

# Christina Biasi

## List of Publications by Year in descending order

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Version: 2024-02-01

73  
papers

3,458  
citations

126907

33  
h-index

149698

56  
g-index

76  
all docs

76  
docs citations

76  
times ranked

4918  
citing authors

#	ARTICLE	IF	CITATIONS
1	Potential carbon emissions dominated by carbon dioxide from thawed permafrost soils. <i>Nature Climate Change</i> , 2016, 6, 950-953.	18.8	288
2	Warming of subarctic tundra increases emissions of all three important greenhouse gases – carbon dioxide, methane, and nitrous oxide. <i>Global Change Biology</i> , 2017, 23, 3121-3138.	9.5	187
3	Large N <sub>2</sub> O emissions from cryoturbated peat soil in tundra. <i>Nature Geoscience</i> , 2009, 2, 189-192.	12.9	171
4	Contrasting denitrifier communities relate to contrasting N <sub>2</sub> O emission patterns from acidic peat soils in arctic tundra. <i>ISME Journal</i> , 2012, 6, 1058-1077.	9.8	152
5	Temperature-dependent shift from labile to recalcitrant carbon sources of arctic heterotrophs. <i>Rapid Communications in Mass Spectrometry</i> , 2005, 19, 1401-1408.	1.5	145
6	Hot spots for nitrous oxide emissions found in different types of permafrost peatlands. <i>Global Change Biology</i> , 2011, 17, 2601-2614.	9.5	145
7	Initial effects of experimental warming on carbon exchange rates, plant growth and microbial dynamics of a lichen-rich dwarf shrub tundra in Siberia. <i>Plant and Soil</i> , 2008, 307, 191-205.	3.7	126
8	Increased nitrous oxide emissions from Arctic peatlands after permafrost thaw. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 6238-6243.	7.1	119
9	Conservation of soil organic matter through cryoturbation in arctic soils in Siberia. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	118
10	A plant-microbe interaction framework explaining nutrient effects on primary production. <i>Nature Ecology and Evolution</i> , 2018, 2, 1588-1596.	7.8	100
11	Nitrous oxide emissions from permafrost-affected soils. <i>Nature Reviews Earth &amp; Environment</i> , 2020, 1, 420-434.	29.7	90
12	Direct experimental evidence for the contribution of lime to CO <sub>2</sub> release from managed peat soil. <i>Soil Biology and Biochemistry</i> , 2008, 40, 2660-2669.	8.8	83
13	Statistical upscaling of ecosystem CO <sub>2</sub> fluxes across the terrestrial tundra and boreal domain: Regional patterns and uncertainties. <i>Global Change Biology</i> , 2021, 27, 4040-4059.	9.5	83
14	Interaction between tannins and fungal necromass stabilizes fungal residues in boreal forest soils. <i>New Phytologist</i> , 2019, 223, 16-21.	7.3	73
15	Linking microbial community structure and allocation of plant-derived carbon in an organic agricultural soil using <sup>13</sup> C <sub>2</sub> pulse-chase labelling combined with <sup>13</sup> C-PLFA profiling. <i>Soil Biology and Biochemistry</i> , 2013, 58, 207-215.	8.8	71
16	Carbon dioxide balance of subarctic tundra from plot to regional scales. <i>Biogeosciences</i> , 2013, 10, 437-452.	3.3	65
17	Significance of dark CO <sub>2</sub> fixation in arctic soils. <i>Soil Biology and Biochemistry</i> , 2018, 119, 11-21.	8.8	58
18	Cultivation of a perennial grass for bioenergy on a boreal organic soil – carbon sink or source?. <i>GCB Bioenergy</i> , 2009, 1, 35-50.	5.6	57

