age affects emissions of N ₂ O in flood-irrigated alfalfa: a comparison of field measurements, DNDC model simulations and IPCC Tier 1 estimates. 2016 , 106, 335-345	7
1371	Non-linear response of soil N ₂ O emissions to nitrogen fertiliser in a cotton-fallow rotation in sub-tropical Australia. 2016 , 54, 494	18
1370	Mitigation of N ₂ O emissions from surface-irrigated cropping systems using water management and the nitrification inhibitor DMPP. 2016 , 54, 481	7
1369	Nitrous Oxide Emissions from Open-Lot Cattle Feedyards: A Review. 2016 , 45, 1797-1811	10
1368	Alternate Wetting and Drying of Rice Reduced CH ₄ Emissions but Triggered N ₂ O Peaks in a Clayey Soil of Central Italy. 2016 , 26, 533-548	58
1367	Einfluss unterschiedlicher Rotteparameter auf die N ₂ O-Freisetzung während der Bioabfallkompostierung Erste Erkenntnisse aus Laborversuchen mit kontinuierlicher Lachgasmessung. 2016 , 68, 38-45	
1366	Nitrous Oxide Metabolism in Nitrate-Reducing Bacteria: Physiology and Regulatory Mechanisms. 2016 , 68, 353-432	37
1365	Effect of the number of tillages in fallow season and fertilizer type on greenhouse gas emission from a rice (<i>Oryza sativa</i> L.) paddy field in Ehime, southwestern Japan. 2016 , 62, 69-79	14
1364	Factors controlling Nitrous Oxide emission from a spruce forest ecosystem on drained organic soil, derived using the CoupModel. 2016 , 321, 46-63	17
1363	Fungal denitrification: <i>Bipolaris sorokiniana</i> exclusively denitrifies inorganic nitrogen in the presence and absence of oxygen. 2016 , 363,	4
1362	Climate change and N ₂ O emissions from South West England grasslands: A modelling approach. 2016 , 132, 249-257	20
1361	Greenhouse gas emissions after application of digestate: short-term effects of nitrification inhibitor and application technique effects. 2016 , 62, 1007-1020	6
1360	Contribution of litter layer to soil greenhouse gas emissions in a temperate beech forest. 2016 , 403, 455-469	34
1359	Plastic mulching in agriculture. Trading short-term agronomic benefits for long-term soil degradation?. 2016 , 550, 690-705	590

1358	Soil N availability, rather than N deposition, controls indirect N ₂ O emissions. 2016 , 95, 288-298	11
1357	The urine patch diffusional area: An important N ₂ O source?. 2016 , 92, 161-170	19
1356	A modeling study on mitigation of N ₂ O emissions and NO ₃ leaching at different agricultural sites across Europe using LandscapeDNDC. 2016 , 553, 128-140	39
1355	Long-term organic and inorganic fertilization alters temperature sensitivity of potential N ₂ O emissions and associated microbes. 2016 , 93, 131-141	145
1354	Biochar-induced N ₂ O emission reductions after field incorporation in a loam soil. 2016 , 267, 10-16	67
1353	Past water management affected GHG production and microbial community pattern in Italian rice paddy soils. 2016 , 93, 17-27	35
1352	Denitrification losses from an intensively managed sub-tropical pasture – Impact of soil moisture on the partitioning of N ₂ and N ₂ O emissions. 2016 , 92, 58-66	49
1351	Nitrate bioreduction in redox-variable low permeability sediments. 2016 , 539, 185-195	25
1350	Asynchronous responses of soil carbon dioxide, nitrous oxide emissions and net nitrogen mineralization to enhanced fine root input. 2016 , 92, 67-78	16
1349	Direct N ₂ O emission factors for synthetic N-fertilizer and organic residues applied on sugarcane for bioethanol production in Central-Southern Brazil. 2016 , 8, 269-280	44
1348	Differences in field-scale N ₂ O flux linked to crop residue removal under two tillage systems in cold climates. 2017 , 9, 666-680	36
1347	Impacts of willow and miscanthus bioenergy buffers on biogeochemical N removal processes along the soil-groundwater continuum. 2017 , 9, 246-261	34
1346	Nitrate leaching and soil nitrous oxide emissions diminish with time in a hybrid poplar short-rotation coppice in southern Germany. 2017 , 9, 613-626	17
1345	Contrasting effects of EDTA applications on the fluxes of methane and nitrous oxide emissions from straw-treated rice paddy soils. 2017 , 97, 278-283	7
1344	Effect of fertilizer N rates and straw management on yield-scaled nitrous oxide emissions in a maize-wheat double cropping system. 2017 , 204, 1-11	52
1343	Nitrous oxide fluxes in a Brazilian clayey oxisol after 24 years of integrated crop-livestock management. 2017 , 108, 55-68	10
1342	Biological nitrification inhibition by Brachiaria grasses mitigates soil nitrous oxide emissions from bovine urine patches. 2017 , 107, 156-163	73
1341	Conversion from rice to vegetable production increases NO emission via increased soil organic matter mineralization. 2017 , 583, 190-201	40

1340	Improving rice production sustainability by reducing water demand and greenhouse gas emissions with biodegradable films. 2017 , 7, 39855	34
1339	Importance of soil NO emissions for the total atmospheric NOx budget of Saxony, Germany. 2017 , 152, 61-76	12
1338	Nitrous oxide emissions from streams in a Swedish agricultural catchment. 2017 , 236, 295-303	29
1337	Stimulation of N O emission by manure application to agricultural soils may largely offset carbon benefits: a global meta-analysis. 2017 , 23, 4068-4083	135
1336	Long-term no-till and stover retention each decrease the global warming potential of irrigated continuous corn. 2017 , 23, 2848-2862	29
1335	Exploring impacts of vegetated buffer strips on nitrogen cycling using a spatially explicit hydro-biogeochemical modeling approach. 2017 , 90, 55-67	15
1334	Soil and vegetation-atmosphere exchange of NO, NH ₃ , and N ₂ O from field measurements in a semi arid grazed ecosystem in Senegal. 2017 , 156, 36-51	11
1333	Effect of agricultural management on N ₂ O emissions in the Brazilian sugarcane yield. 2017 , 109, 205-213	28
1332	Dynamics and emissions of NO in groundwater: A review. 2017 , 584-585, 207-218	39
1331	Year-Round Nitrous Oxide Emissions as Affected by Timing and Method of Dairy Manure Application to Corn. 2017 , 81, 166-178	18
1330	Enhancing the soil and water assessment tool model for simulating N ₂ O emissions of three agricultural systems. 2017 , 3, e01259	21
1329	Rainfall reduction amplifies the stimulatory effect of nitrogen addition on NO emissions from a temperate forest soil. 2017 , 7, 43329	16
1328	Direct Nitrous Oxide Emissions From Tropical And Sub-Tropical Agricultural Systems - A Review And Modelling Of Emission Factors. 2017 , 7, 44235	56
1327	Effects of greenhouse cultivation and organic materials incorporation on global warming potential in rice fields. 2017 , 24, 6581-6591	7
1326	Linkage between NO emission and functional gene abundance in an intensively managed calcareous fluvo-aquic soil. 2017 , 7, 43283	35
1325	The response patterns of community traits of N ₂ O emission-related functional guilds to temperature across different arable soils under inorganic fertilization. 2017 , 108, 65-77	22
1324	Nitrification potential in the rhizosphere of Australian native vegetation. 2017 , 55, 58	8
1323	Impact of reduced tillage on greenhouse gas emissions and soil carbon stocks in an organic grass-clover ley - winter wheat cropping sequence. 2017 , 239, 324-333	60

1322	Globally important nitrous oxide emissions from croplands induced by freeze-thaw cycles. 2017 , 10, 279-283	138
1321	Toward a Better Assessment of Biochar-Nitrous Oxide Mitigation Potential at the Field Scale. 2017 , 46, 237-246	43
1320	Responses of soil nitrous oxide production and abundances and composition of associated microbial communities to nitrogen and water amendment. 2017 , 53, 601-611	49
1319	Distinct fates of atmospheric NH ₄ ⁺ and NO ₃ ⁻ in subtropical, N-saturated forest soils. 2017 , 133, 279-294	23
1318	Nitrous Oxide Reduction by an Obligate Aerobic Bacterium, Gemmatimonas aurantiaca Strain T-27. 2017 , 83,	64
1317	Nitrous oxide emission sources from a mixed livestock farm. 2017 , 243, 92-102	9
1316	Microbial nitrous oxide emissions in dryland ecosystems: mechanisms, microbiome and mitigation. 2017 , 19, 4808-4828	26
1315	Methane and nitrous oxide annual emissions from an old eutrophic temperate reservoir. 2017 , 598, 959-972	26
1314	Soil water content modulates the effect of the nitrification inhibitor 3,4-dimethylpyrazole phosphate (DMPP) on nitrifying and denitrifying bacteria. 2017 , 303, 1-8	49
1313	Responses of denitrifying bacterial communities to short-term waterlogging of soils. 2017 , 7, 803	24
1312	Seasonal and soil-type dependent emissions of nitrous oxide from irrigated desert soils amended with digested poultry manures. 2017 , 593-594, 91-98	10
1311	Global nitrous oxide emission factors from agricultural soils after addition of organic amendments: A meta-analysis. 2017 , 236, 88-98	143
1310	The nitrogen cycle: A review of isotope effects and isotope modeling approaches. 2017 , 105, 121-137	154
1309	The effects of Eriophorum vaginatum on N ₂ O fluxes at a restored, extracted peatland. 2017 , 106, 287-295	8
1308	Denitrifying bacterial communities display different temporal fluctuation patterns across Dutch agricultural soils. 2017 , 110, 1453-1465	
1307	Effects of the nitrification inhibitor acetylene on nitrous oxide emissions and ammonia-oxidizing microorganisms of different agricultural soils under laboratory incubation conditions. 2017 , 119, 80-90	14
1306	Annual greenhouse gas fluxes from a temperate deciduous oak forest floor. 2017 , 90, 541-552	8
1305	Carbon dioxide, methane and nitrous oxide fluxes from a fire chronosequence in subarctic boreal forests of Canada. 2017 , 601-602, 895-905	29

1304	Quantifying the contribution of land use to N ₂ O, NO and CO ₂ fluxes in a montane forest ecosystem of Kenya. 2017 , 134, 95-114	11
1303	Greenhouse gas emissions from excreta patches of grazing animals and their mitigation strategies. 2017 , 171, 44-57	36
1302	Increased nitrous oxide emissions from Arctic peatlands after permafrost thaw. 2017 , 114, 6238-6243	87
1301	Nitrogen nutrition of beech forests in a changing climate: importance of plant-soil-microbe water, carbon, and nitrogen interactions. 2017 , 418, 89-114	38
1300	Ecosystem services in orchards. A review. 2017 , 37, 1	37
1299	To burn or not to burn: The question of straw burning and nitrogen fertilization effect on nitrous oxide emissions in sugarcane. 2017 , 587-588, 399-406	15
1298	Impact of slurry strip-till and surface slurry incorporation on NH ₃ and N ₂ O emissions on different plot trials in Central Germany. 2017 , 169, 54-64	6
1297	Environmental and economic opportunities of applications of different types and application methods of chemical fertilizer in rice paddy. 2017 , 107, 413-431	5
1296	Rejecting hydro-biogeochemical model structures by multi-criteria evaluation. 2017 , 93, 1-12	15
1295	Impact of Shrub Willow (<i>Salix</i> spp.) as a Potential Bioenergy Feedstock on Water Quality and Greenhouse Gas Emissions. 2017 , 228, 1	8
1294	Legacy effects of simulated short-term climate change on ammonia oxidisers, denitrifiers, and nitrous oxide emissions in an acid soil. 2017 , 24, 11639-11649	3
1293	The potential of <i>L. scoparium</i> , <i>K. robusta</i> and <i>P. radiata</i> to mitigate N-losses in silvopastoral systems. 2017 , 225, 12-19	6
1292	Spatial variability of soil N ₂ O and CO ₂ fluxes in different topographic positions in a tropical montane forest in Kenya. 2017 , 122, 514-527	36
1291	Quantifying and predicting spatio-temporal variability of soil CH ₄ and N ₂ O fluxes from a seemingly homogeneous Australian agricultural field. 2017 , 240, 182-193	27
1290	Increased expression of bacterial amoA during an N ₂ O emission peak in an agricultural field. 2017 , 236, 212-220	13
1289	Impact of tillage on greenhouse gas emissions by an agricultural crop and dynamics of N ₂ O fluxes: Insights from automated closed chamber measurements. 2017 , 167, 80-89	32
1288	nirS- and nirK-type denitrifier communities are differentially affected by soil type, rice cultivar and water management. 2017 , 78, 20-28	44
1287	The effect of temperature and moisture on the source of N ₂ O and contributions from ammonia oxidizers in an agricultural soil. 2017 , 53, 141-152	51

1286	Dimethyl pyrazol-based nitrification inhibitors effect on nitrifying and denitrifying bacteria to mitigate NO emission. 2017 , 7, 13810	42
1285	Linking NO and N ₂ O emission pulses with the mobilization of mineral and organic N upon rewetting dry soils. 2017 , 115, 461-466	51
1284	Nitrous oxide emissions are enhanced in a warmer and wetter world. 2017 , 114, 12081-12085	97
1283	Substantial N ₂ O emissions from peat decomposition and N fertilization in an oil palm plantation exacerbated by hotspots. 2017 , 12, 104007	32
1282	Roots-eye view: Using microdialysis and microCT to non-destructively map root nutrient depletion and accumulation zones. 2017 , 40, 3135-3142	25
1281	Spatial and phyloecological analyses of nosZ genes underscore niche differentiation amongst terrestrial N ₂ O reducing communities. 2017 , 115, 82-91	34
1280	Digested bioenergy byproduct with low concentration of nutrients increased greenhouse gas emissions from soil. 2017 , 307, 81-90	1
1279	Hydrogeological Controls on Regional-Scale Indirect Nitrous Oxide Emission Factors for Rivers. 2017 , 51, 10440-10448	22
1278	Insights into the recognition and electron transfer steps in nitric oxide reductase from <i>Marinobacter hydrocarbonoclasticus</i> . 2017 , 177, 402-411	10
1277	Urea deep placement reduces yield-scaled greenhouse gas (CH ₄ and NO) and NO emissions from a ground cover rice production system. 2017 , 7, 11415	21
1276	Carbon Dioxide and Nitrous Oxide Emissions from Naturally Occurring Sulfate-Based Saline Soils at Different Moisture Contents. 2017 , 27, 868-876	5
1275	Temporal integration of soil NO fluxes: validation of IPNOA station automatic chamber prototype. 2017 , 189, 485	4
1274	Nitrous oxide emissions from stems of alder, beech and spruce in a temperate forest. 2017 , 420, 423-434	17
1273	Improving the management of mineral fertilizers for nitrous oxide mitigation: The effect of nitrogen fertilizer type, urease and nitrification inhibitors in two different textured soils. 2017 , 307, 181-188	32
1272	Historic nitrogen deposition determines future climate change effects on nitrogen retention in temperate forests. 2017 , 144, 221-235	15
1271	The Role of Pore Structure on Nitrate Reduction in Peat Soil: A Physical Characterization of Pore Distribution and Solute Transport. 2017 , 37, 951-960	10
1270	Effects of cattle slurry and nitrification inhibitor application on spatial soil O ₂ dynamics and N ₂ O production pathways. 2017 , 114, 200-209	26
1269	The Mechanisms of High N ₂ O Emissions from Greenhouse Vegetable Field Soils. 2017 , 45, 1600210	1

1268	Response to nitrogen addition reveals metabolic and ecological strategies of soil bacteria. 2017 , 26, 5500-5514	20
1267	Long-term field measurements of annual methane and nitrous oxide emissions from a Chinese subtropical wheat-rice rotation system. 2017 , 115, 21-34	38
1266	Nitrous oxide (N ₂ O)-reducing denitrifier-inoculated organic fertilizer mitigates N ₂ O emissions from agricultural soils. 2017 , 53, 885-898	14
1265	Influence of Soil Organic Carbon on Greenhouse Gas Emission Potential After Application of Biogas Residues or Cattle Slurry: Results from a Pot Experiment. 2017 , 27, 807-821	7
1264	Role of Plant Growth-Promoting Rhizobacteria for Improving Crop Productivity in Sustainable Agriculture. 2017 , 673-693	7
1263	Crop residues exacerbate the negative effects of extreme flooding on soil quality. 2017 , 53, 751-765	14
1262	Contributions of nitrification and denitrification to NO emissions from aged refuse bioreactor at different feeding loads of ammonia substrates. 2017 , 68, 319-328	11
1261	Season and location-specific nitrous oxide emissions in an almond orchard in California. 2017 , 107, 139-155	11
1260	N ₂ O emissions from grain cropping systems: a meta-analysis of the impacts of fertilizer-based and ecologically-based nutrient management strategies. 2017 , 107, 335-355	51
1259	Trichoderma for climate resilient agriculture. 2017 , 33, 155	51
1258	Long term farming systems affect soils potential for N ₂ O production and reduction processes under denitrifying conditions. 2017 , 114, 31-41	19
1257	Characterization of the denitrifying bacterial community in a full-scale rockwool biofilter for compost waste-gas treatment. 2017 , 101, 6779-6792	12
1256	The effects of different irrigation regimes on nitrous oxide emissions and influencing factors in greenhouse tomato fields. 2017 , 17, 2457-2468	11
1255	BIOCHAR AS A TOOL TO REDUCE THE AGRICULTURAL GREENHOUSE-GAS BURDEN [KNOWN, UNKNOWN AND FUTURE RESEARCH NEEDS]. 2017 , 25, 114-139	93
1254	Seasonal variations in the soil amino acid pool and flux following the conversion of a natural forest to a pine plantation on the eastern Tibetan Plateau, China. 2017 , 105, 1-11	30
1253	Growth in the global N sink attributed to N fertilizer inputs over 1860 to 2000. 2017 , 574, 1044-1053	23
1252	Can biochar alleviate soil compaction stress on wheat growth and mitigate soil N ₂ O emissions?. 2017 , 104, 8-17	69
1251	Soil N ₂ O fluxes and related processes in laboratory incubations simulating ammonium fertilizer depots. 2017 , 104, 68-80	34

1250	Tillage system affects fertilizer-induced nitrous oxide emissions. 2017 , 53, 49-59	24
1249	Simulating climate change and land use effects on soil nitrous oxide emissions in Mediterranean conditions using the Daycent model. 2017 , 238, 78-88	16
1248	Nitrogen turnover and greenhouse gas emissions in a tropical alpine ecosystem, Mt. Kilimanjaro, Tanzania. 2017 , 411, 243-259	16
1247	Mechanical insights into the effect of fluctuation in soil moisture on nitrous oxide emissions from paddy soil. 2017 , 15, 359-369	7
1246	False positive and false negative errors in the design and implementation of agri-environmental policies: A case study on water quality and agricultural nutrients. 2017 , 575, 1087-1099	11
1245	A meta-analysis of soil salinization effects on nitrogen pools, cycles and fluxes in coastal ecosystems. 2017 , 23, 1338-1352	85
1244	Greenhouse gas emissions intensity of global croplands. 2017 , 7, 63-68	229
1243	Effect of geographical location and stochastic weather variation on life cycle assessment of biodiesel production from camelina in the northwestern USA. 2017 , 22, 867-882	14
1242	Warming of subarctic tundra increases emissions of all three important greenhouse gases - carbon dioxide, methane, and nitrous oxide. 2017 , 23, 3121-3138	120
1241	N ₂ O production pathways relate to land use type in acidic soils in subtropical China. 2017 , 17, 306-314	8
1240	Soil Greenhouse Gas Fluxes, Environmental Controls, and the Partitioning of N ₂ O Sources in UK Natural and Seminal Land Use Types. 2017 , 122, 2617-2633	12
1239	Summertime upper tropospheric nitrous oxide over the Mediterranean as a footprint of Asian emissions. 2017 , 122, 4746-4759	3
1238	Process-based TRIPLEX-GHG model for simulating N ₂ O emissions from global forests and grasslands: Model development and evaluation. 2017 , 9, 2079-2102	8
1237	Dynamics of soil-derived greenhouse gas emissions from shelterbelts under elevated soil moisture conditions in a semi-arid prairie environment. 2017 , 92, 321	1
1236	Preindustrial nitrous oxide emissions from the land biosphere estimated by using a global biogeochemistry model. 2017 , 13, 977-990	13
1235	Gas chromatography vs. quantum cascade laser-based N ₂ O flux measurements using a novel chamber design. 2017 , 14, 1365-1381	13
1234	Comparison of Organic and Integrated Nutrient Management Strategies for Reducing Soil N ₂ O Emissions. 2017 , 9, 510	17
1233	Timing of Manure Injection and Nitrification Inhibitors Impacts on Nitrous Oxide Emissions and Nitrogen Transformations in a Barley Crop. 2017 , 81, 1595-1605	22

1232	Efflux of Soil Nitrous Oxide from Applied Fertilizer Containing Organic Materials in Citrus unshiu Field in Southwestern Japan. 2017 , 7, 10	4
1231	FixK Is the Main Transcriptional Activator of Genes in Response to Low Oxygen. 2017 , 8, 1621	12
1230	Soil Conditions Rather Than Long-Term Exposure to Elevated CO Affect Soil Microbial Communities Associated with N-Cycling. 2017 , 8, 1976	15
1229	Effects of Positively Charged Dicyandiamide and Nitrogen Fertilizer Sources on Nitrous Oxide Emissions in Irrigated Corn. 2017 , 46, 1123-1130	3
1228	Effect of soil saturation on denitrification in a grassland soil. 2017 , 14, 4691-4710	20
1227	Nitrous Oxide Emitted from Soil Receiving Anaerobically Digested Solid Cattle Manure. 2017 , 46, 741-750	10
1226	Complementing the topsoil information of the Land Use/Land Cover Area Frame Survey (LUCAS) with modelled N ₂ O emissions. 2017 , 12, e0176111	12
1225	Estimating global nitrous oxide emissions by lichens and bryophytes with a process-based productivity model. 2017 , 14, 1593-1602	19
1224	Potential short-term losses of N ₂ O and N ₂ from high concentrations of biogas digestate in arable soils. 2017 , 3, 161-176	6
1223	Flooding-related increases in CO ₂ and N ₂ O emissions from a temperate coastal grassland ecosystem. 2017 , 14, 2611-2626	12
1222	Growing season CH ₄ and N ₂ O fluxes from a subarctic landscape in northern Finland; from chamber to landscape scale. 2017 , 14, 799-815	18
1221	Temporal Nitrous Oxide Emissions from Beef Cattle Feedlot Manure after a Simulated Rainfall Event. 2017 , 46, 733-740	7
1220	Agro-Environmental Consequences of Shifting from Nitrogen- to Phosphorus-Based Manure Management of Corn. 2017 , 81, 1127-1138	2
1219	Nitrous Oxide Fluxes and Soil Oxygen Dynamics of Soil Treated with Cow Urine. 2017 , 81, 289-298	26
1218	Quantifying N ₂ O reduction to N ₂ based on N ₂ O isotopocules validation with independent methods (helium incubation and ¹⁵ N gas flux method). 2017 , 14, 711-732	80
1217	Non-Legume Cover Crops Can Increase Non-Growing Season Nitrous Oxide Emissions. 2017 , 81, 189-199	28
1216	Constraining a complex biogeochemical model for CO ₂ and N ₂ O emission simulations from various land uses by model-data fusion. 2017 , 14, 3487-3508	11
1215	Soil trace gas fluxes along orthogonal precipitation and soil fertility gradients in tropical lowland forests of Panama. 2017 , 14, 3509-3524	10

