Bruce A Hungate

List of Publications by Year in descending order

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| # | Article | IF | CITATIONS |
|----|--|------|-----------|
| 1 | A global synthesis reveals biodiversity loss as a major driver of ecosystem change. Nature, 2012, 486, 105-108. | 27.8 | 1,750 |
| 2 | Progressive Nitrogen Limitation of Ecosystem Responses to Rising Atmospheric Carbon Dioxide. BioScience, 2004, 54, 731. | 4.9 | 1,092 |
| 3 | Responses of terrestrial ecosystems to temperature and precipitation change: a metaâ€analysis of experimental manipulation. Global Change Biology, 2011, 17, 927-942. | 9.5 | 1,066 |
| 4 | ATMOSPHERIC SCIENCE: Nitrogen and Climate Change. Science, 2003, 302, 1512-1513. | 12.6 | 735 |
| 5 | Interactions between plant growth and soil nutrient cycling under elevated CO2 : a meta-analysis. Global Change Biology, 2006, 12, 2077-2091. | 9.5 | 504 |
| 6 | The fate of carbon in grasslands under carbon dioxide enrichment. Nature, 1997, 388, 576-579. | 27.8 | 444 |
| 7 | Biochar boosts tropical but not temperate crop yields. Environmental Research Letters, 2017, 12, 053001. | 5.2 | 436 |
| 8 | Altered soil microbial community at elevated CO2 leads to loss of soil carbon. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 4990-4995. | 7.1 | 434 |
| 9 | Mycorrhizal association as a primary control of the CO ₂ fertilization effect. Science, 2016, 353, 72-74. | 12.6 | 426 |
| 10 | Increased soil emissions of potent greenhouse gases under increased atmospheric CO2. Nature, 2011, 475, 214-216. | 27.8 | 413 |
| 11 | A meta-analysis of responses of soil biota to global change. Oecologia, 2011, 165, 553-565. | 2.0 | 378 |
| 12 | Carbon-Nitrogen Interactions in Terrestrial Ecosystems in Response to Rising Atmospheric Carbon Dioxide. Annual Review of Ecology, Evolution, and Systematics, 2006, 37, 611-636. | 8.3 | 366 |
| 13 | Belowâ€ground process responses to elevated CO 2 and temperature: a discussion of observations, measurement methods, and models. New Phytologist, 2004, 162, 311-322. | 7.3 | 358 |
| 14 | Element interactions limit soil carbon storage. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 6571-6574. | 7.1 | 318 |
| 15 | Protecting climate with forests. Environmental Research Letters, 2008, 3, 044006. | 5.2 | 313 |
| 16 | Global change, nitrification, and denitrification: A review. Global Biogeochemical Cycles, 2005, 19, . | 4.9 | 310 |
| 17 | Biophysical considerations in forestry for climate protection. Frontiers in Ecology and the Environment, 2011, 9, 174-182. | 4.0 | 301 |
| 18 | Integrating the evidence for a terrestrial carbon sink caused by increasing atmospheric CO ₂ . New Phytologist, 2021, 229, 2413-2445. | 7.3 | 286 |

| # | Article | IF | CITATIONS |
|----|---|------|-----------|
| 19 | Linking Biodiversity and Ecosystem Services: Current Uncertainties and the Necessary Next Steps. BioScience, 2014, 64, 49-57. | 4.9 | 285 |
| 20 | Life and death in the soil microbiome: how ecological processes influence biogeochemistry. Nature Reviews Microbiology, 2022, 20, 415-430. | 28.6 | 282 |
| 21 | Nitrogen and phosphorus constrain the CO2 fertilization of global plant biomass. Nature Climate Change, 2019, 9, 684-689. | 18.8 | 269 |
| 22 | A trade-off between plant and soil carbon storage under elevated CO2. Nature, 2021, 591, 599-603. | 27.8 | 268 |
| 23 | Accelerated microbial turnover but constant growth efficiency with warming in soil. Nature Climate Change, 2014, 4, 903-906. | 18.8 | 266 |
| 24 | Faster Decomposition Under Increased Atmospheric CO ₂ Limits Soil Carbon Storage. Science, 2014, 344, 508-509. | 12.6 | 266 |
| 25 | Quantitative Microbial Ecology through Stable Isotope Probing. Applied and Environmental Microbiology, 2015, 81, 7570-7581. | 3.1 | 242 |
| 26 | A keystone microbial enzyme for nitrogen control of soil carbon storage. Science Advances, 2018, 4, eaaq1689. | 10.3 | 234 |
| 27 | MYCORRHIZAL CONTROLS ON BELOWGROUND LITTER QUALITY. Ecology, 2003, 84, 2302-2312. | 3.2 | 226 |
| 28 | 13C and 15N natural abundance of the soil microbial biomass. Soil Biology and Biochemistry, 2006, 38, 3257-3266. | 8.8 | 226 |
| 29 | A Comprehensive Census of Microbial Diversity in Hot Springs of Tengchong, Yunnan Province China Using 16S rRNA Gene Pyrosequencing. PLoS ONE, 2013, 8, e53350. | 2.5 | 216 |
