

# Lucas William Mendes

## List of Publications by Year in descending order

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Version: 2024-02-01

91  
papers

4,037  
citations

201385

27  
h-index

133063

59  
g-index

93  
all docs

93  
docs citations

93  
times ranked

4367  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Taxonomical and functional microbial community selection in soybean rhizosphere. ISME Journal, 2014, 8, 1577-1587.   | 4.4 | 633       |
| 2  | Pathogen-induced activation of disease-suppressive functions in the endophytic root microbiome. Science, 2019, 366, 606-612.   | 6.0 | 621       |
| 3  | Influence of resistance breeding in common bean on rhizosphere microbiome composition and function. ISME Journal, 2018, 12, 212-224.   | 4.4 | 296       |
| 4  | Soil-Borne Microbiome: Linking Diversity to Function. Microbial Ecology, 2015, 70, 255-265.  | 1.4 | 227       |
| 5  | Impact of long-term N, P, K, and NPK fertilization on the composition and potential functions of the bacterial community in grassland soil. FEMS Microbiology Ecology, 2014, 90, 195-205.        | 1.3 | 193       |
| 6  | Soil microbiome responses to the short-term effects of Amazonian deforestation. Molecular Ecology, 2015, 24, 2433-2448.  | 2.0 | 171       |
| 7  | Land-use system shapes soil bacterial communities in Southeastern Amazon region. Applied Soil Ecology, 2015, 95, 151-160.  | 2.1 | 114       |
| 8  | Bacterial Community Succession in Pine-Wood Decomposition. Frontiers in Microbiology, 2016, 7, 231.  | 1.5 | 106       |
| 9  | The impact of tropical forest logging and oil palm agriculture on the soil microbiome. Molecular Ecology, 2016, 25, 2244-2257.   | 2.0 | 99        |
| 10 | Breeding for soil-borne pathogen resistance impacts active rhizosphere microbiome of common bean. ISME Journal, 2018, 12, 3038-3042.   | 4.4 | 92        |
| 11 | Multitrophic interactions in the rhizosphere microbiome of wheat: from bacteria and fungi to protists. FEMS Microbiology Ecology, 2020, 96, .  | 1.3 | 77        |
| 12 | Soil microbial community dynamics and assembly under long-term land use change. FEMS Microbiology Ecology, 2017, 93, .   | 1.3 | 69        |
| 13 | Forest-to-agriculture conversion in Amazon drives soil microbial communities and N-cycle. Soil Biology and Biochemistry, 2019, 137, 107567.  | 4.2 | 61        |
| 14 | Variations of Bacterial Community Structure and Composition in Mangrove Sediment at Different Depths in Southeastern Brazil. Diversity, 2014, 6, 827-843.  | 0.7 | 59        |
| 15 | Protist species richness and soil microbiome complexity increase towards climax vegetation in the Brazilian Cerrado. Communications Biology, 2018, 1, 135.                                       | 2.0 | 58        |
| 16 | Using Metagenomics to Connect Microbial Community Biodiversity and Functions. Current Issues in Molecular Biology, 2017, 24, 103-118.  | 1.0 | 47        |
| 17 | Recycling organic residues in agriculture impacts soil-borne microbial community structure, function and N <sub>2</sub> O emissions. Science of the Total Environment, 2018, 631-632, 1089-1099. | 3.9 | 45        |
| 18 | Forest-to-pasture conversion and recovery based on assessment of microbial communities in Eastern Amazon rainforest. FEMS Microbiology Ecology, 2019, 95, .                                      | 1.3 | 44        |