1214	Carbon–nitrogen interactions in idealized simulations with JSBACH (version 3.10). 2017 , 10, 2009-2030	31
1213	Multi-scale measurements show limited soil greenhouse gas emissions in Kenyan smallholder coffee-dairy systems. 2018 , 626, 328-339	15
1212	Effects of controlled-release fertilizer on nitrous oxide and nitric oxide emissions during wheat-growing season: field and pot experiments. 2018 , 16, 99-108	9
1211	Microbial adaptation to long-term N supply prevents large responses in N dynamics and N losses of a subtropical forest. 2018 , 626, 1175-1187	20
1210	Above- and belowground nitrogen distribution of a red clover-perennial ryegrass sward along a soil nutrient availability gradient established by organic and conventional cropping systems. 2018 , 425, 507-525	14
1209	Mitigation potential of soil carbon management overestimated by neglecting N ₂ O emissions. 2018 , 8, 219-223	64
1208	Nitrogen transformation rates and N ₂ O producing pathways in two pasture soils. 2018 , 18, 2970-2979	1
1207	Variations of the nirS-, nirK-, and nosZ-denitrifying bacterial communities in a northern Chinese soil as affected by different long-term irrigation regimes. 2018 , 25, 14057-14067	34
1206	Biochar application increases sorption of nitrification inhibitor 3,4-dimethylpyrazole phosphate in soil. 2018 , 25, 11173-11177	15
1205	Spatial Variation of Soil CO ₂ , CH ₄ and N ₂ O Fluxes Across Topographical Positions in Tropical Forests of the Guiana Shield. 2018 , 21, 1445-1458	20
1204	Land Use, Land Use History, and Soil Type Affect Soil Greenhouse Gas Fluxes From Agricultural Landscapes of the East African Highlands. 2018 , 123, 976-990	7
1203	Land-use and abandonment alters methane and nitrous oxide fluxes in mountain grasslands. 2018 , 628-629, 997-1008	14
1202	Heterotrophic nitrification is responsible for large rates of N ₂ O emission from subtropical acid forest soil in China. 2018 , 69, 646-654	16
1201	Top-down constraints on global N ₂ O emissions at optimal resolution: application of a new dimension reduction technique. 2018 , 18, 735-756	16
1200	The role of nitrifier denitrification in the production of nitrous oxide revisited. 2018 , 123, A3-A16	174
1199	Nitrogen fertilization raises CO ₂ efflux from inorganic carbon: A global assessment. 2018 , 24, 2810-2817	79
1198	Effects of carbon and phosphorus addition on microbial respiration, N ₂ O emission, and gross nitrogen mineralization in a phosphorus-limited grassland soil. 2018 , 54, 481-493	20
1197	The interactive effects of dolomite application and straw incorporation on soil N ₂ O emissions. 2018 , 69, 502-511	19

1196	Spatial zoning of microbial functions and plant-soil nitrogen dynamics across a riparian area in an extensively grazed livestock system. 2018 , 120, 153-164	10
1195	Biochar affects community composition of nitrous oxide reducers in a field experiment. 2018 , 119, 143-151	34
1194	Environmental effects of ozone depletion, UV radiation and interactions with climate change: UNEP Environmental Effects Assessment Panel, update 2017. 2018 , 17, 127-179	105
1193	N ₂ O and N ₂ emissions from denitrification respond differently to temperature and nitrogen supply. 2018 , 18, 1548-1557	7
1192	Nitrogen cycling during secondary succession in Atlantic Forest of Bahia, Brazil. 2018 , 8, 1377	28
1191	From Production to Consumption: A Coupled Human-Environmental Nitrogen Flow Analysis in China. 2018 , 52, 2025-2035	24
1190	Net global warming potential and greenhouse gas intensity as affected by different water management strategies in Chinese double rice-cropping systems. 2018 , 8, 779	18
1189	Greenhouse gas fluxes over managed grasslands in Central Europe. 2018 , 24, 1843-1872	44
1188	Efficient use of nitrogen in agriculture. 2018 , 110, 1-5	66
1187	Stover retention rather than no-till decreases the global warming potential of rainfed continuous maize cropland. 2018 , 219, 14-23	18
1186	Effect of model root exudate on denitrifier community dynamics and activity at different water-filled pore space levels in a fertilised soil. 2018 , 120, 70-79	19
1185	Nitrogen Dynamic in Agricultural Soils Amended With Sewage Sludge. 2018 , 189-205	2
1184	Conversion of grazed pastures to energy cane as a biofuel feedstock alters the emission of GHGs from soils in Southeastern United States. 2018 , 108, 312-322	6
1183	Management intensity controls soil NO fluxes in an Afromontane ecosystem. 2018 , 624, 769-780	15
1182	Mitigation of nitrous oxide emissions from acidic soils by <i>Bacillus amyloliquefaciens</i> , a plant growth-promoting bacterium. 2018 , 24, 2352-2365	19
1181	Fungal and bacterial contributions to codenitrification emissions of N ₂ O and N ₂ following urea deposition to soil. 2018 , 110, 135-149	20
1180	A three-year experiment of annual methane and nitrous oxide emissions from the subtropical permanently flooded rice paddy fields of China: Emission factor, temperature sensitivity and fertilizer nitrogen effect. 2018 , 250-251, 299-307	29
1179	Annual NO emissions from conventionally grazed typical alpine grass meadows in the eastern Qinghai-Tibetan Plateau. 2018 , 625, 885-899	20

1178	Fluxes of nitrous oxide and nitrate from agricultural fields on the Delmarva Peninsula: N biogeochemistry and economics of field management. 2018 , 254, 162-178	5
1177	Stand age amplifies greenhouse gas and NO releases following conversion of rice paddy to tea plantations in subtropical China. 2018 , 248, 386-396	20
1176	Soil Processes and Wheat Cropping Under Emerging Climate Change Scenarios in South Asia. 2018 , 148, 111-171	21
1175	Nitrite transformations under acidic conditions in temperate and subtropical forest ecosystems. 2018 , 317, 47-55	4
1174	No-tillage reduces long-term yield-scaled soil nitrous oxide emissions in rainfed Mediterranean agroecosystems: A field and modelling approach. 2018 , 262, 36-47	23
1173	Assessing Short-Term Impacts of Management Practices on N ₂ O Emissions From Diverse Mediterranean Agricultural Ecosystems Using a Biogeochemical Model. 2018 , 123, 1557-1571	16
1172	Effects of Climate Change on CH ₄ and N ₂ O Fluxes from Temperate and Boreal Forest Soils. 2018 , 11-27	1
1171	Factors controlling nitrous oxide emissions from managed northern peat soils with low carbon to nitrogen ratio. 2018 , 122, 186-195	26
1170	Estimating N O processes during grassland renewal and grassland conversion to maize cropping using N O isotopocules. 2018 , 32, 1053-1067	26
1169	On Upscaling of Soil Microbial Processes and Biogeochemical Fluxes From Aggregates to Landscapes. 2018 , 123, 1526-1547	16
1168	N ₂ O emissions and nitrogen dynamics of winter rapeseed fertilized with different N forms and a nitrification inhibitor. 2018 , 259, 86-97	17
1167	Changes in litter chemistry associated with global change-driven forest succession resulted in time-decoupled responses of soil carbon and nitrogen cycles. 2018 , 120, 200-211	17
1166	Genome-Scale, Constraint-Based Modeling of Nitrogen Oxide Fluxes during Coculture of and. 2018 , 3,	18
1165	Grassland plant species and cultivar effects on nitrous oxide emissions after urine application. 2018 , 323, 74-82	15
1164	Potential dual effect of nitrification inhibitor 3,4-dimethylpyrazole phosphate on nitrifier denitrification in the mitigation of peak N ₂ O emission events in North China Plain cropping systems. 2018 , 121, 147-153	25
1163	Comprehensive effects of a sedge plant on CH ₄ and N ₂ O emissions in an estuarine marsh. 2018 , 204, 202-211	5
1162	Nitrogen-rich organic soils under warm well-drained conditions are global nitrous oxide emission hotspots. 2018 , 9, 1135	56
1161	Bamboo biochar does not affect paddy soil N ₂ O emissions or source following slurry or mineral fertilizer amendment— ¹⁵ N tracer study. 2018 , 181, 90-98	16

1160	Surface interpolation of environmental factors as tool for evaluation of the occurrence of high methane and nitrous oxide fluxes. 2018 , 181, 51-60	2
1159	Characterising effects of management practices, snow cover, and soil texture on soil temperature: Model development in DNDC. 2018 , 168, 54-72	33
1158	Greenhouse gas emissions in natural and managed peatlands of America: Case studies along a latitudinal gradient. 2018 , 114, 34-45	15
1157	Peaks of in situ N ₂ O emissions are influenced by N ₂ O-producing and reducing microbial communities across arable soils. 2018 , 24, 360-370	59
1156	What plant functional traits can reduce nitrous oxide emissions from intensively managed grasslands?. 2018 , 24, e248-e258	46
1155	Analysis of uncertainty for N ₂ O fluxes measured with the closed-chamber method under field conditions: Calculation method, detection limit, and spatial variability.. 2018 , 181, 78-89	15
1154	Relationships between soil organic matter pools and nitrous oxide emissions of agroecosystems in the Brazilian Cerrado. 2018 , 618, 1572-1582	18
1153	Global analysis of agricultural soil denitrification in response to fertilizer nitrogen. 2018 , 616-617, 908-917	47
1152	Interactions between earthworms and mesofauna affect CO ₂ and N ₂ O emissions from soils under long-term conservation tillage. 2018 , 332, 153-160	4
1151	Dynamics of soil biogeochemical gas emissions shaped by remolded aggregate sizes and carbon configurations under hydration cycles. 2018 , 24, e378-e392	22
1150	Emissions of nitrous oxide (N ₂ O) affected by pH-related nitrite accumulation during nitrification of N fertilizers. 2018 , 310, 12-21	38
1149	Determining the effects of tillage and nitrogen sources on soil N ₂ O emission. 2018 , 175, 1-12	26
1148	Effects of water content and N addition on potential greenhouse gas production from two differently textured soils under laboratory conditions. 2018 , 64, 654-667	4
1147	Soil pH as the chief modifier for regional nitrous oxide emissions: New evidence and implications for global estimates and mitigation. 2018 , 24, e617-e626	83
1146	Effects of Litter Inputs on N ₂ O Emissions from a Tropical Rainforest in Southwest China. 2018 , 21, 1013-1026	15
1145	Soil gross N ammonification and nitrification from tropical to temperate forests in eastern China. 2018 , 32, 83-94	22
1144	Models meet data: Challenges and opportunities in implementing land management in Earth system models. 2018 , 24, 1470-1487	63
1143	An increased ratio of fungi to bacteria indicates greater potential for N ₂ O production in a grazed grassland exposed to elevated CO ₂ . 2018 , 254, 111-116	21

1142	Nitrous oxide emissions and biogeochemical responses to soil freezing-thawing and drying-wetting. 2018 , 117, 5-15	83
1141	Can conservation tillage reduce NO emissions on cropland transitioning to organic vegetable production?. 2018 , 618, 927-940	7
1140	Effects of warming on NO fluxes in a boreal peatland of Permafrost region, Northeast China. 2018 , 616-617, 427-434	34
1139	Offsetting global warming-induced elevated greenhouse gas emissions from an arable soil by biochar application. 2018 , 24, e318-e334	53
1138	Genomics and Ecology of Novel NO-Reducing Microorganisms. 2018 , 26, 43-55	212
1137	Alteration of nitrous oxide emissions from floodplain soils by aggregate size, litter accumulation and plant-soil interactions. 2018 , 15, 7043-7057	7
1136	Increased Forest Soil CO ₂ and N ₂ O Emissions During Insect Infestation. 2018 , 9, 612	5
1135	X-ray computed tomography to predict soil N ₂ O production via bacterial denitrification and N ₂ O emission in contrasting bioenergy cropping systems. 2018 , 10, 894-909	13
1134	Combination of Warming and Vegetation Composition Change Strengthens the Environmental Controls on N ₂ O Fluxes in a Boreal Peatland. 2018 , 9, 480	2
1133	Organic Fertilizers and Nutrient Recycling from Diluted Waste Streams. 2018 ,	
1132	Seabird-affected taluses are denitrification hotspots and potential NO emitters in the High Arctic. 2018 , 8, 17261	3
1131	Wet Spots as Hotspots: Moisture Responses of Nitric and Nitrous Oxide Emissions From Poorly Drained Agricultural Soils. 2018 , 123, 3589-3602	16
1130	Closing the N-Budget: How Simulated Groundwater-Borne Nitrate Supply Affects Plant Growth and Greenhouse Gas Emissions on Temperate Grassland. 2018 , 9, 407	4
1129	Soil nitrous oxide flux following land-use reversion from Miscanthus and SRC willow to perennial ryegrass. 2018 , 10, 914-929	10
1128	Non-cropping period accounting for over a half of annual nitric oxide releases from cultivated calcareous-soil alpine ecosystems with marginally low emission factors. 2018 , 11, 338-344	
1127	Nitrous oxide and nitric oxide emissions from lowland rice cultivation with urea deep placement and alternate wetting and drying irrigation. 2018 , 8, 17623	10
1126	Start-up treatment of palm oil mill effluent (POME) final discharge using Napier Grass in wetland system. 2018 , 368, 012008	7
1125	Greenhouse Gas Production and Transport in Desert Soils of the Southwestern United States. 2018 , 32, 1703-1717	4

1124	Carbon footprint of cropping systems with grain legumes and cover crops: A case-study in SW France. 2018 , 167, 92-102	23
1123	Perspective on Wheat Yield and Quality with Reduced Nitrogen Supply. 2018 , 23, 1029-1037	79
1122	Estimating soil nitrogen balance at regional scale in China's croplands from 1984 to 2014. 2018 , 167, 125-135	27
1121	Effect of Dung Quantity and Quality on Greenhouse Gas Fluxes From Tropical Pastures in Kenya. 2018 , 32, 1589-1604	23
1120	Changes in Irrigation Practices Likely Mitigate Nitrous Oxide Emissions From California Cropland. 2018 , 32, 1514-1527	12
1119	Emissions of nitrous oxide (N ₂ O) from soil surfaces and their historical changes in East Asia: a model-based assessment. 2018 , 5,	17
1118	Trade-offs between soil carbon sequestration and reactive nitrogen losses under straw return in global agroecosystems. 2018 , 24, 5919-5932	123
1117	Response of Soil Properties and Soil Microbial Communities to the Projected Climate Change. 2018 , 87-136	3
1116	Characterizing Redox Potential Effects on Greenhouse Gas Emissions Induced by Water-Level Changes. 2018 , 17, 170152	10
1115	Crop residue incorporation and nitrogen fertilizer effects on greenhouse gas emissions from a subtropical rice system in Southwest China. 2018 , 15, 1972-1986	4
1114	Can Incorporating Brassica Tissues into Soil Reduce Nitrification Rates and Nitrous Oxide Emissions?. 2018 , 47, 1436-1444	1
1113	Continental soil drivers of ammonium and nitrate in Australia. 2018 , 4, 213-224	5
1112	Fertiliser timing and use of inhibitors to reduce N ₂ O emissions of rainfed wheat in a semi-arid environment. 2018 , 112, 231-252	11
1111	Effects of long-term increased N deposition on tropical montane forest soil N ₂ and N ₂ O emissions. 2018 , 126, 194-203	21
1110	Interaction of straw amendment and soil NO ₃ ⁻ content controls fungal denitrification and denitrification product stoichiometry in a sandy soil. 2018 , 126, 204-212	36
1109	Management matters: testing a mitigation strategy for nitrous oxide emissions using legumes on intensively managed grassland. 2018 , 15, 5519-5543	31
1108	Nitrous Oxide Emissions from Surface versus Injected Manure in Perennial Hay Crops. 2018 , 82, 156-166	4
1107	Response of Soil Surface Greenhouse Gas Fluxes to Crop Residue Removal and Cover Crops under a Corn-Soybean Rotation. 2018 , 47, 1146-1154	21

1106	Impact of biochar on soil characteristics and temporal greenhouse gas emissions: A field study from southern Canada. 2018 , 118, 154-162	16
1105	Nitrous oxide emissions from biofilm processes for wastewater treatment. 2018 , 102, 9815-9829	42
1104	Seasonal N ₂ O emissions respond differently to environmental and microbial factors after fertilization in wheat/maize agroecosystem. 2018 , 112, 215-229	8
1103	Changes in the Isotopic Signature of Atmospheric Nitrous Oxide and Its Global Average Source During the Last Three Millennia. 2018 , 123, 10,757	9
1102	Phylogenomics Reveal the Dynamic Evolution of Fungal Nitric Oxide Reductases and Their Relationship to Secondary Metabolism. 2018 , 10, 2474-2489	28
1101	Relative abundance of denitrifying and DNRA bacteria and their activity determine nitrogen retention or loss in agricultural soil. 2018 , 123, 97-104	46
1100	Effects of precipitation exclusion on N ₂ O emissions in a savanna ecosystem in SW China. 2018 , 187, 1-8	5
1099	Effects of pH and mineralisation on nitrification in a subtropical acid forest soil. 2018 , 56, 275	20
1098	NO and CO emissions following repeated application of organic and mineral N fertiliser from a vegetable crop rotation. 2018 , 637-638, 813-824	23
1097	Assessing the performance of three frequently used biogeochemical models when simulating N ₂ O emissions from a range of soil types and fertiliser treatments. 2018 , 331, 53-69	18
1096	Influence of Critical Bioretention Design Factors and Projected Increases in Precipitation due to Climate Change on Roadside Bioretention Performance. 2018 , 144, 04018082	10
1095	Field-aged biochar stimulated NO production from greenhouse vegetable production soils by nitrification and denitrification. 2018 , 642, 1303-1310	53
1094	Remotely sensed canopy nitrogen correlates with nitrous oxide emissions in a lowland tropical rainforest. 2018 , 99, 2080-2089	15
1093	Microbial pathways for nitrous oxide emissions from sheep urine and dung in a typical steppe grassland. 2018 , 54, 717-730	30
1092	Primed N ₂ O emission from native soil nitrogen: A ¹⁵ N-tracing laboratory experiment. 2018 , 181, 621-627	8
1091	Nitrogen availability to maize as affected by fertilizer application and soil type in the Tanzanian highlands. 2018 , 112, 197-213	7
1090	Separated pathways for biochar to affect soil NO emission under different moisture contents. 2018 , 645, 887-894	22
1089	Greenhouse gas emissions from soil amended with agricultural residue biochars: Effects of feedstock type, production temperature and soil moisture. 2018 , 117, 1-9	34

1088	Description and Evaluation of the MIT Earth System Model (MESM). 2018 , 10, 1759-1789	16
1087	Postfire nitrogen balance of Mediterranean shrublands: Direct combustion losses versus gaseous and leaching losses from the postfire soil mineral nitrogen flush. 2018 , 24, 4505-4520	13
1086	Spatial patterns of microbial denitrification genes change in response to poultry litter placement and cover crop species in an agricultural soil. 2018 , 54, 769-781	7
1085	Tetracycline and sulfamethazine alter dissimilatory nitrate reduction processes and increase NO release in rice fields. 2018 , 242, 788-796	38
1084	Modeling nitrous oxide emissions from rough fescue grassland soils subjected to long-term grazing of different intensities using the Soil and Water Assessment Tool (SWAT). 2018 , 25, 27362-27377	14
1083	Estuaries as Sources and Sinks of N ₂ O Across a Land Use Gradient in Subtropical Australia. 2018 , 32, 877-894	31
1082	Long-term manure application increased greenhouse gas emissions but had no effect on ammonia volatilization in a Northern China upland field. 2018 , 633, 230-239	31
1081	Nitrous oxide mitigation potential of reduced tillage and N input in durum wheat in the Mediterranean. 2018 , 111, 189-201	4
1080	Systems biology approaches towards predictive microbial ecology. 2018 , 20, 4197-4209	12
1079	Current inventory approach overestimates the effect of irrigated crop management on soil-derived greenhouse gas emissions in the semi-arid Canadian Prairies. 2018 , 208, 19-32	9
1078	Bacterial bioclusters relate to hydrochemistry in New Zealand groundwater. 2018 , 94,	7
1077	Addressing agricultural nitrogen losses in a changing climate. 2018 , 1, 399-408	90
1076	Maintenance of N cycling gene communities with crop-livestock integration management in tropical agriculture systems. 2018 , 267, 52-62	7
1075	Progress towards sustainable intensification in China challenged by land-use change. 2018 , 1, 304-313	71
1074	Nitrogen Budget and Topographic Controls on Nitrous Oxide in a Shale-Based Watershed. 2018 , 123, 1888-1908	9
1073	Impacts of surface-applied residues on N-cycling soil microbial communities in miscanthus and switchgrass cropping systems. 2018 , 130, 79-83	12
1072	A meta-analysis of temperature sensitivity as a microbial trait. 2018 , 24, 4211-4224	33
1071	A critique of the paper Estimate of bacterial and fungal N ₂ O production processes after crop residue input and fertilizer application to an agricultural field by ¹⁵ N isotopomer analysis by Yamamoto et al. (2017), Soil Biology & Biochemistry 108, 916. 2019 , 135, 450-451	2

1070	Nitrous oxide emissions from three temperate forest types in the Qinling Mountains, China. 2019 , 30, 1417-1427	0
1069	Impacts of drainage, restoration and warming on boreal wetland greenhouse gas fluxes. 2019 , 647, 169-181	37
1068	Benefits of integrated nutrient management on NO and NO mitigations in water-saving ground cover rice production systems. 2019 , 646, 1155-1163	15
1067	Rejoinder to: A critique of Estimate of bacterial and fungal N ₂ O production processes after crop residue input and fertilizer application to an agricultural field by ¹⁵ N isotopomer analysis by Yamamoto et al. (2017), Soil Biology & Biochemistry 108, 916. 2019 , 135, 452-453	
1066	A Central Small RNA Regulatory Circuit Controlling Bacterial Denitrification and NO Emissions. 2019 , 10,	7
1065	Mobile continuous-flow isotope-ratio mass spectrometer system for automated measurements of N and NO fluxes in fertilized cropping systems. 2019 , 9, 11097	5
1064	Long-term harvesting of reeds affects greenhouse gas emissions and microbial functional genes in alkaline wetlands. 2019 , 164, 114936	13
1063	Effect of soil tillage and N fertilization on NO mitigation in maize in the Brazilian Cerrado. 2019 , 692, 1165-1174	11
1062	Plant trait-based approaches to improve nitrogen cycling in agroecosystems. 2019 , 56, 2454-2466	18
1061	Archaeal nitrification is a key driver of high nitrous oxide emissions from arctic peatlands. 2019 , 137, 107539	18
1060	Nitrous oxide emission from upland soil amended with different animal manures. 2019 , 62,	9
1059	Denitrification Rate and Its Potential to Predict Biogenic N ₂ O Field Emissions in a Mediterranean Maize-Cropped Soil in Southern Italy. 2019 , 8, 97	3
1058	Evaluation of vegetation communities, water table, and peat composition as drivers of greenhouse gas emissions in lowland tropical peatlands. 2019 , 688, 1193-1204	15
1057	Linking Ammonia Volatilization with Moisture Content and Abundance of Nitrification and Denitrification Genes in N-Fertilized Soils. 2019 , 29-43	2
1056	Organic fertilizers have divergent effects on soil N ₂ O emissions. 2019 , 55, 685-699	18
1055	The coupling interaction of NO with NH or NO as an important source of NO emission from agricultural soil in the North China Plain. 2019 , 692, 82-88	3
1054	Fraction of nitrous oxide production in nitrification and its effect on total soil emission: A meta-analysis and global-scale sensitivity analysis using a process-based model. 2019 , 14, e0219159	10
1053	Process Understanding of Soil BVOC Fluxes in Natural Ecosystems: A Review. 2019 , 57, 966-986	28

1052	Improved prediction of farm nitrous oxide emission through an understanding of the interaction among climate extremes, soil nitrogen dynamics and irrigation water. 2019 , 248, 109278	2
1051	Inventories of methane and nitrous oxide emissions from animal and crop farms of 69 municipalities in Alberta, Canada. 2019 , 234, 895-911	9
1050	Carbon sink reduction by fruit removal triggers respiration but not nitrous oxide emissions from the root zone of cucumber. 2019 , 175, 111-118	3
1049	Exotic <i>Spartina alterniflora</i> invasion alters soil nitrous oxide emission dynamics in a coastal wetland of China. 2019 , 442, 233-246	9
1048	Spatial and Temporal Variation in Soil Nitrous Oxide Emissions from a Rehabilitated and Undisturbed Riparian Forest. 2019 , 48, 624-633	6
1047	Effects of Green Manure Application and Prolonging Mid-Season Drainage on Greenhouse Gas Emission from Paddy Fields in Ehime, Southwestern Japan. 2019 , 9, 29	7
1046	The Nitrification Inhibitor Vizura [®] Reduces N ₂ O Emissions When Added to Digestate before Injection under Irrigated Maize in the Po Valley (Northern Italy). 2019 , 9, 431	7
1045	Comparable bacterial-mediated nitrogen supply and losses under organic reduced tillage and conventional intensive tillage. 2019 , 95, 103121	2
1044	Quantifying NO reduction to N during denitrification in soils via isotopic mapping approach: Model evaluation and uncertainty analysis. 2019 , 179, 108806	29
1043	Black Alder (<i>Alnus glutinosa</i> (L.) Gaertn.) on Compacted Skid Trails: A Trade-off between Greenhouse Gas Fluxes and Soil Structure Recovery?. 2019 , 10, 726	8
1042	Greenhouse gas emissions from intact riparian wetland soil columns continuously loaded with nitrate solution: a laboratory microcosm study. 2019 , 26, 33702-33714	3
1041	Sustainable intensification of agricultural drainage. 2019 , 2, 914-921	35
1040	Oxygen Regulates Nitrous Oxide Production Directly in Agricultural Soils. 2019 , 53, 12539-12547	35
1039	Effects of Changes in Nitrogen Availability on Nitrogen Gas Emissions in a Tropical Forest During a Drought. 2019 , 124, 2917-2926	1
1038	Mechanisms of mitigating nitrous oxide emissions from vegetable soil varied with manure, biochar and nitrification inhibitors. 2019 , 278, 107672	18
1037	Biochar, Manure, and Sawdust Alter Long-Term Water Retention Dynamics in Degraded Soil. 2019 , 83, 1491-1501	6
1036	Innovative Technologies Can Improve Understanding of Microbial Nitrogen Dynamics in Agricultural Soils. 2019 , 4, 190032	1
1035	Effect of cattle slurry application techniques on N ₂ O and NH ₃ emissions from a loamy soil. 2019 , 182, 964-979	6