| 30 | Effect of temperature on metabolic activity of intact microbial communities: Evidence for altered metabolic pathway activity but not for increased maintenance respiration and reduced carbon use efficiency. Soil Biology and Biochemistry, 2011, 43, 2023-2031. | 8.8 | 212 |
| 31 | Sinks for nitrogen inputs in terrestrial ecosystems: a metaâ€analysis of ¹⁵ N tracer field studies. Ecology, 2012, 93, 1816-1829. | 3.2 | 192 |
| 32 | <i>Staphylococcus aureus</i> and the ecology of the nasal microbiome. Science Advances, 2015, 1, e1400216. | 10.3 | 189 |
| 33 | MEASURING TERRESTRIAL SUBSIDIES TO AQUATIC FOOD WEBS USING STABLE ISOTOPES OF HYDROGEN. Ecology, 2007, 88, 1587-1592. | 3.2 | 186 |
| 34 | Plant growth promoting rhizobacteria are more effective under drought: a meta-analysis. Plant and Soil, 2017, 416, 309-323. | 3.7 | 183 |
| 35 | Assessing the effect of elevated carbon dioxide on soil carbon: a comparison of four metaâ€analyses. Global Change Biology, 2009, 15, 2020-2034. | 9.5 | 180 |
| 36 | Carbon protection and fire risk reduction: toward a full accounting of forest carbon offsets. Frontiers in Ecology and the Environment, 2008, 6, 493-498. | 4.0 | 170 |

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|----|---|------|-----------|
| 37 | Stimulation of grassland nitrogen cycling under carbon dioxide enrichment. Oecologia, 1997, 109, 149-153. | 2.0 | 166 |
| 38 | Contrasting effects of elevated CO2 on old and new soil carbon pools. Soil Biology and Biochemistry, 2001, 33, 365-373. | 8.8 | 163 |
| 39 | CO2 Elicits Long-Term Decline in Nitrogen Fixation. Science, 2004, 304, 1291-1291. | 12.6 | 161 |
| 40 | Carbon and water fluxes from ponderosa pine forests disturbed by wildfire and thinning. Ecological Applications, 2010, 20, 663-683. | 3.8 | 154 |
| 41 | Increased greenhouse-gas intensity of rice production under future atmospheric conditions. Nature Climate Change, 2013, 3, 288-291. | 18.8 | 153 |
| 42 | Phylogenetic organization of bacterial activity. ISME Journal, 2016, 10, 2336-2340. | 9.8 | 150 |
| 43 | Linking soil bacterial biodiversity and soil carbon stability. ISME Journal, 2015, 9, 1477-1480. | 9.8 | 147 |
| 44 | Recovery of ponderosa pine ecosystem carbon and water fluxes from thinning and standâ€replacing fire. Global Change Biology, 2012, 18, 3171-3185. | 9.5 | 146 |
| 45 | Ectomycorrhizal colonization slows root decomposition: the post-mortem fungal legacy. Ecology Letters, 2006, 9, 955-959. | 6.4 | 144 |
| 46 | ¹⁵ N enrichment as an integrator of the effects of C and N on microbial metabolism and ecosystem function. Ecology Letters, 2008, 11, 389-397. | 6.4 | 142 |
| 47 | Soil carbon loss with warming: New evidence from carbonâ€degrading enzymes. Global Change Biology, 2020, 26, 1944-1952. | 9.5 | 141 |
| 48 | Ecosystem responses to elevated <scp>CO</scp> ₂ governed by plant–soil interactions and the cost of nitrogen acquisition. New Phytologist, 2018, 217, 507-522. | 7.3 | 139 |
| 49 | Detecting changes in soil carbon in CO2 enrichment experiments. Plant and Soil, 1995, 187, 135-145. | 3.7 | 134 |
| 50 | Ammonia oxidation, denitrification and dissimilatory nitrate reduction to ammonium in two US Great Basin hot springs with abundant ammoniaâ€oxidizing archaea. Environmental Microbiology, 2011, 13, 2371-2386. | 3.8 | 132 |
| 51 | Elevated CO2 increases nitrogen fixation and decreases soil nitrogen mineralization in Florida scrub oak. Global Change Biology, 1999, 5, 781-789. | 9.5 | 130 |
| 52 | Male Circumcision Significantly Reduces Prevalence and Load of Genital Anaerobic Bacteria. MBio, 2013, 4, e00076. | 4.1 | 130 |
| 53 | Longâ€ŧerm impact of a standâ€replacing fire on ecosystem CO ₂ exchange of a ponderosa pine forest. Global Change Biology, 2008, 14, 1801-1820. | 9.5 | 128 |
| 54 | Higher yields and lower methane emissions with new rice cultivars. Global Change Biology, 2017, 23, 4728-4738. | 9.5 | 127 |

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|----|---|------|-----------|
| 55 | Labile carbon input determines the direction and magnitude of the priming effect. Applied Soil Ecology, 2017, 109, 7-13. | 4.3 | 125 |
| 56 | Longâ€ŧerm nitrogen loading alleviates phosphorus limitation in terrestrial ecosystems. Global Change Biology, 2020, 26, 5077-5086. | 9.5 | 123 |
| 57 | Predicting soil carbon loss with warming. Nature, 2018, 554, E4-E5. | 27.8 | 122 |
| 58 | Title is missing!. Biogeochemistry, 1997, 37, 89-109. | 3.5 | 121 |
