

# Mark P Waldrop

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/8057092/mark-p-waldrop-publications-by-year.pdf>

**Version:** 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

70  
papers

7,862  
citations

43  
h-index

80  
g-index

80  
ext. papers

9,373  
ext. citations

8.5  
avg, IF

5.75  
L-index

#	Paper	IF	Citations
70	Mechanisms for retention of low molecular weight organic carbon varies with soil depth at a coastal prairie ecosystem. <i>Soil Biology and Biochemistry</i> , <b>2022</b> , 108601	7.5	
69	Active virus-host interactions at sub-freezing temperatures in Arctic peat soil. <i>Microbiome</i> , <b>2021</b> , 9, 208	16.6	6
68	Influence of Permafrost Type and Site History on Losses of Permafrost Carbon After Thaw. <i>Journal of Geophysical Research G: Biogeosciences</i> , <b>2021</b> , 126, e2021JG006396	3.7	2
67	Carbon Fluxes and Microbial Activities From Boreal Peatlands Experiencing Permafrost Thaw. <i>Journal of Geophysical Research G: Biogeosciences</i> , <b>2021</b> , 126, e2020JG005869	3.7	10
66	The Biophysical Role of Water and Ice Within Permafrost Nearing Collapse: Insights From Novel Geophysical Observations. <i>Journal of Geophysical Research F: Earth Surface</i> , <b>2021</b> , 126, e2021JF006104	3.8	3
65	Emergent biogeochemical risks from Arctic permafrost degradation. <i>Nature Climate Change</i> , <b>2021</b> , 11, 809-819	21.4	8
64	Getting to the Root of Plant-Mediated Methane Emissions and Oxidation in a Thermokarst Bog. <i>Journal of Geophysical Research G: Biogeosciences</i> , <b>2020</b> , 125, e2020JG005825	3.7	8
63	Generalized models to estimate carbon and nitrogen stocks of organic soil horizons in Interior Alaska. <i>Earth System Science Data</i> , <b>2020</b> , 12, 1745-1757	10.5	2
62	Life at the Frozen Limit: Microbial Carbon Metabolism Across a Late Pleistocene Permafrost Chronosequence. <i>Frontiers in Microbiology</i> , <b>2020</b> , 11, 1753	5.7	7
61	Permafrost Mapping with Electrical Resistivity Tomography: A Case Study in Two Wetland Systems in Interior Alaska. <i>Journal of Environmental and Engineering Geophysics</i> , <b>2020</b> , 25, 199-209	1	3
60	Changes in the Active, Dead, and Dormant Microbial Community Structure across a Pleistocene Permafrost Chronosequence. <i>Applied and Environmental Microbiology</i> , <b>2019</b> , 85,	4.8	36
59	Effect of permafrost thaw on plant and soil fungal community in a boreal forest: Does fungal community change mediate plant productivity response?. <i>Journal of Ecology</i> , <b>2019</b> , 107, 1737-1752	6	22
58	Mineralogy dictates the initial mechanism of microbial necromass association. <i>Geochimica Et Cosmochimica Acta</i> , <b>2019</b> , 260, 161-176	5.5	22
57	Towards determining spatial methane distribution on Arctic permafrost bluffs with an unmanned aerial system. <i>SN Applied Sciences</i> , <b>2019</b> , 1, 1	1.8	12
56	Large loss of CO in winter observed across the northern permafrost region.. <i>Nature Climate Change</i> , <b>2019</b> , 9, 852-857	21.4	112
55	Biological and mineralogical controls over cycling of low molecular weight organic compounds along a soil chronosequence. <i>Soil Biology and Biochemistry</i> , <b>2019</b> , 133, 16-27	7.5	11
54	Warming Effects of Spring Rainfall Increase Methane Emissions From Thawing Permafrost. <i>Geophysical Research Letters</i> , <b>2019</b> , 46, 1393-1401	4.9	43

