

# Lukas Van Zwieten

## List of Publications by Year in descending order

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Version: 2024-02-01

163  
papers

15,929  
citations

28274

55  
h-index

18130

120  
g-index

166  
all docs

166  
docs citations

166  
times ranked

13603  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | A communal catalogue reveals Earth's multiscale microbial diversity. <i>Nature</i> , 2017, 551, 457-463.  | 27.8 | 1,942     |
| 2  | Agronomic values of greenwaste biochar as a soil amendment. <i>Soil Research</i> , 2007, 45, 629.   | 1.1  | 1,404     |
| 3  | Effects of biochar from slow pyrolysis of papermill waste on agronomic performance and soil fertility. <i>Plant and Soil</i> , 2010, 327, 235-246.  | 3.7  | 1,376     |
| 4  | An investigation into the reactions of biochar in soil. <i>Soil Research</i> , 2010, 48, 501.   | 1.1  | 840       |
| 5  | Using poultry litter biochars as soil amendments. <i>Soil Research</i> , 2008, 46, 437.   | 1.1  | 814       |
| 6  | Biochar's role in mitigating soil nitrous oxide emissions: A review and meta-analysis. <i>Agriculture, Ecosystems and Environment</i> , 2014, 191, 5-16.  | 5.3  | 746       |
| 7  | Biochar Application to Soil. <i>Advances in Agronomy</i> , 2011, , 103-143.   | 5.2  | 450       |
| 8  | Impact of agricultural inputs on soil organisms—a review. <i>Soil Research</i> , 2006, 44, 379.   | 1.1  | 374       |
| 9  | Influence of biochars on flux of N <sub>2</sub> O and CO <sub>2</sub> from Ferrosol. <i>Soil Research</i> , 2010, 48, 555.  | 1.1  | 337       |
| 10 | How biochar works, and when it doesn't: A review of mechanisms controlling soil and plant responses to biochar. <i>GCB Bioenergy</i> , 2021, 13, 1731-1764.   | 5.6  | 286       |
| 11 | A concise review of biochar application to agricultural soils to improve soil conditions and fight pollution. <i>Journal of Environmental Management</i> , 2018, 228, 429-440.                          | 7.8  | 250       |
| 12 | Multifunctional applications of biochar beyond carbon storage. <i>International Materials Reviews</i> , 2022, 67, 150-200.  | 19.3 | 245       |
| 13 | Biochar built soil carbon over a decade by stabilizing rhizodeposits. <i>Nature Climate Change</i> , 2017, 7, 371-376.  | 18.8 | 232       |
| 14 | Nanoscale organo-mineral reactions of biochars in ferrosol: an investigation using microscopy. <i>Plant and Soil</i> , 2012, 357, 369-380.  | 3.7  | 209       |
| 15 | Marked changes in herbicide sorption-desorption upon ageing of biochars in soil. <i>Journal of Hazardous Materials</i> , 2012, 231-232, 70-78.  | 12.4 | 200       |
| 16 | Effect of biochar amendment on the soil-atmosphere exchange of greenhouse gases from an intensive subtropical pasture in northern New South Wales, Australia. <i>Plant and Soil</i> , 2011, 345, 47-58. | 3.7  | 193       |
| 17 | Comparative analysis of the microbial communities in agricultural soil amended with enhanced biochars or traditional fertilisers. <i>Agriculture, Ecosystems and Environment</i> , 2014, 191, 73-82.    | 5.3  | 171       |
| 18 | An incubation study investigating the mechanisms that impact N <sub>2</sub> O flux from soil following biochar application. <i>Agriculture, Ecosystems and Environment</i> , 2014, 191, 53-62.          | 5.3  | 170       |