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19	Priming effect increases with depth in a boreal forest soil. <i>Soil Biology and Biochemistry</i> , 2016, 99, 104-107.	8.8	56
20	Global patterns of nitrate isotope composition in rivers and adjacent aquifers reveal reactive nitrogen cascading. <i>Communications Earth &amp; Environment</i> , 2021, 2, .	6.8	56
21	Distinct Anaerobic Bacterial Consumers of Cellobiose-Derived Carbon in Boreal Fens with Different CO <sub>2</sub> /CH <sub>4</sub> Production Ratios. <i>Applied and Environmental Microbiology</i> , 2017, 83, .	3.1	55
22	Ecosystem carbon response of an Arctic peatland to simulated permafrost thaw. <i>Global Change Biology</i> , 2019, 25, 1746-1764.	9.5	52
23	Neglecting diurnal variations leads to uncertainties in terrestrial nitrous oxide emissions. <i>Scientific Reports</i> , 2016, 6, 25739.	3.3	51
24	Bare soil and reed canary grass ecosystem respiration in peat extraction sites in Eastern Finland. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 60, 200.	1.6	47
25	Degradation potentials of dissolved organic carbon (DOC) from thawed permafrost peat. <i>Scientific Reports</i> , 2017, 7, 45811.	3.3	47
26	Tundra landscape heterogeneity, not interannual variability, controls the decadal regional carbon balance in the Western Russian Arctic. <i>Global Change Biology</i> , 2018, 24, 5188-5204.	9.5	45
27	Interactive effects of elevated ozone and temperature on carbon allocation of silver birch ( <i>Betula</i> ) Tj ETQq1 1 0.784314 rgBT /Overloc	3.1	41
28	Storage and mineralization of carbon and nitrogen in soils of a frost-boil tundra ecosystem in Siberia. <i>Applied Soil Ecology</i> , 2005, 29, 173-183.	4.3	40
29	Inferring Phytoplankton, Terrestrial Plant and Bacteria Bulk $\delta^{13}C$ Values from Compound Specific Analyses of Lipids and Fatty Acids. <i>PLoS ONE</i> , 2015, 10, e0133974.	2.5	39
30	Modeling CO <sub>2</sub> emissions from Arctic lakes: Model development and site-level study. <i>Journal of Advances in Modeling Earth Systems</i> , 2017, 9, 2190-2213.	3.8	38
31	Methane dynamics in the subarctic tundra: combining stable isotope analyses, plot- and ecosystem-scale flux measurements. <i>Biogeosciences</i> , 2016, 13, 597-608.	3.3	37
32	Mechanisms responsible for high N <sub>2</sub> O emissions from subarctic permafrost peatlands studied via stable isotope techniques. <i>Global Biogeochemical Cycles</i> , 2017, 31, 172-189.	4.9	36
33	Microbial Respiration in Arctic Upland and Peat Soils as a Source of Atmospheric Carbon Dioxide. <i>Ecosystems</i> , 2014, 17, 112-126.	3.4	35
34	Modeled Microbial Dynamics Explain the Apparent Temperature Sensitivity of Wetland Methane Emissions. <i>Global Biogeochemical Cycles</i> , 2020, 34, e2020GB006678.	4.9	34
35	Microbiome assembly in thawing permafrost and its feedbacks to climate. <i>Global Change Biology</i> , 2022, 28, 5007-5026.	9.5	34
36	Microtopography and Plant-Cover Controls on Nitrogen Dynamics in Hummock Tundra Ecosystems in Siberia. <i>Arctic, Antarctic, and Alpine Research</i> , 2005, 37, 435-443.	1.1	33

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37	Effects of prolonged drought stress on Scots pine seedling carbon allocation. <i>Tree Physiology</i> , 2017, 37, 418-427.	3.1	33
38	Archaeal nitrification is a key driver of high nitrous oxide emissions from arctic peatlands. <i>Soil Biology and Biochemistry</i> , 2019, 137, 107539.	8.8	33
39	Vertical stratification of bacteria and archaea in sediments of a small boreal humic lake. <i>FEMS Microbiology Letters</i> , 2019, 366, .	1.8	30
40	A review of the importance of mineral nitrogen cycling in the plant-soil-microbe system of permafrost-affected soils—changing the paradigm. <i>Environmental Research Letters</i> , 2022, 17, 013004.	5.2	29
41	Soil carbon and nitrogen dynamics along a latitudinal transect in Western Siberia, Russia. <i>Biogeochemistry</i> , 2006, 81, 239-252.	3.5	27
42	Trophic transfer of polychlorinated biphenyls (PCB) in a boreal lake ecosystem: Testing of bioaccumulation models. <i>Science of the Total Environment</i> , 2014, 466-467, 690-698.	8.0	27
43	Linking water vapor and CO <sub>2</sub> exchange from a perennial bioenergy crop on a drained organic soil in eastern Finland. <i>Agricultural and Forest Meteorology</i> , 2013, 168, 47-58.	4.8	26
44	Membrane-metabolic coupling and ion homeostasis in anoxia-tolerant and anoxia-intolerant hepatocytes. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 1996, 270, R614-R620.	1.8	25
45	Forest fires in Canadian permafrost region: the combined effects of fire and permafrost dynamics on soil organic matter quality. <i>Biogeochemistry</i> , 2019, 143, 257-274.	3.5	24
46	Thawing Yedoma permafrost is a neglected nitrous oxide source. <i>Nature Communications</i> , 2021, 12, 7107.	12.8	24
47	Carbon assimilation and allocation ( <sup>13</sup> C labeling) in a boreal perennial grass ( <i>Phalaris arundinacea</i> ) subjected to elevated temperature and CO <sub>2</sub> through a growing season. <i>Environmental and Experimental Botany</i> , 2012, 75, 150-158.	4.2	23
48	Atmospheric impact of bioenergy based on perennial crop (reed canary grass, <i>Phalaris</i> ) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 302 Td (	8.6	21
49	Morphology and properties of the soils of permafrost peatlands in the southeast of the Bolâ€™shemezemelâ€™skaya tundra. <i>Eurasian Soil Science</i> , 2016, 49, 498-511.	1.6	21
50	A combined biogeochemical and palaeobotanical approach to study permafrost environments and past dynamics. <i>Journal of Quaternary Science</i> , 2015, 30, 189-200.	2.1	19
51	Variation in N <sub>2</sub> Fixation in Subarctic Tundra in Relation to Landscape Position and Nitrogen Pools and Fluxes. <i>Arctic, Antarctic, and Alpine Research</i> , 2016, 48, 111-125.	1.1	19
52	Studying the impact of living roots on the decomposition of soil organic matter in two different forestry-drained peatlands. <i>Plant and Soil</i> , 2015, 396, 59-72.	3.7	17
53	The impact of long-term water level draw-down on microbial biomass: A comparative study from two peatland sites with different nutrient status. <i>European Journal of Soil Biology</i> , 2017, 80, 59-68.	3.2	17
54	Acute and chronic effects of temperature, and of nutritional state, on ion homeostasis and energy metabolism in teleost hepatocytes. <i>Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology</i> , 1997, 167, 280-286.	1.5	13