| 59 | Priming depletes soil carbon and releases nitrogen in a scrub-oak ecosystem exposed to elevated CO2. Soil Biology and Biochemistry, 2009, 41, 54-60. | 8.8 | 114 |
| 60 | Limits to soil carbon stability; Deep, ancient soil carbon decomposition stimulated by new labile organic inputs. Soil Biology and Biochemistry, 2016, 98, 85-94. | 8.8 | 113 |
| 61 | A general biodiversity–function relationship is mediated by trophic level. Oikos, 2017, 126, 18-31. | 2.7 | 112 |
| 62 | Bacterial carbon use plasticity, phylogenetic diversity and the priming of soil organic matter. ISME Journal, 2017, 11, 1890-1899. | 9.8 | 110 |
| 63 | Evapotranspiration and soil water content in a scrub-oak woodland under carbon dioxide enrichment. Clobal Change Biology, 2002, 8, 289-298. | 9.5 | 105 |
| 64 | Effects of multiple global change treatments on soil N2O fluxes. Biogeochemistry, 2012, 109, 85-100. | 3.5 | 101 |
| 65 | SOIL HETEROGENEITY AND PLANT COMPETITION IN ANANNUAL GRASSLAND. Ecology, 1997, 78, 2076-2090. | 3.2 | 99 |
| 66 | Penile Microbiota and Female Partner Bacterial Vaginosis in Rakai, Uganda. MBio, 2015, 6, e00589. | 4.1 | 96 |
| 67 | Faster turnover of new soil carbon inputs under increased atmospheric <scp>CO</scp> ₂ . Global Change Biology, 2017, 23, 4420-4429. | 9.5 | 96 |
| 68 | The economic value of grassland species for carbon storage. Science Advances, 2017, 3, e1601880. | 10.3 | 96 |
| 69 | Plant Species Mediate Changes in Soil Microbial N in Response to Elevated CO2. Ecology, 1996, 77, 2505-2515. | 3.2 | 93 |
| 70 | Tree species mediated soil chemical changes in a Siberian artificial afforestation experiment. Plant and Soil, 2002, 242, 171-182. | 3.7 | 90 |
| 71 | Soil microbiota in two annual grasslands: responses to elevated atmospheric CO 2. Oecologia, 2000, 124, 589-598. | 2.0 | 87 |
| 72 | Biogeochemical and ecological feedbacks in grassland responses to warming. Nature Climate Change, 2012, 2, 458-461. | 18.8 | 86 |

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|----|---|------|-----------|
| 73 | Estimating taxonâ€specific population dynamics in diverse microbial communities. Ecosphere, 2018, 9, e02090. | 2.2 | 85 |
| 74 | Title is missing!. Plant and Soil, 2002, 242, 183-196. | 3.7 | 83 |
| 75 | Several components of global change alter nitrifying and denitrifying activities in an annual grassland. Functional Ecology, 2006, 20, 557-564. | 3.6 | 83 |
| 76 | Elevated atmospheric CO2 stimulates aboveground biomass in a fire-regenerated scrub-oak ecosystem. Global Change Biology, 2002, 8, 90-103. | 9.5 | 82 |
| 77 | Common bacterial responses in six ecosystems exposed to 10 years of elevated atmospheric carbon dioxide. Environmental Microbiology, 2012, 14, 1145-1158. | 3.8 | 79 |
| 78 | NITROGEN CYCLING DURING SEVEN YEARS OF ATMOSPHERIC CO2ENRICHMENT IN A SCRUB OAK WOODLAND. Ecology, 2006, 87, 26-40. | 3.2 | 77 |
| 79 | Modeling soil metabolic processes using isotopologue pairs of position-specific 13C-labeled glucose and pyruvate. Soil Biology and Biochemistry, 2011, 43, 1848-1857. | 8.8 | 77 |
| 80 | Elevated atmospheric CO2 lowers herbivore abundance, but increases leaf abscission rates. Global Change Biology, 2002, 8, 658-667. | 9.5 | 76 |
| 81 | Evolutionary history constrains microbial traits across environmental variation. Nature Ecology and Evolution, 2019, 3, 1064-1069. | 7.8 | 76 |
| 82 | Extensive belowground carbon storage supports roots and mycorrhizae in regenerating scrub oaks. Oecologia, 2002, 131, 542-548. | 2.0 | 75 |
| 83 | High carbon use efficiency in soil microbial communities is related to balanced growth, not storage compound synthesis. Soil Biology and Biochemistry, 2015, 89, 35-43. | 8.8 | 74 |
| 84 | Title is missing!. Biogeochemistry, 1997, 36, 223-237. | 3.5 | 73 |
| 85 | The Semen Microbiome and Its Relationship with Local Immunology and Viral Load in HIV Infection. PLoS Pathogens, 2014, 10, e1004262. | 4.7 | 73 |
| 86 | Stable isotope discrimination during soil denitrification: Production and consumption of nitrous oxide. Global Biogeochemical Cycles, 2006, 20, n/a-n/a. | 4.9 | 71 |
| 87 | Colonizing opportunistic pathogens (COPs): The beasts in all of us. PLoS Pathogens, 2017, 13, e1006369. | 4.7 | 71 |
| 88 | Dynamics of extracellular DNA decomposition and bacterial community composition in soil. Soil Biology and Biochemistry, 2015, 86, 42-49. | 8.8 | 69 |