53	Understanding how microbiomes influence the systems they inhabit. <i>Nature Microbiology</i> , <b>2018</b> , 3, 977-982	10.6	101
52	Dissolved organic carbon and nitrogen release from boreal Holocene permafrost and seasonally frozen soils of Alaska. <i>Environmental Research Letters</i> , <b>2018</b> , 13, 065011	6.2	49
51	A decade of boreal rich fen greenhouse gas fluxes in response to natural and experimental water table variability. <i>Global Change Biology</i> , <b>2017</b> , 23, 2428-2440	11.4	49
50	The interacting roles of climate, soils, and plant production on soil microbial communities at a continental scale. <i>Ecology</i> , <b>2017</b> , 98, 1957-1967	4.6	45
49	Soil microbial community composition is correlated to soil carbon processing along a boreal wetland formation gradient. <i>European Journal of Soil Biology</i> , <b>2017</b> , 82, 17-26	2.9	15
48	Microbial survival strategies in ancient permafrost: insights from metagenomics. <i>ISME Journal</i> , <b>2017</b> , 11, 2305-2318	11.9	96
47	Potential carbon emissions dominated by carbon dioxide from thawed permafrost soils. <i>Nature Climate Change</i> , <b>2016</b> , 6, 950-953	21.4	211
46	Modeling CH <sub>4</sub> and CO <sub>2</sub> cycling using porewater stable isotopes in a thermokarst bog in Interior Alaska: results from three conceptual reaction networks. <i>Biogeochemistry</i> , <b>2016</b> , 127, 57-87	3.8	21
45	Seasonal Electrical Resistivity Surveys of a Coastal Bluff, Barter Island, North Slope Alaska. <i>Journal of Environmental and Engineering Geophysics</i> , <b>2016</b> , 21, 37-42	1	13
44	Spatially explicit estimation of aboveground boreal forest biomass in the Yukon River Basin, Alaska. <i>International Journal of Remote Sensing</i> , <b>2015</b> , 36, 939-953	3.1	6
43	Multi-omics of permafrost, active layer and thermokarst bog soil microbiomes. <i>Nature</i> , <b>2015</b> , 521, 208-12	150.4	305
42	Patterns in wetland microbial community composition and functional gene repertoire associated with methane emissions. <i>MBio</i> , <b>2015</b> , 6, e00066-15	7.8	61
41	Linking microbial community structure and microbial processes: an empirical and conceptual overview. <i>FEMS Microbiology Ecology</i> , <b>2015</b> , 91,	4.3	100
40	Relationships between protein-encoding gene abundance and corresponding process are commonly assumed yet rarely observed. <i>ISME Journal</i> , <b>2015</b> , 9, 1693-9	11.9	188
39	A pan-Arctic synthesis of CH <sub>4</sub> and CO production from anoxic soil incubations. <i>Global Change Biology</i> , <b>2015</b> , 21, 2787-2803	11.4	110
38	Differential response of carbon fluxes to climate in three peatland ecosystems that vary in the presence and stability of permafrost. <i>Journal of Geophysical Research G: Biogeosciences</i> , <b>2014</b> , 119, 15763-15795	3.7	72
37	Transport of oxygen in soil pore-water systems: implications for modeling emissions of carbon dioxide and methane from peatlands. <i>Biogeochemistry</i> , <b>2014</b> , 121, 455-470	3.8	17
36	Impact of fire on active layer and permafrost microbial communities and metagenomes in an upland Alaskan boreal forest. <i>ISME Journal</i> , <b>2014</b> , 8, 1904-19	11.9	106

35	Expert assessment of vulnerability of permafrost carbon to climate change. <i>Climatic Change</i> , <b>2013</b> , 119, 359-374	4.5	212
34	Response of anaerobic carbon cycling to water table manipulation in an Alaskan rich fen. <i>Soil Biology and Biochemistry</i> , <b>2013</b> , 58, 50-60	7.5	43
33	Extreme CO2 disturbance and the resilience of soil microbial communities. <i>Soil Biology and Biochemistry</i> , <b>2013</b> , 65, 274-286	7.5	20
32	Controls on ecosystem and root respiration across a permafrost and wetland gradient in interior Alaska. <i>Environmental Research Letters</i> , <b>2013</b> , 8, 045029	6.2	24
31	Abundance of microbial genes associated with nitrogen cycling as indices of biogeochemical process rates across a vegetation gradient in Alaska. <i>Environmental Microbiology</i> , <b>2012</b> , 14, 993-1008	5.2	262
30	Estimating aboveground biomass in interior Alaska with Landsat data and field measurements. <i>International Journal of Applied Earth Observation and Geoinformation</i> , <b>2012</b> , 18, 451-461	7.3	69
29	Microbes in thawing permafrost: the unknown variable in the climate change equation. <i>ISME Journal</i> , <b>2012</b> , 6, 709-12	11.9	110
28	Anaerobic oxidation of methane in tropical and boreal soils: Ecological significance in terrestrial methane cycling. <i>Journal of Geophysical Research</i> , <b>2012</b> , 117, n/a-n/a		56
27	Bacterial and enchytraeid abundance accelerate soil carbon turnover along a lowland vegetation gradient in interior Alaska. <i>Soil Biology and Biochemistry</i> , <b>2012</b> , 50, 188-198	7.5	25
26	Integrating microbial ecology into ecosystem models: challenges and priorities. <i>Biogeochemistry</i> , <b>2012</b> , 109, 7-18	3.8	177
25	Vulnerability of high-latitude soil organic carbon in North America to disturbance. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116,		292
24	Metagenomic analysis of a permafrost microbial community reveals a rapid response to thaw. <i>Nature</i> , <b>2011</b> , 480, 368-71	50.4	499
23	Molecular investigations into a globally important carbon pool: permafrost-protected carbon in Alaskan soils. <i>Global Change Biology</i> , <b>2010</b> , 16, 2543	11.4	129
22	Evolutionary-Economic Principles as Regulators of Soil Enzyme Production and Ecosystem Function. <i>Soil Biology</i> , <b>2010</b> , 229-243	1	66
21	Stoichiometry of soil enzyme activity at global scale. <i>Ecology Letters</i> , <b>2008</b> , 11, 1252-1264	10	1158
20	Interactive effects of wildfire and permafrost on microbial communities and soil processes in an Alaskan black spruce forest. <i>Global Change Biology</i> , <b>2008</b> , 14, 2591-2602	11.4	56
19	Short-term response of methane fluxes and methanogen activity to water table and soil warming manipulations in an Alaskan peatland. <i>Journal of Geophysical Research</i> , <b>2008</b> , 113,		143
18	Molecular analysis of fungal communities and laccase genes in decomposing litter reveals differences among forest types but no impact of nitrogen deposition. <i>Environmental Microbiology</i> , <b>2007</b> , 9, 1306-16	5.2	112