1034	Microbial Nitric Oxide, Nitrous Oxide, and Nitrous Acid Emissions from Drylands. 2019 , 335-365	1
1033	Effects of dietary crude protein and tannic acid on nitrogen excretion, urinary nitrogenous composition and urine nitrous oxide emissions in beef cattle. 2019 , 103, 1675-1683	3
1032	Nitrous oxide emission and denitrifier bacteria communities in calcareous soil as affected by drip irrigation with saline water. 2019 , 143, 222-235	3
1031	Shifts in the Composition and Activities of Denitrifiers Dominate CO Stimulation of NO Emissions. 2019 , 53, 11204-11213	15
1030	DMPP reduced nitrification, but not annual N ₂ O emissions from mineral fertilizer applied to oilseed rape on a sandy loam soil. 2019 , 11, 1396-1407	9
1029	Environmental factors affecting greenhouse gas fluxes of green roofs in temperate zone. 2019 , 694, 133699	5
1028	Presence of spring-thaw NO emissions are not linked to functional gene abundance in a drip-fertigated cropped soil in arid northwestern China. 2019 , 695, 133670	9
1027	Temperature effects on NO production pathways in temperate forest soils. 2019 , 691, 1127-1136	10
1026	Emissions of Nitrous Oxide and Methane in a Subtropical Ferralsol Subjected to Nitrogen Fertilization and Sheep Grazing in Integrated Crop-Livestock System. 2019 , 43,	7
1025	Effects of Biochar and Manure Applications on Soil Carbon Dioxide, Methane, and Nitrous Oxide Fluxes from Two Different Soils. 2019 , 48, 1664-1674	19
1024	Effects of triclosan and triclocarban on denitrification and NO emissions in paddy soil. 2019 , 695, 133782	8
1023	Biochar Combined with Vermicompost Increases Crop Production While Reducing Ammonia and Nitrous Oxide Emissions from a Paddy Soil. 2019 , 29, 82-94	22
1022	Reviews and syntheses: Review of causes and sources of N ₂ O emissions and NO ₃ ⁻ leaching from organic arable crop rotations. 2019 , 16, 2795-2819	33
1021	Reduction of NO emission by biochar and/or 3,4-dimethylpyrazole phosphate (DMPP) is closely linked to soil ammonia oxidizing bacteria and nosZI-NO reducer populations. 2019 , 694, 133658	26
1020	Valorization of agricultural wastes could improve soil fertility and mitigate soil direct NO emissions. 2019 , 250, 109389	11
1019	Responses of N ₂ O production pathways and related functional microbes to temperature across greenhouse vegetable field soils. 2019 , 355, 113904	21
1018	Impact of nitrogen compounds on fungal and bacterial contributions to codenitrification in a pasture soil. 2019 , 9, 13371	8
1017	Trace gas fluxes from managed grassland soil subject to multifactorial climate change manipulation. 2019 , 137, 1-11	8

1016	Effect of biochar origin and soil type on the greenhouse gas emission and the bacterial community structure in N fertilised acidic sandy and alkaline clay soil. 2019 , 660, 69-79	36
1015	Fertilizer nitrogen loss via N ₂ emission from calcareous soil following basal urea application of winter wheat. 2019 , 12, 91-97	3
1014	Technical advances in measuring greenhouse gas emissions from thawing permafrost soils in the laboratory. 2019 , 19, 137-145	4
1013	Global Nitrous Oxide Emissions From Pasturelands and Rangelands: Magnitude, Spatiotemporal Patterns, and Attribution. 2019 , 33, 200-222	26
1012	Source partitioning and emission factor of nitrous oxide during warm and cold cropping seasons from an upland soil in South Korea. 2019 , 662, 591-599	2
1011	Microbial kinetics and thermodynamic (MKT) processes for soil organic matter decomposition and dynamic oxidation-reduction potential: Model descriptions and applications to soil NO emissions. 2019 , 247, 812-823	20
1010	Manure Application Decisions Impact Nitrous Oxide and Carbon Dioxide Emissions during Non-Growing Season Thaws. 2019 , 83, 163-172	13
1009	Effects of afforestation on soil nitrous oxide emissions in a subtropical montane agricultural landscape: A 3-year field experiment. 2019 , 266-267, 221-230	7
1008	Direct tracing of NH and NO emissions associated with urea fertilization approaches, using static incubation cells. 2019 , 661, 75-85	10
1007	N ₂ O emissions and NO ₃ ⁻ leaching from two contrasting regions in Austria and influence of soil, crops and climate: a modelling approach. 2019 , 113, 95-111	17
1006	N ₂ O emission increases with mulch mass in a fertilized sugarcane cropping system. 2019 , 55, 511-523	12
1005	Drip irrigation or reduced N-fertilizer rate can mitigate the high annual N ₂ O+NO fluxes from Chinese intensive greenhouse vegetable systems. 2019 , 212, 183-193	32
1004	Surface and subsurface N ₂ O losses from dairy cropping systems. 2019 , 114, 277-293	
1003	Seasonal variations in N ₂ and N ₂ O emissions from a wheat/maize cropping system. 2019 , 55, 539-551	7
1002	Simultaneous Abiotic Production of Greenhouse Gases (CO ₂ , CH ₄ , and N ₂ O) in Subtropical Soils. 2019 , 124, 1977-1987	4
1001	Simulating the effect of tillage practices with the global ecosystem model LPJmL (version 5.0-tillage). 2019 , 12, 2419-2440	16
1000	An incubation study of temperature sensitivity of greenhouse gas fluxes in three land-cover types near Sydney, Australia. 2019 , 688, 324-332	9
999	NO Emissions From Two Agroecosystems: High Spatial Variability and Long Pulses Observed Using Static Chambers and the Flux-Gradient Technique. 2019 , 124, 1887-1904	9

998	Grazing-related nitrous oxide emissions: from patch scale to field scale. 2019 , 16, 1685-1703	14
997	Underestimation of denitrification rates from field application of the $\delta^{15}\text{N}$ gas flux method and its correction by gas diffusion modelling. 2019 , 16, 2233-2246	8
996	Mechanistic representation of soil nitrogen emissions in the Community Multiscale Air Quality (CMAQ) model v 5.1. 2019 , 12, 849-878	7
995	Response of Soil Greenhouse Gas Fluxes and Soil Properties to Nitrogen Fertilizer Rates under Camelina and Carinata Nonfood Oilseed Crops. 2019 , 12, 524-535	7
994	Admixing Fir to European Beech Forests Improves the Soil Greenhouse Gas Balance. 2019 , 10, 213	8
993	Nitrous oxide emissions decrease with plant diversity but increase with grassland primary productivity. 2019 , 190, 497-507	7
992	Produces Nitrous Oxide by Coupling the Assimilatory and Denitrification Pathways. 2019 , 10, 980	12
991	Functional assembly of nitrous oxide reductase provides insights into copper site maturation. 2019 , 116, 12822-12827	14
990	Policy options to streamline the carbon market for agricultural nitrous oxide emissions. 2019 , 19, 893-907	7
989	Soil-atmosphere exchange of nitrous oxide in two Tanzanian croplands: Effects of nitrogen and stover management. 2019 , 275, 24-36	5
988	Application of Bayesian statistics to estimate nitrous oxide emission factors of three nitrogen fertilisers on UK grasslands. 2019 , 128, 362-370	17
987	Influence of irrigation time and frequency on greenhouse gas emissions in a solid-set sprinkler-irrigated maize under Mediterranean conditions. 2019 , 221, 303-311	19
986	Effect of N dose on soil GHG emissions from a drip-fertigated olive (<i>Olea europaea</i> L.) orchard. 2019 , 677, 350-361	6
985	Midmorning Point Sampling May Not Accurately Represent Nitrous Oxide Emissions Following Fertilizer Applications. 2019 , 83, 339-347	5
984	Soil N ₂ O, CH ₄ , and CO ₂ Fluxes in Forest, Grassland, and Tillage/No-Tillage Croplands in French Guiana (Amazonia). 2019 , 3, 29	7
983	Global drivers of methane oxidation and denitrifying gene distribution in drylands. 2019 , 28, 1230-1243	13
982	Nitrogen turnover and NO/N ratio of three contrasting tropical soils amended with biochar. 2019 , 348, 12-20	8
981	How do sand addition, soil moisture and nutrient status influence greenhouse gas fluxes from drained organic soils?. 2019 , 135, 71-84	29

980	Denitrifiers, nitrogen-fixing bacteria and N ₂ O soil gas flux in high Arctic ice-wedge polygon cryosols. 2019 , 95,	8
979	References. 2019 , 547-617	
978	N ₂ O flux short-term response to temperature and topsoil disturbance in a fertilized crop: An eddy covariance campaign. 2019 , 271, 193-206	6
977	Permafrost nitrous oxide emissions observed on a landscape scale using the airborne eddy-covariance method. 2019 , 19, 4257-4268	13
976	Soil Carbon and Nitrogen Dynamics in Two Agricultural Soils Amended with Manure-Derived Biochar. 2019 , 48, 727-734	10
975	Seasonal and diel variation in greenhouse gas emissions from septic system leach fields. 2019 , 16, 6043-6052	6
974	Climate and soil parameters are more important than denitrifier abundances in controlling potential denitrification rates in Chinese grassland soils. 2019 , 669, 62-69	9
973	Annual Greenhouse-Gas Emissions from Forest Soil of a Peri-Urban Conifer Forest in Greece under Different Thinning Intensities and Their Climate-Change Mitigation Potential. 2019 , 65, 387-400	12
972	Desiccation and rehydration of mosses greatly increases resource fluxes that alter soil carbon and nitrogen cycling. 2019 , 107, 1767-1778	12
971	Constraining N cycling in the ecosystem model LandscapeDNDC with the stable isotope model SIMONE. 2019 , 100, e02675	12
970	Biochar for soil amendment. 2019 , 109-146	11
969	Increases in soil sequestered carbon under conservation agriculture cropping decrease the estimated greenhouse gas emissions of wetland rice using life cycle assessment. 2019 , 224, 72-87	21
968	Impact of drainage type on simultaneous nitrogen losses in Atlantic Canada. 2019 , 99, 70-79	2
967	Automated measurements of greenhouse gases fluxes from tree stems and soils: magnitudes, patterns and drivers. 2019 , 9, 4005	33
966	Estimating nitrogen flows of agricultural soils at a landscape level - A modelling study of the Upper Enns Valley, a long-term socio-ecological research region in Austria. 2019 , 665, 275-289	8
965	SPECTRAL VEGETATION INDEXES APPLIED TO NITROGEN SUFFICIENCY INDEX: A STRATEGY WITH POTENTIAL TO INCREASE NITROGEN USE EFFICIENCY ON TOMATO CROP. 2019 , 39, 118-126	1
964	Leaf-cutter ants engineer large nitrous oxide hot spots in tropical forests. 2019 , 286, 20182504	10
963	N ₂ O, CH ₄ , and CO ₂ Emissions from Continuous Flooded, Wet, and Flooded Converted to Wet Soils. 2019 , 19, 342-351	11

962	Modelling biological N fixation and grass-legume dynamics with process-based biogeochemical models of varying complexity. 2019 , 106, 58-66	9
961	N ₂ O production in the organic and mineral horizons of soil had different responses to increasing temperature. 2019 , 19, 3499-3511	3
960	External carbon addition for enhancing denitrification modifies bacterial community composition and affects CH ₄ and NO production in sub-arctic mining pond sediments. 2019 , 158, 22-33	15
959	Laboratory study on nitrate removal and nitrous oxide emission in intact soil columns collected from nitrogenous loaded riparian wetland, Northeast China. 2019 , 14, e0214456	4
958	The Responses of Soil N ₂ O Emissions to Residue Returning Systems: A Meta-Analysis. 2019 , 11, 748	16
957	Nutrient enhancement of chickpea grown with plant growth promoting bacteria in local soil of Bathinda, Northwestern India. 2019 , 25, 1251-1259	12
956	Phosphorus availability and plants alter soil nitrogen retention and loss. 2019 , 671, 786-794	16
955	Arbuscular mycorrhiza: a viable strategy for soil nutrient loss reduction. 2019 , 201, 723-735	27
954	Plant and soil effects on denitrification potential in agricultural soils. 2019 , 439, 459-474	18
953	Early season N ₂ O emissions under variable water management in rice systems: source-partitioning emissions using isotope ratios along a depth profile. 2019 , 16, 383-408	21
952	SWAT-N ₂ O coupler: An integration tool for soil N ₂ O emission modeling. 2019 , 115, 86-97	6
951	Gross N transformation rates and related NO emissions in Chinese and UK agricultural soils. 2019 , 666, 176-186	21
950	Effects of nitrogen and phosphorus on the production of carbon dioxide and nitrous oxide in salt-affected soils under different vegetation communities. 2019 , 204, 78-88	13
949	An evaluation of primers for detecting denitrifiers via their functional genes. 2019 , 21, 1196-1210	31
948	Nitrification inhibitors effectively target N ₂ O-producing <i>Nitrosospora</i> spp. in tropical soil. 2019 , 21, 1241-1254	17
947	Rapid Succession of Actively Transcribing Denitrifier Populations in Agricultural Soil During an Anoxic Spell. 2018 , 9, 3208	8
946	Dinitrogen emissions: an overlooked key component of the N balance of montane grasslands. 2019 , 143, 15-30	19
945	Warming reduces the increase in NO emission under nitrogen fertilization in a boreal peatland. 2019 , 664, 72-78	22

944	Nitrogen use efficiency and nitrous oxide emissions from five UK fertilised grasslands. 2019 , 661, 696-710	50
943	Nitrous oxide from streams and rivers: A review of primary biogeochemical pathways and environmental variables. 2019 , 191, 224-262	64
942	Modelling Nitrous Oxide Emissions from an Oats Cover Crop with the RZWQM2. 2019 , 201-221	
941	The potential of biotechnology for mitigation of greenhouse gasses effects: solutions, challenges, and future perspectives. 2019 , 12, 1	3
940	Emission mechanism and reduction countermeasures of agricultural greenhouse gases: a review. 2019 , 9, 160-174	19
939	Soil NO ₃ level and O ₂ availability are key factors in controlling N ₂ O reduction to N ₂ following long-term liming of an acidic sandy soil. 2019 , 132, 165-173	29
938	Mulch-Derived Organic Carbon Stimulates High Denitrification Fluxes from Agricultural Ditch Sediments. 2019 , 48, 476-484	6
937	Biochar reduces the efficiency of nitrification inhibitor 3,4-dimethylpyrazole phosphate (DMPP) mitigating NO emissions. 2019 , 9, 2346	15
936	Host Range and Symbiotic Effectiveness of NO Reducing Strains. 2019 , 10, 2746	8
935	A new look at an old concept: using ¹⁵ N/ ¹⁴ N and ¹⁸ O/ ¹⁶ O isotopomers to understand the relationship between soil moisture and N ₂ O production pathways. 2019 , 5, 265-274	16
934	Winter emissions of CO ₂ , CH ₄ , and N ₂ O from temperate agricultural dams: fluxes, sources, and processes. 2019 , 10, e02914	4
933	Assessing the Climate Regulation Potential of Agricultural Soils Using a Decision Support Tool Adapted to Stakeholders' Needs and Possibilities. 2019 , 7,	9
932	Management of soil pH promotes nitrous oxide reduction and thus mitigates soil emissions of this greenhouse gas. 2019 , 9, 20182	39
931	Attribution of N ₂ O sources in a grassland soil with laser spectroscopy based isotopocule analysis. 2019 , 16, 3247-3266	28
930	Characterization of atmospheric nitrous oxide emissions from global agricultural soils. 2019 , 1, 1	11
929	Nitrogen use efficiency and N ₂ O and NH ₃ losses attributed to three fertiliser types applied to an intensively managed silage crop. 2019 , 16, 4731-4745	10
928	Major role of ammonia-oxidizing bacteria in N ₂ O production in the Pearl River estuary. 2019 , 16, 4765-4781	4
927	Soil N ₂ O Emissions under Different N Rates in an Oil Palm Plantation on Tropical Peatland. 2019 , 9, 213	11

926	Integrated mesocosms for N ₂ O emissions and soil carbon storage assessments: validation and qualification of a new laboratory device: IMNOA. 2019 ,	
925	Characterizing nitric oxide emissions from two typical alpine ecosystems. 2019 , 77, 312-322	
924	Spatial and temporal variations of N ₂ O emissions from global forest and grassland ecosystems. 2019 , 266-267, 129-139	16
923	Soil NO emissions with different reduced tillage methods during the establishment of in temperate grassland. 2019 , 11, 539-549	6
922	Environmental factors function as constraints on soil nitrous oxide fluxes in bioenergy feedstock cropping systems. 2019 , 11, 416-426	4
921	Out of sight: Profiling soil characteristics, nutrients and bacterial communities affected by organic amendments down to one meter in a long-term maize experiment. 2019 , 134, 54-63	8
920	Deforestation impacts network co-occurrence patterns of microbial communities in Amazon soils. 2019 , 95,	20
919	Global soil nitrous oxide emissions since the preindustrial era estimated by an ensemble of terrestrial biosphere models: Magnitude, attribution, and uncertainty. 2019 , 25, 640-659	111
918	<i>Spartina alterniflora</i> invasion alters soil bacterial communities and enhances soil NO emissions by stimulating soil denitrification in mangrove wetland. 2019 , 653, 231-240	61
917	Drip fertigation significantly reduces nitrogen leaching in solar greenhouse vegetable production system. 2019 , 245, 694-701	58
916	Carbon capture efficiency, yield, nutrient uptake and trafficability of different grass species on a cultivated peat soil. 2019 , 173, 175-182	4
915	Biochar amendment suppresses N ₂ O emissions but has no impact on N site preference in an anaerobic soil. 2019 , 33, 165-175	1
914	δ ¹⁵ N patterns in three subtropical estuaries show switch from nitrogen reactors to pipes with increasing degradation. 2019 , 64, 860-876	14
913	Differential sensitivity of ammonia oxidising archaea and bacteria to matric and osmotic potential. 2019 , 129, 184-190	15
912	N ₂ O emissions from maize production in South-West Germany and evaluation of N ₂ O mitigation potential under single and combined inhibitor application. 2019 , 269, 215-223	11
911	CNP Uncoupling in Grazed Grasslands and Environmental Implications of Management Intensification. 2019 , 15-34	4
910	Nitrous oxide emissions after incorporation of winter oilseed rape (<i>Brassica napus</i> L.) residues under two different tillage treatments. 2019 , 182, 48-59	1
909	Emissions of nitrous oxide from continuous permafrost region in the Daxing'an Mountains, Northeast China. 2019 , 198, 34-45	19

908	Options to model the effects of tillage on N ₂ O emissions at the global scale. 2019 , 392, 212-225	7
907	Optimization of nitrogen use efficiency by means of fertigation management in an integrated aquaculture-agriculture system. 2019 , 212, 401-408	17
906	Pinto peanut cover crop nitrogen contributions and potential to mitigate nitrous oxide emissions in subtropical coffee plantations. 2019 , 656, 108-117	9
905	N ₂ O flux measurements over an irrigated maize crop: A comparison of three methods. 2019 , 264, 56-72	13
904	Nitrous oxide effluxes from plants as a potentially important source to the atmosphere. 2019 , 221, 1398-1408	24
903	Native arbuscular mycorrhizal fungi increase the abundance of ammonia-oxidizing bacteria, but suppress nitrous oxide emissions shortly after urea application. 2019 , 338, 493-501	35
902	Short-term effects of thinning on soil CO, NO and CH fluxes in Mediterranean forest ecosystems. 2019 , 651, 713-724	25
901	Broadcast woody biochar provides limited benefits to deficit irrigation maize in Colorado. 2019 , 269, 71-81	25
900	Nitrous oxide emissions from soils under traditional cropland and apple orchard in the semi-arid Loess Plateau of China. 2019 , 269, 116-124	14
899	Greenhouse gas emissions along a peat swamp forest degradation gradient in the Peruvian Amazon: soil moisture and palm roots effects. 2019 , 24, 625-643	15
898	Assessment of the Environmental Impact of Yeast Waste Application to Soil: An Integrated Approach. 2019 , 10, 1767-1777	2
897	High-resolution spatial distribution and associated uncertainties of greenhouse gas emissions from the agricultural sector. 2019 , 24, 881-905	15
896	Contemporary strategies for enhancing nitrogen retention and mitigating nitrous oxide emission in agricultural soils: present and future. 2020 , 22, 2703-2741	11
895	Variable water cycles have a greater impact on wheat growth and soil nitrogen response than constant watering. 2020 , 290, 110146	9
894	Soil microbiomes and climate change. 2020 , 18, 35-46	274
893	Access mats partially mitigate direct traffic impacts on soil microbial communities in temperate grasslands. 2020 , 145, 103353	1
892	Nitrous Oxide Dynamics in Agricultural Peat Soil in Response to Availability of Nitrate, Nitrite, and Iron Sulfides. 2020 , 37, 76-85	5
891	Characterising the biophysical, economic and social impacts of soil carbon sequestration as a greenhouse gas removal technology. 2020 , 26, 1085-1108	44

890	Simultaneous numerical representation of soil microsite production and consumption of carbon dioxide, methane, and nitrous oxide using probability distribution functions. 2020 , 26, 200-218	11
889	Indications of shifting microbial communities associated with growing biomass crops on marginal lands in Southern Ontario. 2020 , 94, 735-746	3
888	Impacts of nitrogen management and organic matter application on nitrous oxide emissions and soil organic carbon from spring maize fields in the North China Plain. 2020 , 196, 104441	19
887	Reconciling annual nitrous oxide emissions of an intensively grazed dairy pasture determined by eddy covariance and emission factors. 2020 , 287, 106646	11
886	Industrial wastes: Fly ash, steel slag and phosphogypsum- potential candidates to mitigate greenhouse gas emissions from paddy fields. 2020 , 241, 124824	28
885	Enhanced efficiency fertilisers reduce nitrous oxide emissions and improve fertiliser N recovery in a Southern Australian pasture. 2020 , 699, 134147	11
884	Influence of soil properties on N ₂ O and CO ₂ emissions from excreta deposited on tropical pastures in Kenya. 2020 , 140, 107636	18
883	Stimulation of heterotrophic nitrification and N ₂ O production, inhibition of autotrophic nitrification in soil by adding readily degradable carbon. 2020 , 20, 81-90	10
882	NirS-type N ₂ O-producers and nosZ II-type N ₂ O-reducers determine the N ₂ O emission potential in farmland rhizosphere soils. 2020 , 20, 461-471	10
881	Data-driven estimates of global nitrous oxide emissions from croplands. 2020 , 7, 441-452	42
880	Effect of nitrogen fertilisation on nitrous oxide emission and the abundance of microbial nitrifiers and denitrifiers in the bulk and rhizosphere soil of <i>Solanum lycopersicum</i> and <i>Phaseolus vulgaris</i> . 2020 , 451, 107-120	10
879	Sugarcane straw management for bioenergy: effects of global warming on greenhouse gas emissions and soil carbon storage. 2020 , 25, 559-577	2
878	Effects of copper on nitrous oxide (N ₂ O) reduction in denitrifiers and N ₂ O emissions from agricultural soils. 2020 , 56, 39-51	14
877	Soil N ₂ O emissions in Mediterranean arable crops as affected by reduced tillage and N rate. 2020 , 116, 117-133	2
876	Co-culture of rice and aquatic animals: An integrated system to achieve production and environmental sustainability. 2020 , 249, 119310	26
875	Differential responses of soil N ₂ O to biochar depend on the predominant microbial pathway. 2020 , 145, 103348	16
874	No-till increases soil denitrification via its positive effects on the activity and abundance of the denitrifying community. 2020 , 142, 107706	24
873	Large contribution of non-aquaculture period fluxes to the annual N ₂ O emissions from aquaculture ponds in Southeast China. 2020 , 582, 124550	11

