

# Tim Clough

## List of Publications by Year in descending order

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161  
papers

7,477  
citations

76326  
40  
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64796  
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168  
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168  
docs citations

168  
times ranked

6349  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Review of Biochar and Soil Nitrogen Dynamics. <i>Agronomy</i> , 2013, 3, 275-293.	3.0	663
2	Biochar induced soil microbial community change: Implications for biogeochemical cycling of carbon, nitrogen and phosphorus. <i>Pedobiologia</i> , 2011, 54, 309-320.	1.2	585
3	Biochar adsorbed ammonia is bioavailable. <i>Plant and Soil</i> , 2012, 350, 57-69.	3.7	371
4	Biochar and the Nitrogen Cycle: Introduction. <i>Journal of Environmental Quality</i> , 2010, 39, 1218-1223.	2.0	346
5	Biochar Incorporation into Pasture Soil Suppresses in situ Nitrous Oxide Emissions from Ruminant Urine Patches. <i>Journal of Environmental Quality</i> , 2011, 40, 468-476.	2.0	233
6	Unweathered Wood Biochar Impact on Nitrous Oxide Emissions from a Bovine Urine Amended Pasture Soil. <i>Soil Science Society of America Journal</i> , 2010, 74, 852-860.	2.2	228
7	Dissolved Organic Nitrogen: An Overlooked Pathway of Nitrogen Loss from Agricultural Systems?. <i>Journal of Environmental Quality</i> , 2009, 38, 393-401.	2.0	191
8	The temperature dependence of dicyandiamide (DCD) degradation in soils: A data synthesis. <i>Soil Biology and Biochemistry</i> , 2008, 40, 1878-1882.	8.8	160
9	Ten years of elevated atmospheric carbon dioxide alters soil nitrogen transformations in a sheep-grazed pasture. <i>Global Change Biology</i> , 2010, 16, 2530-2542.	9.5	139
10	A wood based low-temperature biochar captures NH <sub>3</sub> -N generated from ruminant urine-N, retaining its bioavailability. <i>Plant and Soil</i> , 2012, 353, 73-84.	3.7	136
11	A Review of the Movement and Fate of N <sub>2</sub> O in the Subsoil. <i>Nutrient Cycling in Agroecosystems</i> , 2005, 72, 3-11.	2.2	135
12	Ammonium sorption and ammonia inhibition of nitrite-oxidizing bacteria explain contrasting soil N <sub>2</sub> O production. <i>Scientific Reports</i> , 2015, 5, 12153.	3.3	125
13	Nitrous oxide emissions and biogeochemical responses to soil freezing-thawing and drying-wetting. <i>Soil Biology and Biochemistry</i> , 2018, 117, 5-15.	8.8	124
14	Changes in Relative Gas Diffusivity Explain Soil Nitrous Oxide Flux Dynamics. <i>Soil Science Society of America Journal</i> , 2013, 77, 1496-1505.	2.2	114
15	Lime and Soil Moisture Effects on Nitrous Oxide Emissions from a Urine Patch. <i>Soil Science Society of America Journal</i> , 2004, 68, 1600-1609.	2.2	99
16	Fate of <sup>15</sup> N labelled urine on four soil types. <i>Plant and Soil</i> , 1998, 199, 195-203.	3.7	95
17	Nitrous oxide and methane emissions from cryptogamic covers. <i>Global Change Biology</i> , 2015, 21, 3889-3900.	9.5	94
18	Diurnal fluctuations of dissolved nitrous oxide (N <sub>2</sub> O) concentrations and estimates of N <sub>2</sub> O emissions from a spring-fed river: implications for IPCC methodology. <i>Global Change Biology</i> , 2007, 13, 1016-1027.	9.5	89

