

Joshua P Schimel

List of Publications by Year in descending order

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188
papers

35,221
citations

3721

89
h-index

3476

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docs citations

195
times ranked

24475
citing authors

#	ARTICLE	IF	CITATIONS
1	Beyond bulk: Density fractions explain heterogeneity in global soil carbon abundance and persistence. <i>Global Change Biology</i> , 2022, 28, 1178-1196.	4.2	67
2	Estimating microbial carbon use efficiency in soil: Isotope-based and enzyme-based methods measure fundamentally different aspects of microbial resource use. <i>Soil Biology and Biochemistry</i> , 2022, 169, 108677.	4.2	26
3	Ecosystem metabolomics of dissolved organic matter from arctic soil pore water across seasonal transitions. , 2022, , 91-106.		0
4	Testing microbial models with data from a ¹⁴ C glucose tracer experiment. <i>Soil Biology and Biochemistry</i> , 2022, 172, 108781.	4.2	2
5	The Democracy of Dirt: Relating Micro-Scale Dynamics to Macro-Scale Ecosystem Function. <i>Advances in Environmental Microbiology</i> , 2021, , 89-102.	0.1	3
6	Soil bacterial communities vary more by season than with over two decades of experimental warming in Arctic tussock tundra. <i>Elementa</i> , 2021, 9, .	1.1	5
7	Amino acids dominate diffusive nitrogen fluxes across soil depths in acidic tussock tundra. <i>New Phytologist</i> , 2021, 231, 2162-2173.	3.5	13
8	A holistic framework integrating plant-microbe-mineral regulation of soil bioavailable nitrogen. <i>Biogeochemistry</i> , 2021, 154, 211-229.	1.7	63
9	High resolution measurements reveal abiotic and biotic mechanisms of elevated nitric oxide emission after wetting dry soil. <i>Soil Biology and Biochemistry</i> , 2021, 160, 108316.	4.2	2
10	Soybeans Grown with Carbonaceous Nanomaterials Maintain Nitrogen Stoichiometry by Assimilating Soil Nitrogen to Offset Impaired Dinitrogen Fixation. <i>ACS Nano</i> , 2020, 14, 585-594.	7.3	15
11	Persistence of soil organic carbon caused by functional complexity. <i>Nature Geoscience</i> , 2020, 13, 529-534.	5.4	363
12	Partitioning sources of CO ₂ emission after soil wetting using high-resolution observations and minimal models. <i>Soil Biology and Biochemistry</i> , 2020, 143, 107753.	4.2	23
13	Cellular and extracellular C contributions to respiration after wetting dry soil. <i>Biogeochemistry</i> , 2020, 147, 307-324.	1.7	38
14	Rainfall intensification increases the contribution of rewetting pulses to soil heterotrophic respiration. <i>Biogeosciences</i> , 2020, 17, 4007-4023.	1.3	23
15	An open-source database for the synthesis of soil radiocarbon data: International Soil Radiocarbon Database (ISRaD) version 1.0. <i>Earth System Science Data</i> , 2020, 12, 61-76.	3.7	48
16	Effects of carbonaceous nanomaterials on soil-grown soybeans under combined heat and insect stresses. <i>Environmental Chemistry</i> , 2019, 16, 482.	0.7	7
17	Changing perspectives on terrestrial nitrogen cycling: The importance of weathering and evolved resource-use traits for understanding ecosystem responses to global change. <i>Functional Ecology</i> , 2019, 33, 1818-1829.	1.7	14
18	Limited effects of early snowmelt on plants, decomposers, and soil nutrients in Arctic tundra soils. <i>Ecology and Evolution</i> , 2019, 9, 1820-1844.	0.8	17