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|----|--|-----|-----------|
| 19 | Resistance Breeding of Common Bean Shapes the Physiology of the Rhizosphere Microbiome. <i>Frontiers in Microbiology</i> , 2019, 10, 2252.   | 1.5 | 41        |
| 20 | Ecological Processes Shaping Bulk Soil and Rhizosphere Microbiome Assembly in a Long-Term Amazon Forest-to-Agriculture Conversion. <i>Microbial Ecology</i> , 2020, 79, 110-122.               | 1.4 | 41        |
| 21 | Shifts in phylogenetic diversity of archaeal communities in mangrove sediments at different sites and depths in southeastern Brazil. <i>Research in Microbiology</i> , 2012, 163, 366-377.     | 1.0 | 35        |
| 22 | Responses of soil bacterial community after seventh yearly applications of composted tannery sludge. <i>Geoderma</i> , 2018, 318, 1-8.   | 2.3 | 35        |
| 23 | Distinct taxonomic and functional composition of soil microbiomes along the gradient forest-restinga-mangrove in southeastern Brazil. <i>Antonie Van Leeuwenhoek</i> , 2018, 111, 101-114.     | 0.7 | 33        |
| 24 | The natural recovery of soil microbial community and nitrogen functions after pasture abandonment in the Amazon region. <i>FEMS Microbiology Ecology</i> , 2020, 96, .                         | 1.3 | 33        |
| 25 | Microbiological indicators of soil quality in a riparian forest recovery gradient. <i>Ecological Engineering</i> , 2013, 53, 313-320.  | 1.6 | 32        |
| 26 | Amazon forest-to-agriculture conversion alters rhizosphere microbiome composition while functions are kept. <i>FEMS Microbiology Ecology</i> , 2019, 95, .                                     | 1.3 | 32        |
| 27 | Land-use systems affect Archaeal community structure and functional diversity in western Amazon soils. <i>Revista Brasileira De Ciencia Do Solo</i> , 2011, 35, 1527-1540.                     | 0.5 | 31        |
| 28 | Bacterial community associated with rhizosphere of maize and cowpea in a subsequent cultivation. <i>Applied Soil Ecology</i> , 2019, 143, 26-34.   | 2.1 | 31        |
| 29 | Response of soil bacterial communities to the application of the herbicides imazethapyr and flumyazin. <i>European Journal of Soil Biology</i> , 2021, 102, 103252.                            | 1.4 | 31        |
| 30 | <i>Bacillus subtilis</i> can modulate the growth and root architecture in soybean through volatile organic compounds. <i>Theoretical and Experimental Plant Physiology</i> , 2020, 32, 99-108. | 1.1 | 29        |
| 31 | Molecular Characterization of the Archaeal Community in an Amazonian Wetland Soil and Culture-Dependent Isolation of Methanogenic Archaea. <i>Diversity</i> , 2010, 2, 1026-1047.              | 0.7 | 28        |
| 32 | Metagenome assembled genomes reveal similar functional profiles of <i>CPR</i> /Patescibacteria phyla in soils. <i>Environmental Microbiology Reports</i> , 2020, 12, 651-655.                  | 1.0 | 27        |
| 33 | Plant Compartments and Developmental Stages Modulate the Balance between Niche-Based and Neutral Processes in Soybean Microbiome. <i>Microbial Ecology</i> , 2021, 82, 416-428.                | 1.4 | 27        |
| 34 | Liming in the sugarcane burnt system and the green harvest practice affect soil bacterial community in northeastern São Paulo, Brazil. <i>Antonie Van Leeuwenhoek</i> , 2016, 109, 1643-1654.  | 0.7 | 26        |
| 35 | Responses of soil microbial biomass and enzyme activity to herbicides imazethapyr and flumioxazin. <i>Scientific Reports</i> , 2020, 10, 7694.   | 1.6 | 26        |
| 36 | Grazing exclusion regulates bacterial community in highly degraded semiarid soils from the Brazilian <i>Caatinga</i> biome. <i>Land Degradation and Development</i> , 2021, 32, 2210-2225.     | 1.8 | 23        |