872	Integrated modelling to assess N pollution swapping in slurry amended soils. 2020 , 713, 136596	2
871	Carbon limits non-linear response of nitrous oxide (N ₂ O) to increasing N inputs in a highly-weathered tropical soil in Sri Lanka. 2020 , 292, 106808	7
870	Multimodel Evaluation of Nitrous Oxide Emissions From an Intensively Managed Grassland. 2020 , 125, e2019JG005261	8
869	Combined application of organic manure with urea does not alter the dominant biochemical pathway producing N ₂ O from urea treated soil. 2020 , 56, 331-343	6
868	How are annual CH ₄ , N ₂ O, and NO emissions from rice/wheat system affected by nitrogen fertilizer rate and type?. 2020 , 150, 103469	13
867	Thiosulfate-driven autotrophic and mixotrophic denitrification processes for secondary effluent treatment: Reducing sulfate production and nitrous oxide emission. 2020 , 300, 122651	17
866	Measurement of NO emissions over the whole year is necessary for estimating reliable emission factors. 2020 , 259, 113864	17
865	Effect of urease and nitrification inhibitors on ammonia volatilization and abundance of N-cycling genes in an agricultural soil. 2020 , 183, 99-109	12
864	Lakes as nitrous oxide sources in the boreal landscape. 2020 , 26, 1432-1445	11
863	Water-saving irrigation is a "win-win" management strategy in rice paddies "With both reduced greenhouse gas emissions and enhanced water use efficiency. 2020 , 228, 105889	25
862	Combination of warming and N inputs increases the temperature sensitivity of soil NO emission in a Tibetan alpine meadow. 2020 , 704, 135450	9
861	Substituting ecological intensification of agriculture for conventional agricultural practices increased yield and decreased nitrogen losses in North China. 2020 , 147, 103395	15
860	Identifying optimum rates of fertilizer nitrogen application to maximize economic return and minimize nitrous oxide emission from rice/wheat systems in the Indo-Gangetic Plains of India. 2020 , 66, 2039-2054	15
859	Elucidating microbial carbon utilization and nitrous oxide dynamics with ¹³ C-substrates and N ₂ O isotopomers in contrasting horticultural soils. 2020 , 147, 103401	4
858	Nitrous oxide emission factors of mineral fertilisers in the UK and Ireland: A Bayesian analysis of 20 years of experimental data. 2020 , 135, 105366	15
857	N ₂ O fluxes and direct N ₂ O emission factors from maize cultivation on Oxisols in Thailand. 2020 , 20, e00244	2
856	Nitrogen transformation processes and gaseous emissions from a humic gley soil at two water filled pore spaces. 2020 , 198, 104543	4
855	Effect of carbon rate and type amended with ammonium or nitrate on nitrous oxide emissions in a strong ammonia oxidation soil. 2020 , 20, 1253-1263	3

854	Combined Effects of Straw Returning and Chemical N Fertilization on Greenhouse Gas Emissions and Yield from Paddy Fields in Northwest Hubei Province, China. 2020 , 20, 392-406	16
853	Simultaneous quantification of N , NH and N O emissions from a flooded paddy field under different N fertilization regimes. 2019 , 26, 2292	22
852	Restricted nitrous oxide emissions by ammonia oxidizers in two agricultural soils following excessive urea fertilization. 2020 , 20, 1502-1512	5
851	Can the presence of plantain (<i>Plantago lanceolata</i> L.) improve nitrogen cycling of dairy grassland systems on peat soils?. 2020 , 63, 106-122	12
850	Biochar promotes the reduction of N ₂ O to N ₂ and concurrently suppresses the production of N ₂ O in calcareous soil. 2020 , 362, 114091	7
849	Assessing the effects of manure application rate and timing on nitrous oxide emissions from managed grasslands under contrasting climate in Canada. 2020 , 716, 135374	17
848	Assessing climate change impacts on greenhouse gas emissions, N losses in drainage and crop production in a subsurface drained field. 2020 , 705, 135969	14
847	Impacts of land management practices on blue carbon stocks and greenhouse gas fluxes in coastal ecosystems-A meta-analysis. 2020 , 26, 1354-1366	24
846	Nitrogen fertiliser interactions with urine deposit affect nitrous oxide emissions from grazed grasslands. 2020 , 290, 106784	11
845	Environmental factors determining distribution and activity of anammox bacteria in minerotrophic fen soils. 2020 , 96,	0
844	Cattle urine and dung additions differently affect nitrification pathways and greenhouse gas emission in a grassland soil. 2020 , 56, 235-247	6
843	Integrating critical values of soil drivers for mitigating GHGs: An assessment in a sugarcane cropping system. 2020 , 704, 135420	2
842	Azolla incorporation and dual cropping influences CH ₄ and N ₂ O emissions from flooded paddy ecosystems. 2020 , 66, 152-162	7
841	Assessing Effects of Agronomic Nitrogen Management on Crop Nitrogen Use and Nitrogen Losses in the Western Canadian Prairies. 2020 , 4,	4
840	Impacts of Clear-Cutting of a Boreal Forest on Carbon Dioxide, Methane and Nitrous Oxide Fluxes. 2020 , 11, 961	7
839	Nitrogen Cycling and Soil Amelioration in <i>Camellia oleifera</i> Plantations. 2020 ,	
838	A comprehensive quantification of global nitrous oxide sources and sinks. 2020 , 586, 248-256	270
837	Nitrous oxide emissions of undrained, forestry-drained, and rewetted boreal peatlands. 2020 , 478, 118494	7

836	Estimating global terrestrial denitrification from measured N ₂ O:(N ₂ O + N ₂) product ratios. 2020 , 47, 72-80	21
835	An ecological study of the association between environmental indicators and early childhood caries. 2020 , 13, 474	2
834	Molecular and ecological perspectives of nitrous oxide producing microbial communities in agro-ecosystems. 2020 , 19, 717-750	20
833	Regulation of the product stoichiometry of denitrification in intensively managed soils. 2020 , 9, e251	2
832	Oil palm plantations are large sources of nitrous oxide, but where are the data to quantify the impact on global warming?. 2020 , 47, 81-88	7
831	Greenhouse gas emissions from inorganic and organic fertilizer production and use: A review of emission factors and their variability. 2020 , 276, 111211	39
830	Conservation tillage enhances crop productivity and decreases soil nitrogen losses in a rainfed agroecosystem of the Loess Plateau, China. 2020 , 274, 122854	16
829	Soil nitrous oxide emissions from Eucalyptus plantation in Argentina. 2020 , 473, 118301	1
828	Long-term diverse rotation alters nitrogen cycling bacterial groups and nitrous oxide emissions after nitrogen fertilization. 2020 , 149, 107917	22
827	Global Research Alliance N O chamber methodology guidelines: Recommendations for deployment and accounting for sources of variability. 2020 , 49, 1092-1109	21
826	Mechanisms responsible for NO emissions from intertidal soils of the Yangtze Estuary. 2020 , 716, 137073	9
825	Role and potential applications of plant growth-promoting rhizobacteria for sustainable agriculture. 2020 , 49-60	37
824	Physiological significance of pedospheric nitric oxide for root growth, development and organismic interactions. 2020 , 43, 2336-2354	11
823	The impact of atmospheric N deposition and N fertilizer type on soil nitric oxide and nitrous oxide fluxes from agricultural and forest Eutric Regosols. 2020 , 56, 1077-1090	4
822	Modest Residual Effects of Short-Term Warming, Altered Hydration, and Biocrust Successional State on Dryland Soil Heterotrophic Carbon and Nitrogen Cycling. 2020 , 8,	3
821	Projected background nitrous oxide emissions from cultivable maize and rice farmland in China. 2020 , 11, 1982-1990	1
820	Nitrite induced transcription of p450 _{nor} during denitrification by <i>Fusarium oxysporum</i> correlates with the production of N ₂ O with a high ¹⁵ N site preference. 2020 , 151, 108043	6
819	Fungi dominate denitrification when Chinese milk vetch green manure is used in paddy soil. 2020 , 1	1

818	Atmospheric Nitrous Oxide Variations on Centennial Time Scales During the Past Two Millennia. 2020 , 34, e2020GB006568	1
817	Is Crop Residue Removal to Reduce N ₂ O Emissions Driven by Quality or Quantity? A Field Study and Meta-Analysis. 2020 , 10, 546	4
816	Nitrogen isotopic signatures and fluxes of NO in response to land-use change on naturally occurring saline-alkaline soil. 2020 , 10, 21253	3
815	Nitrous oxide emission from stormwater biofilters in alternating dry and wet weather. 2020 , 191, 110137	3
814	Global N ₂ O Emissions From Cropland Driven by Nitrogen Addition and Environmental Factors: Comparison and Uncertainty Analysis. 2020 , 34, e2020GB006698	9
813	From research to policy: optimizing the design of a national monitoring system to mitigate soil nitrous oxide emissions. 2020 , 47, 28-36	9
812	Sources and priming of soil N ₂ O and CO ₂ production: Nitrogen and simulated exudate additions. 2020 , 149, 107942	19
811	Bryophytes impact the fluxes of soil non-carbon dioxide greenhouse gases in a subalpine coniferous forest. 2020 , 56, 1151-1163	1
810	Biologically mediated release of endogenous NO and NO gases in a hydrothermal, hypoxic subterranean environment. 2020 , 747, 141218	10
809	N ₂ O changes from the Last Glacial Maximum to the preindustrial [Part 2: terrestrial N ₂ O emissions and carbon-nitrogen cycle interactions. 2020 , 17, 3511-3543	3
808	Denitrification Potential of Paddy and Upland Soils Derived From the Same Parent Material Respond Differently to Long-Term Fertilization. 2020 , 8,	1
807	Enhanced NO Production Induced by Soil Salinity at a Specific Range. 2020 , 17,	2
806	Environmental Tradeoffs between Nutrient Recycling and Greenhouse Gases Emissions in an Integrated Aquaculture-Agriculture System. 2020 , 54, 9584-9592	2
805	Large Variations in N ₂ O Fluxes from Bioenergy Crops According to Management Practices and Crop Type. 2020 , 11, 675	3
804	Land-use change and Biogeochemical controls of soil CO ₂ , N ₂ O and CH ₄ fluxes in Cameroonian forest landscapes. 2020 , 17, 45-67	5
803	Inhibitor-coated enhanced-efficiency N fertilizers for mitigating NO _x and N ₂ O emissions in a high-temperature irrigated agroecosystem. 2020 , 292-293, 108110	4
802	Soil properties mediate the freeze-thaw-related soil N ₂ O and CO ₂ emissions from temperate grasslands. 2020 , 195, 104797	3
801	How do greenhouse gas emissions vary with biofertilizer type and soil temperature and moisture in a tropical grassland?. 2020 , 30, 607-617	9

800	Sorghum biomass production in the continental United States and its potential impacts on soil organic carbon and nitrous oxide emissions. 2020 , 12, 878-890	10
799	Variations in nitrous oxide emissions as manipulated by plastic film mulching and fertilization over three successive years in a hot pepper-radish rotated vegetable production system. 2020 , 304, 107127	6
798	Assessing the climate and eutrophication impacts of grass cultivation at five sites in Sweden. 2020 , 70, 605-619	1
797	No effect of warming and watering on soil nitrous oxide fluxes in a temperate sitka spruce forest ecosystem. 2020 , 17, 83-96	0
796	Comparison of Soil Greenhouse Gas Fluxes during the Spring FreezeThaw Period and the Growing Season in a Temperate Broadleaved Korean Pine Forest, Changbai Mountains, China. 2020 , 11, 1135	2
795	Stable-Isotope-Aided Investigation of the Effect of Redox Potential on Nitrous Oxide Emissions as Affected by Water Status and N Fertilization. 2020 , 12, 2918	1
794	Exotic grass litter modulates seasonal pulse dynamics of CO ₂ and N ₂ O, but not NO, in Mediterranean-type coastal sage scrub at the wildland-urban interface. 2020 , 456, 339-353	4
793	Emerging options for mitigating N ₂ O emissions from food production by manipulating the soil microbiota. 2020 , 47, 89-94	7
792	Quantifying On-Farm Nitrous Oxide Emission Reductions in Food Supply Chains. 2020 , 8, e2020EF001504	11
791	Plant Functional Diversity, Climate and Grazer Type Regulate Soil Activity in Natural Grasslands. 2020 , 10, 1291	7
790	Biochar impacts on nutrient dynamics in a subtropical grassland soil: 2. Greenhouse gas emissions. 2020 , 49, 1421-1434	3
789	Atmospheric impact of nitrous oxide uptake by boreal forest soils can be comparable to that of methane uptake. 2020 , 454, 121-138	5
788	Spatial Variations of N ₂ O Fluxes Across the Water-Air Interface of Mariculture Ponds in a Subtropical Estuary in Southeast China. 2020 , 125, e2019JG005605	4
787	Evaluating Cropland N ₂ O Emissions and Fertilizer Plant Greenhouse Gas Emissions With Airborne Observations. 2020 , 125, e2020JD032815	2
786	Millennial-Scale Changes in Terrestrial and Marine Nitrous Oxide Emissions at the Onset and Termination of Marine Isotope Stage 4. 2020 , 47, e2020GL089110	
785	N ₂ O and CO ₂ Emissions from Bare Soil: Effect of Fertilizer Management. 2020 , 10, 602	1
784	Contingent Effects of Liming on N ₂ O-Emissions Driven by Autotrophic Nitrification. 2020 , 8,	6
783	Closing maize yield gaps in sub-Saharan Africa will boost soil N ₂ O emissions. 2020 , 47, 95-105	14

782	Application methods influence biochar fertilizer interactive effects on soil nitrogen dynamics. 2020 , 84, 1871-1884	1
781	The effect of soil moisture on the response by fungi and bacteria to nitrogen additions for N ₂ O production. 2020 , 32, 2037	0
780	Assessment of nitrous oxide emission factors for arable and grassland ecosystems. 2020 , 17, 165-185	1
779	Mitigation of nitrous oxide emissions in the context of nitrogen loss reduction from agroecosystems: managing hot spots and hot moments. 2020 , 47, 46-53	9
778	Straw amendments did not induce high N ₂ O emissions in non-frozen wintertime conditions: A study in northern Germany. 2020 , 36, 693-703	0
777	Agronomic and Environmental Implications of Substituting Pig Slurry for Synthetic Nitrogen in Mediterranean Wheat Systems. 2020 , 10, 1498	2
776	Nitrous Oxide from Beef Cattle Manure: Effects of Temperature, Water Addition and Manure Properties on Denitrification and Nitrification. 2020 , 11, 1056	2
775	Trace Metal Availability Affects Greenhouse Gas Emissions and Microbial Functional Group Abundance in Freshwater Wetland Sediments. 2020 , 11, 560861	3
774	Soil N ₂ O emissions after perennial legume termination in an alfalfa-wheat crop rotation system under Mediterranean conditions. 2020 , 15, 229-238	2
773	Greenhouse gas exchange over a conventionally managed highbush blueberry field in the Lower Fraser Valley in British Columbia, Canada. 2020 , 295, 108152	3
772	Understanding N ₂ O Emissions in African Ecosystems: Assessments from a Semi-Arid Savanna Grassland in Senegal and Sub-Tropical Agricultural Fields in Kenya. 2020 , 12, 8875	0
771	Simultaneous Detection of Multiple Atmospheric Components Using an NIR and MIR Laser Hybrid Gas Sensing System. 2020 , 5, 3607-3616	8
770	Predicting greenhouse gas benefits of improved nitrogen management in North American maize. 2020 , 49, 882-895	1
769	Measurements and APSIM modelling of soil C and N dynamics. 2020 , 58, 41	5
768	Gross NO Production Process, Not Consumption, Determines the Temperature Sensitivity of Net NO Emission in Arable Soil Subject to Different Long-Term Fertilization Practices. 2020 , 11, 745	2
767	Fertilizer Replacement Value. 2020 , 189-214	1
766	Greenhouse gas emissions and soil bacterial community as affected by biochar amendments after periodic mineral fertilizer applications. 2020 , 56, 907-925	19
765	Atmospheric Trace Metal Deposition near the Great Barrier Reef, Australia. 2020 , 11, 390	9

764	Elucidating three-way interactions between soil, pasture and animals that regulate nitrous oxide emissions from temperate grazing systems. 2020 , 300, 106978	8
763	Influence of vegetation cover and soil features on CO ₂ , CH ₄ and N ₂ O fluxes in northern Finnish Lapland. 2020 , 24, 100531	2
762	Modelling spatio-temporal patterns of soil carbon and greenhouse gas emissions in grazing lands: Current status and prospects. 2020 , 739, 139092	12
761	Liming reduces N ₂ O emissions from Mediterranean soil after-rewetting and affects the size, structure and transcription of microbial communities. 2020 , 147, 107839	4
760	Optimal biochar amendment rate reduced the yield-scaled NO emissions from Ultisols in an intensive vegetable field in South China. 2020 , 723, 138161	9
759	Soil greenhouse gas emissions under different land-use types in savanna ecosystems of Kenya. 2020 , 17, 2149-2167	16
758	Agricultural soils a trigger to nitrous oxide: a persuasive greenhouse gas and its management. 2020 , 192, 436	6
757	Greenhouse gas emissions from peatlands under manipulated warming, nitrogen addition, and vegetation composition change: a review and data synthesis. 2020 , 28, 428-437	4
756	Dinitrogen (N ₂) pulse emissions during freeze-thaw cycles from montane grassland soil. 2020 , 56, 959-972	9
755	Using field-measured soil N ₂ O fluxes and laboratory scale parameterization of N ₂ O/(N ₂ O+N ₂) ratios to quantify field-scale soil N ₂ emissions. 2020 , 148, 107904	10
754	Effects of short-term freezing on nitrous oxide emissions and enzyme activities in a grazed pasture soil after bovine-urine application. 2020 , 740, 140006	3
753	Nitrous oxide emissions as affected by fertilizer and water table management under a corn-soybean rotation. 2020 , 375, 114473	4
752	Effect of organic amendments on yield-scaled NO emissions from winter wheat-summer maize cropping systems in Northwest China. 2020 , 27, 31933-31945	3
751	Effects of dairy cow breed and dietary forage on greenhouse gas emissions from manure during storage and after field application. 2020 , 270, 122461	7
750	Temperature decouples ammonia and nitrite oxidation in greenhouse vegetable soils. 2020 , 733, 139391	3
749	Characteristics of denitrification genes and relevant enzyme activities in heavy-metal polluted soils remediated by biochar and compost. 2020 , 739, 139987	26
748	Enhancement of N ₂ O emissions by grazing is related to soil physicochemical characteristics rather than nitrifier and denitrifier abundances in alpine grassland. 2020 , 375, 114511	7
747	What can we learn from N O isotope data? - Analytics, processes and modelling. 2020 , 34, e8858	35

746	Defining and Managing for Healthy Vineyard Soils, Intersections With the Concept of Terroir. 2020 , 8,	13
745	Quantifying the uncertainty in nitrogen application and groundwater nitrate leaching in manure based cropping systems. 2020 , 184, 102877	7
744	Soil N intensity as a measure to estimate annual N ₂ O and NO fluxes from natural and managed ecosystems. 2020 , 47, 1-6	7
743	Denitrification Is the Main Nitrous Oxide Source Process in Grassland Soils According to Quasi-Continuous Isotopocule Analysis and Biogeochemical Modeling. 2020 , 34, e2019GB006505	2
742	Towards Country-Specific Nitrous Oxide Emission Factors for Manures Applied to Arable and Grassland Soils in the UK. 2020 , 4,	10
741	A Review of Ongoing Advancements in Soil and Water Assessment Tool (SWAT) for Nitrous Oxide (N ₂ O) Modeling. 2020 , 11, 450	3
740	Maize root and shoot litter quality controls short-term CO ₂ and N ₂ O emissions and bacterial community structure of arable soil. 2020 , 17, 1181-1198	14
739	Spatial and seasonal variability of nitrous oxide in a large freshwater lake in the lower reaches of the Yangtze River, China. 2020 , 721, 137716	4
738	NO and N ₂ O transformations of diverse fungi in hypoxia: evidence for anaerobic respiration only in Fusarium strains. 2020 , 22, 2182-2195	14
737	Orthophosphate enhances N ₂ O production from aerobic hydroxylamine decomposition: implications to N ₂ O emissions from nitrification in ornithogenic and manure-fertilized soils. 2020 , 56, 687-695	1
736	How do forest fires affect soil greenhouse gas emissions in upland boreal forests? A review. 2020 , 184, 109328	20
735	Impact of irrigation and fertilization regimes on greenhouse gas emissions from soil of mulching cultivated maize (<i>Zea mays</i> L.) field in the upper reaches of Yellow River, China. 2020 , 259, 120873	25
734	Natural Nitrogen Isotope Ratios as a Potential Indicator of N ₂ O Production Pathways in a Floodplain Fen. 2020 , 12, 409	1
733	Soil trace gas fluxes in living mulch and conventional agricultural systems. 2020 , 49, 268-280	3
732	Modeling indirect N ₂ O emissions along the N cascade from cropland soils to rivers. 2020 , 148, 207-221	5
731	Nitrous oxide, methane, and ammonia emissions from cattle excreta on <i>Brachiaria decumbens</i> growing in monoculture or silvopasture with <i>Acacia mangium</i> and <i>Eucalyptus grandis</i> . 2020 , 295, 106896	8
730	Characterization of Denitrifying Community for Application in Reducing Nitrogen: a Comparison of nirK and nirS Gene Diversity and Abundance. 2020 , 192, 22-41	5
729	Developing a country specific method for estimating nitrous oxide emissions from agricultural soils in Canada. 2020 , 117, 145-167	9

728	Patterns of Denitrification and Methanogenesis Rates from Vernal Pools in a Temperate Forest Driven by Seasonal, Microbial Functional Gene Abundances, and Soil Chemistry. 2020 , 40, 721-731	1
727	Predicting nitrous oxide emissions after the application of solid manure to grassland in the United Kingdom. 2020 , 49, 1-13	9
726	Magnitude and Edaphic Controls of Nitrous Oxide Fluxes in Natural Forests at Different Scales. 2020 , 11, 251	3
725	Soil greenhouse gas fluxes from maize cropping system under different soil fertility management technologies in Kenya. 2020 , 301, 107064	11
724	Nitrous oxide emissions from manured soils as a function of various nitrification inhibitor rates and soil moisture contents. 2020 , 738, 139669	24
723	Characterizing Greenhouse Gas Emissions and Global Warming Potential of Wheat-Maize Cropping Systems in Response to Organic Amendments in Eutric Regosols, China. 2020 , 11, 614	3
722	The isotopic composition of atmospheric nitrous oxide observed at the high-altitude research station Jungfrauoch, Switzerland. 2020 , 20, 6495-6519	5
721	Responses of Denitrification Rate and Denitrifying Bacterial Communities Carrying nirS and nirK Genes to Grazing in Peatland. 2020 , 20, 1249-1260	2
720	Methane emissions reduce the radiative cooling effect of a subtropical estuarine mangrove wetland by half. 2020 , 26, 4998-5016	16
719	Soil nitrite measurements have potential to estimate nitrous oxide emissions. 2020 , 118, 1-8	1
718	Nitrous oxide emissions from permafrost-affected soils. 2020 , 1, 420-434	34
717	Evaluating the potential of different carbon sources to promote denitrification. 2020 , 158, 194-205	5
716	Biochar as electron donor for reduction of N ₂ O by <i>Paracoccus denitrificans</i> . 2020 , 96,	3
715	Global Research Alliance N O chamber methodology guidelines: Summary of modeling approaches. 2020 , 49, 1168-1185	12
714	Clonal integration in <i>Phragmites australis</i> mitigates effects of oil pollution on greenhouse gas emissions in a coastal wetland. 2020 , 739, 140007	2
713	Nitrogen use efficiency, crop water productivity and nitrous oxide emissions from Chinese greenhouse vegetables: A meta-analysis. 2020 , 743, 140696	9
712	Soil incubation study showed biogas digestate to cause higher and more variable short-term N ₂ O and N ₂ fluxes than mineral-N. 2020 , 183, 208-219	5
711	Tail-drain sediments are a potential hotspot for nitrous oxide emissions in furrow-irrigated Vertisols used to grow cotton: A laboratory incubation study. 2020 , 49, 14-26	3