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19	Effect of elevated CO <sub>2</sub> on soil N dynamics in a temperate grassland soil. <i>Soil Biology and Biochemistry</i> , 2009, 41, 1996-2001.	8.8	81
20	Effect of nitrogen and waterlogging on denitrifier gene abundance, community structure and activity in the rhizosphere of wheat. <i>FEMS Microbiology Ecology</i> , 2013, 83, 568-584.	2.7	81
21	Soil Gas Diffusivity Controls N <sub>2</sub> O and N <sub>2</sub> Emissions and their Ratio. <i>Soil Science Society of America Journal</i> , 2016, 80, 529-540.	2.2	76
22	Nitrification gene ratio and free ammonia explain nitrite and nitrous oxide production in urea-amended soils. <i>Soil Biology and Biochemistry</i> , 2017, 111, 143-153.	8.8	76
23	Biochar does not affect soil N-transformations or microbial community structure under ruminant urine patches but does alter relative proportions of nitrogen cycling bacteria. <i>Agriculture, Ecosystems and Environment</i> , 2014, 191, 63-72.	5.3	72
24	Phylogenetic and functional potential links pH and N <sub>2</sub> O emissions in pasture soils. <i>Scientific Reports</i> , 2016, 6, 35990.	3.3	67
25	Fate of urine nitrogen on mineral and peat soils in New Zealand. <i>Plant and Soil</i> , 1996, 178, 141-152.	3.7	64
26	High-Resolution Denitrification Kinetics in Pasture Soils Link N <sub>2</sub> O Emissions to pH, and Denitrification to C Mineralization. <i>PLoS ONE</i> , 2016, 11, e0151713.	2.5	62
27	Abiotic processes dominate CO <sub>2</sub> fluxes in Antarctic soils. <i>Soil Biology and Biochemistry</i> , 2012, 53, 99-111.	8.8	61
28	Effects of aggregate size, soil compaction, and bovine urine on N <sub>2</sub> O emissions from a pasture soil. <i>Soil Biology and Biochemistry</i> , 2008, 40, 924-931.	8.8	60
29	A comparison of soil and environmental quality under organic and conventional farming systems in New Zealand. <i>New Zealand Journal of Agricultural Research</i> , 2000, 43, 443-466.	1.6	59
30	Confirmation of co-denitrification in grazed grassland. <i>Scientific Reports</i> , 2015, 5, 17361.	3.3	59
31	Diffusion of <sup>15</sup> N-labelled N <sub>2</sub> O into soil columns: a promising method to examine the fate of N <sub>2</sub> O in subsoils. <i>Soil Biology and Biochemistry</i> , 2006, 38, 1462-1468.	8.8	58
32	Denitrification in vadose zone material amended with dissolved organic matter from topsoil and subsoil. <i>Soil Biology and Biochemistry</i> , 2013, 61, 96-104.	8.8	55
33	Influence of copper on expression of <i>nirS</i> , <i>norB</i> and <i>nosZ</i> and the transcription and activity of <i>NIR</i> , <i>NOR</i> and N <sub>2</sub> O <i>OR</i> in the denitrifying soil bacteria <i>Pseudomonas stutzeri</i> . <i>Microbial Biotechnology</i> , 2016, 9, 381-388.	4.2	55
34	Flooding-induced N <sub>2</sub> O emission bursts controlled by pH and nitrate in agricultural soils. <i>Soil Biology and Biochemistry</i> , 2014, 69, 17-24.	8.8	52
35	Can liming mitigate N <sub>2</sub> O fluxes from a urine-amended soil?. <i>Soil Research</i> , 2003, 41, 439.	1.1	51
36	The mitigation potential of hippuric acid on N <sub>2</sub> O emissions from urine patches: An in situ determination of its effect. <i>Soil Biology and Biochemistry</i> , 2009, 41, 2222-2229.	8.8	51

