Michael N Weintraub

List of Publications by Year in descending order

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54 papers

9,744 citations

33 h-index 55 g-index

57 all docs

57 docs citations

57 times ranked

9097 citing authors

#	Article	IF	CITATIONS
1	Stoichiometry of soil enzyme activity at global scale. Ecology Letters, 2008, 11, 1252-1264.	6.4	1,684
2	Soil enzymes in a changing environment: Current knowledge and future directions. Soil Biology and Biochemistry, 2013, 58, 216-234.	8.8	1,535
3	The implications of exoenzyme activity on microbial carbon and nitrogen limitation in soil: a theoretical model. Soil Biology and Biochemistry, 2003, 35, 549-563.	8.8	1,237
4	Optimization of hydrolytic and oxidative enzyme methods for ecosystem studies. Soil Biology and Biochemistry, 2011, 43, 1387-1397.	8.8	794
5	Vector analysis of ecoenzyme activities reveal constraints on coupled C, N and P dynamics. Soil Biology and Biochemistry, 2016, 93, 1-7.	8.8	344
6	BIOGEOCHEMICAL CONSEQUENCES OF RAPID MICROBIAL TURNOVER AND SEASONAL SUCCESSION IN SOIL. Ecology, 2007, 88, 1379-1385.	3.2	297
7	Emerging tools for measuring and modeling the in situ activity of soil extracellular enzymes. Soil Biology and Biochemistry, 2008, 40, 2098-2106.	8.8	278
8	Interactions between Carbon and Nitrogen Mineralization and Soil Organic Matter Chemistry in Arctic Tundra Soils. Ecosystems, 2003, 6, 129-143.	3.4	258
9	The effects of chronic nitrogen fertilization on alpine tundra soil microbial communities: implications for carbon and nitrogen cycling. Environmental Microbiology, 2008, 10, 3093-3105.	3.8	252
10	The earliest stages of ecosystem succession in high-elevation (5000 metres above sea level), recently deglaciated soils. Proceedings of the Royal Society B: Biological Sciences, 2008, 275, 2793-2802.	2.6	222
11	The effects of tree rhizodeposition on soil exoenzyme activity, dissolved organic carbon, and nutrient availability in a subalpine forest ecosystem. Oecologia, 2007, 154, 327-338.	2.0	209
12	Integrating legacy soil phosphorus into sustainable nutrient management strategies for future food, bioenergy and water security. Nutrient Cycling in Agroecosystems, 2016, 104, 393-412.	2.2	199
13	Relationship between soil enzyme activities, nutrient cycling and soil fungal communities in a northern hardwood forest. Soil Biology and Biochemistry, 2011, 43, 795-803.	8.8	187
14	Measuring phenol oxidase and peroxidase activities with pyrogallol, l-DOPA, and ABTS: Effect of assay conditions and soil type. Soil Biology and Biochemistry, 2013, 67, 183-191.	8.8	182
15	Nitrogen Cycling and the Spread of Shrubs Control Changes in the Carbon Balance of Arctic Tundra Ecosystems. BioScience, 2005, 55, 408.	4.9	154
16	Extracellular enzymes in terrestrial, freshwater, and marine environments: perspectives on system variability and common research needs. Biogeochemistry, 2014, 117, 5-21.	3.5	146
17	The seasonal dynamics of amino acids and other nutrients in Alaskan Arctic tundra soils. Biogeochemistry, 2005, 73, 359-380.	3.5	137
18	Crop rotation complexity regulates the decomposition of high and low quality residues. Soil Biology and Biochemistry, 2014, 78, 243-254.	8.8	133