710	Response to Comment on "Oxygen Regulates Nitrous Oxide Production Directly in Agricultural Soils". 2020 , 54, 2556-2557	2
709	Lowering nitrogen inputs and optimizing fertilizer types can reduce direct and indirect greenhouse gas emissions from rice-wheat rotation systems. 2020 , 97, 103152	7
708	Short-term flooding increases CH and NO emissions from trees in a riparian forest soil-stem continuum. 2020 , 10, 3204	18
707	Effect of the nitrification inhibitor 3,4-dimethylpyrazole phosphate (DMPP) on N-turnover, the NO reductase-gene nosZ and NO:N partitioning from agricultural soils. 2020 , 10, 2399	20
706	Bioactive carbon improves nitrogen fertiliser efficiency and ecological sustainability. 2020 , 10, 3227	5
705	Occurrence and 15N-quantification of simultaneous nitrification and denitrification in N-fertilised soils incubated under oxygen-limiting conditions. 2020 , 143, 107757	7
704	Observation of vertical profiles of NO, O ₃ , and VOCs to estimate their sources and sinks by inverse modeling in a Japanese larch forest. 2020 , 76, 1-10	3
703	Irrigation and tillage effects on soil nitrous oxide emissions in maize monoculture. 2020 , 112, 56-71	7
702	High-Temperature Hay Biochar Application into Soil Increases N ₂ O Fluxes. 2020 , 10, 109	3
701	Comparing the variations and controlling factors of soil N ₂ O emissions and NO ₃ ⁻ -N leaching on tea and bamboo hillslopes. 2020 , 188, 104463	6
700	Denitrifier abundance and community composition linked to denitrification activity in an agricultural and wetland soil. 2020 , 151, 103521	16
699	Nitrate leaching and nitrous oxide emissions from maize after grass-clover on a coarse sandy soil: Mitigation potentials of 3,4-dimethylpyrazole phosphate (DMPP). 2020 , 260, 110165	10
698	Bacterial community composition in soils covered by different vegetation types in the Yancheng tidal marsh. 2020 , 27, 21517-21532	3
697	Variation of deep nitrate in a typical red soil Critical Zone: Effects of land use and slope position. 2020 , 297, 106966	9
696	How the mass and quality of wheat and vetch mulches affect drivers of soil N ₂ O emissions. 2020 , 372, 114395	8
695	Crab Bioturbation and Seasonality Control Nitrous Oxide Emissions in Semiarid Mangrove Forests (Ceará/Brazil). 2020 , 10, 2215	9
694	Irrigation and Greenhouse Gas Emissions: A Review of Field-Based Studies. 2020 , 4, 20	16
693	Climate-resilient and smart agricultural management tools to cope with climate change-induced soil quality decline. 2020 , 613-662	3

692	Riparian land-use systems impact soil microbial communities and nitrous oxide emissions in an agro-ecosystem. 2020 , 724, 138148	11
691	Methane and Nitrous Oxide Emission Fluxes Along Water Level Gradients in Littoral Zones of Constructed Surface Water Bodies in a Rewetted Extracted Peatland in Sweden. 2020 , 4, 17	1
690	A comparison of patterns of microbial C : N : P stoichiometry between topsoil and subsoil along an aridity gradient. 2020 , 17, 2009-2019	9
689	Influence of liming-induced pH changes on nitrous oxide emission, nirS, nirK and nosZ gene abundance from applied cattle urine in allophanic and fluvial grazed pasture soils. 2020 , 56, 811-824	9
688	Global patterns and controlling factors of soil nitrification rate. 2020 , 26, 4147-4157	41
687	Discriminating surface soil inorganic nitrogen cycling under various land uses in a watershed with simulations of energy balanced temperature and slope introduced moisture. 2020 , 587, 124950	3
686	C:N ratio is not a reliable predictor of NO production in acidic soils after a 30-day artificial manipulation. 2020 , 725, 138427	6
685	Legacy effects override soil properties for CO and NO but not CH emissions following digestate application to soil. 2020 , 12, 445-457	3
684	Can flooding-induced greenhouse gas emissions be mitigated by trait-based plant species choice?. 2020 , 727, 138476	3
683	Functional structures of soil microbial community relate to contrasting NO emission patterns from a highly acidified forest. 2020 , 725, 138504	9
682	Graminoid Removal Reduces the Increase in N ₂ O Fluxes Due to Nitrogen Fertilization in a Boreal Peatland. 2021 , 24, 261-271	2
681	Nitrous oxide emissions and forage accumulation in the Brazilian Amazon forage-livestock systems submitted to N input strategies. 2021 , 67, 63-72	2
680	Drivers of N ₂ O Emissions from Natural Forests and Grasslands Differ in Space and Time. 2021 , 24, 335-350	1
679	An approach for calibrating laser-based N O isotopic analyzers for soil biogeochemistry research. 2021 , 35, e8978	3
678	Assessing impacts of nitrogen management on nitrous oxide emissions and nitrate leaching from greenhouse vegetable systems using a biogeochemical model. 2021 , 382, 114701	2
677	Nitrous oxide production from soybean and maize under the influence of weedicides and zero tillage conservation agriculture. 2021 , 402, 123572	1
676	Increase of soil nitrogen availability and recycling with stand age of Chinese-fir plantations. 2021 , 480, 118643	8
675	Irrigation with treated wastewater containing nanobubbles to aerate soils and reduce nitrous oxide emissions. 2021 , 280, 124509	6

674	No-tillage with rye cover crop can reduce net global warming potential and yield-scaled global warming potential in the long-term organic soybean field. 2021 , 205, 104747	8
673	Effect of animal manure, crop type, climate zone, and soil attributes on greenhouse gas emissions from agricultural soils: A global meta-analysis. 2021 , 278, 124019	38
672	Denitrification in wetlands: A review towards a quantification at global scale. 2021 , 754, 142398	30
671	Impacts of land use and cropland management on soil organic matter and greenhouse gas emissions in the Brazilian Cerrado. 2021 , 72, 1431-1446	1
670	Elevated atmospheric CO ₂ reduces yield-scaled N ₂ O fluxes from subtropical rice systems: Six site-years field experiments. 2021 , 27, 327-339	6
669	How does management legacy, nitrogen addition, and nitrification inhibition affect soil organic matter priming and nitrous oxide production?. 2021 , 50, 78-93	12
668	Reduced tillage with residue retention and nitrogen application rate increase N ₂ O fluxes from irrigated wheat in a subtropical floodplain soil. 2021 , 306, 107194	7
667	Long term effects of fire on the soil greenhouse gas balance of an old-growth temperate rainforest. 2021 , 755, 142442	8
666	Sustaining yield and mitigating methane emissions from rice production with plastic film mulching technique. 2021 , 245, 106667	3
665	How nitrification-related NO ₃ ⁻ is associated with soil ammonia oxidizers in two contrasting soils in China?. 2021 , 770, 143212	6
664	Application of a triple 15N tracing technique to elucidate N transformations in a UK grassland soil. 2021 , 385, 114844	5
663	Ecotrons: Powerful and versatile ecosystem analysers for ecology, agronomy and environmental science. 2021 , 27, 1387-1407	10
662	Alternate Wetting and Drying (AWD) in Broadcast rice (<i>Oryza sativa</i> L.) Management to Maintain Yield, Conserve Water, and Reduce Gas Emissions in Thailand. 2021 , 10, 116-130	2
661	Nitrous oxide and methane emissions from beef cattle excreta deposited on feedlot pen surface in tropical conditions. 2021 , 187, 102995	1
660	Zinc-nitrogen co-fertilization influences N ₂ O emissions and microbial communities in an irrigated maize field. 2021 , 383, 114735	6
659	Assessing the impacts of diversified crop rotation systems on yields and nitrous oxide emissions in Canada using the DNDC model. 2021 , 759, 143433	5
658	Role of Recombinant DNA Technology in Biofertilizer Production. 2021 , 143-163	
657	Nitrous oxide emissions from cow urine patches in an intensively managed grassland: Influence of nitrogen loading under contrasting soil moisture. 2021 , 757, 143790	2

656	Interactive effects of dung deposited onto urine patches on greenhouse gas fluxes from tropical pastures in Kenya. 2021 , 761, 143184	2
655	Nitrogen cycling microbiomes are structured by plant mycorrhizal associations with consequences for nitrogen oxide fluxes in forests. 2020 , 27, 1068	15
654	Strong mitigation of greenhouse gas emission impact via aerobic short pre-digestion of green manure amended soils during rice cropping. 2021 , 761, 143193	8
653	Fall-applied manure with cover crop did not increase nitrous oxide emissions during spring freeze-thaw periods. 2021 , 158, 103786	7
652	Decomposition of black pine (<i>Pinus nigra</i> J. F. Arnold) deadwood and its impact on forest soil components. 2021 , 754, 142039	4
651	The importance of nitrogen for net carbon sequestration when considering natural climate solutions. 2021 , 27, 218-219	5
650	Greenhouse gas emissions and net global warming potential of vineyards under different fertilizer and water managements in North China. 2021 , 243, 106521	4
649	Rhamnolipid-modified biochar-enhanced bioremediation of crude oil-contaminated soil and mediated regulation of greenhouse gas emission in soil. 2021 , 21, 123-133	10
648	Pellets from Biogas Digestates: A Substantial Source of N ₂ O Emissions. 2021 , 12, 2433-2444	4
647	Can N ₂ O emissions offset the benefits from soil organic carbon storage?. 2021 , 27, 237-256	54
646	Differentiated responses of nirS- and nirK-type denitrifiers to 30 years of combined inorganic and organic fertilization in a paddy soil. 2021 , 67, 79-92	6
645	How Soil Organic Carbon Fractions Affect N ₂ O Emissions in a Long-Term Integrated Crop-Livestock System: A Case Study. 2021 , 307-332	
644	Stem CH ₄ and N ₂ O fluxes of <i>Fraxinus excelsior</i> and <i>Populus alba</i> trees along a flooding gradient. 2021 , 461, 407-420	4
643	Effect of Rice Planting on Nitrous Oxide (N ₂ O) Emission under Different Levels of Nitrogen Fertilization. 2021 , 11, 217	3
642	Oxygen concentrations regulate NO, N ₂ O, and N ₂ kinetics and nitrogen transformation in a fluvo-aquic soil using a robotized incubation system. 2021 , 21, 1337-1347	1
641	Little Effect of Land Use on N ₂ O and NO Emission Pulses Following Rewetting of Dry Soils Across Seasonally Dry sub-Saharan Africa. 2021 , 126,	
640	Regulating CH ₄ , NO, and NO emissions from an alkaline paddy field under rice-wheat rotation with controlled release N fertilizer. 2021 , 28, 18246-18259	2
639	Machine learning improves predictions of agricultural nitrous oxide (N ₂ O) emissions from intensively managed cropping systems. 2021 , 16, 024004	13

638	Topography Controls N ₂ O Emissions Differently during Early and Late Corn Growing Season. 2021 , 11, 187	6
637	Global gases. 2021 , 557-579	
636	Ideas and perspectives: patterns of soil CO ₂ , CH ₄ , and N ₂ O fluxes along an altitudinal gradient in a pilot study from an Ecuadorian neotropical montane forest. 2021 , 18, 413-421	0
635	Field-aged biochar decreased N ₂ O emissions by reducing autotrophic nitrification in a sandy loam soil. 2021 , 57, 471-483	4
634	Isotopic Techniques to Measure N ₂ O, N ₂ and Their Sources. 2021 , 213-301	1
633	Soil respiration analysis using a mid-infrared quantum cascade laser and calibration-free WMS-based dual-gas sensor. 2021 , 146, 3841-3851	3
632	High Application Rates of Biochar to Mitigate N ₂ O Emissions From a N-Fertilized Tropical Soil Under Warming Conditions. 2021 , 8,	3
631	Retrieval of Metop-A/IASI N ₂ O Profiles and Validation with NDACC FTIR Data. 2021 , 12, 219	2
630	Simultaneous quantification of greenhouse gas and nitric oxide emissions from subtropical conventional vegetable systems: a 2-site field case study in Sichuan Basin. 2021 , 18, 671-682	
629	Translating New Synthetic Biology Advances for Biosensing Into the Earth and Environmental Sciences. 2020 , 11, 618373	7
628	Nitrogen Losses and Potential Mitigation Strategies for a Sustainable Agroecosystem. 2021 , 13, 2400	24
627	Increased Likelihood of High Nitrous Oxide (N ₂ O) Exchange in Soils at Reduced Microbial Diversity. 2021 , 13, 1685	
626	Converting rice husk to biochar reduces bamboo soil NO emissions under different forms and rates of nitrogen additions. 2021 , 28, 28777-28788	1
625	Impact of sulphuric, hydrochloric, nitric, and lactic acids in the preparation of a blend of agro-industrial digestate and wood ash to produce a novel fertiliser. 2021 , 9, 105021	8
624	Denitrifying pathways dominate nitrous oxide emissions from managed grassland during drought and rewetting. 2021 , 7,	15
623	Soil N ₂ O emissions increased by litter removal but decreased by phosphorus additions. 1	1
622	Soil fertilization affects the abundance and distribution of carbon and nitrogen cycling genes in the maize rhizosphere. 2021 , 11, 24	10
621	Denitrification in soil as a function of oxygen availability at the microscale. 2021 , 18, 1185-1201	14

620	New approach for predicting nitrification and its fraction of N ₂ O emissions in global terrestrial ecosystems. 2021 , 16, 034053	7
619	Implication of O dynamics for both NO and CH emissions from soil during biological soil disinfestation. 2021 , 11, 6590	0
618	Are there memory effects on greenhouse gas emissions (CO ₂ , N ₂ O and CH ₄) following grassland restoration?. 2021 , 18, 1481-1498	1
617	A few key nirK- and nosZ-denitrifier taxa play a dominant role in moisture-enhanced N ₂ O emissions in acidic paddy soil. 2021 , 385, 114917	9
616	Microplastic fibers affect dynamics and intensity of CO ₂ and N ₂ O fluxes from soil differently. 2021 , 1,	9
615	Nitrous oxide processing in carbonate karst aquifers. 2021 , 594, 125936	1
614	Wintertime Nitrous Oxide Emissions in the San Joaquin Valley of California Estimated from Aircraft Observations. 2021 , 55, 4462-4473	0
613	Assessing Seasonal Methane and Nitrous Oxide Emissions from Furrow-Irrigated Rice with Cover Crops. 2021 , 11, 261	3
612	Beyond denitrification: The role of microbial diversity in controlling nitrous oxide reduction and soil nitrous oxide emissions. 2021 , 27, 2669-2683	14
611	Precise multispecies agricultural gas flux determined using broadband open-path dual-comb spectroscopy. 2021 , 7,	8
610	Effects of long-term nitrogen fertilization on N ₂ O, N ₂ and their yield-scaled emissions in a temperate semi-arid agro-ecosystem. 2021 , 21, 1659-1671	8
609	Global greenhouse vegetable production systems are hotspots of soil NO emissions and nitrogen leaching: A meta-analysis. 2021 , 272, 116372	23
608	Nitrification inhibitors reduce N ₂ O emissions induced by application of biogas digestate to oilseed rape. 2021 , 120, 99-118	1
607	Anthropogenic nutrient loads and season variability drive high atmospheric NO fluxes in a fragmented mangrove system. 2021 , 11, 6930	3
606	Quantifying Nitrous Oxide Emissions in the U.S. Midwest: A Top-Down Study Using High Resolution Airborne In-Situ Observations. 2021 , 48, e2020GL091266	2
605	Spatio-Temporal Variability of Peat CH ₄ and N ₂ O Fluxes and Their Contribution to Peat GHG Budgets in Indonesian Forests and Oil Palm Plantations. 2021 , 9,	4
604	Comparison between observed and DeNitrification-DeComposition model-based nitrous oxide fluxes and maize yields under selected soil fertility management technologies in Kenya. 2021 , 463, 395-413	2
603	Drip fertigation with straw incorporation significantly reduces NO emission and N leaching while maintaining high vegetable yields in solar greenhouse production. 2021 , 273, 116521	11

602	Nitrous oxide emissions in maize on mollisols in the Pampas of Argentina. 2021 , 24, e00362	1
601	Impact of different chloride salts and their concentrations on nitrification and trace gas emissions from a sandy soil under a controlled environment.	2
600	Long-term nitrogen fertilization shaped the , , and gene community patterns in red paddy soil in south China. 2021 , 67, 310-322	1
599	Time-resolved characteristics and production pathways of simulated landfilling NO emission under different oxygen concentrations. 2021 , 149, 106396	
598	Bedrock weathering contributes to subsurface reactive nitrogen and nitrous oxide emissions. 2021 , 14, 217-224	6
597	Optimizing tillage method and irrigation schedule for greenhouse gas mitigation, yield improvement, and water conservation in wheat-maize cropping systems. 2021 , 248, 106762	9
596	Relative contributions of bacteria and fungi to nitrous oxide emissions following nitrate application in soils representing different land uses. 2021 , 159, 105199	2
595	Factors That Influence Nitrous Oxide Emissions from Agricultural Soils as Well as Their Representation in Simulation Models: A Review. 2021 , 11, 770	24
594	Type of pulse crop included in a 2-year rotation with wheat affects total N ₂ O loss and intensity. 2021 , 57, 699-713	
593	Influence of rye cover cropping on denitrification potential and year-round field NO emissions. 2021 , 765, 144295	3
592	Biological nitrification inhibition and forage productivity of <i>Megathyrus maximus</i> in Colombian dry tropics. 2021 , 67, 270-277	2
591	Primings of soil organic matter and denitrification mediate the effects of moisture on nitrous oxide production. 2021 , 155, 108166	16
590	Comparative Effectiveness of Four Nitrification Inhibitors for Mitigating Carbon Dioxide and Nitrous Oxide Emissions from Three Different Textured Soils. 2021 , 2, 155-166	2
589	How do natural soil NH ₄ ⁺ , NO ₃ ⁻ and N ₂ O interact in response to nitrogen input in different climatic zones? A global meta-analysis. 2021 , 72, 2231-2245	3
588	Long-term effects of biochar application on greenhouse gas production and microbial community in temperate forest soils under increasing temperature. 2021 , 767, 145021	7
587	A novel dual enrichment strategy provides soil- and digestate-competent N ₂ O-respiring bacteria for mitigating climate forcing in agriculture.	
586	Diversity of nitrogen cycling genes at a Midwest long-term ecological research site with different management practices. 2021 , 105, 4309-4327	1
585	Strong potential of slurry application timing and method to reduce N losses in a permanent grassland. 2021 , 311, 107329	4

584	Sources of nitrous oxide from intensively managed pasture soils: the hole in the pipe. 2021 , 16, 065004	2
583	CO and N ₂ O emissions and microbial community structure from fields that include salt-affected soils. 2021 , 50, 567-579	0
582	Effects of Organic Fertilizers on the Soil Microorganisms Responsible for NO Emissions: A Review. 2021 , 9,	15
581	Differential responses of soil nitrogen-oxide emissions to organic substitution for synthetic fertilizer and biochar amendment in a subtropical tea plantation. 2021 , 13, 1260-1274	6
580	Metagenomic Characterization of Soil Microbial Communities in the Luquillo Experimental Forest (Puerto Rico) and Implications for Nitrogen Cycling. 2021 , 87, e0054621	1
579	No-Till and Solid Digestate Amendment Selectively Affect the Potential Denitrification Activity in Two Mediterranean Orchard Soils. 2021 , 5, 31	1
578	Increased CO emissions surpass reductions of non-CO emissions more under higher experimental warming in an alpine meadow. 2021 , 769, 144559	4
577	Nitrous oxide emission from agricultural soils: Application of animal manure or biochar? A global meta-analysis. 2021 , 285, 112170	23
576	In-situ soil greenhouse gas fluxes under different cryptogamic covers in maritime Antarctica. 2021 , 770, 144557	0
575	Effect of feeding practices and manure quality on CH ₄ and NO emissions from uncovered cattle manure heaps in Kenya. 2021 , 126, 209-220	6
574	Corn cobs efficiently reduced ammonia volatilization and improved nutrient value of stored dairy effluents. 2021 , 769, 144712	3
573	Biochar Mitigates NO Emission of Microbial Denitrification through Modulating Carbon Metabolism and Allocation of Reducing Power. 2021 , 55, 8068-8078	10
572	Influence of Agricultural Managed Aquifer Recharge (AgMAR) and Stratigraphic Heterogeneities on Nitrate Reduction in the Deep Subsurface. 2021 , 57, e2020WR029148	4
571	Effect of straw incorporation and nitrification inhibitor on nitrous oxide emission in various cropland soils and its microbial mechanism.	0
570	Irrigation Scheduling with Soil Gas Diffusivity as a Decision Tool to Mitigate N ₂ O Emissions from a Urine-Affected Pasture. 2021 , 11, 443	0
569	The Influence of Grain Legume and Tillage Strategies on CO ₂ and N ₂ O Gas Exchange under Varied Environmental Conditions. 2021 , 11, 464	1
568	In-depth analysis of NO fluxes in tropical forest soils of the Congo Basin combining isotope and functional gene analysis. 2021 , 15, 3357-3374	6
567	Impact of climate change on soil nitric oxide and nitrous oxide emissions from typical land uses in Scotland. 2021 , 16, 055035	3

566	Modeling cover crop biomass production and related emissions to improve farm-scale decision-support tools. 2021 , 191, 103151	3
565	Elevating soil pH does not reduce N ₂ O emissions from urine deposited onto pastoral soils. 1-23	1
564	Nitrogen cycling in pastoral livestock systems in Sub-Saharan Africa: knowns and unknowns. 2021 , 31, e02368	2
563	Rainfall frequency and soil water availability regulate soil methane and nitrous oxide fluxes from a native forest exposed to elevated carbon dioxide. 2021 , 35, 1833-1847	0
562	Nitrous oxide emissions from red clover and winter wheat residues depend on interacting effects of distribution, soil N availability and moisture level. 2021 , 466, 121-138	5
561	Continuous application of conservation tillage affects in situ N ₂ O emissions and nitrogen cycling gene abundances following nitrogen fertilization. 2021 , 157, 108239	4
560	Exponential response of nitrous oxide (N ₂ O) emissions to increasing nitrogen fertiliser rates in a tropical sugarcane cropping system. 2021 , 313, 107376	8
559	Estimating nitrous oxide (N ₂ O) emissions for the Los Angeles Megacity using mountaintop remote sensing observations. 2021 , 259, 112351	1
558	Differing effects of increasing calcium ammonium nitrate, urea and urea + NBPT fertiliser rates on nitrous oxide emission factors at six temperate grassland sites in Ireland. 2021 , 313, 107382	5
557	How do water table drawdown, duration of drainage, and warming influence greenhouse gas emissions from drained peatlands of the Zoige Plateau?. 2021 , 32, 3351-3364	1
556	Topography-related controls on NO emission and CH uptake in a tropical rainforest catchment. 2021 , 775, 145616	2
555	Nitrogen removal and greenhouse gas fluxes from integrated buffer zones treating agricultural drainage water. 2021 , 774, 145070	2
554	Within-field spatial variability of greenhouse gas fluxes from an extensive and intensive sheep-grazed pasture. 2021 , 312, 107355	1
553	Precipitation and nitrogen application stimulate soil nitrous oxide emission. 2021 , 120, 363	0
552	Integrated field assessment of nitrogen release dynamics and crop recovery of band-applied controlled-release fertilisers. 2021 , 466, 257-273	1
551	Effect of Biochar and Straw Application on Nitrous Oxide and Methane Emissions from Eutric Regosols with Different pH in Sichuan Basin: A Mesocosm Study. 2021 , 12, 729	1
550	Nitrogen turnover and N ₂ O production in incubated soils after receiving field applications of liquid manure and nitrification inhibitors. 2021 , 101, 290-304	3
549	Diurnal Tree Stem CH ₄ and N ₂ O Flux Dynamics from a Riparian Alder Forest. 2021 , 12, 863	1

548	Human activity intensity controls the relative importance of denitrification and anaerobic ammonium oxidation across subtropical estuaries. 2021 , 202, 105260	4
547	Net-mineralization of organic matter and greenhouse gas emissions from Quebracho tannin-enriched manure applied to acidic and alkaline soils. 2021 , 184, 530	0
546	Linking meta-omics to the kinetics of denitrification intermediates reveals pH-dependent causes of NO emissions and nitrite accumulation in soil. 2021 ,	3
545	Nitrous oxide emission factors in conventionally and naturally simulated cattle urine patches. 2021 , 121, 129	0
544	Microbial processes responsible for soil N ₂ O production in a tropical rainforest, illustrated using an in situ ¹⁵ N labeling approach. 2021 , 202, 105214	0
543	Hot moments drive extreme nitrous oxide and methane emissions from agricultural peatlands. 2021 , 27, 5141-5153	5
542	Detection of hidden model errors by combining single and multi-criteria calibration. 2021 , 777, 146218	0
541	Competition and community succession link N transformation and greenhouse gas emissions in urine patches. 2021 , 779, 146318	0
540	N ₂ and N ₂ O mitigation potential of replacing maize with the perennial biomass crop <i>Silphium perfoliatum</i> An incubation study. 2021 , 13, 1649-1665	2
539	High denitrification potential but low nitrous oxide emission in a constructed wetland treating nitrate-polluted agricultural run-off. 2021 , 779, 146614	4
538	Comparison of N ₂ O Emissions From Cold Waterlogged and Normal Paddy Fields. 2021 , 9,	
537	Impact of stratospheric air and surface emissions on tropospheric nitrous oxide during ATom. 2021 , 21, 11113-11132	3
536	Post-Harvest N ₂ O Emissions Can Be Mitigated With Organic Amendments. 2021 , 9,	1
535	The Significance of Microbial Transformation of Nitrogen Compounds in the Light of Integrated Crop Management. 2021 , 11, 1415	3
534	Forest canopy mitigates soil N ₂ O emission during hot moments. 2021 , 4,	1
533	Procyanidin inhibited N ₂ O emissions from paddy soils by affecting nitrate reductase activity and nirS- and nirK-denitrifier populations. 2021 , 57, 935-947	1
532	Nitrogen-fixing trees increase soil nitrous oxide emissions: a meta-analysis. 2021 , 102, e03415	4
531	Arbuscular mycorrhizal fungal-mediated reductions in N ₂ O emissions were not impacted by experimental warming for two common pasture species. 2021 , 87-88, 150744	0