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19	Plant community regulates decomposer response to freezing more strongly than the rate or extent of the freezing regime. <i>Ecosphere</i> , 2019, 10, e02608.	1.0	1
20	Beyond clay: towards an improved set of variables for predicting soil organic matter content. <i>Biogeochemistry</i> , 2018, 137, 297-306.	1.7	423
21	The Millennial model: in search of measurable pools and transformations for modeling soil carbon in the new century. <i>Biogeochemistry</i> , 2018, 137, 51-71.	1.7	139
22	Carbonaceous Nanomaterials Have Higher Effects on Soybean Rhizosphere Prokaryotic Communities During the Reproductive Growth Phase than During Vegetative Growth. <i>Environmental Science & Technology</i> , 2018, 52, 6636-6646.	4.6	54
23	Cooperation of earthworm and arbuscular mycorrhizae enhanced plant N uptake by balancing absorption and supply of ammonia. <i>Soil Biology and Biochemistry</i> , 2018, 116, 351-359.	4.2	33
24	Multiple models and experiments underscore large uncertainty in soil carbon dynamics. <i>Biogeochemistry</i> , 2018, 141, 109-123.	1.7	169
25	Evaluating soil microbial carbon use efficiency explicitly as a function of cellular processes: implications for measurements and models. <i>Biogeochemistry</i> , 2018, 140, 269-283.	1.7	59
26	Improving understanding of soil organic matter dynamics by triangulating theories, measurements, and models. <i>Biogeochemistry</i> , 2018, 140, 1-13.	1.7	83
27	Effects of altered dry season length and plant inputs on soluble soil carbon. <i>Ecology</i> , 2018, 99, 2348-2362.	1.5	60
28	Biotic versus Abiotic Controls on Bioavailable Soil Organic Carbon. <i>Soil Systems</i> , 2018, 2, 10.	1.0	25
29	Environmental controls on extracellular polysaccharide accumulation in a California grassland soil. <i>Soil Biology and Biochemistry</i> , 2018, 125, 86-92.	4.2	17
30	Understanding how microbiomes influence the systems they inhabit. <i>Nature Microbiology</i> , 2018, 3, 977-982.	5.9	169
31	Life in Dry Soils: Effects of Drought on Soil Microbial Communities and Processes. <i>Annual Review of Ecology, Evolution, and Systematics</i> , 2018, 49, 409-432.	3.8	486
32	Minerals in the rhizosphere: overlooked mediators of soil nitrogen availability to plants and microbes. <i>Biogeochemistry</i> , 2018, 139, 103-122.	1.7	203
33	Shrub encroachment in Arctic tundra: <i>Betula nana</i> effects on above- and belowground litter decomposition. <i>Ecology</i> , 2017, 98, 1361-1376.	1.5	85
34	Shifting patterns of microbial N-metabolism across seasons in upland Alaskan tundra soils. <i>Soil Biology and Biochemistry</i> , 2017, 105, 96-107.	4.2	15
35	Agglomeration Determines Effects of Carbonaceous Nanomaterials on Soybean Nodulation, Dinitrogen Fixation Potential, and Growth in Soil. <i>ACS Nano</i> , 2017, 11, 5753-5765.	7.3	80
36	Global pattern and controls of soil microbial metabolic quotient. <i>Ecological Monographs</i> , 2017, 87, 429-441.	2.4	106

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37	Nitrogen cycling and export in California chaparral: the role of climate in shaping ecosystem responses to fire. <i>Ecological Monographs</i> , 2017, 87, 76-90.	2.4	28
38	Damage assessment for soybean cultivated in soil with either CeO ₂ or ZnO manufactured nanomaterials. <i>Science of the Total Environment</i> , 2017, 579, 1756-1768.	3.9	100
39	Linking NO and N ₂ O emission pulses with the mobilization of mineral and organic N upon rewetting dry soils. <i>Soil Biology and Biochemistry</i> , 2017, 115, 461-466.	4.2	81
40	The importance of anabolism in microbial control over soil carbon storage. <i>Nature Microbiology</i> , 2017, 2, 17105.	5.9	1,288
41	Soil carbon and nitrogen dynamics throughout the summer drought in a California annual grassland. <i>Soil Biology and Biochemistry</i> , 2017, 115, 54-62.	4.2	82
42	Estimating decay dynamics for enzyme activities in soils from different ecosystems. <i>Soil Biology and Biochemistry</i> , 2017, 114, 5-11.	4.2	106
43	Acidity and organic matter promote abiotic nitric oxide production in drying soils. <i>Global Change Biology</i> , 2017, 23, 1735-1747.	4.2	35
44	Aridity and plant uptake interact to make dryland soils hotspots for nitric oxide (NO) emissions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, E2608-16.	3.3	89
45	Water balance creates a threshold in soil pH at the global scale. <i>Nature</i> , 2016, 540, 567-569.	13.7	358
46	Microbial ecology: Linking omics to biogeochemistry. <i>Nature Microbiology</i> , 2016, 1, 15028.	5.9	46
47	Vegetation Leachate During Arctic Thaw Enhances Soil Microbial Phosphorus. <i>Ecosystems</i> , 2016, 19, 477-489.	1.6	13
48	Factors Regulating Nitrogen Retention During the Early Stages of Recovery from Fire in Coastal Chaparral Ecosystems. <i>Ecosystems</i> , 2016, 19, 910-926.	1.6	29
49	Modeling coupled enzymatic and solute transport controls on decomposition in drying soils. <i>Soil Biology and Biochemistry</i> , 2016, 95, 275-287.	4.2	72
50	Effects of substrate supply, pH, and char on net nitrogen mineralization and nitrification along a wildfire-structured age gradient in chaparral. <i>Soil Biology and Biochemistry</i> , 2016, 95, 87-99.	4.2	57
51	Frontiers in Ecosystem Ecology from a Community Perspective: The Future is Boundless and Bright. <i>Ecosystems</i> , 2016, 19, 753-770.	1.6	40
52	Long-Term Effects of Multiwalled Carbon Nanotubes and Graphene on Microbial Communities in Dry Soil. <i>Environmental Science & Technology</i> , 2016, 50, 3965-3974.	4.6	91
53	Plant versus microbial controls on soil aggregate stability in a seasonally dry ecosystem. <i>Geoderma</i> , 2016, 272, 39-50.	2.3	106
54	Improving Nitrite Analysis in Soils: Drawbacks of the Conventional 2 M KCl Extraction. <i>Soil Science Society of America Journal</i> , 2015, 79, 1237-1242.	1.2	27

