David A Lipson

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/9350418/publications.pdf

Version: 2024-02-01

49 papers

3,455 citations

201674 27 h-index 214800 47 g-index

49 all docs 49 docs citations

49 times ranked 5242 citing authors

| # | Article | IF | Citations |
|----|--|------|-----------|
| 1 | Seasonal Dynamics of Previously Unknown Fungal Lineages in Tundra Soils. Science, 2003, 301, 1359-1361. | 12.6 | 586 |
| 2 | Seasonal Changes in an Alpine Soil Bacterial Community in the Colorado Rocky Mountains. Applied and Environmental Microbiology, 2004, 70, 2867-2879. | 3.1 | 318 |
| 3 | Cold season emissions dominate the Arctic tundra methane budget. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 40-45. | 7.1 | 278 |
| 4 | Links between Microbial Population Dynamics and Nitrogen Availability in an Alpine Ecosystem. Ecology, 1999, 80, 1623. | 3.2 | 205 |
| 5 | Global phylogeography and ancient evolution of the widespread human gut virus crAssphage. Nature Microbiology, 2019, 4, 1727-1736. | 13.3 | 184 |
| 6 | The complex relationship between microbial growth rate and yield and its implications for ecosystem processes. Frontiers in Microbiology, 2015, 6, 615. | 3.5 | 170 |
| 7 | Relationships between temperature responses and bacterial community structure along seasonal and altitudinal gradients. FEMS Microbiology Ecology, 2007, 59, 418-427. | 2.7 | 123 |
| 8 | Metagenomic Insights into Anaerobic Metabolism along an Arctic Peat Soil Profile. PLoS ONE, 2013, 8, e64659. | 2.5 | 121 |
| 9 | Reduction of iron (III) and humic substances plays a major role in anaerobic respiration in an Arctic peat soil. Journal of Geophysical Research, $2010,115,.$ | 3.3 | 119 |
| 10 | The trade-off between growth rate and yield in microbial communities and the consequences for under-snow soil respiration in a high elevation coniferous forest. Biogeochemistry, 2009, 95, 23-35. | 3.5 | 115 |
| 11 | Effects of Elevated Atmospheric CO 2 on Soil Microbial Biomass, Activity, and Diversity in a Chaparral Ecosystem. Applied and Environmental Microbiology, 2005, 71, 8573-8580. | 3.1 | 110 |
| 12 | Grass invasion causes rapid increases in ecosystem carbon and nitrogen storage in a semiarid shrubland. Global Change Biology, 2010, 16, 1351-1365. | 9.5 | 95 |
| 13 | The contribution of beneath-snow soil respiration to total ecosystem respiration in a high-elevation, subalpine forest. Global Biogeochemical Cycles, 2006, 20, n/a-n/a. | 4.9 | 84 |
| 14 | Soil microbial responses to drought and exotic plants shift carbon metabolism. ISME Journal, 2019, 13, 1776-1787. | 9.8 | 80 |
| 15 | Methane suppression by iron and humic acids in soils of the Arctic Coastal Plain. Soil Biology and Biochemistry, 2015, 83, 176-183. | 8.8 | 65 |
| 16 | The contribution of Fe(III) and humic acid reduction to ecosystem respiration in drained thaw lake basins of the Arctic Coastal Plain. Global Biogeochemical Cycles, 2013, 27, 399-409. | 4.9 | 55 |
| 17 | Microbial macroecology: In search of mechanisms governing microbial biogeographic patterns. Global Ecology and Biogeography, 2020, 29, 1870-1886. | 5.8 | 55 |
| 18 | Relationships Between Microbial Community Structure and Soil Processes Under Elevated Atmospheric Carbon Dioxide. Microbial Ecology, 2006, 51, 302-314. | 2.8 | 52 |