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37	Using near-continuous measurements of $\text{N}_2\text{O}$ emission from urine-affected soil to guide manual gas sampling regimes. New Zealand Journal of Agricultural Research, 2013, 56, 60-76.	1.6	51
38	Advances in understanding nitrogen flows and transformations: gaps and research pathways. Journal of Agricultural Science, 2014, 152, 34-44.	1.3	51
39	Emission of nitrogen oxides and ammonia from varying rates of applied synthetic urine and correlations with soil chemistry. Soil Research, 2003, 41, 421.	1.1	48
40	Accounting for the utilization of a $\text{N}_2\text{O}$ mitigation tool in the IPCC inventory methodology for agricultural soils. Nutrient Cycling in Agroecosystems, 2007, 78, 1-14.	2.2	44
41	Influence of soil moisture on codenitrification fluxes from a urea-affected pasture soil. Scientific Reports, 2017, 7, 2185.	3.3	44
42	Transformations of inorganic-N in soil leachate under differing storage conditions. Soil Biology and Biochemistry, 2001, 33, 1473-1480.	8.8	43
43	Irrigation of DOC-rich liquid promotes potential denitrification rate and decreases $\text{N}_2\text{O}/(\text{N}_2\text{O}+\text{N}_2)$ product ratio in a $\text{C}_{2\text{m}}$ soil profile. Soil Biology and Biochemistry, 2017, 106, 1-8.	8.8	43
44	Influence of soil bulk density and matric potential on microbial dynamics, inorganic N transformations, $\text{N}_2\text{O}$ and $\text{N}_2$ fluxes following urea deposition. Soil Biology and Biochemistry, 2013, 65, 1-11.	8.8	41
45	Evaluation of the stable isotope signatures of nitrate to detect denitrification in a shallow groundwater system in New Zealand. Agriculture, Ecosystems and Environment, 2015, 202, 188-197.	5.3	41
46	Nitrous Oxide Fluxes, Soil Oxygen, and Denitrification Potential of Urine- and Non-Urine-Treated Soil under Different Irrigation Frequencies. Journal of Environmental Quality, 2016, 45, 1169-1177.	2.0	41
47	Explaining the doubling of $\text{N}_2\text{O}$ emissions under elevated $\text{CO}_2$ in the Giessen FACE via in-field $^{15}\text{N}$ tracing. Global Change Biology, 2018, 24, 3897-3910.	9.5	41
48	Nitrate leaching losses are lower from ryegrass/white clover forages containing plantain than from ryegrass/white clover forages under different irrigation. New Zealand Journal of Agricultural Research, 2019, 62, 150-172.	1.6	41
49	Soil Respiratory Quotient Determined via Barometric Process Separation Combined with Nitrogen-15 Labeling. Soil Science Society of America Journal, 2004, 68, 1610-1615.	2.2	40
50	Comparison of measured and EF5-r-derived $\text{N}_2\text{O}$ fluxes from a spring-fed river. Global Change Biology, 2006, 12, 352-363.	9.5	40
51	Potential for forage diet manipulation in New Zealand pasture ecosystems to mitigate ruminant urine derived $\text{N}_2\text{O}$ emissions: a review. New Zealand Journal of Agricultural Research, 2016, 59, 301-317.	1.6	39
52	Transformation of Organic Matter and the Emissions of Methane and Ammonia during Storage of Liquid Manure as Affected by Acidification. Journal of Environmental Quality, 2017, 46, 514-521.	2.0	39
53	Comparison of measured and EF5-r-derived $\text{N}_2\text{O}$ fluxes from a spring-fed river. Global Change Biology, 2006, 12, 477-488.	9.5	38
54	Hippuric acid and benzoic acid inhibition of urine derived $\text{N}_2\text{O}$ emissions from soil. Global Change Biology, 2009, 15, 2067-2077.	9.5	38