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55	Controls on Methane Flux from Terrestrial Ecosystems. ASA Special Publication, 2015, , 167-182.	0.8	12
56	Linking microbial community structure and microbial processes: an empirical and conceptual overview. FEMS Microbiology Ecology, 2015, 91, fiv113.	1.3	143
57	Responses of a tundra system to warming using SCAMPS: a stoichiometrically coupled, acclimating microbeâ€“plantâ€“soil model. Ecological Monographs, 2014, 84, 151-170.	2.4	55
58	Soil heterogeneity and the distribution of native grasses in California: Can soil properties inform restoration plans?. Ecosphere, 2014, 5, 1-14.	1.0	4
59	Substrate and environmental controls on microbial assimilation of soil organic carbon: a framework for Earth system models. Ecology Letters, 2014, 17, 547-555.	3.0	148
60	Analysis of Run-to-Run Variation of Bar-Coded Pyrosequencing for Evaluating Bacterial Community Shifts and Individual Taxa Dynamics. PLoS ONE, 2014, 9, e99414.	1.1	10
61	A theoretical analysis of microbial eco-physiological and diffusion limitations to carbon cycling in drying soils. Soil Biology and Biochemistry, 2014, 73, 69-83.	4.2	220
62	Separating cellular metabolism from exoenzyme activity in soil organic matter decomposition. Soil Biology and Biochemistry, 2014, 71, 68-75.	4.2	97
63	Five reasons to use bacteria when assessing manufactured nanomaterial environmental hazards and fates. Current Opinion in Biotechnology, 2014, 27, 73-78.	3.3	82
64	Soybean Plants Modify Metal Oxide Nanoparticle Effects on Soil Bacterial Communities. Environmental Science & Technology, 2014, 48, 13489-13496.	4.6	99
65	Assessing Nitrogen-Saturation in a Seasonally Dry Chaparral Watershed: Limitations of Traditional Indicators of N-Saturation. Ecosystems, 2014, 17, 1286-1305.	1.6	55
66	Terrestrial Ecosystems at Toolik Lake, Alaska. , 2014, , 90-142.		29
67	Assessing interactions of hydrophilic nanoscale TiO ₂ with soil water. Journal of Nanoparticle Research, 2013, 15, 1.	0.8	25
68	Microbes and global carbon. Nature Climate Change, 2013, 3, 867-868.	8.1	68
69	Potential Mechanisms and Environmental Controls of TiO ₂ Nanoparticle Effects on Soil Bacterial Communities. Environmental Science & Technology, 2013, 47, 14411-14417.	4.6	95
70	Soilâ€“plant N processes in a High Arctic ecosystem, <sc>NW</sc> Greenland are altered by longâ€“term experimental warming and higher rainfall. Global Change Biology, 2013, 19, 3529-3539.	4.2	80
71	The impacts of climate change on ecosystem structure and function. Frontiers in Ecology and the Environment, 2013, 11, 474-482.	1.9	433
72	Ecological Nanotoxicology: Integrating Nanomaterial Hazard Considerations Across the Subcellular, Population, Community, and Ecosystems Levels. Accounts of Chemical Research, 2013, 46, 813-822.	7.6	125