530	Seasonal Nitrous Oxide Emissions From Hydroponic Tomato and Cucumber Cultivation in a Commercial Greenhouse Company. 2021 , 5,	2
529	Effect of pH on the denitrification proteome of the soil bacterium <i>Paracoccus denitrificans</i> PD1222. 2021 , 11, 17276	2
528	Responses of soil carbon and nitrogen cycles to the physical influences of rock fragment in soils. 2021 , 203, 105369	2
527	Flow regulates biological NO ₃ ⁻ and N ₂ O production in a turbid sub-tropical stream. 2021 , 306, 124-142	1
526	Influence of agricultural managed aquifer recharge on nitrate transport: The role of soil texture and flooding frequency. 2021 , 20, e20150	1
525	Short-Term Assessment of Nitrous Oxide and Methane Emissions on a Crop Yield Basis in Response to Different Organic Amendment Types in Sichuan Basin. 2021 , 12, 1104	2
524	Distribution of Denitrification among Haloarchaea: A Comprehensive Study. 2021 , 9,	0
523	Temporal Variability and Drivers of Nitrous Oxide Emissions from Central Hungarian Croplands: Field and Lab Experiments. 2021 , 54, 1183-1195	1
522	Ammonium-Based Compound Fertilisers Mitigate Nitrous Oxide Emissions in Temperate Grassland. 2021 , 11, 1712	2
521	Impacts of Low Disturbance Liquid Dairy Manure Incorporation on Alfalfa Yield and Fluxes of Ammonia, Nitrous Oxide, and Methane. 2021 , 11, 750	0
520	Increasing the productivity of an upland pasture with the least environmental impacts. 2021 , 315, 107449	1
519	Microbial pathways account for the pH effect on soil N ₂ O production. 2021 , 106, 103337	6
518	Greenhouse Gas Emissions and Crop Yields From Winter Oilseed Rape Cropping Systems are Unaffected by Management Practices. 2021 , 9,	2
517	Comparing Soil Nitrous Oxide and Methane Fluxes From Oil Palm Plantations and Adjacent Riparian Forests in Malaysian Borneo. 2021 , 4,	0
516	A meta-analysis of management practices for simultaneously mitigating N ₂ O and NO emissions from agricultural soils. 2021 , 213, 105142	6
515	Soil NO emission from organic and conventional cotton farming in Northern Tanzania. 2021 , 785, 147301	1
514	Nonlinear dependency of N ₂ O emissions on nitrogen input in dry farming systems may facilitate green development in China. 2021 , 317, 107456	6
513	Improved accuracy and reduced uncertainty in greenhouse gas inventories by refining the IPCC emission factor for direct N ₂ O emissions from nitrogen inputs to managed soils. 2021 , 27, 6536-6550	3

512	Sixteen Genome Sequences of Denitrifying Bacteria Assembled from Enriched Cultures of Anaerobic Pig Manure Digestate. 2021 , 10, e0078221	
511	Influence of land-use change and season on soil greenhouse gas emissions from a tropical wetland: A stepwise explorative assessment. 2021 , 787, 147701	4
510	Vegetation composition modulates the interaction of climate warming and elevated nitrogen deposition on nitrous oxide flux in a boreal peatland. 2021 , 27, 5588-5598	1
509	An improved UK-DNDC model for evaluations of soil temperature and nitrous oxide emissions from Canadian agriculture. 1	0
508	Nitrous oxide surface fluxes in a low Arctic heath: Effects of experimental warming along a natural snowmelt gradient. 2021 , 160, 108346	2
507	Evidence for microbial rather than aggregate origin of substrates fueling freeze-thaw induced N ₂ O emissions. 2021 , 160, 108352	2
506	Global gross nitrification rates are dominantly driven by soil carbon-to-nitrogen stoichiometry and total nitrogen. 2021 , 27, 6512-6524	8
505	Diversity of microbial communities and genes involved in nitrous oxide emissions in Antarctic soils impacted by marine animals as revealed by metagenomics and 100 metagenome-assembled genomes. 2021 , 788, 147693	2
504	N ₂ O Is an Important Piece of the Puzzle, but Seeing the Whole Picture Strengthens Denitrification Research. 2021 , 126, e2021JG006576	
503	The Fate of Nitrogen from Soil to Plants: Influence of Agricultural Practices in Modern Agriculture. 2021 , 11, 944	3
502	Nitrous Oxide Emission from Forage Plantain and Perennial Ryegrass Swards Is Affected by Belowground Resource Allocation Dynamics. 2021 , 11, 1936	1
501	Nitrous oxide respiring bacteria in biogas digestates for reduced agricultural emissions. 2021 ,	3
500	Soil N ₂ O emissions are more sensitive to phosphorus addition and plant presence than to nitrogen addition and arbuscular mycorrhizal fungal inoculation. 2021 , 19, 100414	1
499	Nitrous oxide (NO) emissions from the high dam reservoir in longitudinal range-gorge regions on the Lancang-Mekong River, southwest China. 2021 , 295, 113027	1
498	Experimental comparison of continuous and intermittent flooding of rice in relation to methane, nitrous oxide and ammonia emissions and the implications for nitrogen use efficiency and yield. 2021 , 319, 107571	1
497	Increasing N use efficiency while decreasing gaseous N losses in a non-tilled wheat (<i>Triticum aestivum</i> L.) crop using a double inhibitor. 2021 , 319, 107546	3
496	Use of urease and nitrification inhibitors to decrease yield-scaled N ₂ O emissions from winter wheat and oilseed rape fields: A two-year field experiment. 2021 , 319, 107552	2
495	Farmyard manure application and associated root proliferation improve the net greenhouse gas balance of Italian ryegrass - Maize double-cropping field in Nasu, Japan. 2021 , 792, 148332	1

494	Biochar decreases the efficacy of the nitrification inhibitor nitrapyrin in mitigating nitrous oxide emissions at different soil moisture levels. 2021 , 295, 113080	4
493	Soil greenhouse gas emissions and grazing management in northern temperate grasslands. 2021 , 796, 148975	1
492	Soil type affects not only magnitude but also thermal sensitivity of NO emissions in subtropical mountain area. 2021 , 797, 149127	1
491	Effects of experimental fire in combination with climate warming on greenhouse gas fluxes in Arctic tundra soils. 2021 , 795, 148847	2
490	End water content determines the magnitude of N ₂ O pulse from nitrifier denitrification after rewetting a fluvo-aquic soil. 2021 , 31, e01824	0
489	Measuring frequency and accuracy of annual nitrous oxide emission estimates. 2021 , 310, 108624	1
488	Attempt to correct grassland N ₂ O fluxes biased by the DN-based opaque static chamber measurement. 2021 , 264, 118687	1
487	Plausible impacts of fall manuring on cover crop production and spring nitrous oxide emissions under climate change in southern Quebec, Canada. 2021 , 321, 107620	
486	Mitigating global warming potential while coordinating economic benefits by optimizing irrigation managements in maize production. 2021 , 298, 113474	1
485	Livestock-induced N ₂ O emissions may limit the benefits of converting cropland to grazed grassland as a greenhouse gas mitigation strategy for agricultural peatlands. 2021 , 174, 105764	1
484	Nitrous oxide fluxes from long-term limed soils following P and glucose addition: Nonlinear response to liming rates and interaction from added P. 2021 , 797, 148933	0
483	Effects of extensive-to-intensive pasture conversion on soil nitrogen availability and CO ₂ and N ₂ O fluxes in a Brazilian oxisol. 2021 , 321, 107633	1
482	Impacts of silver nanoparticles on enzymatic activities, nitrifying bacteria, and nitrogen transformation in soil amended with ammonium and nitrate. 2021 , 31, 934-943	3
481	Influence of the shallow groundwater table on the groundwater NO and direct NO emissions in summer maize field in the North China Plain. 2021 , 799, 149495	1
480	New N ₂ O emission factors for crop residues and fertiliser inputs to agricultural soils in Germany. 2021 , 322, 107640	3
479	Distinguishing NO and N ratio and their microbial source in soil fertilized for vegetable production using a stable isotope method. 2021 , 801, 149694	1
478	Effect of vole bioturbation on NO, NO, NH, CH and CO fluxes of slurry fertilized and non-fertilized montane grassland soils in Southern Germany. 2021 , 800, 149597	0
477	Modeling nitrous oxide mitigation potential of enhanced efficiency nitrogen fertilizers from agricultural systems. 2021 , 801, 149342	1

476	A broad-scale spatial analysis of the environmental benefits of fertiliser closed periods implemented under the Nitrates Directive in Europe. 2021 , 299, 113674	0
475	Biochar-induced reduction of NO emission from East Asian soils under aerobic conditions: Review and data analysis. 2021 , 291, 118154	2
474	Concomitant tracking of NH ₃ , N ₂ O and soil mineral-N using steady-state incubation cells to enhance sustainability of urea fertilization approaches. 2021 , 404, 115305	0
473	Characteristics of annual NO and NO fluxes from Chinese urban turfgrasses. 2021 , 290, 118017	1
472	Eight years organic amendment application alters NO emission potential by increasing soil O consumption rate. 2022 , 806, 150466	
471	The inhibitory efficacy of procyanidin on soil denitrification varies with N fertilizer type applied. 2022 , 806, 150588	0
470	Environmental heterogeneity determines the response patterns of microbially mediated N-reduction processes to sulfamethoxazole in river sediments. 2022 , 421, 126730	0
469	Strategies to mitigate ammonia and nitrous oxide losses across the manure management chain for intensive laying hen farms. 2022 , 803, 150017	4
468	The addition of magnesium sulfate and borax to urea reduced soil NH emissions but increased NO emissions from soil with grass. 2022 , 803, 149902	0
467	Plants are a natural source of nitrous oxide even in field conditions as explained by N site preference. 2022 , 805, 150262	0
466	Soil nitrous oxide emissions after the introduction of integrated cropping systems in subtropical condition. 2022 , 323, 107684	
465	A [3Cu:2S] cluster provides insight into the assembly and function of the Cu site of nitrous oxide reductase. 2021 , 12, 3239-3244	1
464	Fluxes of Reactive Nitrogen and Greenhouse Gases from Arable Land in South-Western Ukraine. 2021 , 225-235	
463	Abiotic reduction of nitrite by Fe(II): a comparison of rates and NO production. 2021 , 23, 1531-1541	1
462	Nitrogen biogeochemistry of water-agro-food systems: the example of the Seine land-to-sea continuum. 2021 , 154, 307-321	3
461	Soil-gas diffusivity and soil-moisture effects on N ₂ O emissions from repacked pasture soils. 2020 , 84, 371-386	5
460	Use of Biochar in Sustainable Agriculture. 2019 , 501-528	1
459	Advances in Pyrolytic Technologies with Improved Carbon Capture and Storage to Combat Climate Change. 2020 , 535-575	4

458	Scaling Point and Plot Measurements of Greenhouse Gas Fluxes, Balances, and Intensities to Whole Farms and Landscapes. 2016 , 175-188	3
457	Effects of biochar on nitrification and denitrification-mediated NO emissions and the associated microbial community in an agricultural soil. 2021 , 28, 6649-6663	9
456	Soil nitrous oxide emissions from agricultural soils in Canada: Exploring relationships with soil, crop and climatic variables. 2018 , 254, 69-81	53
455	Effect of tropical grass and nitrogen fertilization on nitrous oxide, methane, and ammonia emissions of maize-based rotation systems. 2020 , 234, 117571	6
454	Impacts of climate and management on water balance and nitrogen leaching from montane grassland soils of S-Germany. 2017 , 229, 119-131	24
453	Effects of soil warming and increased precipitation on greenhouse gas fluxes in spring maize seasons in the North China Plain. 2020 , 734, 139269	14
452	A Biogeoscience Approach to Ecosystems. 215-253	7
451	Histidine-Gated Proton-Coupled Electron Transfer to the Cu Site of Nitrous Oxide Reductase. 2021 , 143, 830-838	6
450	Hotspots of soil N ₂ O emission enhanced through water absorption by plant residue. 2017 , 10, 496-500	84
449	Maximising climate mitigation potential by carbon and radiative agricultural land management with cover crops. 2020 , 15, 094075	8
448	Tea-planted soils as global hotspots for N ₂ O emissions from croplands. 2020 , 15, 104018	7
447	Consumption of NO and other N-cycle intermediates by strain T-27. 2019 , 165, 1345-1354	20
446	Response to nitrogen addition reveals metabolic and ecological strategies of soil bacteria.	1
445	Linking meta-omics to the kinetics of denitrification intermediates reveals pH-dependent causes of N ₂ O emissions and nitrite accumulation in soil.	1
444	Truncated denitrifiers dominate the denitrification pathway in tundra soil metagenomes.	5
443	Trace metal availability affects greenhouse gas emissions and microbial functional group abundance in freshwater wetland sediments.	1
442	Effects of short term bioturbation by common voles on biogeochemical soil variables. 2015 , 10, e0126011	13
441	Effects of Environmental Drivers and Agricultural Management on Soil CO ₂ and N ₂ O Emissions. 2021 , 11, 54	2

440	Nitrous oxide emissions from a tropical Oxisol under monocultures and an integrated system in the Southern Amazon [Brazil. 2020 , 44,	2
439	Lachgas: Hotspots im pflanzenbaulichen Produktionssystem. 2015 , 707-717	1
438	TransCom N ₂ O model inter-comparison, Part II: Atmospheric inversion estimates of N ₂ O emissions.	2
437	N ₂ O isotope approaches for source partitioning of N ₂ O production and estimation of N ₂ O reduction □ validation with the ¹⁵ N gas-flux method in laboratory and field studies. 2020 , 17, 5513–5537	9
436	Gaseous nitrogen losses and mineral nitrogen transformation along a water table gradient in a black alder (<i>Alnus glutinosa</i> (L.) Gaertn.) forest on organic soils.	1
435	Short-term effects of biogas digestate and cattle slurry application on greenhouse gas emissions from high organic carbon grasslands.	3
434	N ₂ O, NO, N ₂ , and CO ₂ emissions from tropical savanna and grassland of Northern Australia: an incubation experiment with intact soil cores.	1
433	Application of the ¹⁵ N-Gas Flux method for measuring in situ N ₂ and N ₂ O fluxes due to denitrification in natural and semi-natural terrestrial ecosystems and comparison with the acetylene inhibition technique.	2
432	Soil N ₂ O and NO emissions from land use and land-use change in the tropics and subtropics: a meta-analysis.	2
431	First on-line isotopic characterization of N ₂ O emitted from intensively managed grassland.	5
430	Global soil nitrous oxide emissions in a dynamic carbon–nitrogen model.	2
429	The greenhouse gas balance of a drained fen peatland is mainly controlled by land-use rather than soil organic carbon content.	2
428	Responses of N ₂ O flux to water level fluctuation and other environmental factors at littoral zone of Miyun Reservoir: a comparison with CH ₄ fluxes.	4
427	The importance of management information and soil moisture representation for simulating tillage effects on N ₂ O emissions in LPJmL5.0-tillage. 2020 , 13, 3905-3923	2
426	Carbon and nitrogen dynamics and greenhouse gases emissions in constructed wetlands: a review.	3
425	Eddy covariance for quantifying trace gas fluxes from soils.	1
424	Mitigating N ₂ O emissions from soil: from patching leaks to transformative action.	1
423	Greenhouse gas emissions limited by low nitrogen and carbon availability in natural, restored, and agricultural Oregon seasonal wetlands. 2018 , 6, e5465	5

422	Greenhouse gas flux with reflooding of a drained salt marsh soil. 2018 , 6, e5659	4
421	Optimizing alfalfa productivity and persistence versus greenhouse gases fluxes in a continental arid region. 2020 , 8, e8738	6
420	Effects of alpine meadow degradation on nitrifying and denitrifying microbial communities, and N ₂ O emissions on the Tibetan Plateau. 2021 ,	0
419	Greenhouse gas emissions and carbon sink potential in Eastern Africa rangeland ecosystems: A review. 2021 , 11,	0
418	Effects of crop residue incorporation and properties on combined soil gaseous NO, NO, and NH emissions-A laboratory-based measurement approach. 2021 , 151051	3
417	Yak dung pat fragmentation decreases yield-scaled growing-season nitrous oxide emissions in an alpine steppe on the Qinghai-Tibetan Plateau. 2021 , 57, 1103	0
416	Nitrous oxide production and nitrogen transformations in a soil amended with biosolids.	1
415	Nitrogen addition, rather than altered precipitation, stimulates nitrous oxide emissions in an alpine steppe. 2021 , 11, 15153-15163	0
414	NO emissions from decomposing crop residues are strongly linked to their initial soluble fraction and early C mineralization. 2022 , 806, 150883	3
413	Socio-Technical Changes for Sustainable Rice Production: Rice Husk Amendment, Conservation Irrigation, and System Changes. 3,	1
412	Effects of slurry acidification on soil N ₂ O fluxes and denitrification.	0
411	Nitrous Oxide Emission and Crop Yield in Arable Soil Amended with Bottom Ash. 2021 , 11, 1012	2
410	Fertilizer stabilizers reduce nitrous oxide emissions from agricultural soil by targeting microbial nitrogen transformations. 2022 , 806, 151225	1
409	Agricultural Fertilization Aggravates Air Pollution by Stimulating Soil Nitrous Acid Emissions at High Soil Moisture. 2021 , 55, 14556-14566	1
408	Global mapping of crop-specific emission factors highlights hotspots of nitrous oxide mitigation.	3
407	Evaluation of denitrification and decomposition from three biogeochemical models using laboratory measurements of N₂, N₂O and CO₂. 2021 , 18, 5681-5697	0
406	Return of crop residues to arable land stimulates N ₂ O emission but mitigates NO ₃ ⁻ leaching: a meta-analysis. 2021 , 41, 1	3
405	Oxygen-depletion by rapid ammonia oxidation regulates kinetics of N ₂ O, NO and N ₂ production in an ammonium fertilised agricultural soil. 2021 , 163, 108460	0

- 404 NITROUS OXIDE AND CARBON DIOXIDE EMISSIONS FROM PADDY SOIL TREATED WITH RICE HUSK PRODUCTS AT DIFFERENT MOISTURE CONTENTS IN A SHORT-TERM EXPERIMENT. **2015**, 7, 9-15
- 403 Simulation of atmospheric N_2O with GEOS-Chem and its adjoint: evaluation of observational constraints.
- 402 Microbial Cycling of Greenhouse Gases and Their Impact on Climate Change. **2018**, 129-143
- 401 Assessing the Absorption Degree of the Nitrogen Forms from Soil into Plant Using the ^{15}N Isotope as a Marker. **2018**, 1, 86-92
- 400 Harnessing the Microbial Interactions in Rhizosphere and Microbiome for Sustainable Agriculture. **2019**, 497-515
- 399 Nitrogen-Cycling Communities in Organically Amended Versus Conventionally Managed Agricultural Soil. **2020**, 377-398
- 398 Biochar Application for Greenhouse Gases Mitigation. **2020**, 39-68 0
- 397 No-Till Farming Systems to Reduce Nitrous Oxide Emissions and Increase Methane Uptake. **2020**, 319-335
- 396 Metagenomic characterization of soil microbial communities in the Luquillo experimental forest (Puerto Rico) and implications for nitrogen cycling.
- 395 Different responses of soil CO_2 and N_2O emissions to simulated N deposition in forests with divergent N transformation characteristics. **2021**, 37, 63-71
- 394 Toward Improved Nitrogen Fertilization with Precision Farming Based on Sensor and Satellite Technologies. **2021**, 69-83
- 393 Short- and long-term temperature responses of soil denitrifier net N_2O efflux rates, inter-profile N_2O dynamics, and microbial genetic potentials. **2020**, 6, 399-412
- 392 Checking the progress of using the static chamber method for the measurement of greenhouse gases in Latin America. 1-13 1
- 391 Effects of N Application Rate and Dicyandiamide on the Fate of ^{15}N Fertilizer and the Abundance of Microbial Genes in a Sandy Soil Amended with Sugarcane Litter. 1 0
- 390 Characteristics of greenhouse gas emissions from farmland soils based on a structural equation model: Regulation mechanism of biochar. **2021**, 206, 112303 3
- 389 Nitrous Oxide Emissions from Smallholders' Cropping Systems in Sub-Saharan Africa. **2021**, 2021, 1-13 0
- 388 Banded urea placement did not affect nitrous oxide emission from furrow-irrigated Vertisols. **2022**, 122, 1 0
- 387 Influence of Agricultural Managed Aquifer Recharge and Stratigraphic Heterogeneities on Nitrate Reduction in the Deep Subsurface.

386	Fluxes of dissolved methane and nitrous oxide in the tidal cycle in a mangrove in South China. 2021 ,	1
385	Greenhouse gas emissions from cattle dung depositions in two forage fields with contrasting biological nitrification inhibition (BNI) capacity.. 2022 , 406, 115516	0
384	Soil oxygen depletion and corresponding nitrous oxide production at hot moments in an agricultural soil. 2022 , 292, 118345	0
383	Effects of white-rot fungal pretreatment of corn straw return on greenhouse gas emissions from the North China Plain soil. 2021 , 807, 150837	1
382	Nitrous oxide emission factors from an intensively grazed temperate grassland: A comparison of cumulative emissions determined by eddy covariance and static chamber methods. 2022 , 324, 107725	1
381	Endophytic Microbiomes and Their Plant GrowthPromoting Attributes for Plant Health. 2020 , 145-158	
380	Facing Climate Change: Urban Gardening and Sustainable Agriculture. 2020 , 345-419	
379	Agroforestry and Opportunities for Improved Nitrogen Management. 2020 , 393-417	1
378	Nitrous oxide emissions from agricultural soils challenge climate sustainability in the US Corn Belt. 2021 , 118,	5
377	A novel injection technique: using a field-based quantum cascade laser for the analysis of gas samples derived from static chambers. 2020 , 13, 5763-5777	
376	N2O-respiring bacteria in biogas digestates for reduced agricultural emissions.	
375	Seasonal greenhouse gases fluxes from monoculture and mixed native grasslands in the Southern Plains, USA. 2021 , 4, e20227	1
374	Assessing nitrous oxide emissions in time and space with minimal uncertainty using static chambers and eddy covariance from a temperate grassland. 2022 , 313, 108743	
373	Soil nitrate leaching of tea plantation and its responses to seasonal drought and wetness scenarios. 2022 , 260, 107325	0
372	Land use conversion and soil moisture affect the magnitude and pattern of soil-borne N2, NO, and N2O emissions. 2022 , 407, 115568	1
371	Impact of organic fertilizer substitution and biochar amendment on net greenhouse gas budget in a tea plantation. 2022 , 326, 107779	2
370	Nitrous Oxide Consumption Potential in a Semi-Arid Agricultural System: Effects of Conservation Soil Management and Nitrogen Timing on nosZ Mediated N2O Consumption. 2021 , 9,	0
369	NO emission dynamics along an intertidal elevation gradient in a subtropical estuary: Importance of NO consumption. 2021 , 205, 112432	0

368	Agricultural phosphorus surplus trajectories for Ontario, Canada (1961-2016), and erosional export risk. 2021 , 151717	5
367	Comparing GHG Emissions from Drained Oil Palm and Recovering Tropical Peatland Forests in Malaysia. 2021 , 13, 3372	1
366	The potential importance of soil denitrification as a major N loss pathway in intensive greenhouse vegetable production systems. 1	0
365	Process-oriented simulation and observations of N ₂ O emission from intensively managed agricultural cropping system. 2021 ,	
364	Nitrous oxide hot moments and cold spots in a subtropical estuary: Floods and mangroves. 2021 , 264, 107656	
363	Seasonal changes in the abundance and activity of bacterial and fungal denitrifying communities associated with different compost amendments. 2021 ,	
362	Optimizing the impact of film mulching pattern and nitrogen application rate on maize production, gaseous N emissions, and utilization of water and nitrogen in northwest China. 2021 , 261, 107350	2
361	Boreal Headwater Catchment as Hot Spot of Carbon Processing From Headwater to Fjord. 2021 , 126, e2021JG006359	1
360	Spatiotemporal Dynamics of Nitrous Oxide Emission Hotspots in Heterogeneous Riparian Sediments. 2021 , 57, e2021WR030496	0
359	Short-term effects of cover crops on soil properties and the abundance of N-cycling genes in citrus agroecosystems. 2022 , 172, 104341	2
358	A relationship paradigm between biochar amendment and greenhouse gas emissions. 2021 , 7, 203-220	
357	Hierarchical feedbacks of vegetation and soil carbon pools to climate constraints in Brazilian ecosystems. 2021 , 45,	
356	In Situ Nitrous Oxide and Dinitrogen Fluxes from a Grazed Pasture Soil Following Cow Urine Application at Two Nitrogen Rates.	
355	Soil Greenhouse Gas Fluxes Following Conversion of Tropical Forests to Fertilizer-Based Sugarcane Systems in Northwestern Uganda.	
354	A review of the importance of mineral nitrogen cycling in the plant-soil-microbe system of permafrost-affected soils—changing the paradigm. 2022 , 17, 013004	6
353	Application of ammonium sulfate affects greenhouse gases and microbial diversity of an oil palm plantation on tropical peat. 1-14	
352	Changes in precipitation regime lead to acceleration of the N cycle and dramatic NO emission. 2021 , 808, 152140	2
351	In-season split nitrogen application and cover cropping effects on nitrous oxide emissions in rainfed maize. 2022 , 326, 107813	1