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|----|--|------|-----------|
| 19 | A glasshouse study on the interaction of low mineral ash biochar with nitrogen in a sandy soil. <i>Soil Research</i> , 2010, 48, 569.  | 1.1  | 167       |
| 20 | The molar H:C <sub>org</sub> ratio of biochar is a key factor in mitigating N <sub>2</sub> O emissions from soil. <i>Agriculture, Ecosystems and Environment</i> , 2015, 202, 135-138.                           | 5.3  | 164       |
| 21 | Biochar lowers ammonia emission and improves nitrogen retention in poultry litter composting. <i>Waste Management</i> , 2017, 61, 129-137.   | 7.4  | 155       |
| 22 | Changes in microbial biomass and the metabolic quotient with biochar addition to agricultural soils: A Meta-analysis. <i>Agriculture, Ecosystems and Environment</i> , 2017, 239, 80-89.                         | 5.3  | 143       |
| 23 | Wood biochar increases nitrogen retention in field settings mainly through abiotic processes. <i>Soil Biology and Biochemistry</i> , 2015, 90, 232-240.  | 8.8  | 123       |
| 24 | The Electrochemical Properties of Biochars and How They Affect Soil Redox Properties and Processes. <i>Agronomy</i> , 2015, 5, 322-340.  | 3.0  | 122       |
| 25 | Contrasting effects of manure and green waste biochars on the properties of an acidic ferralsol and productivity of a subtropical pasture. <i>Plant and Soil</i> , 2013, 366, 213-227.                           | 3.7  | 121       |
| 26 | Impact of glyphosate on soil microbial biomass and respiration: A meta-analysis. <i>Soil Biology and Biochemistry</i> , 2016, 92, 50-57.   | 8.8  | 119       |
| 27 | Biochar increases nitrogen retention and lowers greenhouse gas emissions when added to composting poultry litter. <i>Waste Management</i> , 2017, 61, 138-149.   | 7.4  | 119       |
| 28 | Carbon-nitrogen isotope coupling of soil organic matter in a karst region under land use change, Southwest China. <i>Agriculture, Ecosystems and Environment</i> , 2020, 301, 107027.                            | 5.3  | 108       |
| 29 | The effects of short term, long term and reapplication of biochar on soil bacteria. <i>Science of the Total Environment</i> , 2018, 636, 142-151.  | 8.0  | 105       |
| 30 | Plant growth responses to biochar addition: an Australian soils perspective. <i>Biology and Fertility of Soils</i> , 2014, 50, 1035-1045.  | 4.3  | 102       |
| 31 | Impact of Herbicides on Soil Biology and Function. <i>Advances in Agronomy</i> , 2016, , 133-220.  | 5.2  | 98        |
| 32 | Enhanced biological N <sub>2</sub> fixation and yield of faba bean ( <i>Vicia faba</i> L.) in an acid soil following biochar addition: dissection of causal mechanisms. <i>Plant and Soil</i> , 2015, 395, 7-20. | 3.7  | 97        |
| 33 | Influence of copper fungicide residues on occurrence of earthworms in avocado orchard soils. <i>Science of the Total Environment</i> , 2004, 329, 29-41.   | 8.0  | 96        |
| 34 | Is current biochar research addressing global soil constraints for sustainable agriculture?. <i>Agriculture, Ecosystems and Environment</i> , 2016, 226, 25-32.  | 5.3  | 96        |
| 35 | Oil mallee biochar improves soil structural properties—A study with x-ray micro-CT. <i>Agriculture, Ecosystems and Environment</i> , 2014, 191, 142-149.   | 5.3  | 94        |
| 36 | Designing advanced biochar products for maximizing greenhouse gas mitigation potential. <i>Critical Reviews in Environmental Science and Technology</i> , 2016, 46, 1367-1401.                                   | 12.8 | 86        |

