Margaret S. Torn

List of Publications by Year
in descending order

171 papers	23,354 citations	8732 75 h-index	8599 146 g-index
179 all docs	179 docs citations	179 times ranked	21179 citing authors

#	Article	IF	Citations
1	Persistence of soil organic matter as an ecosystem property. Nature, 2011, 478, 49-56.	13.7	4,243
2	Mineral control of soil organic carbon storage and turnover. Nature, 1997, 389, 170-173.	13.7	1,318
3	Stabilization of Soil Organic Matter: Association with Minerals or Chemical Recalcitrance?. Biogeochemistry, 2006, 77, 25-56.	1.7	681
4	The FLUXNET2015 dataset and the ONEFlux processing pipeline for eddy covariance data. Scientific Data, 2020, 7, 225.	2.4	646
5	The Technology Path to Deep Greenhouse Gas Emissions Cuts by 2050: The Pivotal Role of Electricity. Science, 2012, 335, 53-59.	6.0	630
6	Large contribution of arbuscular mycorrhizal fungi to soil carbon pools in tropical forest soils. Plant and Soil, 2001, 233, 167-177.	1.8	487
7	Changes in microbial community characteristics and soil organic matter with nitrogen additions in two tropical forests. Ecology, 2011, 92, 621-632.	1.5	371
8	The whole-soil carbon flux in response to warming. Science, 2017, 355, 1420-1423.	6.0	363
9	Persistence of soil organic carbon caused by functional complexity. Nature Geoscience, 2020, 13, 529-534.	5.4	363
10	The effect of vertically resolved soil biogeochemistry and alternate soil C and N models on C dynamics of CLM4. Biogeosciences, 2013, 10, 7109-7131.	1.3	359
11	Greenhouse Gas Emissions from Biofuelsâ€™ Indirect Land Use Change Are Uncertain but May Be Much Greater than Previously Estimated. Environmental Science & Technology, 2010, 44, 8015-8021.	4.6	353
12	The Significance of the Erosion-induced Terrestrial Carbon Sink. BioScience, 2007, 57, 337-346.	2.2	348
13	Toward more realistic projections of soil carbon dynamics by Earth system models. Global Biogeochemical Cycles, 2016, 30, 40-56.	1.9	343
14	Barriers to predicting changes in global terrestrial methane fluxes: analyses using CLM4Me, a methane biogeochemistry model integrated in CESM. Biogeosciences, 2011, 8, 1925-1953.	1.3	325
15	Integrating the evidence for a terrestrial carbon sink caused by increasing atmospheric CO₂. New Phytologist, 2021, 229, 2413-2445.	3.5	286
16	A modelâ€data comparison of gross primary productivity: Results from the North American Carbon Program site synthesis. Journal of Geophysical Research, 2012, 117, .	3.3	274
17	Global Warming and Soil Microclimate: Results from a Meadow-Warming Experiment. , 1995, 5, 132-150.		258
18	Global CO₂ fluxes estimated from GOSAT retrievals of total column CO₂. Atmospheric Chemistry and Physics, 2013, 13, 8695-8717.	1.9	251

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19	Microbial carbon limitation: The need for integrating microorganisms into our understanding of ecosystem carbon cycling. Global Change Biology, 2020, 26, 1953-1961.	4.2	239
20	Estimation of net ecosystem carbon exchange for the conterminous United States by combining MODIS and AmeriFlux data. Agricultural and Forest Meteorology, 2008, 148, 1827-1847.	1.9	221
21	Carbonâ€Neutral Pathways for the United States. AGU Advances, 2021, 2, e2020AV000284.	2.3	215
22	Heterogeneous global crop yield response to biochar: a meta-regression analysis. Environmental Research Letters, 2013, 8, 044049.	2.2	214
23	A continuous measure of gross primary production for the conterminous United States derived from MODIS and AmeriFlux data. Remote Sensing of Environment, 2010, 114, 576-591.	4.6	210
24	Poorly crystalline mineral phases protect organic matter in acid subsoil horizons. European Journal of Soil Science, 2005, 56, 050912034650054.	1.8	198
25	The Impact of Climate Change on Wildfire Severity: A Regional Forecast for Northern California. Climatic Change, 2004, 64, 169-191.	1.7	194
26	Weathering controls on mechanisms of carbon storage in grassland soils. Global Biogeochemical Cycles, 2004, 18, n/a-n/a.	1.9	194
27	Fire-derived organic carbon in soil turns over on a centennial scale. Biogeosciences, 2012, 9, 2847-2857.	1.3	190
28	Principles of Ecosystem Sustainability. American Naturalist, 1996, 148, 1016-1037.	1.0	184
29	Fineâ€root turnover patterns and their relationship to root diameter and soil depth in a 14 Câ€labeled hardwood forest. New Phytologist, 2006, 172, 523-535.	3.5	181
30	Observational determination of surface radiative forcing by CO2 from 2000 to 2010. Nature, 2015, 519, 339-343.	13.7	174
31	Initial characterization of processes of soil carbon stabilization using forest stand-level radiocarbon enrichment. Geoderma, 2005, 128, 52-62.	2.3	167
32	Coordinated approaches to quantify longâ€term ecosystem dynamics in response to global change. Global Change Biology, 2011, 17, 843-854.	4.2	165
33	Impacts of organic matter amendments on carbon and nitrogen dynamics in grassland soils. Soil Biology and Biochemistry, 2014, 68, 52-61.	4.2	161
34	Mineral Assemblage and Aggregates Control Carbon Dynamics in a California Conifer Forest. Soil Science Society of America Journal, 2005, 69, 1711-1721.	1.2	160
35	Assessing net ecosystem carbon exchange of U.S. terrestrial ecosystems by integrating eddy covariance flux measurements and satellite observations. Agricultural and Forest Meteorology, 2011, 151, 60-69.	1.9	157
36	Centennial black carbon turnover observed in a Russian steppe soil. Biogeosciences, 2008, 5, 1339-1350.	1.3	154