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73	Cloud shading and fog drip influence the metabolism of a coastal pine ecosystem. <i>Global Change Biology</i> , 2013, 19, 484-497.	4.2	43
74	Static osmolyte concentrations in microbial biomass during seasonal drought in a California grassland. <i>Soil Biology and Biochemistry</i> , 2013, 57, 356-361.	4.2	61
75	Drivers of microbial respiration and net N mineralization at the continental scale. <i>Soil Biology and Biochemistry</i> , 2013, 60, 65-76.	4.2	156
76	Long-term warming restructures Arctic tundra without changing net soil carbon storage. <i>Nature</i> , 2013, 497, 615-618.	13.7	350
77	Seasonal patterns of microbial extracellular enzyme activities in an arctic tundra soil: Identifying direct and indirect effects of long-term summer warming. <i>Soil Biology and Biochemistry</i> , 2013, 66, 119-129.	4.2	94
78	What's in a name? The importance of soil taxonomy for ecology and biogeochemistry. <i>Frontiers in Ecology and the Environment</i> , 2013, 11, 405-406.	1.9	15
79	Reply to Lombi et al.: Clear effects of manufactured nanomaterials to soybean. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, .	3.3	1
80	Microbial control over carbon cycling in soil. <i>Frontiers in Microbiology</i> , 2012, 3, 348.	1.5	978
81	Stoichiometric flexibility as a regulator of carbon and nutrient cycling in terrestrial ecosystems under change. <i>New Phytologist</i> , 2012, 196, 68-78.	3.5	249
82	Soybean susceptibility to manufactured nanomaterials with evidence for food quality and soil fertility interruption. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, E2451-6.	3.3	436
83	Sinks for nitrogen inputs in terrestrial ecosystems: a meta-analysis of ¹⁵ N tracer field studies. <i>Ecology</i> , 2012, 93, 1816-1829.	1.5	192
84	Grassland community composition drives small-scale spatial patterns in soil properties and processes. <i>Geoderma</i> , 2012, 170, 269-279.	2.3	18
85	Responses of soil microbial communities to water stress: results from a meta-analysis. <i>Ecology</i> , 2012, 93, 930-938.	1.5	830
86	Identification of Soil Bacteria Susceptible to TiO ₂ and ZnO Nanoparticles. <i>Applied and Environmental Microbiology</i> , 2012, 78, 6749-6758.	1.4	225
87	When structure means conservation: Effect of aggregate structure in controlling microbial responses to rewetting events. <i>Soil Biology and Biochemistry</i> , 2012, 44, 1-8.	4.2	120
88	Detecting microbial N-limitation in tussock tundra soil: Implications for Arctic soil organic carbon cycling. <i>Soil Biology and Biochemistry</i> , 2012, 55, 78-84.	4.2	129
89	Evidence for Negative Effects of TiO ₂ and ZnO Nanoparticles on Soil Bacterial Communities. <i>Environmental Science & Technology</i> , 2011, 45, 1659-1664.	4.6	437
90	Soil nitrogen availability and transformations differ between the summer and the growing season in a California grassland. <i>Applied Soil Ecology</i> , 2011, 48, 185-192.	2.1	130