| 89 | Decadal biomass increment in early secondary succession woody ecosystems is increased by CO2 enrichment. Nature Communications, 2019, 10, 454. | 12.8 | 68 |
| 90 | The soil priming effect: Consistent across ecosystems, elusive mechanisms. Soil Biology and Biochemistry, 2020, 140, 107617. | 8.8 | 67 |

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|-----|---|-----|-----------|
| 91 | Taxon-specific microbial growth and mortality patterns reveal distinct temporal population responses to rewetting in a California grassland soil. ISME Journal, 2020, 14, 1520-1532. | 9.8 | 67 |
| 92 | Predictive genomic traits for bacterial growth in culture versus actual growth in soil. ISME Journal, 2019, 13, 2162-2172. | 9.8 | 66 |
| 93 | Accounting for risk in valuing forest carbon offsets. Carbon Balance and Management, 2009, 4, 1. | 3.2 | 65 |
| 94 | Response of Terrestrial CH4 Uptake to Interactive Changes in Precipitation and Temperature Along a Climatic Gradient. Ecosystems, 2010, 13, 1157-1170. | 3.4 | 65 |
| 95 | The temperature sensitivity of soil: microbial biodiversity, growth, and carbon mineralization. ISME Journal, 2021, 15, 2738-2747. | 9.8 | 65 |
| 96 | Persistent effects of fire-induced vegetation change on energy partitioning and evapotranspiration in ponderosa pine forests. Agricultural and Forest Meteorology, 2009, 149, 491-500. | 4.8 | 62 |
| 97 | Penile Anaerobic Dysbiosis as a Risk Factor for HIV Infection. MBio, 2017, 8, . | 4.1 | 62 |
| 98 | Changing land use reduces soil CH ₄ uptake by altering biomass and activity but not composition of highâ€affinity methanotrophs. Global Change Biology, 2008, 14, 2405-2419. | 9.5 | 60 |
| 99 | Coupling Between and Among Ammonia Oxidizers and Nitrite Oxidizers in Grassland Mesocosms Submitted to Elevated CO2 and Nitrogen Supply. Microbial Ecology, 2015, 70, 809-818. | 2.8 | 60 |
| 100 | Global warming and shifts in cropping systems together reduce China's rice production. Global Food Security, 2020, 24, 100359. | 8.1 | 58 |
| 101 | Seasonal patterns in microbial communities inhabiting the hot springs of <scp>T</scp> engchong, <scp>Y</scp> unnan Province, <scp>C</scp> hina. Environmental Microbiology, 2014, 16, 1579-1591. | 3.8 | 57 |
| 102 | Interactive effects of tree species and soil moisture on methane consumption. Soil Biology and Biochemistry, 2003, 35, 625-628. | 8.8 | 56 |
| 103 | Responses of soil cellulolytic fungal communities to elevated atmospheric CO ₂ are complex and variable across five ecosystems. Environmental Microbiology, 2011, 13, 2778-2793. | 3.8 | 56 |
| 104 | Testing interactive effects of global environmental changes on soil nitrogen cycling. Ecosphere, 2011, 2, art56. | 2.2 | 56 |
| 105 | Restoring forest structure and process stabilizes forest carbon in wildfireâ€prone southwestern ponderosa pine forests. Ecological Applications, 2016, 26, 382-391. | 3.8 | 56 |
| 106 | Probing carbon flux patterns through soil microbial metabolic networks using parallel position-specific tracer labeling. Soil Biology and Biochemistry, 2011, 43, 126-132. | 8.8 | 54 |
| 107 | Stimulation of ammonia oxidizer and denitrifier abundances by nitrogen loading: Poor predictability for increased soil N ₂ O emission. Global Change Biology, 2022, 28, 2158-2168. | 9.5 | 54 |
| 108 | Managing for disturbance stabilizes forest carbon. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 10193-10195. | 7.1 | 52 |

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|-----|--|------|-----------|
| 109 | Nutrients cause consolidation of soil carbon flux to small proportion of bacterial community. Nature Communications, 2021, 12, 3381. | 12.8 | 51 |
| 110 | Predicting the Responses of Soil Nitrite-Oxidizers to Multi-Factorial Global Change: A Trait-Based Approach. Frontiers in Microbiology, 2016, 7, 628. | 3.5 | 50 |
| 111 | Soil mineral assemblage and substrate quality effects on microbial priming. Geoderma, 2018, 322, 38-47. | 5.1 | 50 |
| 112 | Ecosystem context illuminates conflicting roles of plant diversity in carbon storage. Ecology Letters, 2018, 21, 1604-1619. | 6.4 | 50 |
| 113 | The Functional Significance of Bacterial Predators. MBio, 2021, 12, . | 4.1 | 48 |
| 114 | Disturbance, rainfall and contrasting species responses mediated aboveground biomass response to 11 years of CO ₂ enrichment in a Florida scrubâ€oak ecosystem. Global Change Biology, 2009, 15, 356-367. | 9.5 | 47 |