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|----|--|-----|-----------|
| 37 | Nanoscale analyses of the surface structure and composition of biochars extracted from field trials or after co-composting using advanced analytical electron microscopy. <i>Geoderma</i> , 2017, 294, 70-79.  | 5.1 | 84        |
| 38 | A re-evaluation of the agronomic effectiveness of the nitrification inhibitors DCD and DMPP and the urease inhibitor NBPT. <i>Agriculture, Ecosystems and Environment</i> , 2018, 252, 69-73.  | 5.3 | 81        |
| 39 | Biochar-based fertilizer: Supercharging root membrane potential and biomass yield of rice. <i>Science of the Total Environment</i> , 2020, 713, 136431.  | 8.0 | 78        |
| 40 | Phytoremediation of an arsenic-contaminated site using <i>Pteris vittata</i> L. and <i>Pityrogramma calomelanos</i> var. <i>austroamericana</i> : a long-term study. <i>Environmental Science and Pollution Research</i> , 2012, 19, 3506-3515.          | 5.3 | 76        |
| 41 | Terra Preta Australis: Reassessing the carbon storage capacity of temperate soils. <i>Agriculture, Ecosystems and Environment</i> , 2011, 140, 137-147.  | 5.3 | 75        |
| 42 | Plant-biochar interactions drive the negative priming of soil organic carbon in an annual ryegrass field system. <i>Soil Biology and Biochemistry</i> , 2015, 90, 111-121.   | 8.8 | 75        |
| 43 | Combined effects of biochar and fertilizer applications on yield: A review and meta-analysis. <i>Science of the Total Environment</i> , 2022, 808, 152073.   | 8.0 | 75        |
| 44 | Feeding Biochar to Cows: An Innovative Solution for Improving Soil Fertility and Farm Productivity. <i>Pedosphere</i> , 2015, 25, 666-679.   | 4.0 | 74        |
| 45 | Rusty sink of rhizodeposits and associated keystone microbiomes. <i>Soil Biology and Biochemistry</i> , 2020, 147, 107840.   | 8.8 | 73        |
| 46 | A meta-analysis and critical evaluation of influencing factors on soil carbon priming following biochar amendment. <i>Journal of Soils and Sediments</i> , 2018, 18, 1507-1517.  | 3.0 | 70        |
| 47 | Effects of 4-nonylphenol and 17 $\beta$ -ethynylestradiol exposure in the Sydney rock oyster, <i>Saccostrea glomerata</i> : Vitellogenin induction and gonadal development. <i>Aquatic Toxicology</i> , 2008, 88, 39-47.                                 | 4.0 | 68        |
| 48 | The potential impact of long-term copper fungicide usage on soil microbial biomass and microbial activity in an avocado orchard. <i>Soil Research</i> , 2002, 40, 749.   | 1.1 | 63        |
| 49 | <i>Spartina alterniflora</i> invasion controls organic carbon stocks in coastal marsh and mangrove soils across tropics and subtropics. <i>Global Change Biology</i> , 2021, 27, 1627-1644.  | 9.5 | 62        |
| 50 | Chemical and structural analysis of enhanced biochars: Thermally treated mixtures of biochar, chicken litter, clay and minerals. <i>Chemosphere</i> , 2013, 91, 35-40.   | 8.2 | 61        |
| 51 | Lowering N <sub>2</sub> O emissions from soils using eucalypt biochar: the importance of redox reactions. <i>Scientific Reports</i> , 2015, 5, 16773.  | 3.3 | 61        |
| 52 | Soil and foliar nutrient and nitrogen isotope composition ( $\delta^{15}\text{N}$ ) at 5 years after poultry litter and green waste biochar amendment in a macadamia orchard. <i>Environmental Science and Pollution Research</i> , 2015, 22, 3803-3809. | 5.3 | 60        |
| 53 | Influence of arsenic co-contamination on DDT breakdown and microbial activity. <i>Environmental Pollution</i> , 2003, 124, 331-339.  | 7.5 | 58        |
| 54 | Developing More Effective Enhanced Biochar Fertilisers for Improvement of Pepper Yield and Quality. <i>Pedosphere</i> , 2015, 25, 703-712.   | 4.0 | 58        |