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55	Impact of bovine urine deposition on soil microbial activity, biomass, and community structure. <i>Applied Soil Ecology</i> , 2010, 44, 89-100.	4.3	38
56	Nitrous Oxide Fluxes and Soil Oxygen Dynamics of Soil Treated with Cow Urine. <i>Soil Science Society of America Journal</i> , 2017, 81, 289-298.	2.2	38
57	Effects of bovine urine, plants and temperature on N <sub>2</sub> O and CO <sub>2</sub> emissions from a sub-tropical soil. <i>Plant and Soil</i> , 2011, 345, 171-186.	3.7	37
58	Resolution of the 15N balance enigma?. <i>Soil Research</i> , 2001, 39, 1419.	1.1	36
59	Impact of short-interval, repeat application of dicyandiamide on soil N transformation in urine patches. <i>Agriculture, Ecosystems and Environment</i> , 2013, 167, 60-70.	5.3	36
60	Compaction influences N <sub>2</sub> O and N <sub>2</sub> emissions from 15N-labeled synthetic urine in wet soils during successive saturation/drainage cycles. <i>Soil Biology and Biochemistry</i> , 2015, 88, 178-188.	8.8	35
61	Isotopes and Trace Elements as Natal Origin Markers of <i>Helicoverpa armigera</i> – An Experimental Model for Biosecurity Pests. <i>PLoS ONE</i> , 2014, 9, e92384.	2.5	35
62	Fungal and bacterial contributions to codenitrification emissions of N <sub>2</sub> O and N <sub>2</sub> following urea deposition to soil. <i>Nutrient Cycling in Agroecosystems</i> , 2018, 110, 135-149.	2.2	34
63	Dynamics of nitrous oxide in groundwater at the aquatic-terrestrial interface. <i>Global Change Biology</i> , 2007, 13, 1528-1537.	9.5	31
64	The effect of lignite on nitrogen mobility in a low-fertility soil amended with biosolids and urea. <i>Science of the Total Environment</i> , 2016, 543, 601-608.	8.0	31
65	Electrodes Donate Electrons for Nitrate Reduction in a Soil Matrix via DNRA and Denitrification. <i>Environmental Science &amp; Technology</i> , 2019, 53, 2002-2012.	10.0	31
66	Measuring denitrification and the N <sub>2</sub> O:(N <sub>2</sub> O + N <sub>2</sub> ) emission ratio from terrestrial soils. <i>Current Opinion in Environmental Sustainability</i> , 2020, 47, 61-71.	6.3	31
67	Short-term consequences of spatial heterogeneity in soil nitrogen concentrations caused by urine patches of different sizes. <i>Applied Soil Ecology</i> , 2009, 42, 271-278.	4.3	29
68	Nitrous Oxide Dynamics in a Braided River System, New Zealand. <i>Journal of Environmental Quality</i> , 2011, 40, 1532-1541.	2.0	29
69	Influence of soil pH on NO <sub>x</sub> and N <sub>2</sub> O emissions from bovine urine applied to soil columns. <i>New Zealand Journal of Agricultural Research</i> , 2011, 54, 285-301.	1.6	29
70	Temporal in situ dynamics of N <sub>2</sub> O reductase activity as affected by nitrogen fertilization and implications for the N <sub>2</sub> O/(N <sub>2</sub> O+N <sub>2</sub> ) product ratio and N <sub>2</sub> O mitigation. <i>Biology and Fertility of Soils</i> , 2017, 53, 723-727.	4.3	29
71	Potential Environmental Benefits from Blending Biosolids with Other Organic Amendments before Application to Land. <i>Journal of Environmental Quality</i> , 2017, 46, 481-489.	2.0	28
72	Global Research Alliance N <sub>2</sub> O chamber methodology guidelines: Design considerations. <i>Journal of Environmental Quality</i> , 2020, 49, 1081-1091.	2.0	27