17	Seasonal dynamics of microbial community composition and function in oak canopy and open grassland soils. <i>Microbial Ecology</i> , <b>2006</b> , 52, 470-9	4.4	133
16	Response of microbial community composition and function to soil climate change. <i>Microbial Ecology</i> , <b>2006</b> , 52, 716-24	4.4	201
15	A molecular dawn for biogeochemistry. <i>Trends in Ecology and Evolution</i> , <b>2006</b> , 21, 288-95	10.9	82
14	Resource availability controls fungal diversity across a plant diversity gradient. <i>Ecology Letters</i> , <b>2006</b> , 9, 1127-35	10	199
13	Response of Oxidative Enzyme Activities to Nitrogen Deposition Affects Soil Concentrations of Dissolved Organic Carbon. <i>Ecosystems</i> , <b>2006</b> , 9, 921-933	3.9	157
12	Soil organic matter and litter chemistry response to experimental N deposition in northern temperate deciduous forest ecosystems. <i>Global Change Biology</i> , <b>2005</b> , 11, 1514-1521	11.4	51
11	Extracellular Enzyme Activities and Soil Organic Matter Dynamics for Northern Hardwood Forests receiving Simulated Nitrogen Deposition. <i>Biogeochemistry</i> , <b>2005</b> , 75, 201-215	3.8	255
10	Restoration and Canopy Type Influence Soil Microflora in a Ponderosa Pine Forest. <i>Soil Science Society of America Journal</i> , <b>2005</b> , 69, 1627-1638	2.5	36
9	Microbial community response to nitrogen deposition in northern forest ecosystems. <i>Soil Biology and Biochemistry</i> , <b>2004</b> , 36, 1443-1451	7.5	210
8	Altered utilization patterns of young and old soil C by microorganisms caused by temperature shifts and N additions. <i>Biogeochemistry</i> , <b>2004</b> , 67, 235-248	3.8	159
7	Microbial community utilization of recalcitrant and simple carbon compounds: impact of oak-woodland plant communities. <i>Oecologia</i> , <b>2004</b> , 138, 275-84	2.9	240
6	NITROGEN DEPOSITION MODIFIES SOIL CARBON STORAGE THROUGH CHANGES IN MICROBIAL ENZYMATIC ACTIVITY <b>2004</b> , 14, 1172-1177		305
5	Effects of Forest Postharvest Management Practices on Enzyme Activities in Decomposing Litter. <i>Soil Science Society of America Journal</i> , <b>2003</b> , 67, 1250-1256	2.5	45
4	Linking microbial community composition to function in a tropical soil. <i>Soil Biology and Biochemistry</i> , <b>2000</b> , 32, 1837-1846	7.5	455
3	Soil data for a thermokarst bog and the surrounding permafrost plateau forest, located at Bonanza Creek Long Term Ecological Research Site, Interior Alaska. <i>US Geological Survey Open-File Report</i> , 1-11		5
2	Changes in the Active, Dead, and Dormant Microbial Community Structure Across a Pleistocene Permafrost Chronosequence		1
1	Ecology of active viruses and their bacterial hosts in frozen Arctic peat soil revealed with H218O stable isotope probing metagenomics		1