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|----|--|-----|-----------|
| 37 | Functional diversity of bacterial genes associated with aromatic hydrocarbon degradation in anthropogenic dark earth of Amazonia. <i>Pesquisa Agropecuaria Brasileira</i> , 2012, 47, 654-664. | 0.9 | 21        |
| 38 | Assessment of Bacterial bph Gene in Amazonian Dark Earth and Their Adjacent Soils. <i>PLoS ONE</i> , 2014, 9, e99597.  | 1.1 | 21        |
| 39 | Nodule microbiome from cowpea and lima bean grown in composted tannery sludge-treated soil. <i>Applied Soil Ecology</i> , 2020, 151, 103542.   | 2.1 | 21        |
| 40 | Diversity and structure of bacterial community in rhizosphere of lima bean. <i>Applied Soil Ecology</i> , 2020, 150, 103490.   | 2.1 | 20        |
| 41 | When the going gets tough: Emergence of a complex methane-driven interaction network during recovery from desiccation-rewetting. <i>Soil Biology and Biochemistry</i> , 2021, 153, 108109.     | 4.2 | 20        |
| 42 | Microbial co-occurrence network and its key microorganisms in soil with permanent application of composted tannery sludge. <i>Science of the Total Environment</i> , 2021, 789, 147945.        | 3.9 | 20        |
| 43 | Response of a methane-driven interaction network to stressor intensification. <i>FEMS Microbiology Ecology</i> , 2020, 96, .   | 1.3 | 19        |
| 44 | Archaea diversity in vegetation gradients from the Brazilian Cerrado. <i>Brazilian Journal of Microbiology</i> , 2018, 49, 522-528.  | 0.8 | 16        |
| 45 | Tannin supplementation modulates the composition and function of ruminal microbiome in lambs infected with gastrointestinal nematodes. <i>FEMS Microbiology Ecology</i> , 2020, 96, .          | 1.3 | 16        |
| 46 | Amazon deforestation enriches antibiotic resistance genes. <i>Soil Biology and Biochemistry</i> , 2021, 153, 108110.   | 4.2 | 16        |
| 47 | Land degradation affects the microbial communities in the Brazilian Caatinga biome. <i>Catena</i> , 2022, 211, 105961.   | 2.2 | 16        |
| 48 | Dynamics of archaeal community in soil with application of composted tannery sludge. <i>Scientific Reports</i> , 2019, 9, 7347.  | 1.6 | 15        |
| 49 | <i>Bacillus subtilis</i> changes the root architecture of soybean grown on nutrient-poor substrate. <i>Rhizosphere</i> , 2021, 18, 100348.   | 1.4 | 15        |
| 50 | Long-term application of biomass and reduced use of chemicals alleviate soil compaction and improve soil quality. <i>Soil and Tillage Research</i> , 2012, 120, 147-153.                       | 2.6 | 14        |
| 51 | Recovery of Methanotrophic Activity Is Not Reflected in the Methane-Driven Interaction Network after Peat Mining. <i>Applied and Environmental Microbiology</i> , 2021, 87, .                  | 1.4 | 14        |
| 52 | Dynamics of bacterial and archaeal communities along the composting of tannery sludge. <i>Environmental Science and Pollution Research</i> , 2021, 28, 64295-64306.                            | 2.7 | 12        |
| 53 | The use of indigenous bacterial community as inoculant for plant growth promotion in soybean cultivation. <i>Archives of Agronomy and Soil Science</i> , 2023, 69, 135-150.                    | 1.3 | 12        |
| 54 | Genome-Resolved Metagenomics Is Essential for Unlocking the Microbial Black Box of the Soil. <i>Trends in Microbiology</i> , 2021, 29, 279-282.  | 3.5 | 11        |