| 115 | Plant community feedbacks and long-term ecosystem responses to multi-factored global change. AoB PLANTS, 2014, 6, plu035-plu035. | 2.3 | 47 |
| 116 | Stream carbon and nitrogen supplements during leaf litter decomposition: contrasting patterns for two foundation species. Oecologia, 2014, 176, 1111-1121. | 2.0 | 45 |
| 117 | Fire affects the taxonomic and functional composition of soil microbial communities, with cascading effects on grassland ecosystem functioning. Global Change Biology, 2020, 26, 431-442. | 9.5 | 45 |
| 118 | Effects of Elevated Carbon Dioxide on Soils in a Florida Scrub Oak Ecosystem. Journal of Environmental Quality, 2001, 30, 501-507. | 2.0 | 44 |
| 119 | Impacts of Hurricane Frances on Florida scrub-oak ecosystem processes: defoliation, net CO2exchange and interactions with elevated CO2. Global Change Biology, 2007, 13, 1101-1113. | 9.5 | 43 |
| 120 | Cumulative response of ecosystem carbon and nitrogen stocks to chronic <scp>CO</scp> ₂ exposure in a subtropical oak woodland. New Phytologist, 2013, 200, 753-766. | 7.3 | 43 |
| 121 | A call to investigate drivers of soil organic matter retention vs. mineralization in a high CO2 world. Soil Biology and Biochemistry, 2010, 42, 665-668. | 8.8 | 42 |
| 122 | Potential role of Thermus thermophilus and T.Âoshimai in high rates of nitrous oxide (N2O) production in â^¼80 °C hot springs in the US Great Basin. Geobiology, 2011, 9, 471-480. | 2.4 | 42 |
| 123 | Measuring Nitrification, Denitrification, and Related Biomarkers in Terrestrial Geothermal Ecosystems. Methods in Enzymology, 2011, 486, 171-203. | 1.0 | 42 |
| 124 | THE EFFECTS OF ELEVATED CO2ON NUTRIENT DISTRIBUTION IN A FIRE-ADAPTED SCRUB OAK FOREST. , 2003, 13, 1388-1399. | | 41 |
| 125 | C and N availability affects the 15 N natural abundance of the soil microbial biomass across a cattle manure gradient. European Journal of Soil Science, 2006, 57, 468-475. | 3.9 | 41 |
| 126 | Nitrogen stable isotope composition of leaves and roots of plants growing in a forest and a meadow. Isotopes in Environmental and Health Studies, 2003, 39, 29-39. | 1.0 | 40 |

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|-----|--|-----|-----------|
| 127 | Wildfire reduces carbon dioxide efflux and increases methane uptake in ponderosa pine forest soils of the southwestern USA. Biogeochemistry, 2011, 104, 251-265. | 3.5 | 40 |
| 128 | Ominous projections for global antibiotic use in food-animal production. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 5554-5555. | 7.1 | 40 |
| 129 | Taxonomic patterns in the nitrogen assimilation of soil prokaryotes. Environmental Microbiology, 2018, 20, 1112-1119. | 3.8 | 39 |
| 130 | Relationships between C and N availability, substrate age, and natural abundance 13C and 15N signatures of soil microbial biomass in a semiarid climate. Soil Biology and Biochemistry, 2009, 41, 1605-1611. | 8.8 | 38 |
| 131 | Does deep soil N availability sustain longâ€ŧerm ecosystem responses to elevated CO ₂ ?. Global Change Biology, 2009, 15, 2035-2048. | 9.5 | 37 |
| 132 | Using metabolic tracer techniques to assess the impact of tillage and straw management on microbial carbon use efficiency in soil. Soil Biology and Biochemistry, 2013, 66, 139-145. | 8.8 | 37 |
| 133 | The effects of 11Âyr of <scp>CO</scp> ₂ enrichment on roots in a <scp>F</scp> lorida scrubâ€oak ecosystem. New Phytologist, 2013, 200, 778-787. | 7.3 | 36 |
| 134 | Effects of interactive global changes on methane uptake in an annual grassland. Journal of Geophysical Research, 2010, 115, . | 3.3 | 35 |
| 135 | New soil carbon sequestration with nitrogen enrichment: a meta-analysis. Plant and Soil, 2020, 454, 299-310. | 3.7 | 35 |
| 136 | Global Change Could Amplify Fire Effects on Soil Greenhouse Gas Emissions. PLoS ONE, 2011, 6, e20105. | 2.5 | 35 |
| 137 | Quantitative stable isotope probing with H2 Â18O reveals that most bacterial taxa in soil synthesize new ribosomal RNA. ISME Journal, 2018, 12, 3043-3045. | 9.8 | 34 |
| 138 | Long-term elevated CO2 shifts composition of soil microbial communities in a Californian annual grassland, reducing growth and N utilization potentials. Science of the Total Environment, 2019, 652, 1474-1481. | 8.0 | 34 |
| 139 | Lowerâ€ŧhanâ€expected CH ₄ emissions from rice paddies with rising CO ₂ concentrations. Global Change Biology, 2020, 26, 2368-2376. | 9.5 | 34 |