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73	Response to nitrogen addition reveals metabolic and ecological strategies of soil bacteria. <i>Molecular Ecology</i> , 2017, 26, 5500-5514.	3.9	26
74	Soil Bulk Density and Moisture Content Influence Relative Gas Diffusivity and the Reduction of Nitrogenâ€”Nitrous Oxide. <i>Vadose Zone Journal</i> , 2014, 13, 1-8.	2.2	25
75	Vertical stratification of redox conditions, denitrification and recharge in shallow groundwater on a volcanic hillslope containing relict organic matter. <i>Science of the Total Environment</i> , 2018, 639, 1205-1219.	8.0	25
76	Nitrite accumulation and nitrogen gas production increase with decreasing temperature in urea-amended soils: Experiments and modeling. <i>Soil Biology and Biochemistry</i> , 2020, 142, 107727.	8.8	24
77	A review of indirect N<sub>2</sub>O emission factors from artificial agricultural waters. <i>Environmental Research Letters</i> , 2021, 16, 043005.	5.2	24
78	Soil microbial respiration responses to repeated urea applications in three grasslands. <i>Soil Research</i> , 2005, 43, 905.	1.1	24
79	Urine patch and fertiliser N interaction: Effects of fertiliser rate and season of urine application on nitrate leaching and pasture N uptake. <i>Agriculture, Ecosystems and Environment</i> , 2015, 203, 19-28.	5.3	23
80	Effects of forage type and gibberellic acid on nitrate leaching losses. <i>Soil Use and Management</i> , 2016, 32, 565-572.	4.9	22
81	Spatial and temporal variations in nitrogen export from a New Zealand pastoral catchment revealed by stream water nitrate isotopic composition. <i>Water Resources Research</i> , 2016, 52, 2840-2854.	4.2	22
82	Density Effects on Soilâ€”Water Characteristics, Soilâ€”Gas Diffusivity, and Emissions of N<sub>2</sub>O and N<sub>2</sub> from a Reâ€”packed Pasture Soil. <i>Soil Science Society of America Journal</i> , 2019, 83, 118-125.	2.2	22
83	Reducing nitrogen leaching losses in grazed dairy systems using an Italian ryegrassâ€”plantainâ€”white clover forage mix. <i>Grass and Forage Science</i> , 2018, 73, 878-887.	2.9	21
84	Denitrification capacity in the vadose zone at three sites in the Lake Taupo catchment, New Zealand. <i>Soil Research</i> , 2007, 45, 91.	1.1	21
85	Regulation of soil surface respiration in a grazed pasture in New Zealand. <i>Agricultural and Forest Meteorology</i> , 2009, 149, 205-213.	4.8	20
86	Effect of Pine Waste and Pine Biochar on Nitrogen Mobility in Biosolids. <i>Journal of Environmental Quality</i> , 2016, 45, 360-367.	2.0	20
87	Potential inhibition of urine patch nitrous oxide emissions by <i>Plantago lanceolata</i> and its metabolite aucubin. <i>New Zealand Journal of Agricultural Research</i> , 2018, 61, 495-503.	1.6	20
88	Effect of soil moisture and bovine urine on microbial stress. <i>Pedobiologia</i> , 2012, 55, 211-218.	1.2	19
89	Ammonia volatilisation is not the dominant factor in determining the soil nitrate isotopic composition of pasture systems. <i>Agriculture, Ecosystems and Environment</i> , 2015, 199, 290-300.	5.3	19
90	Long-term elevation of temperature affects organic N turnover and associated N&lt;sub>2</sub>&lt;sub>O emissions in a permanent grassland soil. <i>Soil</i> , 2016, 2, 601-614.	4.9	18

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91	Soil Gas Diffusivity and Soil Moisture effects on N <sub>2</sub> O Emissions from Intact Pasture Soils. Soil Science Society of America Journal, 2019, 83, 1032-1043.	2.2	18
92	Rice root Fe plaque enhances paddy soil N <sub>2</sub> O emissions via Fe(II) oxidation-coupled denitrification. Soil Biology and Biochemistry, 2019, 139, 107610.	8.8	18
93	The Impact of Relict Organic Materials on the Denitrification Capacity in the Unsaturated-Saturated Zone Continuum of Three Volcanic Profiles. Journal of Environmental Quality, 2013, 42, 145-154.	2.0	17
94	Soil aeration affects the degradation rate of the nitrification inhibitor dicyandiamide. Soil Research, 2015, 53, 137.	1.1	17
95	Fertiliser and seasonal urine effects on N <sub>2</sub> O emissions from the urine-fertiliser interface of a grazed pasture. New Zealand Journal of Agricultural Research, 2015, 58, 311-324.	1.6	17
96	Effect of aggregate size distribution on soil moisture, soil-gas diffusivity, and N <sub>2</sub> O emissions from a pasture soil. Geoderma, 2021, 383, 114737.	5.1	17
97	Dairy Farm Effluent Effects on Urine Patch Nitrous Oxide and Carbon Dioxide Emissions. Journal of Environmental Quality, 2005, 34, 979-986.	2.0	16
98	Carbon Cycling in Floodplain Ecosystems: Out-Gassing and Photosynthesis Transmit Soil $\delta^{13}C$ Gradient Through Stream Food Webs. Ecosystems, 2011, 14, 583-597.	3.4	16
99	Biogeochemistry and community ecology in a spring-fed urban river following a major earthquake. Environmental Pollution, 2013, 182, 190-200.	7.5	16
100	Tillage, compaction and wetting effects on NO <sub>3</sub> , N <sub>2</sub> O and N <sub>2</sub> losses. Soil Research, 2019, 57, 670.	1.1	16
101	N <sub>2</sub> O and N <sub>2</sub> gas fluxes, soil gas pressures, and ebullition events following irrigation of <sup>15</sup> NO <sub>3</sub> -labelled subsoils. Soil Research, 2003, 41, 401.	1.1	15
102	Soil properties and presence of plants affect the temperature sensitivity of carbon dioxide production by soils. Plant and Soil, 2010, 337, 375-387.	3.7	15
103	Plant N uptake in the periphery of a bovine urine patch: determining the "effective area". New Zealand Journal of Agricultural Research, 2016, 59, 122-140.	1.6	15
104	The potential of L.Âscoparium , K.Ârobusta and P.Âradiata to mitigate N-losses in silvopastoral systems. Environmental Pollution, 2017, 225, 12-19.	7.5	15
105	Gross N transformations vary with soil moisture and time following urea deposition to a pasture soil. Geoderma, 2021, 386, 114904.	5.1	15
106	Emissions of nitrous oxide, dinitrogen and carbon dioxide from three soils amended with carbon substrates under varying soil matric potentials. European Journal of Soil Science, 2021, 72, 2261-2275.	3.9	15
107	Impact of nitrogen compounds on fungal and bacterial contributions to codenitrification in a pasture soil. Scientific Reports, 2019, 9, 13371.	3.3	14
108	Nitrous oxide emissions from ruminant urine: science and mitigation for intensively managed perennial pastures. Current Opinion in Environmental Sustainability, 2020, 47, 21-27.	6.3	14