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19	Evolutionary-Economic Principles as Regulators of Soil Enzyme Production and Ecosystem Function. Soil Biology, 2010, , 229-243.	0.8	124
20	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
21	Structure and function of alpine and arctic soil microbial communities. Research in Microbiology, 2005, 156, 775-784.	2.1	110
22	Carbon structure and enzyme activities in alpine and forest ecosystems. Soil Biology and Biochemistry, 2007, 39, 2701-2711.	8.8	106
23	Persulfate Digestion and Simultaneous Colorimetric Analysis of Carbon and Nitrogen in Soil Extracts. Soil Science Society of America Journal, 2004, 68, 669-676.	2.2	94
24	Seasonal protein dynamics in Alaskan arctic tundra soils. Soil Biology and Biochemistry, 2005, 37, 1469-1475.	8.8	94
25	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
26	Earlier snowmelt and warming lead to earlier but not necessarily more plant growth. AoB PLANTS, 2016, 8, .	2.3	60
27	Interactions between leaf litter quality, particle size, and microbial community during the earliest stage of decay. Biogeochemistry, 2014, 117, 153-168.	3.5	59
28	Microbial substrate preference and community dynamics during decomposition of Acer saccharum. Fungal Ecology, 2011, 4, 396-407.	1.6	57
29	Calculating co-metabolic costs of lignin decay and their impacts on carbon use efficiency. Soil Biology and Biochemistry, 2013, 66, 17-19.	8.8	47
30	Evidence for spatially inaccessible labile N from a comparison of soil core extractions and soil pore water lysimetry. Soil Biology and Biochemistry, 2014, 73, 22-32.	8.8	44
31	Soil enzymes in response to climate warming: Mechanisms and feedbacks. Functional Ecology, 2022, 36, 1378-1395.	3.6	44
32	Persulfate Digestion and Simultaneous Colorimetric Analysis of Carbon and Nitrogen in Soil Extracts. Soil Science Society of America Journal, 2004, 68, 669.	2.2	40
33	Fluorescent microplate analysis of amino acids and other primary amines in soils. Soil Biology and Biochemistry, 2013, 57, 78-82.	8.8	39
34	Nitrogen alters microbial enzyme dynamics but not lignin chemistry during maize decomposition. Biogeochemistry, 2016, 128, 171-186.	3.5	31
35	Guiding phosphorus stewardship for multiple ecosystem services. Ecosystem Health and Sustainability, 2016, 2, .	3.1	30
36	Field and lab conditions alter microbial enzyme and biomass dynamics driving decomposition of the same leaf litter. Frontiers in Microbiology, 2013, 4, 260.	3.5	27

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37	Eleven years of crop diversification alters decomposition dynamics of litter mixtures incubated with soil. Ecosphere, 2016, 7, e01426.	2.2	25
38	Cross-laboratory comparison of fluorimetric microplate and colorimetric bench-scale soil enzyme assays. Soil Biology and Biochemistry, 2018, 121, 240-248.	8.8	22
39	The evolution and application of the reverse Michaelis-Menten equation. Soil Biology and Biochemistry, 2018, 125, 261-262.	8.8	22
40	Labile carbon limits late winter microbial activity near Arctic treeline. Nature Communications, 2020, 11, 4024.	12.8	22
41	Biological Phosphorus Cycling in Arctic and Alpine Soils. Soil Biology, 2011, , 295-316.	0.8	22
42	Seasonal Effects Stronger than Three-Year Climate Manipulation on Grassland Soil Microbial Community. Soil Science Society of America Journal, 2015, 79, 1352-1365.	2.2	21
43	Microbial activity is not always limited by nitrogen in Arctic tundra soils. Soil Biology and Biochemistry, 2015, 90, 52-61.	8.8	21
44	Impact of a short-term heat event on C and N relations in shoots vs. roots of the stress-tolerant C4 grass, Andropogon gerardii. Journal of Plant Physiology, 2014, 171, 977-985.	3.5	20
45	Comparison and standardization of soil enzyme assay for meaningful data interpretation. Journal of Microbiological Methods, 2017, 133, 32-34.	1.6	19
46	Influence of Timber Harvesting Alternatives on Forest Soil Respiration and Its Biophysical Regulatory Factors over a 5-year Period in the Missouri Ozarks. Ecosystems, 2011, 14, 1310-1327.	3.4	17
47	Limited effects of early snowmelt on plants, decomposers, and soil nutrients in Arctic tundra soils. Ecology and Evolution, 2019, 9, 1820-1844.	1.9	17
48	Biogeochemical and ecosystem properties in three adjacent semiâ€arid grasslands are resistant to nitrogen deposition but sensitive to edaphic variability. Journal of Ecology, 2022, 110, 1615-1631.	4.0	13
49	Experimentally warmer and drier conditions in an Arctic plant community reveal microclimatic controls on senescence. Ecosphere, 2019, 10, e02677.	2.2	10
50	Seasonal patterns of soil nitrogen availability in moist acidic tundra. Arctic Science, 2017, , .	2.3	7
51	Can we reduce phosphorus runoff from agricultural fields by stimulating soil biota?. Journal of Environmental Quality, 2020, 49, 933-944.	2.0	5
52	Does stimulating ground arthropods enhance nutrient cycling in conventionally managed corn fields?. Agriculture, Ecosystems and Environment, 2020, 297, 106934.	5.3	5
53	Response to Steen and Ziervogel's comment on "Optimization of hydrolytic and oxidative enzyme methods to ecosystem studies―[Soil Biology & Biochemistry 43: 1387–1397]. Soil Biology and Biochemistry, 2012, 48, 198-199.	8.8	3
54	The Effect of Trails on Soil in the Oak Openings of Northwest Ohio. Natural Areas Journal, 2011, 31, 391-399.	0.5	1