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91	Carbon and Nitrogen Cycling in Snow-Covered Environments. <i>Geography Compass</i> , 2011, 5, 682-699.	1.5	177
92	A cross-seasonal comparison of active and total bacterial community composition in Arctic tundra soil using bromodeoxyuridine labeling. <i>Soil Biology and Biochemistry</i> , 2011, 43, 287-295.	4.2	83
93	Drying/rewetting cycles mobilize old C from deep soils from a California annual grassland. <i>Soil Biology and Biochemistry</i> , 2011, 43, 1101-1103.	4.2	75
94	Seasonal and episodic moisture controls on plant and microbial contributions to soil respiration. <i>Oecologia</i> , 2011, 167, 265-278.	0.9	169
95	Marine Macrophyte Wrack Inputs and Dissolved Nutrients in Beach Sands. <i>Estuaries and Coasts</i> , 2011, 34, 839-850.	1.0	114
96	Understanding and eliminating iron interference in colorimetric nitrate and nitrite analysis. <i>Environmental Monitoring and Assessment</i> , 2010, 165, 633-641.	1.3	19
97	Slow turnover and production of fungal hyphae during a Californian dry season. <i>Soil Biology and Biochemistry</i> , 2010, 42, 1657-1660.	4.2	26
98	The ecological coherence of high bacterial taxonomic ranks. <i>Nature Reviews Microbiology</i> , 2010, 8, 523-529.	13.6	562
99	Measuring soil microbial parameters relevant for soil carbon fluxes. , 2010, , 169-186.		2
100	Invasive Grasses Increase Nitrogen Availability in California Grassland Soils. <i>Invasive Plant Science and Management</i> , 2010, 3, 40-47.	0.5	39
101	Pushing the limits for amplifying BrdU-labeled DNA encoding 16S rRNA: DNA polymerase as the determining factor. <i>Journal of Microbiological Methods</i> , 2010, 83, 312-316.	0.7	5
102	Adding an empirical factor to better represent the rewetting pulse mechanism in a soil biogeochemical model. <i>Geoderma</i> , 2010, 159, 440-451.	2.3	25
103	Seasonal variation in nitrogen uptake and turnover in two high-elevation soils: mineralization responses are site-dependent. <i>Biogeochemistry</i> , 2009, 93, 253-270.	1.7	40
104	Seasonal variation in enzyme activities and temperature sensitivities in Arctic tundra soils. <i>Global Change Biology</i> , 2009, 15, 1631-1639.	4.2	296
105	Does adding microbial mechanisms of decomposition improve soil organic matter models? A comparison of four models using data from a pulsed rewetting experiment. <i>Soil Biology and Biochemistry</i> , 2009, 41, 1923-1934.	4.2	166
106	Microbial growth in Arctic tundra soil at $\sim 2^{\circ}\text{C}$. <i>Environmental Microbiology Reports</i> , 2009, 1, 162-166.	1.0	56
107	Abiotic nitrate incorporation, anaerobic microsites, and the ferrous wheel. <i>Biogeochemistry</i> , 2008, 91, 223-227.	1.7	35
108	Evaluation of hyperspectral data for pasture estimate in the Brazilian Amazon using field and imaging spectrometers. <i>Remote Sensing of Environment</i> , 2008, 112, 1569-1583.	4.6	82

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109	Towards a predictive understanding of belowground process responses to climate change: have we moved any closer?. <i>Functional Ecology</i> , 2008, 22, 937-940.	1.7	34
110	Soil heterogeneity in lumped mineralization-immobilization models. <i>Soil Biology and Biochemistry</i> , 2008, 40, 1137-1148.	4.2	38
111	Drying and rewetting effects on C and N mineralization and microbial activity in surface and subsurface California grassland soils. <i>Soil Biology and Biochemistry</i> , 2008, 40, 2281-2289.	4.2	450
112	New Directions in Microbial Ecology1. <i>Ecology</i> , 2007, 88, 1343-1344.	1.5	51
113	MICROBIAL STRESS-RESPONSE PHYSIOLOGY AND ITS IMPLICATIONS FOR ECOSYSTEM FUNCTION. <i>Ecology</i> , 2007, 88, 1386-1394.	1.5	1,935
114	Characterization of pasture biophysical properties and the impact of grazing intensity using remotely sensed data. <i>Remote Sensing of Environment</i> , 2007, 109, 314-327.	4.6	119
115	Bacterial and fungal community structure in Arctic tundra tussock and shrub soils. <i>FEMS Microbiology Ecology</i> , 2007, 59, 428-435.	1.3	221
116	Nitrogen transfer between decomposing leaves of different N status. <i>Soil Biology and Biochemistry</i> , 2007, 39, 1428-1436.	4.2	196
117	Temporal nutrient variation in soil and vegetation of post-forest pastures as a function of soil order, pasture age, and management, Rondônia, Brazil. <i>Agriculture, Ecosystems and Environment</i> , 2007, 118, 159-172.	2.5	26
118	Abiotic nitrate incorporation in soil: is it real?. <i>Biogeochemistry</i> , 2007, 84, 161-169.	1.7	55
119	Mineralization responses at near-zero temperatures in three alpine soils. <i>Biogeochemistry</i> , 2007, 84, 233-245.	1.7	37
120	Predicting the temperature dependence of microbial respiration in soil: A continental-scale analysis. <i>Global Biogeochemical Cycles</i> , 2006, 20, n/a-n/a.	1.9	222
121	Decadal-scale Dynamics of Water, Carbon and Nitrogen in a California Chaparral Ecosystem: DAYCENT Modeling Results. <i>Biogeochemistry</i> , 2006, 77, 217-245.	1.7	41
122	Cold-season Production of CO ₂ in Arctic Soils: Can Laboratory and Field Estimates Be Reconciled through a Simple Modeling Approach?. <i>Arctic, Antarctic, and Alpine Research</i> , 2006, 38, 249-256.	0.4	50
123	Microbial community composition and soil nitrogen cycling: is there really a connection?. , 2005, , 171-188.		46
124	Changing microbial substrate use in Arctic tundra soils through a freeze-thaw cycle. <i>Soil Biology and Biochemistry</i> , 2005, 37, 1411-1418.	4.2	183
125	Seasonal protein dynamics in Alaskan arctic tundra soils. <i>Soil Biology and Biochemistry</i> , 2005, 37, 1469-1475.	4.2	94
126	Episodic rewetting enhances carbon and nitrogen release from chaparral soils. <i>Soil Biology and Biochemistry</i> , 2005, 37, 2195-2204.	4.2	305