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109	Identification and verification of key functional groups of biochar influencing soil N <sub>2</sub> O emission. <i>Biology and Fertility of Soils</i> , 2021, 57, 447-456.	4.3	14
110	Entrapment and displacement of nitrous oxide in a drained pasture soil. <i>Nutrient Cycling in Agroecosystems</i> , 2000, 57, 191-193.	2.2	13
111	Intensive Cattle Grazing Affects Pasture Litter-Fall: An Unrecognized Nitrous Oxide Source. <i>Journal of Environmental Quality</i> , 2012, 41, 444-448.	2.0	13
112	Nitrous oxide emissions from pastures during wet and cold seasons. <i>Grassland Science</i> , 2015, 61, 61-74.	1.1	13
113	Enhancement of subsoil denitrification using an electrode as an electron donor. <i>Soil Biology and Biochemistry</i> , 2017, 115, 511-515.	8.8	13
114	Effects of denitrification and transport on the isotopic composition of nitrate ( $\delta^{18}\text{O}$ , $\delta^{15}\text{N}$ ) in freshwater systems. <i>Science of the Total Environment</i> , 2019, 651, 2228-2234.	8.0	13
115	Global Research Alliance N <sub>2</sub> O chamber methodology guidelines: Introduction, with health and safety considerations. <i>Journal of Environmental Quality</i> , 2020, 49, 1073-1080.	2.0	13
116	Regulation of N <sub>2</sub> O emissions from acid organic soil drained for agriculture. <i>Biogeosciences</i> , 2019, 16, 4555-4575.	3.3	12
117	Co-application of a biochar and an electric potential accelerates soil nitrate removal while decreasing N <sub>2</sub> O emission. <i>Soil Biology and Biochemistry</i> , 2020, 149, 107946.	8.8	12
118	Relationships between soil thermal units, nitrogen mineralization and dry matter production in pastures. <i>Soil Use and Management</i> , 1998, 14, 65-69.	4.9	11
119	Influence of photosynthetically active radiation on diurnal N <sub>2</sub> O emissions under ruminant urine patches. <i>New Zealand Journal of Agricultural Research</i> , 2012, 55, 319-331.	1.6	11
120	Assessing the Impact of Non-Urea Ruminant Urine Nitrogen Compounds on Urine Patch Nitrous Oxide Emissions. <i>Journal of Environmental Quality</i> , 2018, 47, 812-819.	2.0	11
121	Gas Diffusivity based characterization of aggregated agricultural soils. <i>Soil Science Society of America Journal</i> , 2020, 84, 387-398.	2.2	11
122	Ammonia oxidising populations and relationships with N <sub>2</sub> O emissions in three New Zealand soils. <i>New Zealand Journal of Agricultural Research</i> , 2014, 57, 228-243.	1.6	10
123	Nitrous Oxide Dynamics in Agricultural Peat Soil in Response to Availability of Nitrate, Nitrite, and Iron Sulfides. <i>Geomicrobiology Journal</i> , 2020, 37, 76-85.	2.0	10
124	Nitrous Oxide Emissions from In Situ Deposition of <sup>15</sup> N-Labeled Ryegrass Litter in a Pasture Soil. <i>Journal of Environmental Quality</i> , 2013, 42, 323-331.	2.0	9
125	Soil type, bulk density and drainage effects on relative gas diffusivity and N <sub>2</sub> O emissions. <i>Soil Research</i> , 2020, 58, 726.	1.1	9
126	Temperature alters dicyandiamide (DCD) efficacy for multiple reactive nitrogen species in urea-amended soils: Experiments and modeling. <i>Soil Biology and Biochemistry</i> , 2021, 160, 108341.	8.8	9