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|----|---|------|-----------|
| 55 | An effective biochar-based slow-release fertilizer for reducing nitrogen loss in paddy fields. <i>Journal of Soils and Sediments</i> , 2020, 20, 3027-3040.   | 3.0  | 58        |
| 56 | Pyrolysing poultry litter reduces N <sub>2</sub> O and CO <sub>2</sub> fluxes. <i>Science of the Total Environment</i> , 2013, 465, 279-287.  | 8.0  | 57        |
| 57 | Retention capacity of biochar-amended New Zealand dairy farm soil for an estrogenic steroid hormone and its primary metabolite. <i>Soil Research</i> , 2010, 48, 648.   | 1.1  | 55        |
| 58 | Nutrient stoichiometry and labile carbon content of organic amendments control microbial biomass and carbon-use efficiency in a poorly structured sodic-subsoil. <i>Biology and Fertility of Soils</i> , 2020, 56, 219-233. | 4.3  | 52        |
| 59 | Towards a better understanding of the role of Fe cycling in soil for carbon stabilization and degradation. , 2022, 1, .   |      | 51        |
| 60 | Opportunities and constraints for biochar technology in Australian agriculture: looking beyond carbon sequestration. <i>Soil Research</i> , 2014, 52, 739.  | 1.1  | 49        |
| 61 | Nitrification (DMPP) and urease (NBPT) inhibitors had no effect on pasture yield, nitrous oxide emissions, or nitrate leaching under irrigation in a hot-dry climate. <i>Soil Research</i> , 2016, 54, 675.                 | 1.1  | 49        |
| 62 | Priming, stabilization and temperature sensitivity of native SOC is controlled by microbial responses and physicochemical properties of biochar. <i>Soil Biology and Biochemistry</i> , 2021, 154, 108139.                  | 8.8  | 48        |
| 63 | Biochar as a Geoengineering Climate Solution: Hazard Identification and Risk Management. <i>Critical Reviews in Environmental Science and Technology</i> , 2012, 42, 225-250.   | 12.8 | 47        |
| 64 | Phytolith accumulation in broadleaf and conifer forests of northern China: Implications for phytolith carbon sequestration. <i>Geoderma</i> , 2018, 312, 36-44.   | 5.1  | 47        |
| 65 | Biochar increases soil organic carbon, avocado yields and economic return over 4 years of cultivation. <i>Science of the Total Environment</i> , 2020, 724, 138153.   | 8.0  | 46        |
| 66 | A critical review of biochar-based nitrogen fertilizers and their effects on crop production and the environment. <i>Biochar</i> , 2022, 4, .   | 12.6 | 46        |
| 67 | Sugarcane bagasse biochars impact respiration and greenhouse gas emissions from a latosol. <i>Journal of Soils and Sediments</i> , 2017, 17, 632-640.   | 3.0  | 45        |
| 68 | In Situ Persistence and Migration of Biochar Carbon and Its Impact on Native Carbon Emission in Contrasting Soils under Managed Temperate Pastures. <i>PLoS ONE</i> , 2015, 10, e0141560.                                   | 2.5  | 45        |
| 69 | Temperature sensitivity and priming of organic matter with different stabilities in a Vertisol with aged biochar. <i>Soil Biology and Biochemistry</i> , 2017, 115, 346-356.  | 8.8  | 44        |
| 70 | The characteristics of rhizosphere microbes associated with plants in arsenic-contaminated soils from cattle dip sites. <i>Science of the Total Environment</i> , 2007, 378, 331-342.                                       | 8.0  | 43        |
| 71 | A Critical Review of Methods for Analyzing Freshwater Eutrophication. <i>Water (Switzerland)</i> , 2021, 13, 225.   | 2.7  | 42        |
| 72 | Impacts of management on soil biota in Vertosols supporting the broadacre grains industry in northern Australia. <i>Soil Research</i> , 2006, 44, 433.  | 1.1  | 39        |