- 350 Perennial grain crops reduce N₂O emissions under specific site conditions. **2022**, 326, 107802 0
- 349 Nitrous oxide flux observed with tall-tower eddy covariance over a heterogeneous rice cultivation landscape. **2021**, 810, 152210 0
- 348 Mitigation of nitrous oxide emission through fertigation and 'N' inhibitors - A sustainable climatic crop cultivation in tomato.. **2021**, 813, 152419
- 347 Tomato productivity and soil greenhouse gas emissions under reduced water and N fertilizers in a Mediterranean environment. **2022**, 326, 107819 1
- 346 Long-term variability in NO emissions and emission factors for corn and soybeans induced by weather and management at a cold climate site.. **2021**, 815, 152744 1
- 345 N₂O emission and mineral N leaching from contrasting land-use hillslopes as jointly affected by climate and rock fragment factors. **2020**, 183, 637-647 2
- 344 Rotary and subsoiling tillage rotations influence soil carbon and nitrogen sequestration and crop yield. **2022**, 68, 89-97 3
- 343 Chemical looping mechanisms for sequestration of greenhouse gases for biofuel and biomaterials. **2022**, 85-109
- 342 Evaluation of the DNDC Model to Estimate Soil Parameters, Crop Yield and Nitrous Oxide Emissions for Alternative Long-Term Multi-Cropping Systems in the North China Plain. **2022**, 12, 109 0
- 341 Evaluation of nitrous oxide emission by soybean inoculated with Bradyrhizobium strains commonly used as inoculants in South America. **2022**, 472, 311 1
- 340 Effects of pharmaceuticals on the nitrogen cycle in water and soil: a review.. **2022**, 194, 105 1
- 339 Minimizing N-losses at the orchard scale. **2022**, 25-34
- 338 Urea-based nitrogen fertilization in agriculture: a key source of N₂O emissions and recent development in mitigating strategies. 1-16 1
- 337 Increased N₂ emissions from an arable soil four years after biochar application. 0
- 336 Responses of nitrous oxide fluxes to autumn freeze-thaw cycles in permafrost peatlands of the Da Xing'an Mountains, Northeast China.. **2022**, 1 1
- 335 Forward and Inverse Modelling of Atmospheric Nitrous Oxide Using MIROC4-Atmospheric Chemistry-Transport Model. **2022**, 100, 1 1
- 334 Assessing seasonal variation of diffusive nitrous oxide emission from freshwater wetland in Keibul Lamjao National Park, Manipur Northeast India. **2022**, 13, 100147 1
- 333 Increased soil-derived N₂O production following a simulated fall-freeze-thaw cycle: effects of fall urea addition, soil moisture, and history of manure applications. **2022**, 157, 379-398 0

332	Climate Overrides Effects of Fertilizer and Straw Management as Controls of Nitrous Oxide Emissions After Oilseed Rape Harvest. 2022 , 9,	
331	Emissions of atmospherically reactive gases nitrous acid and nitric oxide from Arctic permafrost peatlands. 2022 , 17, 024034	0
330	Regulation of the Emissions of the Greenhouse Gas Nitrous Oxide by the Soybean Endosymbiont .. 2022 , 23,	1
329	Potential denitrification activity response to long-term nitrogen fertilization - A global meta-analysis. 2022 , 336, 130451	0
328	Biochar can reduce N ₂ O production potential from rhizosphere of fertilized agricultural soils by suppressing bacterial denitrification. 2022 , 109, 103391	0
327	Soil pore architecture and rhizosphere legacy define N ₂ O production in root detritusphere. 2022 , 166, 108565	0
326	Mitigating greenhouse gas emissions from irrigated rice cultivation through improved fertilizer and water management.. 2022 , 307, 114520	4
325	Exploring wheat-based management strategies to balance agricultural production and environmental sustainability in a wheat-maize cropping system using the DNDC model.. 2022 , 307, 114445	0
324	Nitrous oxide emissions in silvopastoral systems: Key driving variables and seasonality. 2022 , 316, 108851	1
323	The mechanisms and potentially positive effects of seven years of delayed and wetter wet seasons on nitrous oxide fluxes in a tropical monsoon forest. 2022 , 412, 115740	0
322	Greenhouse gas fluxes from riparian forest soil depend on the responses of microbes to nitrogen and phosphorus additions. 2022 , 173, 104365	0
321	Greenhouse gas emissions from the wheat-maize cropping system under different tillage and crop residue management practices in the North China Plain.. 2022 , 819, 153089	1
320	Greenhouse Gas Fluxes from Selected Soil Fertility Management Practices in Humic Nitisols of Upper Eastern Kenya. 2022 , 14, 1938	1
319	Impacts of Elevated Atmospheric CO ₂ and N Fertilization on N ₂ O Emissions and Dynamics of Associated Soil Labile C Components and Mineral N in a Maize Field in the North China Plain. 2022 , 12, 432	0
318	Sugarcane residue and N-fertilization effects on soil GHG emissions in south-central, Brazil. 2022 , 158, 106342	0
317	Ammonia-oxidizing bacteria and fungal denitrifier diversity are associated with N ₂ O production in tropical soils. 2022 , 166, 108563	2
316	Effects of Reducing Nitrogen Application and Adding Straw on N ₂ o Emission and Soil Nitrogen Leaching of Tomato in Greenhouse.	
315	Functional Analysis of Copper (Cu) and Soil Ph for the Nosz Gene Abundance and N ₂ o Emissions in Acidic Soils.	

314	Global benefits of non-continuous flooding to reduce greenhouse gases and irrigation water use without rice yield penalty.. 2022 ,	0
313	From the middle stratosphere to the surface, using nitrous oxide to constrain the stratosphere-troposphere exchange of ozone. 2022 , 22, 2079-2093	1
312	Effects of Forest Thinning on Soil Litter Input Nutrients in Relation to Soil CO ₂ , CH ₄ , and N ₂ O Fluxes in Greece. 2022 , 13, 376	
311	Delineation of Nitrate Reduction Hotspots in Artificially Drained Areas through Assessment of Small-Scale Spatial Variability of Electrical Conductivity Data.. 2022 , 22,	0
310	New Insights into the Use of Rhizobia to Mitigate Soil N ₂ O Emissions. 2022 , 12, 271	0
309	Thirty years of rice-crab coculture in China: Research progress and prospects.	1
308	Linking long-term soil phosphorus management to microbial communities involved in nitrogen reactions. 2022 , 58, 389-402	0
307	Homogeneous land-use sequences in heterogeneous small-scale systems of Central Kenya: Land-use categorization for enhanced greenhouse gas emission estimation. 2022 , 136, 108677	0
306	Evaluation of indirect and direct scoring methods to relate biochemical soil quality indicators to ecosystem services.	0
305	Driving Factors on Greenhouse Gas Emissions in Permafrost Region of Daxing'an Mountains, Northeast China. 2022 , 127,	0
304	Rotational pasture management to increase the sustainability of mountain livestock farms in the Alpine region. 2022 , 22, 1	1
303	Responses of N ₂ O Production and Abundances of Associated Microorganisms to Soil Profiles and Water Regime in Two Paddy Soils. 2022 , 12, 743	1
302	Rewetting Tropical Peatlands Reduced Net Greenhouse Gas Emissions in Riau Province, Indonesia. 2022 , 13, 505	2
301	Greenhouse Gas Emissions Response to Fertilizer Application and Soil Moisture in Dry Agricultural Uplands of Central Kenya. 2022 , 13, 463	1
300	Management Strategies to Mitigate NO Emissions in Agriculture.. 2022 , 12,	2
299	Influence of Azolla incorporation and/or dual cropping on CH ₄ and N ₂ O emission from a paddy field. 1-10	
298	Ammonia, nitrous oxide and methane emissions from excreta of cattle receiving rumen undegradable protein.	
297	Mixed Effects of Soil Compaction on the Nitrogen Cycle Under Pea and Wheat.. 2021 , 12, 822487	0

296	Development of a Process-Based N ₂ O Emission Model for Natural Forest and Grassland Ecosystems. 2022 , 14,	0
295	Distinct denitrifying phenotypes of predominant bacteria mould nitrous oxide metabolism in upland agricultural soils.	
294	Quantifying biological processes producing nitrous oxide in soil using a mechanistic model. 2022 , 159, 1	1
293	A Decreasing Trend of Nitrous Oxide Emissions from California Cropland from 2000 to 2015.	
292	Softwood biochar and greenhouse gas emissions: a field study over three growing seasons on a temperate agricultural soil. 2022 , 102, 197-211	0
291	Structure and function of the soil microbiome underlying NO emissions from global wetlands.. 2022 , 13, 1430	0
290	Optimizing accuracy of measurement protocols for nitrogen application in dilute dairy manure.. 2021 ,	1
289	Reduced Soil Gross N ₂ O Emission Driven by Substrates Rather Than Denitrification Gene Abundance in Cropland Agroforestry and Monoculture. 2022 , 127,	0
288	Assessing nitrous oxide (N ₂ O) isotopic analyzer performance for in-field use. 2022 , 316, 108855	1
287	Responses of soil nitrous oxide emission to nitrogen addition at two topographic positions of a subtropical forest.	0
286	KGML-ag: a modeling framework of knowledge-guided machine learning to simulate agroecosystems: a case study of estimating N ₂ O emission using data from mesocosm experiments. 2022 , 15, 2839-2858	1
285	Effects of reducing nitrogen application and adding straw on NO emission and soil nitrogen leaching of tomato in greenhouse.. 2022 , 134549	0
284	Distinct enhanced efficiency urea fertilizers differentially influence ammonia volatilization losses and maize yield. 1	1
283	Effect of straw incorporation and nitrification inhibitor on nitrous oxide emission in three cropland soils.	
282	Using isotope pool dilution to understand how organic carbon additions affect N ₂ O consumption in diverse soils.. 2022 ,	1
281	Effects of nitrogen and phosphorus enrichment on soil NO emission from natural ecosystems: A global meta-analysis.. 2022 , 118993	1
280	Tracing NO formation in full-scale wastewater treatment with natural abundance isotopes indicates control by organic substrate and process settings.. 2022 , 15, 100130	0
279	Effects of water and nitrogen management on N ₂ O emissions and NH ₃ volatilization from a vineyard in North China. 2022 , 266, 107601	2

278	Soil clay minerals: An overlooked mediator of gross N transformations in Regosolic soils of subtropical montane landscapes. 2022 , 168, 108612	1
277	Effects of free-air temperature increase on grain yield and greenhouse gas emissions in a double rice cropping system. 2022 , 281, 108489	4
276	Comprehensive assessment of nitrous oxide emissions and mitigation potentials across European peatlands.. 2022 , 119041	0
275	Meta-analysis of the impact of freeze-thaw cycles on soil microbial diversity and C and N dynamics. 2022 , 168, 108608	2
274	Functional N-cycle genes in soil and N ₂ O emissions in tropical grass-maize intercropping systems. 2022 , 169, 108655	0
273	Physical and hydric factors regulating nitrous oxide and methane fluxes in mountainous Atlantic forest soils in southeastern Brazil. 2022 , 116, 103781	0
272	Soil carbon sequestration, greenhouse gas emissions, and water pollution under different tillage practices.. 2022 , 154161	1
271	Reduced fertilization mitigates NO emission and drip irrigation has no impact on NO and NO emissions in plastic-shed vegetable production in northern China.. 2022 , 824, 153976	0
270	Isotopic assessment of soil NO emission from a sub-tropical agricultural soil under varying N-inputs.. 2022 , 154311	0
269	Will climate warming of terrestrial ecosystem contribute to increase soil greenhouse gas fluxes in plot experiment? A global meta-analysis.. 2022 , 154114	0
268	Appropriate N fertilizer addition mitigates NO emissions from forage crop fields.. 2022 , 829, 154628	1
267	Interactive effects of straw management, tillage, and a cover crop on nitrous oxide emissions and nitrate leaching from a sandy loam soil.. 2022 , 154316	1
266	A review and meta-analysis of mitigation measures for nitrous oxide emissions from crop residues.. 2022 , 828, 154388	4
265	A global meta-analysis of crop yield and agricultural greenhouse gas emissions under nitrogen fertilizer application.. 2022 , 154982	4
264	Compost application in an olive grove influences nitrogen dynamics under Mediterranean conditions. 2022 , 175, 104462	
263	Impact of anaerobic soil disinfection on seasonal NO emissions and N leaching in greenhouse vegetable production system depends on amount and quality of organic matter additions.. 2022 , 154673	1
262	Effect of information-driven irrigation scheduling on water use efficiency, nutrient leaching, greenhouse gas emission, and plant growth in South Florida. 2022 , 333, 107954	0
261	Soil greenhouse gas fluxes following conversion of tropical forests to fertilizer-based sugarcane systems in northwestern Uganda. 2022 , 333, 107953	

260	Thawing Yedoma permafrost is a neglected nitrous oxide source. 2021 , 12, 7107	5
259	Inhibitory effect of high nitrate on N ₂ O reduction is offset by long moist spells in heavily N loaded arable soils. 2022 , 58, 77-90	1
258	Elevated CO ₂ negates O ₃ impacts on terrestrial carbon and nitrogen cycles. 2021 , 4, 1752-1763	2
257	Modeling Nitrous Oxide Emissions From Large-Scale Intensive Cropping Systems in the Southern Amazon. 2021 , 5,	
256	Candidatus Nitrosopolaris, a genus of putative ammonia-oxidizing archaea with a polar/alpine distribution.	1
255	Bioinoculants-Natural Biological Resources for Sustainable Plant Production.. 2021 , 10,	10
254	Impacts of Different Nitrogen Fertilization on Greenhouse Gas Emissions and Lettuce Productivity in Upland Soils during Cultivation. 2020 , 53, 600-613	1
253	NO Reduction by Gemmatimonas aurantiaca and Potential Involvement of Gemmatimonadetes Bacteria in NO Reduction in Agricultural Soils.. 2022 , 37,	0
252	Contribution of the nongrowing season to annual NO emissions from the permafrost wetland in Northeast China.. 2022 , 1	0
251	Soil N ₂ O and CH ₄ emissions from fodder maize production with and without riparian buffer strips of differing vegetation. 1	0
250	Using nitrification inhibitors and deep placement to tackle the trade-offs between NH and N O emissions in global croplands.. 2022 ,	1
249	Nitrous oxide production pathways in Australian forest soils. 2022 , 420, 115871	0
248	Table_1.DOCX. 2019 ,	
247	Data_Sheet_1.xlsx. 2019 ,	
246	Data_Sheet_1.docx. 2020 ,	
245	Data_Sheet_1.docx. 2020 ,	
244	Data_Sheet_1.docx. 2020 ,	
243	Table_1.XLS. 2020 ,	

- 242 Data_Sheet_1.docx. **2019**,
- 241 Data_Sheet_2.xlsx. **2019**,
- 240 Image_1.JPEG. **2020**,
- 239 Table_1.pdf. **2020**,
- 238 Table_2.pdf. **2020**,
- 237 Image_1.jpg. **2020**,
- 236 Higher than expected NO emissions from soybean crops in the Pampas Region of Argentina: Estimates from DayCent simulations and field measurements.. **2022**, 155408 0
- 235 Soil nitrogen supply and N fertilizer losses from Australian dryland grain cropping systems. **2022**, 1-52 1
- 234 The interaction between vegetation types and intensities of freeze-thaw cycles during the autumn freezing affected in-situ soil N₂O emissions in the permafrost peatlands of the Great Hinggan Mountains, Northeastern China. **2022**, 14, 100175
- 233 Prescribed defoliation strategies influence soil carbon and nitrous oxide potential in pastures.
- 232 Estimating field N₂ emissions based on laboratory-quantified N₂O/(N₂O + N₂) ratios and field-quantified N₂O emissions. 0
- 231 Differential Responses of the Catalytic Efficiency of Ammonia and Nitrite Oxidation to Changes in Temperature. **2022**, 13,
- 230 Modeling the Dynamics of Carbon Dioxide Emission and Ecosystem Exchange Using a Modified SWAT Hydrologic Model in Cold Wetlands. **2022**, 14, 1458 0
- 229 The Impact of Modifications in Forest Litter Inputs on Soil N₂O Fluxes: A Meta-Analysis. **2022**, 13, 742 0
- 228 Effects of fire on CO₂, CH₄ and N₂O exchange in a well-drained Arctic heath ecosystem.. **2022**, 1 1
- 227 Characterizing the importance of denitrification for N₂O production in soils using natural abundance and isotopic labelling techniques. 1
- 226 Prairie wetlands as sources or sinks of nitrous oxide: Effects of land use and hydrology. **2022**, 320, 108968 0
- 225 Simulation of N₂O emissions from greenhouse vegetable production under different management systems in North China. **2022**, 470, 110019 0

224	Clumped isotope signatures of nitrous oxide formed by bacterial denitrification. 2022,	1
223	Understanding the Impact of Liquid Organic Fertilisation and Associated Application Techniques on N ₂ , N ₂ O and CO ₂ Fluxes from Agricultural Soils. 2022, 12, 692	0
222	CO ₂ , N ₂ O and CH ₄ Emissions and C Storage in Eucalyptus Forests with Different Management Practices of Harvest Residues. 1	0
221	Hot Spots and Hot Moments in the Critical Zone: Identification of and Incorporation into Reactive Transport Models. 2022, 9-47	1
220	Different variations in soil CO, CH, and NO fluxes and their responses to edaphic factors along a boreal secondary forest successional trajectory.. 2022, 155983	0
219	Soil compaction raises nitrous oxide emissions in managed agroecosystems. A review. 2022, 42,	1
218	Effects of Nitrogen and Phosphorus Additions on Soil N ₂ O Emissions and CH ₄ Uptake in a Phosphorus-Limited Subtropical Chinese Fir Plantation. 2022, 13, 772	
217	Nitrogen uptake by plants may alleviate N deposition-induced increase in soil N ₂ O emissions in subtropical Chinese fir (<i>Cunninghamia lanceolata</i>) plantations.	0
216	How can process-based modeling improve peat CO ₂ and N ₂ O emission factors for oil palm plantations?. 2022, 156153	0
215	Micromanaging the nitrogen cycle in agroecosystems. 2022,	0
214	Traditional, Modern, and Molecular Strategies for Improving the Efficiency of Nitrogen Use in Crops for Sustainable Agriculture: a Fresh Look at an Old Issue.	0
213	Utilizing Novel Field and Data Exploration Methods to Explore Hot Moments in High-Frequency Soil Nitrous Oxide Emissions Data: Opportunities and Challenges. 2022, 5,	
212	Comammox <i>Nitrospira</i> play a minor role in N ₂ O emissions from an alkaline arable soil. 2022, 171, 108720	0
211	How sustainable is the nitrogen management in Brazil? A sustainability assessment using the Entropy Weight Method. 2022, 316, 115330	1
210	Effects of soil mulching on staple crop yield and greenhouse gas emissions in China: A meta-analysis. 2022, 284, 108566	1
209	Cover crop composition drives changes in the abundance and diversity of nitrifiers and denitrifiers in citrus orchards with critical effects on N ₂ O emissions. 2022, 422, 115952	1
208	A Dual Enrichment Strategy Provides Soil- and Digestate-Competent Nitrous Oxide-Respiring Bacteria for Mitigating Climate Forcing in Agriculture.	
207	Continuous no-till decreased soil nitrous oxide emissions during corn years after 48 and 50 years in a poorly-drained Alfisol. 2022, 156296	

- 206 Effect of lignite amendment on carbon and nitrogen mineralization from raw and composted manure during incubation with soil. **2022**,
- 205 Soil Management, Irrigation, and Fertilisation Strategies for N₂O Emissions Mitigation in Mediterranean Agricultural Systems. **2022**, 12, 1349 2
- 204 Rice Rusk-Derived Biochar Suppressed N₂O Emission from Acidic Arable Soil by Inhibiting Nitrate Reduction.
- 203 Aggravation of nitrous oxide emissions driven by burrowing crab activities in intertidal marsh soils: Mechanisms and environmental implications. **2022**, 171, 108732 1
- 202 Effects of nitrogen and water addition on N₂O emissions in temperate grasslands, northern China. **2022**, 177, 104548
- 201 Soil nitrous oxide emissions in a maize (*Zea mays* L.) crop in response to nitrogen fertilisation. **2022**,
- 200 Global evaluation of inhibitor impacts on ammonia and nitrous oxide emissions from agricultural soils: A meta-analysis. 3
- 199 Impact of Combined Drought and Heat Stress and Nitrogen on Winter Wheat Productivity and End-Use Quality. **2022**, 12, 1452 0
- 198 Nitrogen mineralisation and N₂O emissions in pure and mixed-species plantations of *Eucalyptus urograndis* and *Acacia mangium*. 1-10
- 197 Simulated warming and low O₂ promote N₂O and N₂ emissions in subtropical montane forest soil. 0
- 196 Integrated Modeling of U.S. Agricultural Soil Emissions of Reactive Nitrogen and Associated Impacts on Air Pollution, Health, and Climate. 0
- 195 Ecological Distribution and Diversity of Key Functional Genes for Denitrification in Surface Sediments of the Northern South China Sea: Implications for Potential N₂O Emissions. 9,
- 194 To what extent can soil moisture and soil Cu contamination stresses affect nitrous species emissions? Estimation through calibration of a nitrification-denitrification model. **2022**, 19, 2953-2968
- 193 Distribution of ammonia oxidizers and their role in N₂O emissions in the reservoir riparian zone. 0
- 192 *Candidatus Nitrosopolaris*, a genus of putative ammonia-oxidizing archaea with a polar/alpine distribution. 0
- 191 Integrating major agricultural practices into the TRIPLEX-GHG model v2.0 for simulating global cropland nitrous oxide emissions: Development, sensitivity analysis and site evaluation. **2022**, 156945
- 190 Cover Crop Species Affect N₂O Emissions at Hotspot Moments of Summer Crops. 2,
- 189 Proximal and distal mechanisms through which arbuscular mycorrhizal associations alter terrestrial denitrification. 0

188	Experimental warming increased greenhouse gas emissions of a near-natural peatland and Sphagnum farming sites.	0
187	Successful year-round mainstream partial nitrification anammox: Assessment of effluent quality, performance and N ₂ O emissions. 2022 , 16, 100145	0
186	Split N application and DMP based nitrification inhibitors mitigate N ₂ O losses in a soil cropped with winter wheat. 2022 , 123, 119-135	0
185	In-depth characterization of denitrifier communities across different soil ecosystems in the tundra. 2022 , 17,	1
184	Introduction of a guideline for measurements of greenhouse gas fluxes from soils using non-steady-state chambers.	0
183	Effects of condensed tannins on greenhouse gas emissions and nitrogen dynamics from urine-treated grassland soil.	1
182	Biocrust diazotrophs and bacteria rather than fungi are sensitive to chronic low N deposition.	0
181	Soil greenhouse gas emissions from an animal excrement-based forage cropping system. 2022 , 123, 153-167	
180	Future Projection of CO ₂ Absorption and N ₂ O Emissions of the South Korean Forests under Climate Change Scenarios: Toward Net-Zero CO ₂ Emissions by 2050 and Beyond. 2022 , 13, 1076	1
179	Effects of the combined application of biochar-based fertilizer and urea on N ₂ O emissions, nitrifier, and denitrifier communities in the acidic soil of pomelo orchards.	
178	Increasing the Environmental Sustainability of Greenhouse Vegetable Production by Combining Biochar Application and Drip Fertigation Effects on Soil N ₂ O Emissions and Carbon Sequestrations. 2022 , 12, 1661	0
177	Effects of no-tillage on greenhouse gas emissions in maize fields in a semi-humid temperate climate region. 2022 , 309, 119747	0
176	Direct N ₂ O emissions from global tea plantations and mitigation potential by climate-smart practices. 2022 , 185, 106501	1
175	Liming decreases the emission and temperature sensitivity of N ₂ O following labile carbon addition. 2022 , 425, 116032	0
174	Gained net ecosystem economic benefit in machine-transplanted double-cropped rice strategies.	0
173	Does Loading Ammonium to Sorbents Affect Plant Availability in Soil?. 2022 , 12, 1057	
172	Contrasting Effects of Nitrogen and Labile Carbon Addition on N ₂ O Emissions from Andosols in Costa Rica and Chile Under Controlled Conditions.	
171	Greenhouse gas fluxes (CO ₂ , N ₂ O and CH ₄) of pea and maize during two cropping seasons: Drivers, budgets, and emission factors for nitrous oxide. 2022 , 157541	2