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127	Soil microbial respiration responses to changing temperature and substrate availability in fertile grassland. <i>Soil Research</i> , 2010, 48, 395.	1.1	8
128	N <sub>2</sub> production via aerobic pathways may play a significant role in nitrogen cycling in upland soils. <i>Soil Biology and Biochemistry</i> , 2017, 108, 36-40.	8.8	8
129	Global Research Alliance N <sub>2</sub> O chamber methodology guidelines: Recommendations for air sample collection, storage, and analysis. <i>Journal of Environmental Quality</i> , 2020, 49, 1110-1125.	2.0	8
130	Using stable isotopes to follow excreta N dynamics and N <sub>2</sub> O emissions in animal production systems. <i>Animal</i> , 2013, 7, 418-426.	3.3	7
131	Nitric and nitrous oxide fluxes following bovine urine deposition to summer-grazed pasture. <i>New Zealand Journal of Agricultural Research</i> , 2014, 57, 136-147.	1.6	7
132	15N recoveries from ruminant urine patches on three forage types. <i>Plant and Soil</i> , 2017, 417, 453-465.	3.7	7
133	Perturbation-free measurement of in situ di-nitrogen emissions from denitrification in nitrate-rich aquatic ecosystems. <i>Water Research</i> , 2017, 109, 94-101.	11.3	7
134	A hydrochemically guided landscape classification system for modelling spatial variation in multiple water quality indices: Process-attribute mapping. <i>Science of the Total Environment</i> , 2019, 672, 815-833.	8.0	7
135	Efficacy of aucubin as a nitrification inhibitor assessed in two Canterbury field trials. <i>New Zealand Journal of Agricultural Research</i> , 2020, 63, 73-86.	1.6	7
136	Rice root Fe plaque enhances oxidation of microbially available organic carbon via Fe(III) reduction-coupled microbial respiration. <i>Soil Biology and Biochemistry</i> , 2022, 167, 108568.	8.8	7
137	Effects of dairy shed effluent dry matter content on ammonia and nitrous oxide emissions from a pasture soil. <i>Journal of Agricultural Science</i> , 2018, 156, 1070-1078.	1.3	6
138	Ruminant urine patch nitrification and N <sub>2</sub> O flux: effects of urine aucubin rate in a laboratory trial. <i>New Zealand Journal of Agricultural Research</i> , 2020, 63, 65-72.	1.6	6
139	Impacts of pasture species and ruminant urine on N <sub>2</sub> O emissions and nitrogen transforming microbial communities in soil mesocosms. <i>New Zealand Journal of Agricultural Research</i> , 2022, 65, 42-62.	1.6	6
140	Competition and community succession link N transformation and greenhouse gas emissions in urine patches. <i>Science of the Total Environment</i> , 2021, 779, 146318.	8.0	6
141	Soil gas diffusivity and soil moisture effects on N <sub>2</sub> O emissions from repacked pasture soils. <i>Soil Science Society of America Journal</i> , 2020, 84, 371-386.	2.2	6
142	In situ nitrous oxide and dinitrogen fluxes from a grazed pasture soil following cow urine application at two nitrogen rates. <i>Science of the Total Environment</i> , 2022, 838, 156473.	8.0	6
143	Sources of N <sub>2</sub> O following simulated animal treading of ungrazed pastures. <i>New Zealand Journal of Agricultural Research</i> , 2014, 57, 202-215.	1.6	5
144	Increasing soil aeration reduces mitigation efficacy of dicyandiamide when targeted at ruminant urine-derived N <sub>2</sub> O emissions. <i>New Zealand Journal of Agricultural Research</i> , 2015, 58, 441-453.	1.6	5