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|----|---|------|-----------|
| 73 | Short-term effects of organo-mineral biochar and organic fertilisers on nitrogen cycling, plant photosynthesis, and nitrogen use efficiency. <i>Journal of Soils and Sediments</i> , 2017, 17, 2763-2774.   | 3.0  | 39        |
| 74 | Crop-season and residual effects of sequentially applied mineral enhanced biochar and N fertiliser on crop yield, soil chemistry and microbial communities. <i>Agriculture, Ecosystems and Environment</i> , 2018, 255, 52-61.  | 5.3  | 36        |
| 75 | Soil Microbial Community Structure Shifts Induced by Biochar and Biochar-Based Fertilizer Amendment to Karst Calcareous Soil. <i>Soil Science Society of America Journal</i> , 2019, 83, 398-408.   | 2.2  | 36        |
| 76 | Abiotic and biotic regulation on carbon mineralization and stabilization in paddy soils along iron oxide gradients. <i>Soil Biology and Biochemistry</i> , 2021, 160, 108312.   | 8.8  | 36        |
| 77 | Biochar carbon dynamics in physically separated fractions and microbial use efficiency in contrasting soils under temperate pastures. <i>Soil Biology and Biochemistry</i> , 2018, 116, 399-409.  | 8.8  | 35        |
| 78 | Probing the nature of soil organic matter. <i>Critical Reviews in Environmental Science and Technology</i> , 2022, 52, 4072-4093.   | 12.8 | 35        |
| 79 | Phytolith-rich straw application and groundwater table management over 36 years affect the soil-plant silicon cycle of a paddy field. <i>Plant and Soil</i> , 2020, 454, 343-358.   | 3.7  | 34        |
| 80 | Subsoil application of compost improved sugarcane yield through enhanced supply and cycling of soil labile organic carbon and nitrogen in an acidic soil at tropical Australia. <i>Soil and Tillage Research</i> , 2018, 180, 73-81.  | 5.6  | 33        |
| 81 | Priming of soil organic carbon induced by sugarcane residues and its biochar control the source of nitrogen for plant uptake: A dual <sup>13</sup> C and <sup>15</sup> N isotope three-source-partitioning study. <i>Soil Biology and Biochemistry</i> , 2020, 146, 107792. | 8.8  | 31        |
| 82 | Arbuscular mycorrhizal fungi and goethite promote carbon sequestration via hyphal-aggregate mineral interactions. <i>Soil Biology and Biochemistry</i> , 2021, 162, 108417.   | 8.8  | 31        |
| 83 | Sorption of Pb(II) onto biochar is enhanced through co-sorption of dissolved organic matter. <i>Science of the Total Environment</i> , 2022, 825, 153686.   | 8.0  | 30        |
| 84 | Faba bean is less susceptible to fertiliser N impacts on biological N <sub>2</sub> fixation than chickpea in monoculture and intercropping systems. <i>Biology and Fertility of Soils</i> , 2016, 52, 271-276.  | 4.3  | 29        |
| 85 | The interactive effects of dolomite application and straw incorporation on soil N <sub>2</sub> O emissions. <i>European Journal of Soil Science</i> , 2018, 69, 502-511.  | 3.9  | 29        |
| 86 | Estrogen mediated effects in the Sydney rock oyster, <i>Saccostrea glomerata</i> , following field exposures to sewage effluent containing estrogenic compounds and activity. <i>Aquatic Toxicology</i> , 2012, 120-121, 99-108.  | 4.0  | 28        |
| 87 | Wheat straw biochar application increases ammonia volatilization from an urban compacted soil giving a short-term reduction in fertilizer nitrogen use efficiency. <i>Journal of Soils and Sediments</i> , 2019, 19, 1624-1631.   | 3.0  | 28        |
| 88 | Soil type regulates carbon and nitrogen stoichiometry and mineralization following biochar or nitrogen addition. <i>Science of the Total Environment</i> , 2021, 753, 141645.   | 8.0  | 28        |
| 89 | Phytoremediation Potential of <i>Pityrogramma Calomelanos</i> Var. <i>Austroamericana</i> and <i>Pteris Vittata</i> L. Grown at a Highly Variable Arsenic Contaminated Site. <i>International Journal of Phytoremediation</i> , 2011, 13, 912-932.                          | 3.1  | 26        |
| 90 | The long-term role of organic amendments in addressing soil constraints to production. <i>Nutrient Cycling in Agroecosystems</i> , 2018, 111, 99-102.   | 2.2  | 26        |