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127	The seasonal dynamics of amino acids and other nutrients in Alaskan Arctic tundra soils. <i>Biogeochemistry</i> , 2005, 73, 359-380.	1.7	137
128	New Section: Synthesis and Emerging Ideas. <i>Biogeochemistry</i> , 2005, 75, v-vi.	1.7	0
129	LITTER QUALITY AND THE TEMPERATURE SENSITIVITY OF DECOMPOSITION. <i>Ecology</i> , 2005, 86, 320-326.	1.5	566
130	Winter Biological Processes Could Help Convert Arctic Tundra to Shrubland. <i>BioScience</i> , 2005, 55, 17.	2.2	557
131	Nitrogen Cycling and the Spread of Shrubs Control Changes in the Carbon Balance of Arctic Tundra Ecosystems. <i>BioScience</i> , 2005, 55, 408.	2.2	154
132	Role of Land-Surface Changes in Arctic Summer Warming. <i>Science</i> , 2005, 310, 657-660.	6.0	1,186
133	Persulfate Digestion and Simultaneous Colorimetric Analysis of Carbon and Nitrogen in Soil Extracts. <i>Soil Science Society of America Journal</i> , 2004, 68, 669-676.	1.2	94
134	Playing scales in the methane cycle: From microbial ecology to the globe. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 12400-12401.	3.3	31
135	Increased snow depth affects microbial activity and nitrogen mineralization in two Arctic tundra communities. <i>Soil Biology and Biochemistry</i> , 2004, 36, 217-227.	4.2	530
136	NITROGEN MINERALIZATION: CHALLENGES OF A CHANGING PARADIGM. <i>Ecology</i> , 2004, 85, 591-602.	1.5	1,926
137	Persulfate Digestion and Simultaneous Colorimetric Analysis of Carbon and Nitrogen in Soil Extracts. <i>Soil Science Society of America Journal</i> , 2004, 68, 669.	1.2	40
138	Mechanisms underlying export of N from high-elevation catchments during seasonal transitions. <i>Biogeochemistry</i> , 2003, 64, 1-24.	1.7	100
139	Influence of Drying-Rewetting Frequency on Soil Bacterial Community Structure. <i>Microbial Ecology</i> , 2003, 45, 63-71.	1.4	583
140	Comparison of subsurface and surface soil bacterial communities in California grassland as assessed by terminal restriction fragment length polymorphisms of PCR-amplified 16S rRNA genes. <i>Microbial Ecology</i> , 2003, 46, 216-227.	1.4	87
141	Interactions between Carbon and Nitrogen Mineralization and Soil Organic Matter Chemistry in Arctic Tundra Soils. <i>Ecosystems</i> , 2003, 6, 129-143.	1.6	258
142	Variations in microbial community composition through two soil depth profiles. <i>Soil Biology and Biochemistry</i> , 2003, 35, 167-176.	4.2	1,409
143	Controls on microbial CO ₂ production: a comparison of surface and subsurface soil horizons. <i>Global Change Biology</i> , 2003, 9, 1322-1332.	4.2	377
144	The implications of exoenzyme activity on microbial carbon and nitrogen limitation in soil: a theoretical model. <i>Soil Biology and Biochemistry</i> , 2003, 35, 549-563.	4.2	1,237