#	ARTICLE	IF	CITATIONS
145	Urea treatment decouples intrinsic pH control over N <sub>2</sub> O emissions in soils. <i>Soil Biology and Biochemistry</i> , 2021, 163, 108461.	8.8	5
146	Net ecosystem carbon exchange for Bermuda grass growing in mesocosms as affected by irrigation frequency. <i>Pedosphere</i> , 2022, 32, 393-401.	4.0	5
147	Real-Time, High-Resolution Quantitative Measurement of Multiple Soil Gas Emissions. <i>Journal of Environmental Quality</i> , 2002, 31, 515.	2.0	4
148	Denitrification in the shallow groundwater system of a lowland catchment: A laboratory study. <i>Catena</i> , 2015, 131, 109-118.	5.0	4
149	Determining the nitrous oxide transfer velocity and emission factor of an agricultural drain. <i>New Zealand Journal of Agricultural Research</i> , 2017, 60, 277-286.	1.6	4
150	Characterization of Grainâ€”Size Distribution, Thermal Conductivity, and Gas Diffusivity in Variably Saturated Binary Sand Mixtures. <i>Vadose Zone Journal</i> , 2018, 17, 1-13.	2.2	4
151	Soil nitrous oxide emissions from grassland: Potential inhibitor effect of hippuric acid. <i>Journal of Plant Nutrition and Soil Science</i> , 2019, 182, 40-47.	1.9	4
152	Irrigation Scheduling with Soil Gas Diffusivity as a Decision Tool to Mitigate N <sub>2</sub> O Emissions from a Urine-Affected Pasture. <i>Agriculture (Switzerland)</i> , 2021, 11, 443.	3.1	3
153	Nitrous oxide responses to long-term phosphorus application on pasture soil. <i>New Zealand Journal of Agricultural Research</i> , 2023, 66, 171-188.	1.6	3
154	Research and Application of Biochar in New Zealand. <i>SSSA Special Publication Series</i> , 2015, , 423-443.	0.2	2
155	Application methods of tracers for N<sub>2</sub>O source determination lead to inhomogeneous distribution in field plots. <i>Analytical Science Advances</i> , 2020, 1, 221-232.	2.8	2
156	Can ruminant urine-N rate and plants affect nitrate leaching and its isotopic composition?. <i>New Zealand Journal of Agricultural Research</i> , 2020, 63, 87-105.	1.6	1
157	Ammonium sorption and ammonia inhibition of nitrite-oxidizing bacteria explain contrasting soil N <sub>2</sub> O production. , 0, .		1
158	Role of plants in reducing nitrogen losses. <i>New Zealand Journal of Agricultural Research</i> , 2020, 63, 1-2.	1.6	1
159	Reply to Elberling etÂ”al.'s (2013) comments on “Abiotic processes dominate CO <sub>2</sub> fluxes in Antarctic soils” ( <i>Soil Biol. Biochem.</i> 53, 99â€”111). <i>Soil Biology and Biochemistry</i> , 2014, 75, 312-313.	8.8	0
160	Recent advances in grazed pasture-based dairy science. <i>New Zealand Journal of Agricultural Research</i> , 2021, 64, 1-2.	1.6	0
161	Wetting and drainage cycles in two New Zealand soil types: Effects on relative gas diffusivity and N <sub>2</sub> O emissions. <i>Geoderma Regional</i> , 2022, , e00504.	2.1	0