- 170 Effect of nitrification inhibitor (DMPP) on nitrous oxide emissions from agricultural fields: Automated and manual measurements. **2022**, 157650
- 169 Impacts of Soil Moisture and Fertilizer on N₂O Emissions from Cornfield Soil in a Karst Watershed, SW China. **2022**, 13, 1200 ○
- 168 Molecular interplay of an assembly machinery for nitrous oxide reductase. **2022**, 608, 626-631 ○
- 167 Challenges in measuring nitrogen isotope signatures in inorganic nitrogen forms: an inter-laboratory comparison of three common measurement approaches. ○
- 166 Topography-driven soil properties modulate effects of nitrogen deposition on soil nitrous oxide sources in a subtropical forest. **2022**, 58, 707-720 ○
- 165 Warming and redistribution of nitrogen inputs drive an increase in terrestrial nitrous oxide emission factor. **2022**, 13, ○
- 164 Effects of Plasticulture and Conservation Tillage on Nematode Assemblage and Their Relationships with Nitrous Oxide Emission following a Winter Cover Cropping and Vegetable Production System. **2022**, 8, 728
- 163 Maize diversification and nitrogen fertilization effects on soil nitrous oxide emissions in irrigated mediterranean conditions. 10,
- 162 Hot Moments of N₂O Emission Under Water and Nitrogen Management in Three Types of Steppe. **2022**, 127,
- 161 Spatial Variations of Soil N₂ and N₂O Emissions from a Temperate Forest: Quantified by the In Situ ¹⁵N Labeling Method. **2022**, 13, 1347
- 160 Distinct Denitrifying Phenotypes of Predominant Bacteria Modulate Nitrous Oxide Metabolism in Two Typical Cropland Soils. ○
- 159 Reactive Nitrogen Hotspots Related to Microscale Heterogeneity in Biological Soil Crusts. **2022**, 56, 11865-11877
- 158 Autonomous high-throughput in situ soil nitrogen flux measurement system. **2022**, 194,
- 157 The effect of static chamber base on N₂O flux in drip irrigation. **2022**, 19, 3699-3711 ○
- 156 Use of Mulches in Various Tillage Conditions Reduces the Greenhouse Gas Emission—An Overview. 1
- 155 Recent trends in nitrogen cycle and eco-efficient nitrogen management strategies in aerobic rice system. 13, ○
- 154 Atmospheric N Deposition Significantly Enhanced Soil N₂O Emission From Eastern China Forests. **2022**, 36,
- 153 Can N₂O act as a catalyst in the Atmosphere? A case study for the oxidation of CO by Criegee intermediate (CH₂OO). **2022**, 1215, 113829 1

- 152 New insight into ammonium removal in riverbanks under the exposure of microplastics. **2022**, 440, 129725 ○
- 151 Grazing amplifies the stimulating effects of N addition on N₂O emissions in a temperate meadow steppe. **2022**, 339, 108143
- 150 Patterns of denitrifier communities assembly and co-occurrence network regulate N₂O emissions in soils with long-term contrasting tillage histories. **2022**, 339, 108117 ○
- 149 Litter-derived nitrogen reduces methane uptake in tropical rainforest soils. **2022**, 849, 157891
- 148 Combined effects of biochar and biogas slurry on soil nitrogen transformation rates and N₂O emission in a subtropical poplar plantation. **2022**, 848, 157766 ○
- 147 Low N₂O emissions associated with sheep excreta deposition in temperate managed lowland grassland and extensively grazed hill pasture. **2022**, 850, 158070
- 146 Simulated heat wave events increase CO₂ and N₂O emissions from cropland and forest soils in an incubation experiment. **2022**, 58, 789-802 ○
- 145 Revisiting sampling duration to estimate N₂O emission factors for manure application and cattle excreta deposition for the UK and Ireland. **2022**, 322, 116037 ○
- 144 Subsurface drainage reduces the amount and interannual variability of optimum nitrogen fertilizer input to maize cropping systems in southeast Iowa, USA. **2022**, 288, 108663 ○
- 143 Direct and indirect greenhouse gas emissions under conventional, organic, and conservation agriculture. **2022**, 340, 108148 ○
- 142 Projected climate effects on soil workability and trafficability determine the feasibility of converting permanent grassland to arable land. **2022**, 203, 103500 ○
- 141 Microbial community structure from southern High Plains beef cattle feedyard manure and relationship with nitrous oxide emissions. **2022**, 5, ○
- 140 Insights into production and consumption processes of nitrous oxide emitted from soilless culture systems by dual isotopocule plot and functional genes. **2023**, 856, 159046 ○
- 139 Research Progress on Greenhouse Gas Emissions From Livestock in Sub-Saharan Africa Falls Short of National Inventory Ambitions. 2, ○
- 138 Preceding crops changed greenhouse gases emission and carbon neutrality under maize-rice and double rice cropping systems. 1-16 ○
- 137 Arbuscular Mycorrhizae Shift Community Composition of N-Cycling Microbes and Suppress Soil N₂O Emission. **2022**, 56, 13461-13472 ○
- 136 Do Metals Increase or Decrease Nitrous Oxide Emissions and Maize Yields from Upland Soils?. **2022**, 12, 1458 ○
- 135 Nitrous Oxide Emission and Grain Yield in Chinese Winter WheatSummer Maize Rotation: A Meta-Analysis. **2022**, 12, 2305 ○

- 134 Number of Chamber Measurement Locations for Accurate Quantification of Landscape-Scale Greenhouse Gas Fluxes: Importance of Land Use, Seasonality, and Greenhouse Gas Type. **2022**, 127, 0
- 133 Catchment properties as predictors of greenhouse gas concentrations across a gradient of boreal lakes. 10, 0
- 132 Integrated isotope and microbiome analysis indicates dominance of denitrification in N₂O production after rewetting of drained fen peat. 0
- 131 Ensifer meliloti denitrification is involved in infection effectiveness and N₂O emissions by alfalfa root nodules. 0
- 130 Effects of controlled-release fertilizer on N₂O emissions in wheat under elevated CO₂ and temperature. 0
- 129 A model-based estimate of nitrate leaching in Germany for GHG reporting. 0
- 128 Process-based modeling of soil nitrous oxide emissions from United States corn fields under different management and climate scenarios coupled with evaluation using regional estimates. 10, 0
- 127 Nitrate-Nitrite-Nitric Oxide Pathway: A Mechanism of Hypoxia and Anoxia Tolerance in Plants. **2022**, 23, 11522 0
- 126 Real-world wintertime CO, N₂O, and CO₂ emissions of a central European village. **2022**, 15, 5019-5031 0
- 125 Quantification of N and C cycling during aerobic composting, including automated direct measurement of N₂, N₂O, NO, NH₃, CO₂ and CH₄ emissions. **2022**, 159177 1
- 124 Denitrifying bradyrhizobia retain strong N₂O reduction during periods of starvation. 0
- 123 Nitrous oxide emission in altered nitrogen cycle and implications for climate change. **2022**, 314, 120272 0
- 122 On the Issues of NO_x as Greenhouse Gases: An Ongoing Discussion **2022**, 12, 10429 1
- 121 Impacts of slurry acidification and injection on fertilizer nitrogen fates in grassland. 0
- 120 Modelling the growth of atmospheric nitrous oxide using a global hierarchical inversion. **2022**, 22, 12945-12960 0
- 119 Long-term artificial drainage altered the product stoichiometry of denitrification in alpine peatland soil of Qinghai-Tibet Plateau. **2022**, 116206 0
- 118 How Stand Age Affects Soil Nitrification and Nitrogen Gas Emissions in Tropical and Subtropical Tea Plantations. **2022**, 12, 2521 0
- 117 Modeling nitrous oxide emissions from agricultural soil incubation experiments using CoupModel. **2022**, 19, 4811-4832 0

116	Characteristics of N ₂ and N ₂ O Fluxes from a Cultivated Black Soil: A Case Study through In Situ Measurement Using the 15N Gas Flux Method. 2022 , 12, 1664	0
115	Agroforestry alters the fluxes of greenhouse gases of Moso bamboo plantation soil. 2022 , 17, 115003	1
114	Balancing high yields and low N ₂ O emissions from greenhouse vegetable fields with large water and fertilizer input: a case study of multiple-year irrigation and nitrogen fertilizer regimes.	0
113	Responses of Soil N ₂ O and CO ₂ Emissions and Their Global Warming Potentials to Irrigation Water Salinity. 2022 , 13, 1777	1
112	No evidence that earthworms increase soil greenhouse gas emissions (CO ₂ and N ₂ O) in the presence of plants and soil moisture fluctuations.	0
111	Impacts of monoculture cropland to alley cropping agroforestry conversion on soil N ₂ O emissions.	0
110	Influences of carbon sources on N ₂ O production during denitrification in freshwaters: Activity, isotopes and functional microbes. 2022 , 226, 119315	0
109	Cropland nitrous oxide emissions exceed the emissions of RCP 2.6: A global spatial analysis. 2022 , 159738	0
108	Soil C/N ratio is the dominant control of annual N ₂ O fluxes from organic soils of natural and semi-natural ecosystems. 2022 , 327, 109198	1
107	The effect of contrasting soil textures on the efficiency of alternate wetting-drying to reduce water use and global warming potential. 2022 , 274, 107970	1
106	Identifying effective agricultural management practices for climate change adaptation and mitigation: A win-win strategy in South-Eastern Australia. 2022 , 203, 103527	0
105	The use of double-cropping in combination with no-tillage and optimized nitrogen fertilization reduces soil N ₂ O emissions under irrigation. 2023 , 857, 159458	0
104	Combining reduced tillage and green manures minimized N ₂ O emissions from organic cropping systems in a cool humid climate. 2023 , 341, 108205	0
103	Nitrous Oxide Dynamics in the Southern Benguela Upwelling System. 2022 , 127,	0
102	Intensive grassland management disrupts below-ground multi-trophic resource transfer in response to drought. 2022 , 13,	0
101	Role of Microbial Communities in Methane and Nitrous Oxide Fluxes and the Impact of Soil Management. 2022 , 159-183	0
100	Deep Drainage Lowers Methane and Nitrous Oxide Emissions from Rice Fields in a Semi-Arid Environment in Rwanda. 2022 , 6, 84	0
99	Long-term Fertilization Increased Nitrous Oxide Emissions from Croplands Reclaimed from Desert. 2022 , 13, 1897	0

- 98 Using DMPP with cattle manure can mitigate yield-scaled global warming potential under low rainfall conditions. **2022**, 120679 ○
- 97 Influence of rewetting on N₂O emissions in three different fen types. ○
- 96 Current challenges and developments of inorganic/organic materials for the abatement of toxic nitrogen oxides (NO_x) | A critical review. **2022**, 100380 ○
- 95 Nitrogen stabilizers mitigate nitrous oxide emissions across maize production areas of China: A multi-agroecosystems evaluation. **2023**, 143, 126692 ○
- 94 Mulching Effects on Soil Greenhouse Gas Emission in Agricultural Systems. **2022**, 251-287 ○
- 93 Spatial-temporal variations of nitrous oxide emissions in coffee agroforestry systems in Costa Rica. **2023**, 343, 108257 ○
- 92 Transient nitrite accumulation explains the variation of N₂O emissions to N fertilization in upland agricultural soils. **2023**, 177, 108917 ○
- 91 Soil texture is an easily overlooked factor affecting the temperature sensitivity of N₂O emissions. **2023**, 862, 160648 1
- 90 Relationship between soil 15N natural abundance and soil water content at global scale: Patterns and implications. **2023**, 222, 106879 ○
- 89 Responses of N₂O emissions to straw addition under different tillage soils: A 15N labelling study. **2023**, 183, 104744 ○
- 88 Deciphering nitrous oxide emissions from tropical soils of different land uses. **2023**, 862, 160916 ○
- 87 Long-term manure amendment reduces nitrous oxide emissions through decreasing the abundance ratio of amoA and nosZ genes in an Ultisol. **2023**, 184, 104771 ○
- 86 Efficacy of three nitrification inhibitors to reduce nitrous oxide emissions from pig slurry and mineral fertilizers applied to spring barley and winter wheat in Denmark. **2023**, 32, e00597 1
- 85 Nitrogen cycling in aquatic environments of China: Progress and future challenges. **2022**, 46, 846-868 1
- 84 Soil greenhouse gas emissions from different land utilization types in Western Kenya. 2, ○
- 83 Biochar-Compost Additions Have Strong Short-Term Effects on Carbon and Nitrogen Emissions from an Agricultural Soil. **2022**, 12, 2959 ○
- 82 Waterlogging effects on N₂O and N₂ emissions from a Stagnosol cultivated with *Silphium perfoliatum* and silage maize. ○
- 81 Impacts of vermicompost application on crop yield, ammonia volatilization and greenhouse gases emission on upland in Southwest China. **2022**, 160479 ○

80	Greenhouse gas emissions from <i>Silphium perfoliatum</i> and silage maize cropping on Stagnosols.	0
79	Predicted Soil Greenhouse Gas Emissions from Climate Management Interactions in Temperate Grassland. 2022 , 12, 3055	0
78	GHG Emissions from Drainage Ditches in Peat Extraction Sites and Peatland Forests in Hemiboreal Latvia. 2022 , 11, 2233	1
77	Are service crops an alternative for mitigating N ₂ O emissions in soybean crops in the argentinian pampas?.	0
76	Global variations and drivers of nitrous oxide emissions from forests and grasslands. 2,	0
75	Characteristics of soil N ₂ O emission and N ₂ O-producing microbial communities in paddy fields under elevated CO ₂ concentrations. 2022 , 120872	0
74	Organic farming decreases nitrate leaching but increases dissolved organic nitrogen leaching in greenhouse vegetable production systems.	0
73	Physical, chemical and microbiological soil attributes influence soil greenhouse gases fluxes in Atlantic Forest and pine (<i>Pinus taeda</i>) plantations in Brazil.	0
72	Ratio of non-growing season to growing season N ₂ O emissions in Canadian croplands: an update to national inventory methodology.	0
71	Potential to improve nitrogen use efficiency (NUE) by use of perennial mobile green manures.	0
70	Nitrous oxide production and isotopomer composition by fungi isolated from salt marsh sediments. 9,	0
69	The legacy effect of biochar application on soil nitrous oxide emissions.	0
68	Sources of nitrous oxide emissions from hydroponic tomato cultivation: Evidence from stable isotope analyses. 13,	0
67	Soil pH and long-term fertilization affect gross N transformation and N ₂ O production pathways in Chinese and UK croplands.	0
66	Review: Exchanges of O ₃ , NO, and NO ₂ between forest ecosystems and the atmosphere. 2023 , 79, 38-48	0
65	Water Availability and Land Management Control Catchment-Scale Agricultural Nitrogen and Phosphorous Use Efficiencies. 2023 , 37,	0
64	Nitrogen fertilizer driven nitrous and nitric oxide production is decoupled from microbial genetic potential in low carbon, semi-arid soil. 2,	0
63	Yield-scaled and area-scaled greenhouse gas emissions from common soil fertility management practices under smallholder maize fields in Kenya. 2023 ,	0

- 62 Identifying criteria for greenhouse gas flux estimation with automatic and manual chambers: A case study for N₂O. ○
- 61 The Limits of Grass. **2023**, 157-175 ○
- 60 Quantifying nitrous oxide production rates from nitrification and denitrification under various moisture conditions in agricultural soils: Laboratory study and literature synthesis. 13, ○
- 59 The utilization and molecular mechanism of arbuscular mycorrhizal symbiosis in vegetables. **2023**, 3, 1-7 ○
- 58 The Limits of Vegetarianism. **2023**, 57-83 ○
- 57 Dinitrogen emissions dominate nitrogen gas emissions from soils with low oxygen availability in a moist tropical forest. ○
- 56 Soil CH₄ and N₂O response diminishes during decadal soil warming in a temperate mountain forest. **2023**, 329, 109287 ○
- 55 Interactive effects of irrigation system and level on grain yield, crop water use, and greenhouse gas emissions of summer maize in North China Plain. **2023**, 864, 161165 ○
- 54 Nitrification derived N₂O emission increases but denitrification derived N₂O emission decreases with N enrichment in both topsoil and subsoil. **2023**, 222, 106890 ○
- 53 Short-term Response of Greenhouse Gas Emissions from Precision Fertilization on Barley. **2023**, 13, 96 ○
- 52 Opportunities for Adaptation to Climate Change of Extensively Grazed Pastures in the Central Apennines (Italy). **2023**, 12, 351 ○
- 51 Fertilizer-induced N₂O and NO emissions in tea gardens and the main controlling factors: A recent three-decade data synthesis. **2023**, 871, 162054 ○
- 50 Ensifer meliloti denitrification is involved in infection effectiveness and N₂O emissions from alfalfa root nodules. ○
- 49 Effects of controlled-release fertilizer on N₂O emissions in wheat under elevated CO₂ concentration and temperature. ○
- 48 Increasing net ecosystem carbon budget and mitigating global warming potential with improved irrigation and nitrogen fertilization management of a spring wheat farmland system in arid Northwest China. ○
- 47 Modeling of dual-permeability gas and solute reactive transport in macroporous agricultural soils with a focus on GHG cycling and emissions. **2023**, 620, 129408 ○
- 46 Deepened snow in combination with summer warming increases growing season nitrous oxide emissions in dry tundra, but not in wet tundra. **2023**, 180, 109013 ○
- 45 Controlled-release nitrogen fertilizer application mitigated N losses and modified microbial community while improving wheat yield and N use efficiency. **2023**, 349, 108445 ○

- 44 Effects of landscape modification on coastal sediment nitrogen availability, microbial functional gene abundances and N₂O production potential across the tropical-subtropical gradient. **2023**, 227, 115829 ○
- 43 An approach to provide maps of the N₂O emission risks by soils at the regional scale: A case-study at the Haut-Loir watershed, France. **2023**, 33, e00635 ○
- 42 Agricultural practice negatively affects soil bacterial diversity and nitrogen functional genes comparing to adjacent native forest soils. **2023**, 186, 104856 ○
- 41 Subsurface fertilization boosts crop yields and lowers greenhouse gas emissions: A global meta-analysis. **2023**, 876, 162712 ○
- 40 Greenhouse gases fluxes and carbon cycle in agroecosystems under humid continental climate conditions. **2023**, 352, 108502 ○
- 39 Effects of long-term organic fertilizer substitutions on soil nitrous oxide emissions and nitrogen cycling gene abundance in a greenhouse vegetable field. **2023**, 188, 104877 ○
- 38 Maize stalk incorporation increases N₂O emissions that offset the benefit of SOC sequestration in a winter wheat-summer maize field: A four-year measurement in long-term fertilizer experiments. **2023**, 352, 108507 ○
- 37 How much can changes in the agro-food system reduce agricultural nitrogen losses to the environment? Example of a temperate-Mediterranean gradient. **2023**, 337, 117732 1
- 36 Denitrification by Bradyrhizobia under Feast and Famine and the Role of the bc1 Complex in Securing Electrons for N₂O Reduction. **2023**, 89, ○
- 35 High greenhouse gas emissions after grassland renewal on bog peat soil. **2023**, 331, 109309 ○
- 34 Biochar-derived persistent free radicals and reactive oxygen species reduce the potential of biochar to mitigate soil N₂O emissions by inhibiting nosZ. **2023**, 178, 108970 ○
- 33 Increased Nitrogen Loading Facilitates Nitrous Oxide Production through Fungal and Chemodenitrification in Estuarine and Coastal Sediments. **2023**, 57, 2660-2671 ○
- 32 Solubility of soil phosphorus in extended waterlogged conditions: An incubation study. **2023**, 9, e13502 ○
- 31 Mechanistic Understanding of Leakage and Consequences and Recent Technological Advances in Improving Nitrogen Use Efficiency in Cereals. **2023**, 13, 527 ○
- 30 Pandemic restrictions in 2020 highlight the significance of non-road NO_x sources in central London. **2023**, 23, 2315-2330 ○
- 29 Suggested role of NosZ in preventing N₂O inhibition of dissimilatory nitrite reduction to ammonium. ○
- 28 Spatiotemporal patterns and drivers of greenhouse gas fluxes in the sub-tropical wetland ecosystem of Indian Himalayan foothill. ○
- 27 Urbanization can accelerate climate change by increasing soil N₂O emission while reducing CH₄ uptake. ○

- 26 Effects of Temperature and Humidity on Soil Gross Nitrogen Transformation in a Typical Shrub Ecosystem in Yanshan Mountain and Hilly Region. **2023**, 13, 643 ○
- 25 Quantifying patterns, sources and uncertainty of nitrous oxide emissions from global grazing lands: Nitrogen forms are the determinant factors for estimation and mitigation. **2023**, 223, 104080 ○
- 24 Hot moment of N₂O emissions in seasonally frozen peatlands. ○
- 23 Increased N₂O emission due to paddy soil drainage is regulated by carbon and nitrogen availability. **2023**, 432, 116422 ○
- 22 Nonlinear response of N₂O and N₂ emissions to increasing soil nitrate availability in a tropical sugarcane soil. **2023**, 23, 2065-2071 ○
- 21 Moderate precipitation reduction enhances nitrogen cycling and soil nitrous oxide emissions in a semi-arid grassland. ○
- 20 Mycorrhiza-mediated recruitment of complete denitrifying Pseudomonas reduces N₂O emissions from soil. **2023**, 11, ○
- 19 Spatial and Seasonal Variability of Hydroxylamine Concentrations in a Human-Impacted Estuary Off Southeast China. **2023**, 128, ○
- 18 Dry rainfed conditions are key drivers of the effect of conservation tillage and a nitrification inhibitor on N fate and N₂O emissions: A field 15N tracing study. **2023**, 432, 116424 ○
- 17 Effects of limed manure digestate application in sandy soil on plant nitrogen availability and soil N₂O emissions. **2023**, 1, 100006 ○
- 16 Nitrous oxide emissions after application of cattle-manure-based pellet of different pH levels to an Andosol upland field. ○
- 15 Soil-atmosphere exchange of carbon dioxide, methane and nitrous oxide in temperate forests along an elevation gradient in the Qinling Mountains, China. ○
- 14 Effects of Long-Term Organic-Inorganic Nitrogen Application on Maize Yield and Nitrogen-Containing Gas Emission. **2023**, 13, 848 ○
- 13 Sources and Monitoring Tools of Atmospheric Carbon Dioxide. **2023**, 19-26 ○
- 12 Effects of Biological Nitrification Inhibitor on Nitrous Oxide and nosZ, nirK, nirS Denitrifying Bacteria in Paddy Soils. **2023**, 15, 5348 ○
- 11 Greenhouse Gas Emissions from Row Crop, Agroforestry, and Forested Land Use Systems in Floodplain Soils. **2023**, 234, ○
- 10 Effects of acidifiers on soil greenhouse gas emissions in calcareous soils in a semi-arid area. **2023**, 13, ○
- 9 Key nitrogen and phosphorus performance indicators derived from farm-gate mass balances on dairies. **2023**, ○

- 8 Soil nitrous oxide emissions from a soybean-wheat succession under different tillage systems in Southern Brazil. **2023**, 47, ○
- 7 Nitrous Oxide Fluxes in Permafrost Peatlands Remain Negligible After Wildfire and Thermokarst Disturbance. **2023**, 128, ○
- 6 Potential of TROPOMI for understanding spatio-temporal variations in surface NO₂ and their dependencies upon land use over the Iberian Peninsula. **2023**, 23, 3905-3935 ○
- 5 Carbon-sink potential of continuous alfalfa agriculture lowered by short-term nitrous oxide emission events. **2023**, 14, ○
- 4 Adding inhibitors to manure injections can mitigate nitrous oxide emissions from barley croplands. ○
- 3 Nitrous oxide flux from soil with *Urochloa brizantha* under nitrogen fertilization in Honduras. **2022**, 40, 403-410 ○
- 2 Comparison of Biochar- and Lime-Adjusted pH Changes in N₂O Emissions and Associated Microbial Communities in a Tropical Tea Plantation Soil. **2023**, 13, 1144 ○
- 1 Sewage sludge application stimulated soil N₂O emissions with a low heavy metal pollution risk in Eucalyptus plantations. **2023**, 339, 117933 ○