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145	A Proposed Mechanism for the Pulse in Carbon Dioxide Production Commonly Observed Following the Rapid Rewetting of a Dry Soil. <i>Soil Science Society of America Journal</i> , 2003, 67, 798-805.	1.2	219
146	A Proposed Mechanism for the Pulse in Carbon Dioxide Production Commonly Observed Following the Rapid Rewetting of a Dry Soil. <i>Soil Science Society of America Journal</i> , 2003, 67, 798.	1.2	466
147	Effects of dryingâ€“rewetting frequency on soil carbon and nitrogen transformations. <i>Soil Biology and Biochemistry</i> , 2002, 34, 777-787.	4.2	874
148	Temperature controls of microbial respiration in arctic tundra soils above and below freezing. <i>Soil Biology and Biochemistry</i> , 2002, 34, 1785-1795.	4.2	427
149	Errors in â€œOverestimation of gross N transformation rates in grassland soilsâ€. <i>Soil Biology and Biochemistry</i> , 2001, 33, 1433-1435.	4.2	14
150	Influence of balsam poplar tannin fractions on carbon and nitrogen dynamics in Alaskan taiga floodplain soils. <i>Soil Biology and Biochemistry</i> , 2001, 33, 1827-1839.	4.2	254
151	<i>Biogeochemical Models.</i> , 2001, , 177-183.		51
152	The Influence of Soil Biodiversity on Hydrological Pathways and the Transfer of Materials between Terrestrial and Aquatic Ecosystems. <i>Ecosystems</i> , 2001, 4, 421-429.	1.6	66
153	Respiration from coarse wood litter in central Amazon forests. <i>Biogeochemistry</i> , 2001, 52, 115-131.	1.7	173
154	Controls over carbon storage and turnover in high-latitude soils. <i>Global Change Biology</i> , 2000, 6, 196-210.	4.2	525
155	Rice, microbes and methane. <i>Nature</i> , 2000, 403, 375-377.	13.7	186
156	Decomposition and carbon cycling of dead trees in tropical forests of the central Amazon. <i>Oecologia</i> , 2000, 122, 380-388.	0.9	360
157	Controls on Soil Carbon Dioxide and Methane Fluxes in a Variety of Taiga Forest Stands in Interior Alaska. <i>Ecosystems</i> , 2000, 3, 269-282.	1.6	113
158	Moisture effects on microbial activity and community structure in decomposing birch litter in the Alaskan taiga. <i>Soil Biology and Biochemistry</i> , 1999, 31, 831-838.	4.2	294
159	Title is missing!. <i>Biogeochemistry</i> , 1998, 42, 221-234.	1.7	203
160	Ancient trees in Amazonia. <i>Nature</i> , 1998, 391, 135-136.	13.7	244
161	Microbial community structure and global trace gases. <i>Global Change Biology</i> , 1998, 4, 745-758.	4.2	258
162	Moisture control over atmospheric CH ₄ consumption and CO ₂ production in diverse Alaskan soils. <i>Soil Biology and Biochemistry</i> , 1998, 30, 1127-1132.	4.2	118