| 140 | Stable-Isotope-Informed, Genome-Resolved Metagenomics Uncovers Potential Cross-Kingdom Interactions in Rhizosphere Soil. MSphere, 2021, 6, e0008521. | 2.9 | 34 |
| 141 | SOIL RESPONSES TO MANAGEMENT, INCREASED PRECIPITATION, AND ADDED NITROGEN IN PONDEROSA PINE FORESTS. , 2007, 17, 1352-1365. | | 33 |
| 142 | Carbon Tradeoffs of Restoration and Provision of Endangered Species Habitat in a Fire-Maintained Forest. Ecosystems, 2015, 18, 76-88. | 3.4 | 33 |
| 143 | DECREASED LEAF-MINER ABUNDANCE IN ELEVATED CO2: REDUCED LEAF QUALITY AND INCREASED PARASITOID ATTACK. , 1999, 9, 240-244. | | 31 |
| 144 | Rapid root closure after fire limits fine root responses to elevated atmospheric CO2 in a scrub oak ecosystem in central Florida, USA. Global Change Biology, 2006, 12, 1047-1053. | 9.5 | 31 |

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|-----|--|------|-----------|
| 145 | Leaf-litter leachate is distinct in optical properties and bioavailability to stream heterotrophs. Freshwater Science, 2015, 34, 857-866. | 1.8 | 31 |
| 146 | Stable isotope probing with 18O-water to investigate microbial growth and death in environmental samples. Current Opinion in Biotechnology, 2016, 41, 14-18. | 6.6 | 31 |
| 147 | Responses of Ecosystem Carbon Cycling to Climate Change Treatments Along an Elevation Gradient. Ecosystems, 2011, 14, 1066-1080. | 3.4 | 27 |
| 148 | Climate-driven changes in forest succession and the influence of management on forest carbon dynamics in the Puget Lowlands of Washington State, USA. Forest Ecology and Management, 2016, 362, 194-204. | 3.2 | 27 |
| 149 | Microbial rRNA Synthesis and Growth Compared through Quantitative Stable Isotope Probing with H ₂ ¹⁸ O. Applied and Environmental Microbiology, 2018, 84, . | 3.1 | 27 |
| 150 | Ectomycorrhizal Colonization, Biomass, and Production in a Regenerating Scrub Oak Forest in Response to Elevated CO2. Ecosystems, 2003, 6, 424-430. | 3.4 | 26 |
| 151 | Plantâ^'Soil Distribution of Potentially Toxic Elements in Response to Elevated Atmospheric CO ₂ . Environmental Science & Technology, 2011, 45, 2570-2574. | 10.0 | 26 |
| 152 | Elevated Carbon Dioxide and Litter Decomposition in California Annual Grasslands: Which Mechanisms Matter?. Ecosystems, 2002, 5, 171-183. | 3.4 | 25 |
| 153 | Root biomass and nutrient dynamics in a scrub-oak ecosystem under the influence of elevated atmospheric CO2. Plant and Soil, 2007, 292, 219-232. | 3.7 | 25 |
| 154 | Acclimation of photosynthesis and respiration to elevated atmospheric CO2 in two Scrub Oaks. Global Change Biology, 2002, 8, 317-328. | 9.5 | 24 |
| 155 | Natural abundance δ15N and δ13C of DNA extracted from soil. Soil Biology and Biochemistry, 2007, 39, 3101-3107. | 8.8 | 24 |
| 156 | Restoration of a ponderosa pine forest increases soil CO ₂ efflux more than either water or nitrogen additions. Journal of Applied Ecology, 2008, 45, 913-920. | 4.0 | 24 |
| 157 | Seeing the forest for the trees: longâ€ŧerm exposure to elevated CO ₂ increases some herbivore densities. Global Change Biology, 2009, 15, 1895-1902. | 9.5 | 24 |
| 158 | Responses of soil nitrogen cycling to the interactive effects of elevated CO2 and inorganic N supply. Plant and Soil, 2010, 327, 35-47. | 3.7 | 24 |
| 159 | Warming induced changes in soil carbon and nitrogen influence priming responses in four ecosystems. Applied Soil Ecology, 2018, 124, 110-116. | 4.3 | 24 |
| 160 | Soil minerals affect taxon-specific bacterial growth. ISME Journal, 2022, 16, 1318-1326. | 9.8 | 24 |
| 161 | Aligning ecology and markets in the forest carbon cycle. Frontiers in Ecology and the Environment, 2013, 11, 37-42. | 4.0 | 23 |
| 162 | Linking tree genetics and stream consumers: isotopic tracers elucidate controls on carbon and nitrogen assimilation. Ecology, 2018, 99, 1759-1770. | 3.2 | 22 |

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|-----|--|------|-----------|
| 163 | Ecosystem Responses to Rising Atmospheric CO2. , 1999, , 265-285. | | 22 |
| 164 | Unexpected Parabolic Temperature Dependency of CH ₄ Emissions from Rice Paddies. Environmental Science & Technology, 2022, 56, 4871-4881. | 10.0 | 21 |
| 165 | Direct and indirect effects of elevated CO2 on transpiration from Quercus myrtifolia in a scrub-oak ecosystem. Global Change Biology, 2003, 9, 96-105. | 9.5 | 20 |