| # | Article | IF | CITATIONS |
|----|---|------|-----------|
| 19 | COSORE: A community database for continuous soil respiration and other soilâ€atmosphere greenhouse gas flux data. Global Change Biology, 2020, 26, 7268-7283. | 9.5 | 50 |
| 20 | A cost-effective and field-ready potentiostat that poises subsurface electrodes to monitor bacterial respiration. Biosensors and Bioelectronics, 2012, 32, 309-313. | 10.1 | 49 |
| 21 | Topâ€down control of microbial activity and biomass in an Arctic soil ecosystem. Environmental Microbiology, 2010, 12, 642-648. | 3.8 | 43 |
| 22 | Increased CO ₂ loss from vegetated drained lake tundra ecosystems due to flooding. Global Biogeochemical Cycles, 2012, 26, . | 4.9 | 43 |
| 23 | Changes in microbial communities along redox gradients in polygonized <scp>A</scp> rctic wet tundra soils. Environmental Microbiology Reports, 2015, 7, 649-657. | 2.4 | 42 |
| 24 | Growth of Eastern Cottonwoods (Populus deltoides) in elevated [CO2] stimulates stand-level respiration and rhizodeposition of carbohydrates, accelerates soil nutrient depletion, yet stimulates above- and belowground biomass production. Global Change Biology, 2005, 11, 1220-1233. | 9.5 | 41 |
| 25 | Direct and indirect effects of shifting rainfall on soil microbial respiration and enzyme activity in a semi-arid system. Plant and Soil, 2017, 411, 333-346. | 3.7 | 39 |
| 26 | Microbial community structure and soil p <scp>H</scp> correspond to methane production in <scp>A</scp> rctic <scp>A</scp> laska soils. Environmental Microbiology, 2017, 19, 3398-3410. | 3.8 | 33 |
| 27 | <i>Trichotorquatus</i> gen. nov. ―a new genus of soil cyanobacteria discovered from American drylands ¹ . Journal of Phycology, 2021, 57, 886-902. | 2.3 | 29 |
| 28 | Elevated atmospheric CO 2 stimulates soil fungal diversity through increased fine root production in a semiarid shrubland ecosystem. Global Change Biology, 2014, 20, 2555-2565. | 9.5 | 28 |
| 29 | Differential responses of native and exotic coastal sage scrub plant species to N additions and the soil microbial community. Plant and Soil, 2013, 371, 37-51. | 3.7 | 27 |
| 30 | Snow melt stimulates ecosystem respiration in Arctic ecosystems. Global Change Biology, 2020, 26, 5042-5051. | 9.5 | 23 |
| 31 | Mechanistic Modeling of Microtopographic Impacts on CO ₂ and CH ₄ Fluxes in an Alaskan Tundra Ecosystem Using the CLMâ€Microbe Model. Journal of Advances in Modeling Earth Systems, 2019, 11, 4288-4304. | 3.8 | 22 |
| 32 | Anaerobic Methane Oxidation in High-Arctic Alaskan Peatlands as a Significant Control on Net CH4 Fluxes. Soil Systems, 2019, 3, 7. | 2.6 | 20 |
| 33 | Phosphorus alleviation of nitrogenâ€suppressed methane sink in global grasslands. Ecology Letters, 2020, 23, 821-830. | 6.4 | 18 |
| 34 | Controls on soil microbial carbon use efficiency over long-term ecosystem development. Biogeochemistry, 2021, 152, 309-325. | 3.5 | 17 |
| 35 | Biological chlorine cycling in the Arctic Coastal Plain. Biogeochemistry, 2017, 134, 243-260. | 3.5 | 16 |
| 36 | Earlier snowmelt may lead to late season declines in plant productivity and carbon sequestration in Arctic tundra ecosystems. Scientific Reports, 2022, 12, 3986. | 3.3 | 16 |

| # | Article | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Invasion and drought alter phenological sensitivity and synergistically lower ecosystem production. Ecology, 2019, 100, e02802. | 3.2 | 14 |
| 38 | Drought in Southern California coastal sage scrub reduces herbaceous biomass of exotic species more than native species, but exotic growth recovers quickly when drought ends. Plant Ecology, 2019, 220, 151-169. | 1.6 | 13 |
| 39 | Dynamics of Fungal and Bacterial Biomass Carbon in Natural Ecosystems: Siteâ€Level Applications of the CLMâ€Microbe Model. Journal of Advances in Modeling Earth Systems, 2021, 13, e2020MS002283. | 3.8 | 11 |
| 40 | Potentiostatically Poised Electrodes Mimic Iron Oxide and Interact with Soil Microbial Communities to Alter the Biogeochemistry of Arctic Peat Soils. Minerals (Basel, Switzerland), 2013, 3, 318-336. | 2.0 | 10 |
| 41 | Seasonal Patterns of Dry Deposition at a Highâ€Elevation Site in the Colorado Rocky Mountains. Journal of Geophysical Research D: Atmospheres, 2017, 122, 11,183. | 3.3 | 10 |
| 42 | Groundwater-surface water interactions and flux of organic matter and nutrients in an urban, Mediterranean stream. Science of the Total Environment, 2022, 811, 152379. | 8.0 | 9 |
| 43 | Temperature Response of Respiration Across the Heterogeneous Landscape of the Alaskan Arctic Tundra. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 2287-2302. | 3.0 | 8 |
| 44 | Dust deposition drives microbial metabolism in a remote, high-elevation catchment. Holocene, 2020, 30, 589-596. | 1.7 | 4 |
| 45 | Organohalide-Respiring Bacteria at the Heart of Anaerobic Metabolism in Arctic Wet Tundra Soils. Applied and Environmental Microbiology, 2021, 87, . | 3.1 | 2 |
| 46 | Ecosystem Scale Implication of Soil CO ₂ Concentration Dynamics During Soil Freezing in Alaskan Arctic Tundra Ecosystems. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2020JG005724. | 3.0 | 2 |
| 47 | Integrating Soil Microbiology into Ecosystem Science. Advances in Environmental Microbiology, 2019, , 65-102. | 0.3 | 1 |
| 48 | Molecular Mirror Technology Facilitates High-Throughput, Accurate SARS-CoV-2 Testing. Microbiology Spectrum, 2021, 9, e0039221. | 3.0 | 0 |
| 49 | Upscaling Methane Flux From Plot Level to Eddy Covariance Tower Domains in Five Alaskan Tundra Ecosystems. Frontiers in Environmental Science, 0, 10, . | 3.3 | О |