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163	Effect of CH ₄ -starvation on atmospheric CH ₄ oxidizers in Taiga and temperate forest soils. <i>Soil Biology and Biochemistry</i> , 1998, 30, 1463-1467.	4.2	8
164	Rivers and Soils: Parallels in Carbon and Nutrient Processing. <i>BioScience</i> , 1998, 48, 104-108.	2.2	87
165	Dichromate Digestion and Simultaneous Colorimetry of Microbial Carbon and Nitrogen. <i>Soil Science Society of America Journal</i> , 1998, 62, 937-941.	1.2	4
166	Stratification of Soil Ecological Processes: A Study of the Birch Forest Floor in the Alaskan Taiga. <i>Oikos</i> , 1998, 81, 63.	1.2	32
167	Low-Concentration Kinetics of Atmospheric CH ₄ Oxidation in Soil and Mechanism of NH ₄ ⁺ Inhibition. <i>Applied and Environmental Microbiology</i> , 1998, 64, 4291-4298.	1.4	128
168	Different NH ₄ ⁺ -inhibition patterns of soil CH ₄ consumption: A result of distinct CH ₄ -oxidizer populations across sites?. <i>Soil Biology and Biochemistry</i> , 1997, 29, 13-21.	4.2	141
169	Assumptions and errors in the 15NH ₄ ⁺ pool dilution technique for measuring mineralization and immobilization. <i>Soil Biology and Biochemistry</i> , 1996, 28, 827-828.	4.2	22
170	Microbial response to freeze-thaw cycles in tundra and taiga soils. <i>Soil Biology and Biochemistry</i> , 1996, 28, 1061-1066.	4.2	421
171	Analysis of Kjeldahl digests by the salicylate method: Optimizing pH and buffering improves both sensitivity and precision. <i>Communications in Soil Science and Plant Analysis</i> , 1996, 27, 2549-2560.	0.6	3
172	Tundra Plant Uptake of Amino Acid and NH ₄ ⁺ -Nitrogen in Situ: Plants Complete Well for Amino Acid N. <i>Ecology</i> , 1996, 77, 2142-2147.	1.5	285
173	Effects of balsam poplar (<i>Populus balsamifera</i>) tannins and low molecular weight phenolics on microbial activity in taiga floodplain soil: implications for changes in N cycling during succession. <i>Canadian Journal of Botany</i> , 1996, 74, 84-90.	1.2	196
174	Plant transport and methane production as controls on methane flux from arctic wet meadow tundra. <i>Biogeochemistry</i> , 1995, 28, 183-200.	1.7	241
175	Nitrogen turnover and availability during succession from alder to poplar in Alaskan taiga forests. <i>Soil Biology and Biochemistry</i> , 1995, 27, 743-752.	4.2	93
176	Microbial activity of tundra and taiga soils at sub-zero temperatures. <i>Soil Biology and Biochemistry</i> , 1995, 27, 1231-1234.	4.2	261
177	Reduction in microbial activity in Birch litter due to drying and rewetting event. <i>Soil Biology and Biochemistry</i> , 1994, 26, 403-406.	4.2	104
178	Decomposition and biomass incorporation of ¹⁴ C-labeled glucose and phenolics in taiga forest floor: effect of substrate quality, successional state, and season. <i>Soil Biology and Biochemistry</i> , 1993, 25, 1379-1389.	4.2	89
179	Effects of starch additions on N turnover in Sitka spruce forest floor. <i>Plant and Soil</i> , 1992, 139, 139-143.	1.8	32
180	Mars after the viking missions: Is life still possible?. <i>Icarus</i> , 1991, 91, 199-206.	1.1	13

#	ARTICLE	IF	CITATIONS
181	Ecophysiology of the soil microbial biomass and its relation to the soil microbial N pool. <i>Soil Use and Management</i> , 1990, 6, 86-88.	2.6	8
182	Inorganic N incorporation by coniferous forest floor material. <i>Soil Biology and Biochemistry</i> , 1989, 21, 41-46.	4.2	87
183	Spatial and temporal effects on plant-microbial competition for inorganic nitrogen in a california annual grassland. <i>Soil Biology and Biochemistry</i> , 1989, 21, 1059-1066.	4.2	250
184	Short-term partitioning of ammonium and nitrate between plants and microbes in an annual grassland. <i>Soil Biology and Biochemistry</i> , 1989, 21, 409-415.	4.2	345
185	Nitrogen Incorporation and Flow Through a Coniferous Forest Soil Profile. <i>Soil Science Society of America Journal</i> , 1989, 53, 779-784.	1.2	74
186	Changes in Cytoplasmic Carbon and Nitrogen Pools in a Soil Bacterium and a Fungus in Response to Salt Stress. <i>Applied and Environmental Microbiology</i> , 1989, 55, 1635-1637.	1.4	51
187	Identification of Heterotrophic Nitrification in a Sierran Forest Soil. <i>Applied and Environmental Microbiology</i> , 1984, 48, 802-806.	1.4	206
188	Facile new synthesis and purification of 5,10-methenyltetrahydrofolate from folic acid. <i>Analytical Biochemistry</i> , 1980, 103, 255-257.	1.1	12