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|----|--|-----|-----------|
| 55 | Distinct taxonomic composition of soil bacterial community across a native gradient of Cerrado-Ecotone-Caatinga. <i>Applied Soil Ecology</i> , 2021, 161, 103874.  | 2.1 | 9         |
| 56 | Cover crops shape the soil bacterial community in a tropical soil under no-till. <i>Applied Soil Ecology</i> , 2021, 168, 104166.  | 2.1 | 9         |
| 57 | Distinct bacterial community structure and composition along different cowpea producing ecoregions in Northeastern Brazil. <i>Scientific Reports</i> , 2021, 11, 831.  | 1.6 | 8         |
| 58 | Assessment of microbial diversity associated with CH <sub>4</sub> emission from sugarcane vinasse storage and transportation systems. <i>Journal of Environmental Management</i> , 2020, 269, 110748.  | 3.8 | 7         |
| 59 | Isolation and enzyme bioprospection of bacteria associated to <i>Bruguiera cylindrica</i> , a mangrove plant of North Sumatra, Indonesia. <i>Biotechnology Reports (Amsterdam, Netherlands)</i> , 2021, 30, e00617.                              | 2.1 | 7         |
| 60 | Metabolic potential and survival strategies of microbial communities across extreme temperature gradients on Deception Island volcano, Antarctica. <i>Environmental Microbiology</i> , 2021, 23, 4054-4073.                                      | 1.8 | 7         |
| 61 | Does algae $\beta$ -glucan affect the fecal bacteriome in dairy calves?. <i>PLoS ONE</i> , 2021, 16, e0258069.   | 1.1 | 7         |
| 62 | Forest-to-pasture conversion modifies the soil bacterial community in Brazilian dry forest Caatinga. <i>Science of the Total Environment</i> , 2022, 810, 151943.  | 3.9 | 7         |
| 63 | Endophytic Bacteria and Fungi from Indonesian Medicinal Plants with Antibacterial, Pathogenic Antifungal and Extracellular Enzymes Activities: A Review. <i>International Journal of Science Technology &amp; Management</i> , 2022, 3, 245-255. | 0.1 | 7         |
| 64 | Domestication of Lima Bean ( <i>Phaseolus lunatus</i> ) Changes the Microbial Communities in the Rhizosphere. <i>Microbial Ecology</i> , 2023, 85, 1423-1433.  | 1.4 | 7         |
| 65 | Arbuscular mycorrhizal community in soil from different Brazilian Cerrado physiognomies. <i>Rhizosphere</i> , 2021, 19, 100375.  | 1.4 | 6         |
| 66 | The effect of <i>Haemonchus contortus</i> and <i>Trichostrongylus colubriformis</i> infection on the ruminal microbiome of lambs. <i>Experimental Parasitology</i> , 2021, 231, 108175.  | 0.5 | 6         |
| 67 | Long-term land use in Amazon influence the dynamic of microbial communities in soil and rhizosphere. <i>Rhizosphere</i> , 2022, 21, 100482.  | 1.4 | 6         |
| 68 | The methane-driven interaction network in terrestrial methane hotspots. <i>Environmental Microbiomes</i> , 2022, 17, 15.   | 2.2 | 6         |
| 69 | Enzymatic Stoichiometry in Soils from Physiognomies of Brazilian Cerrado. <i>Journal of Soil Science and Plant Nutrition</i> , 2022, 22, 2735-2742.  | 1.7 | 6         |
| 70 | Capability of plant growth-promoting bacteria in chromium-contaminated soil after application of composted tannery sludge. <i>Annals of Microbiology</i> , 2019, 69, 665-671.  | 1.1 | 5         |
| 71 | Aerobic Methanotrophy and Co-occurrence Networks of a Tropical Rainforest and Oil Palm Plantations in Malaysia. <i>Microbial Ecology</i> , 2022, 84, 1154-1165.  | 1.4 | 5         |
| 72 | Genetically related genotypes of cowpea present similar bacterial community in the rhizosphere. <i>Scientific Reports</i> , 2022, 12, 3472.  | 1.6 | 5         |

