

Tim Clough

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5257134/publications.pdf>

Version: 2024-02-01

161
papers

7,477
citations

76322

40
h-index

64791

79
g-index

168
all docs

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 ₃ -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 ₂ 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 ₂ 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 ¹⁵ 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 ₂ O) concentrations and estimates of N ₂ O emissions from a spring-fed river: implications for IPCC methodology. <i>Global Change Biology</i> , 2007, 13, 1016-1027. | 9.5 | 89 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Effect of elevated CO ₂ 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 ₂ O and N ₂ 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 ₂ 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 ₂ O Emissions to pH, and Denitrification to C Mineralization. <i>PLoS ONE</i> , 2016, 11, e0151713. | 2.5 | 62 |
| 27 | Abiotic processes dominate CO ₂ 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 ₂ 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 ¹⁵ N-labelled N ₂ O into soil columns: a promising method to examine the fate of N ₂ 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 ₂ 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 ₂ 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 ₂ 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 ₂ 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 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Using near-continuous measurements of N ₂ O emission from urine-affected soil to guide manual gas sampling regimes. <i>New Zealand Journal of Agricultural Research</i> , 2013, 56, 60-76. | 1.6 | 51 |
| 38 | Advances in understanding nitrogen flows and transformations: gaps and research pathways. <i>Journal of Agricultural Science</i> , 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. <i>Soil Research</i> , 2003, 41, 421. | 1.1 | 48 |
| 40 | Accounting for the utilization of a N ₂ O mitigation tool in the IPCC inventory methodology for agricultural soils. <i>Nutrient Cycling in Agroecosystems</i> , 2007, 78, 1-14. | 2.2 | 44 |
| 41 | Influence of soil moisture on codenitrification fluxes from a urea-affected pasture soil. <i>Scientific Reports</i> , 2017, 7, 2185. | 3.3 | 44 |
| 42 | Transformations of inorganic-N in soil leachate under differing storage conditions. <i>Soil Biology and Biochemistry</i> , 2001, 33, 1473-1480. | 8.8 | 43 |
| 43 | Irrigation of DOC-rich liquid promotes potential denitrification rate and decreases N ₂ O/(N ₂ O+N ₂) product ratio in a 0-2m soil profile. <i>Soil Biology and Biochemistry</i> , 2017, 106, 1-8. | 8.8 | 43 |
| 44 | Influence of soil bulk density and matric potential on microbial dynamics, inorganic N transformations, N ₂ O and N ₂ fluxes following urea deposition. <i>Soil Biology and Biochemistry</i> , 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. <i>Agriculture, Ecosystems and Environment</i> , 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. <i>Journal of Environmental Quality</i> , 2016, 45, 1169-1177. | 2.0 | 41 |
| 47 | Explaining the doubling of N ₂ O emissions under elevated CO ₂ in the Giessen FACE via in-field ¹⁵ N tracing. <i>Global Change Biology</i> , 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. <i>New Zealand Journal of Agricultural Research</i> , 2019, 62, 150-172. | 1.6 | 41 |
| 49 | Soil Respiratory Quotient Determined via Barometric Process Separation Combined with Nitrogen-15 Labeling. <i>Soil Science Society of America Journal</i> , 2004, 68, 1610-1615. | 2.2 | 40 |
| 50 | Comparison of measured and EF _{5-r} -derived N ₂ O fluxes from a spring-fed river. <i>Global Change Biology</i> , 2006, 12, 352-363. | 9.5 | 40 |
| 51 | Potential for forage diet manipulation in New Zealand pasture ecosystems to mitigate ruminant urine derived N ₂ O emissions: a review. <i>New Zealand Journal of Agricultural Research</i> , 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. <i>Journal of Environmental Quality</i> , 2017, 46, 514-521. | 2.0 | 39 |
| 53 | Comparison of measured and EF _{5-r} -derived N ₂ O fluxes from a spring-fed river. <i>Global Change Biology</i> , 2006, 12, 477-488. | 9.5 | 38 |
| 54 | Hippuric acid and benzoic acid inhibition of urine derived N ₂ O emissions from soil. <i>Global Change Biology</i> , 2009, 15, 2067-2077. | 9.5 | 38 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 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 ₂ O and CO ₂ 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 ₂ O and N ₂ 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 ₂ O and N ₂ 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 & Technology</i> , 2019, 53, 2002-2012. | 10.0 | 31 |
| 66 | Measuring denitrification and the N ₂ O:(N ₂ O + N ₂) 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 _x and N ₂ 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 ₂ O reductase activity as affected by nitrogen fertilization and implications for the N ₂ O/(N ₂ O+ \dot{N} ₂) product ratio and N ₂ 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 ₂ O chamber methodology guidelines: Design considerations. <i>Journal of Environmental Quality</i> , 2020, 49, 1081-1091. | 2.0 | 27 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 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 Nitrogen ¹⁵ 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 ₂ 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 Soil ¹⁵ N Water Characteristics, Soil ¹⁵ N Gas Diffusivity, and Emissions of N ₂ O and N ₂ from a Re ¹⁵ N-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 ryegrass ¹⁵ N plantain ¹⁵ N 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 ₂ O emissions in a permanent grassland soil. <i>Soil</i> , 2016, 2, 601-614. | 4.9 | 18 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 91 | Soil Gas Diffusivity and Soil Moisture effects on N ₂ 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 ₂ 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 ₂ 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 ₂ 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 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 ₃ , N ₂ O and N ₂ losses. Soil Research, 2019, 57, 670. | 1.1 | 16 |
| 101 | N ₂ O and N ₂ gas fluxes, soil gas pressures, and ebullition events following irrigation of ¹⁵ NO ₃ -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 <i>L.Âscoparium</i> , <i>K.Ârobusta</i> and <i>P.Âradiata</i> 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 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 109 | Identification and verification of key functional groups of biochar influencing soil N ₂ 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 ($\delta^{18}O$, $\delta^{15}N$) in freshwater systems. <i>Science of the Total Environment</i> , 2019, 651, 2228-2234. | 8.0 | 13 |
| 115 | Global Research Alliance N ₂ 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 ₂ 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 ₂ 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 ₂ 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 ₂ 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 ¹⁵ 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 ₂ 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 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 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 ₂ 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 ₂ 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 ₂ 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 ₂ 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 ₂ 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 ₂ 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 ₂ 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 ₂ 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 ₂ 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 Grain 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 ₂ 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 ₂ 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 ₂ 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 et al.'s (2013) comments on "Abiotic processes dominate CO ₂ fluxes in Antarctic soils" (<i>Soil Biol. Biochem.</i> 53, 99-111). <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 ₂ O emissions. <i>Geoderma Regional</i> , 2022, , e00504. | 2.1 | 0 |