| 166 | Tree species of the central amazon and soil moisture alter stable isotope composition of nitrogen and oxygen in nitrous oxide evolved from soil. Isotopes in Environmental and Health Studies, 2003, 39, 41-52. | 1.0 | 20 |
| 167 | Direct and legacy effects of longâ€ŧerm elevated <scp>CO</scp> ₂ on fine root growth and plant–insect interactions. New Phytologist, 2013, 200, 788-795. | 7.3 | 20 |
| 168 | Identification of growing bacteria during litter decomposition in freshwater through quantitative stable isotope probing. Environmental Microbiology Reports, 2016, 8, 975-982. | 2.4 | 20 |
| 169 | Glucose triggers strong taxonâ€specific responses in microbial growth and activity: insights from <scp>DNA</scp> and <scp>RNA qSIP</scp> . Ecology, 2020, 101, e02887. | 3.2 | 20 |
| 170 | Measurement Error and Resolution in Quantitative Stable Isotope Probing: Implications for Experimental Design. MSystems, 2020, 5, . | 3.8 | 20 |
| 171 | Rapid Response of Nitrogen Cycling Gene Transcription to Labile Carbon Amendments in a Soil Microbial Community. MSystems, 2021, 6, . | 3.8 | 20 |
| 172 | Effects of Elevated CO2 and Herbivore Damage on Litter Quality in a Scrub Oak Ecosystem. Journal of Chemical Ecology, 2005, 31, 2343-2356. | 1.8 | 19 |
| 173 | The Influence of Time and Plant Species on the Composition of the Decomposing Bacterial Community in a Stream Ecosystem. Microbial Ecology, 2016, 71, 825-834. | 2.8 | 19 |
| 174 | The Influence of Microbial Community Structure and Function on Community-Level Physiological Profiles. , 1997, , 171-183. | | 18 |
| 175 | Application of a twoâ€pool model to soil carbon dynamics under elevated <scp>CO</scp> ₂ . Global Change Biology, 2015, 21, 4293-4297. | 9.5 | 18 |
| 176 | Managing forests infested by spruce beetles in south-central Alaska: Effects on nitrogen availability, understory biomass, and spruce regeneration. Forest Ecology and Management, 2006, 227, 267-274. | 3.2 | 17 |
| 177 | Elevated CO ₂ mitigates the adverse effects of drought on daytime net ecosystem CO ₂ exchange and photosynthesis in a Florida scrub-oak ecosystem. Photosynthetica, 2007, 45, 51-58. | 1.7 | 17 |
| 178 | Decreased growth of wild soil microbes after 15Âyears of transplantâ€induced warming in a montane meadow. Global Change Biology, 2022, 28, 128-139. | 9.5 | 16 |
| 179 | Nitrogen source influences natural abundance 15N of Escherichia coli. FEMS Microbiology Letters, 2008, 282, 246-250. | 1.8 | 15 |
| 180 | Plant genotype influences aquaticâ€ŧerrestrial ecosystem linkages through timing and composition of insect emergence. Ecosphere, 2016, 7, e01331. | 2.2 | 15 |

| # | Article | IF | CITATIONS |
|-----|---|------|-----------|
| 181 | Valuing ecosystems for climate. Nature Climate Change, 2012, 2, 151-152. | 18.8 | 14 |
| 182 | What Constitutes Plant-Available Molybdenum in Sandy Acidic Soils?. Communications in Soil Science and Plant Analysis, 2015, 46, 318-326. | 1.4 | 14 |
| 183 | Comparing traditional and Bayesian approaches to ecological metaâ€analysis. Methods in Ecology and Evolution, 2020, 11, 1286-1295. | 5.2 | 14 |
| 184 | Microbes on decomposing litter in streams: entering on the leaf or colonizing in the water?. ISME Journal, 2022, 16, 717-725. | 9.8 | 14 |
| 185 | Water, Nitrogen, Rising Atmospheric CO2, and Terrestrial Productivity. , 2001, , 123-167. | | 13 |
| 186 | Closely Related Tree Species Differentially Influence the Transfer of Carbon and Nitrogen from Leaf Litter Up the Aquatic Food Web. Ecosystems, 2015, 18, 186-201. | 3.4 | 13 |
| 187 | Warming effects on grassland productivity depend on plant diversity. Global Ecology and Biogeography, 2022, 31, 588-598. | 5.8 | 13 |
| 188 | Long-term warming in a Mediterranean-type grassland affects soil bacterial functional potential but not bacterial taxonomic composition. Npj Biofilms and Microbiomes, 2021, 7, 17. | 6.4 | 12 |
| 189 | On maintenance and metabolisms in soil microbial communities. Plant and Soil, 2022, 476, 385-396. | 3.7 | 12 |
| 190 | Carbon and nitrogen stable isotopes in forest soils of Siberia. Doklady Earth Sciences, 2006, 409, 747-749. | 0.7 | 11 |
| 191 | Stable Carbon Isotope Fractionation in Chlorinated Ethene Degradation by Bacteria Expressing Three Toluene Oxygenases. Frontiers in Microbiology, 2012, 3, 63. | 3.5 | 11 |
| 192 | Wide distribution of autochthonous branched glycerol dialkyl glycerol tetraethers (bGDGTs) in U.S. Great Basin hot springs. Frontiers in Microbiology, 2013, 4, 222. | 3.5 | 11 |