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|----|---|-----|-----------|
| 73 | Taxonomy and Functional Diversity in the Fecal Microbiome of Beef Cattle Reared in Brazilian Traditional and Semi-Intensive Production Systems. <i>Frontiers in Microbiology</i> , 2021, 12, 768480.  | 1.5 | 5         |
| 74 | Environmental DNA Sequencing to Monitor Restoration Practices on Soil Bacterial and Archaeal Communities in Soils Under Desertification in the Brazilian Semi-arid. <i>Microbial Ecology</i> , 2023, 85, 1072-1076.   | 1.4 | 5         |
| 75 | Maintaining grass coverage increases methane uptake in Amazonian pastures, with a reduction of methanogenic archaea in the rhizosphere. <i>Science of the Total Environment</i> , 2022, 838, 156225.  | 3.9 | 5         |
| 76 | Rhizosphere Microbiome and Soil-Borne Diseases. <i>Rhizosphere Biology</i> , 2021, , 155-168.   | 0.4 | 4         |
| 77 | Soil microbial C:N:P ratio across physiognomies of Brazilian Cerrado Soil microbial biomass across a gradient of preserved native Cerrado. <i>Anais Da Academia Brasileira De Ciencias</i> , 2019, 91, e20190049.   | 0.3 | 4         |
| 78 | On-Site Blackwater Treatment Fosters Microbial Groups and Functions to Efficiently and Robustly Recover Carbon and Nutrients. <i>Microorganisms</i> , 2021, 9, 75.  | 1.6 | 4         |
| 79 | Cowpea nodules host a similar bacterial community regardless of soil properties. <i>Applied Soil Ecology</i> , 2022, 172, 104354.   | 2.1 | 4         |
| 80 | Characterization and Comparison of Intestinal Bacterial Microbiomes of <i>Euschistus heros</i> and <i>Piezodorus guildinii</i> Collected in Brazil and the United States. <i>Frontiers in Microbiology</i> , 2021, 12, 769965.  | 1.5 | 3         |
| 81 | Seed size influences the promoting activity of rhizobia on plant growth, nodulation and N fixation in lima bean. <i>Ciencia Rural</i> , 2021, 51, .   | 0.3 | 2         |
| 82 | Diversity, structure, and composition of plant growth-promoting bacteria in soil from Brazilian Cerrado. <i>Rhizosphere</i> , 2021, 20, 100435.   | 1.4 | 2         |
| 83 | Microbial Assembly in Agroecosystems "From the Small Arise the Big. , 0, , .  |     | 1         |
| 84 | Analysis of a bacterial community structure and the diversity of <i>phzF</i> gene in samples of the Amazonian Dark Earths cultivated with cowpea [ <i>Vigna unguiculata</i> (L.) Wald]. <i>African Journal of Agricultural Research Vol Pp</i> , 2018, 13, 1980-1989. | 0.2 | 1         |
| 85 | Using Metagenomics to Connect Microbial Community Biodiversity and Functions. , 2017, , .   |     | 1         |
| 86 | BIOPROSPECTING FOR BACTERIAL ENDOPHYTES ASSOCIATED WITH ZINGIBERACEAE FAMILY RHIZOMES IN SIBOLANGIT FOREST, NORTH SUMATERA. <i>International Journal of Science Technology &amp; Management</i> , 2020, 1, 27-36.   | 0.1 | 1         |
| 87 | Ecosystem functions in different physiognomies of Cerrado through the Rapid Ecosystem Function Assessment (REFA). <i>Anais Da Academia Brasileira De Ciencias</i> , 2022, 94, e20200457.  | 0.3 | 1         |
| 88 | 5. Exploring Diversity of Soil Microorganisms: A Multidimensional Approach. , 2016, , 66-86.  |     | 0         |
| 89 | Methods to Identify Soil Microbial Bioindicators of Sustainable Management of Bioenergy Crops. <i>Methods in Molecular Biology</i> , 2021, 2232, 251-263.   | 0.4 | 0         |
| 90 | Dataset for effects of the transition from dry forest to pasture on diversity and structure of bacterial communities in Northeastern Brazil. <i>Data in Brief</i> , 2022, 41, 107842.   | 0.5 | 0         |

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|----|---|-----|-----------|
| 91 | Biogeographic responses and niche occupancy of microbial communities following long-term land-use change. Antonie Van Leeuwenhoek, 0, , . | 0.7 | 0         |