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|-----|--|-----|-----------|
| 91  | Short-term biochar manipulation of microbial nitrogen transformation in wheat rhizosphere of a metal contaminated Inceptisol from North China plain. <i>Science of the Total Environment</i> , 2018, 640-641, 1287-1296. | 8.0 | 26        |
| 92  | Balanced nutrient stoichiometry of organic amendments enhances carbon priming in a poorly structured sodic subsoil. <i>Soil Biology and Biochemistry</i> , 2020, 145, 107800.  | 8.8 | 26        |
| 93  | The accumulation of phytolith-occluded carbon in soils of different grasslands. <i>Journal of Soils and Sediments</i> , 2017, 17, 2420-2427.   | 3.0 | 25        |
| 94  | Soil organic matter formation is controlled by the chemistry and bioavailability of organic carbon inputs across different land uses. <i>Science of the Total Environment</i> , 2021, 770, 145307.                       | 8.0 | 25        |
| 95  | Rapid Degradation of Atrazine by <i>Rhodococcus</i> sp. NI86/21 and by an Atrazine-Perfused Soil. <i>Journal of Agricultural and Food Chemistry</i> , 1995, 43, 1377-1382.   | 5.2 | 24        |
| 96  | Utilization of Biochar in Sugarcane and Sugar-Industry Management. <i>Sugar Tech</i> , 2012, 14, 321-326.  | 1.8 | 23        |
| 97  | The accumulation of rhizodeposits in organo-mineral fractions promoted biochar-induced negative priming of native soil organic carbon in Ferralsol. <i>Soil Biology and Biochemistry</i> , 2018, 118, 91-96.             | 8.8 | 23        |
| 98  | Phosphorus speciation and bioavailability in diverse biochars. <i>Plant and Soil</i> , 2019, 443, 233-244.   | 3.7 | 22        |
| 99  | Biochar-based fertilizer decreased while chemical fertilizer increased soil N <sub>2</sub> O emissions in a subtropical Moso bamboo plantation. <i>Catena</i> , 2021, 202, 105257.                                       | 5.0 | 22        |
| 100 | Biochar accelerates soil organic carbon mineralization via rhizodeposit-activated Actinobacteria. <i>Biology and Fertility of Soils</i> , 2022, 58, 565-577.   | 4.3 | 22        |
| 101 | No evidence for higher agronomic N use efficiency or lower nitrous oxide emissions from enhanced efficiency fertilisers in aerobic subtropical rice. <i>Field Crops Research</i> , 2018, 225, 47-54.                     | 5.1 | 21        |
| 102 | Is sustainability certification for biochar the answer to environmental risks?. <i>Pesquisa Agropecuaria Brasileira</i> , 2012, 47, 637-648.   | 0.9 | 20        |
| 103 | Improving the statistical preparation for measuring soil N <sub>2</sub> O flux by closed chamber. <i>Science of the Total Environment</i> , 2013, 465, 166-172.  | 8.0 | 20        |
| 104 | The stoichiometric C-Fe ratio regulates glucose mineralization and stabilization via microbial processes. <i>Geoderma</i> , 2021, 383, 114769.   | 5.1 | 20        |
| 105 | Atrazine degradation by encapsulated <i>Rhodococcus erythropolis</i> NI86/21. <i>Journal of Applied Microbiology</i> , 2005, 99, 767-775.  | 3.1 | 19        |
| 106 | Silicon accumulation controls carbon cycle in wetlands through modifying nutrients stoichiometry and lignin synthesis of <i>Phragmites australis</i> . <i>Environmental and Experimental Botany</i> , 2020, 175, 104058. | 4.2 | 19        |
| 107 | Biochar in Soil for Climate Change Mitigation and Adaptation. <i>Soil Biology</i> , 2011, , 345-368.   | 0.8 | 19        |
| 108 | Soil parent material controls organic matter stocks and retention patterns in subtropical China. <i>Journal of Soils and Sediments</i> , 2020, 20, 2426-2438.  | 3.0 | 18        |