| 193 | Litter identity affects assimilation of carbon and nitrogen by a shredding caddisfly. Ecosphere, 2018, 9, e02340. | 2.2 | 11 |
| 194 | Soil Heterogeneity and Plant Competition in an Annual Grassland. Ecology, 1997, 78, 2076. | 3.2 | 10 |
| 195 | Tree species and moisture effects on soil sources of N2O: Quantifying contributions from nitrification and denitrification with18O isotopes. Journal of Geophysical Research, 2006, 111, n/a-n/a. | 3.3 | 10 |
| 196 | Mechanistic insights into the success of xenobiotic degraders resolved from metagenomes of microbial enrichment cultures. Journal of Hazardous Materials, 2021, 418, 126384. | 12.4 | 10 |
| 197 | Nitrogen inputs and losses in response to chronic CO ₂ exposure in a subtropical oak woodland. Biogeosciences, 2014, 11, 3323-3337. | 3.3 | 9 |
| 198 | Effects of plant species on stream bacterial communities via leachate from leaf litter. Hydrobiologia, 2018, 807, 131-144. | 2.0 | 9 |

| # | Article | IF | CITATIONS |
|-----|---|------|-----------|
| 199 | Microbial Taxon-Specific Isotope Incorporation with DNA Quantitative Stable Isotope Probing. Methods in Molecular Biology, 2019, 2046, 137-149. | 0.9 | 9 |
| 200 | Tree Species Effects on Potential Production and Consumption of Carbon Dioxide, Methane, and Nitrous Oxide: The Siberian Afforestation Experiment. , 2005, , 293-305. | | 9 |
| 201 | Variation in genomic traits of microbial communities among ecosystems. FEMS Microbes, 2022, 2, . | 2.1 | 9 |
| 202 | Fire, hurricane and carbon dioxide: effects on net primary production of a subtropical woodland. New Phytologist, 2013, 200, 767-777. | 7.3 | 8 |
| 203 | Phylogenetic organization in the assimilation of chemically distinct substrates by soil bacteria. Environmental Microbiology, 2022, 24, 357-369. | 3.8 | 8 |
| 204 | Element Pool Changes within a Scrub-Oak Ecosystem after 11 Years of Exposure to Elevated CO2. PLoS ONE, 2013, 8, e64386. | 2.5 | 7 |
| 205 | The distribution and abundance of archaeal tetraether lipids in U.S. Great Basin hot springs. Frontiers in Microbiology, 2013, 4, 247. | 3.5 | 7 |
| 206 | Re-evaluation of the Relationship between Pfiesteria and Estuarine Fish Kills. Ecosystems, 2003, 6, 0001-0010. | 3.4 | 6 |
| 207 | Quantitative stable isotope probing with H ₂ ¹⁸ 0 to measure taxonâ€specific microbial growth. Soil Science Society of America Journal, 2020, 84, 1503-1518. | 2.2 | 6 |
| 208 | Decreased Leaf-Miner Abundance in Elevated CO 2 : Reduced Leaf Quality and Increased Parasitoid Attack. , 1999, 9, 240. | | 5 |
| 209 | Effects of elevated CO2 on nutrient cycling in forests , 2001, , 237-252. | | 5 |
| 210 | Substrate stoichiometric regulation of microbial respiration and community dynamics across four different ecosystems. Soil Biology and Biochemistry, 2021, 163, 108458. | 8.8 | 5 |
| 211 | Scavenging for scrap metal. Nature Geoscience, 2008, 1, 213-214. | 12.9 | 4 |
| 212 | A positive relationship between the abundance of ammonia oxidizing archaea and natural abundance δ15N of ecosystems. Soil Biology and Biochemistry, 2013, 65, 313-315. | 8.8 | 4 |
| 213 | Response to Comment on "Mycorrhizal association as a primary control of the CO ₂ fertilization effect― Science, 2017, 355, 358-358. | 12.6 | 4 |
| 214 | The Influence of Leaf Type on Carbon and Nitrogen Assimilation by Aquatic Invertebrate Communities: A New Perspective on Trophic Efficiency. Ecosystems, 2021, 24, 788-805. | 3.4 | 4 |
| 215 | Quantitative Stable Isotope Probing with H O to Measure Taxon-Specific Microbial Growth. Methods of Soil Analysis, 2019, 4, 1503. | 0.8 | 3 |
| 216 | Proximate controls on semiarid soil greenhouse gas fluxes across 3Âmillion years of soil development. Biogeochemistry, 2015, 125, 375-391. | 3.5 | 2 |

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 217 | Stable Isotope Probing of Microorganisms in Environmental Samples with H218O. Methods in Molecular Biology, 2019, 2046, 129-136. | 0.9 | 2 |
| 218 | mRNA, rRNA and DNA quantitative stable isotope probing with H218O indicates use of old rRNA among soil Thaumarchaeota. Soil Biology and Biochemistry, 2019, 130, 159-166. | 8.8 | 2 |
| 219 | Metagenomes and Metatranscriptomes of a Glucose-Amended Agricultural Soil. Microbiology Resource Announcements, 2020, 9, . | 0.6 | 2 |
| 220 | Belowground Food Webs in a Changing Climate. Advances in Agroecology, 2006, , 117-150. | 0.3 | 1 |