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55	Atmospheric impact of nitrous oxide uptake by boreal forest soils can be comparable to that of methane uptake. <i>Plant and Soil</i> , 2020, 454, 121-138.	3.7	12
56	Denitrification is the major nitrous acid production pathway in boreal agricultural soils. <i>Communications Earth &amp; Environment</i> , 2021, 2, .	6.8	12
57	Heterogeneity of carbon loss and its temperature sensitivity in East-European subarctic tundra soils. <i>FEMS Microbiology Ecology</i> , 2016, 92, fiw140.	2.7	10
58	Diet and movements of pikeperch ( <i>Sander lucioperca</i> ) in a large oligotrophic lake with an exceptionally high pikeperch yield. <i>Ecology of Freshwater Fish</i> , 2019, 28, 533-543.	1.4	10
59	Effects of energy limitation on Ca <sup>2+</sup> and K <sup>+</sup> homeostasis in anoxia-tolerant and anoxia-intolerant hepatocytes. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 1997, 273, R307-R316.	1.8	9
60	Differentiating sources of CO <sub>2</sub> from organic soil under bioenergy crop cultivation: A field-based approach using <sup>14</sup> C. <i>Soil Biology and Biochemistry</i> , 2011, 43, 2406-2409.	8.8	9
61	Measured and modeled biomass growth in relation to photosynthesis acclimation of a bioenergy crop (Reed canary grass) under elevated temperature, CO <sub>2</sub> enrichment and different water regimes. <i>Biomass and Bioenergy</i> , 2012, 46, 251-262.	5.7	9
62	Living, dead, and absent treesâ€”How do moth outbreaks shape smallâ€”scale patterns of soil organic matter stocks and dynamics at the Subarctic mountain birch treeline?. <i>Global Change Biology</i> , 2022, 28, 441-462.	9.5	9
63	The emissions of nitrous oxide and methane from natural soil temperature gradients in a volcanic area in southwest Iceland. <i>Soil Biology and Biochemistry</i> , 2017, 109, 70-80.	8.8	8
64	Uptake of Soil-Derived Carbon into Plants: Implications for Disposal of Nuclear Waste. <i>Environmental Science &amp; Technology</i> , 2019, 53, 4198-4205.	10.0	5
65	Microorganisms in the phylloplane modulate the BVOC emissions of <i>Brassica nigra</i> leaves. <i>Plant Signaling and Behavior</i> , 2020, 15, 1728468.	2.4	5
66	Emissions of atmospherically reactive gases nitrous acid and nitric oxide from Arctic permafrost peatlands. <i>Environmental Research Letters</i> , 2022, 17, 024034.	5.2	5
67	Isotopically characterised N <sub>2</sub> O reference materials for use as community standards. <i>Rapid Communications in Mass Spectrometry</i> , 2022, 36, e9296.	1.5	5
68	Sources of nitrous oxide and the fate of mineral nitrogen in subarctic permafrost peat soils. <i>Biogeosciences</i> , 2022, 19, 2683-2698.	3.3	4
69	Warming climate forcing impact from a sub-arctic peatland as a result of late Holocene permafrost aggradation and initiation of bare peat surfaces. <i>Quaternary Science Reviews</i> , 2021, 264, 107022.	3.0	3
70	The effect of geothermal soil warming on the production of carbon dioxide (CO <sub>2</sub> ), methane (CH <sub>4</sub> ), nitrous oxide (N <sub>2</sub> O), nitric oxide (NO) and nitrous acid (HONO) from forest soil in southern Iceland. <i>Icelandic Agricultural Sciences</i> , 0, 31, 11-22.	0.0	2
71	Content of soil-derived carbon in soil biota and fauna living near soil surface: Implications for radioactive waste. <i>Journal of Environmental Radioactivity</i> , 2020, 225, 106450.	1.7	1
72	Primary plant succession on freshly degraded yedoma (ice complex) in Lena delta (Eastern Siberia). <i>BIO Web of Conferences</i> , 2020, 24, 00047.	0.2	1

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73	Stable isotope method reveals the role of abiotic source of carbon dioxide efflux from geothermally warmed soil in southern Iceland. Icelandic Agricultural Sciences, 0, 33, 41-56.	0.0	1