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|-----|---|------|-----------|
| 109 | Enhancing cell survival of atrazine degrading <i>Rhodococcus erythropolis</i> NI86/21 cells encapsulated in alginate beads. <i>Journal of Applied Microbiology</i> , 2007, 102, 212-220.  | 3.1  | 17        |
| 110 | Influence of ameliorating soil acidity with dolomite on the priming of soil C content and CO <sub>2</sub> emission. <i>Environmental Science and Pollution Research</i> , 2017, 24, 9241-9250.                                    | 5.3  | 17        |
| 111 | Effect of glyphosate and a commercial formulation on soil functionality assessed by substrate induced respiration and enzyme activity. <i>European Journal of Soil Biology</i> , 2018, 85, 64-72.                                 | 3.2  | 17        |
| 112 | Phytotoxicity of soilborne glyphosate residues is influenced by the method of phosphorus fertiliser application. <i>Plant and Soil</i> , 2018, 422, 455-465.  | 3.7  | 17        |
| 113 | Bioavailable DDT residues in sediments: Laboratory assessment of ageing effects using semi-permeable membrane devices. <i>Environmental Pollution</i> , 2008, 153, 110-118.   | 7.5  | 16        |
| 114 | Wetting-drying cycles during a rice-wheat crop rotation rapidly (im)mobilize recalcitrant soil phosphorus. <i>Journal of Soils and Sediments</i> , 2020, 20, 3921-3930.   | 3.0  | 16        |
| 115 | Spatial distribution of plant-available silicon and its controlling factors in paddy fields of China. <i>Geoderma</i> , 2021, 401, 115215.  | 5.1  | 16        |
| 116 | Impact of climate and lithology on soil phytolith-occluded carbon accumulation in eastern China. <i>Journal of Soils and Sediments</i> , 2017, 17, 481-490.   | 3.0  | 15        |
| 117 | Influence of growth stage and seed nitrogen on B values and potential contributions to error in estimating biological N <sub>2</sub> fixation using the 15N natural abundance method. <i>Plant and Soil</i> , 2018, 425, 389-399. | 3.7  | 15        |
| 118 | Shifts in the bacterial community along with root-associated compartments of maize as affected by goethite. <i>Biology and Fertility of Soils</i> , 2020, 56, 1201-1210.  | 4.3  | 15        |
| 119 | Vertical distributions of organic carbon fractions under paddy and forest soils derived from black shales: Implications for potential of long-term carbon storage. <i>Catena</i> , 2021, 198, 105056.                             | 5.0  | 15        |
| 120 | Pinto peanut cover crop nitrogen contributions and potential to mitigate nitrous oxide emissions in subtropical coffee plantations. <i>Science of the Total Environment</i> , 2019, 656, 108-117.                                 | 8.0  | 14        |
| 121 | Application of woody biochar and woody mulch to mitigate nitrous oxide emissions from a poultry litter-amended soil in the subtropics. <i>Agriculture, Ecosystems and Environment</i> , 2016, 228, 1-8.                           | 5.3  | 13        |
| 122 | The nitrification inhibitor DMPP applied to subtropical rice has an inconsistent effect on nitrous oxide emissions. <i>Soil Research</i> , 2017, 55, 547.   | 1.1  | 13        |
| 123 | Integration and potential nitrogen contributions of green manure inter-row legumes in coppiced tree cropping systems. <i>European Journal of Agronomy</i> , 2019, 103, 47-53.   | 4.1  | 13        |
| 124 | Biochar improves dairy pasture yields by alleviating P and K constraints with no influence on soil respiration or N <sub>2</sub> O emissions. <i>Biochar</i> , 2019, 1, 115-126.  | 12.6 | 13        |
| 125 | Additive effects of organic and inorganic amendments can significantly improve structural stability of a sodic dispersive subsoil. <i>Geoderma</i> , 2021, 404, 115281.   | 5.1  | 13        |
| 126 | Herbicide residues in Australian grain cropping soils at sowing and their relevance to crop growth. <i>Science of the Total Environment</i> , 2022, 833, 155105.  | 8.0  | 13        |



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|-----|---|-----|-----------|
| 127 | Effect of clay and iron sulphate on volatile and water-extractable organic compounds in bamboo biochars. <i>Journal of Analytical and Applied Pyrolysis</i> , 2018, 133, 22-29.   | 5.5 | 12        |
| 128 | Minor effects of herbicides on microbial activity in agricultural soils are detected by N-transformation but not enzyme activity assays. <i>European Journal of Soil Biology</i> , 2018, 87, 72-79.                       | 3.2 | 12        |
| 129 | Assessing plant-available glyphosate in contrasting soils by diffusive gradient in thin-films technique (DGT). <i>Science of the Total Environment</i> , 2019, 646, 735-744.  | 8.0 | 11        |
| 130 | Effects of crabs on greenhouse gas emissions, soil nutrients, and stoichiometry in a subtropical estuarine wetland. <i>Biology and Fertility of Soils</i> , 2021, 57, 131-144.  | 4.3 | 11        |
| 131 | Release of native and mass labelled PCDD/PCDF from soil heated to simulate bushfires. <i>Environmental Pollution</i> , 2012, 166, 10-16.  | 7.5 | 10        |
| 132 | Real-time forecasting of pesticide concentrations in soil. <i>Science of the Total Environment</i> , 2019, 663, 709-717.  | 8.0 | 10        |
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