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37	Biological degradation of pyrogenic organic matter in temperate forest soils. Soil Biology and Biochemistry, 2012, 51, 115-124.	4.2	154
38	Radiocarbon constraints imply reduced carbon uptake by soils during the 21st century. Science, 2016, 353, 1419-1424.	6.0	149
39	Grand Challenges for Life-Cycle Assessment of Biofuels. Environmental Science & Technology, 2011, 45, 1751-1756.	4.6	148
40	The effect of experimental ecosystem warming on CO 2 fluxes in a montane meadow. Global Change Biology, 1999, 5, 125-141.	4.2	146
41	Global stocks and capacity of mineral-associated soil organic carbon. Nature Communications, 2022, 13, .	5.8	146
42	Effects of nitrogen additions on above- and belowground carbon dynamics in two tropical forests. Biogeochemistry, 2011, 104, 203-225.	1.7	145
43	13C and 15N stabilization dynamics in soil organic matter fractions during needle and fine root decomposition. Organic Geochemistry, 2008, 39, 465-477.	0.9	144
44	Fine Roots vs. Needles: A Comparison of 13C and 15N Dynamics in a Ponderosa Pine Forest Soil. Biogeochemistry, 2006, 79, 361-382.	1.7	140
45	The AmeriFlux network: A coalition of the willing. Agricultural and Forest Meteorology, 2018, 249, 444-456.	1.9	140
46	The Millennial model: in search of measurable pools and transformations for modeling soil carbon in the new century. Biogeochemistry, 2018, 137, 51-71.	1.7	139
47	Persistence of soil organic matter in eroding versus depositional landform positions. Journal of Geophysical Research, 2012, 117, .	3.3	138
48	Spatiotemporal Variations in Growing Season Exchanges of CO2, H2O, and Sensible Heat in Agricultural Fields of the Southern Great Plains. Earth Interactions, 2007, 11, 1-21.	0.7	135
49	The response of heterotrophic activity and carbon cycling to nitrogen additions and warming in two tropical soils. Global Change Biology, 2010, 16, 2555-2572.	4.2	130
50	Greenness indices from digital cameras predict the timing and seasonal dynamics of canopyâ€scale photosynthesis. Ecological Applications, 2015, 25, 99-115.	1.8	129
51	Linking soil organic matter dynamics and erosionâ€induced terrestrial carbon sequestration at different landform positions. Journal of Geophysical Research, 2008, 113, .	3.3	126
52	Warming and provenance limit tree recruitment across and beyond the elevation range of subalpine forest. Global Change Biology, 2017, 23, 2383-2395.	4.2	126
53	A mechanistic model of H218O and C18OO fluxes between ecosystems and the atmosphere: Model description and sensitivity analyses. Global Biogeochemical Cycles, 2002, 16, 42-1-42-14.	1.9	125
54	Representativeness of Eddy-Covariance flux footprints for areas surrounding AmeriFlux sites. Agricultural and Forest Meteorology, 2021, 301-302, 108350.	1.9	125

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55	Organic carbon and carbon isotopes in modern and 100-year-old-soil archives of the Russian steppe. Global Change Biology, 2002, 8, 941-953.	4.2	121
56	Arctic tundra shrubification: a review of mechanisms and impacts on ecosystem carbon balance. Environmental Research Letters, 2021, 16, 053001.	2.2	121
57	Warming accelerates decomposition of decades-old carbon in forest soils. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E1753-61.	3.3	118
58	Root litter decomposition slows with soil depth. Soil Biology and Biochemistry, 2018, 125, 103-114.	4.2	110
59	Environmental and biotic controls over methane flux from Arctic tundra. Chemosphere, 1993, 26, 357-368.	4.2	107
60	Chemical and mineral control of soil carbon turnover in abandoned tropical pastures. Geoderma, 2008, 143, 49-62.	2.3	105
61	Landscape topography structures the soil microbiome in arctic polygonal tundra. Nature Communications, 2018, 9, 777.	5.8	105
62	Sensitivity of vegetation indices and gross primary production of tallgrass prairie to severe drought. Remote Sensing of Environment, 2014, 152, 1-14.	4.6	103
63	Vegetation controls on surface heat flux partitioning, and landâ€atmosphere coupling. Geophysical Research Letters, 2015, 42, 9416-9424.	1.5	103
64	Microbial community-level regulation explains soil carbon responses to long-term litter manipulations. Nature Communications, 2017, 8, 1223.	5.8	99
65	Ecological limits to terrestrial biological carbon dioxide removal. Climatic Change, 2013, 118, 89-103.	1.7	98
66	Widespread inhibition of daytime ecosystem respiration. Nature Ecology and Evolution, 2019, 3, 407-415.	3.4	98
67	Five years of whole-soil warming led to loss of subsoil carbon stocks and increased CO ₂ efflux. Science Advances, 2021, 7, .	4.7	98
68	Long residence times of rapidly decomposable soil organic matter: application of a multi-phase, multi-component, and vertically resolved model (BAMS1) to soil carbon dynamics. Geoscientific Model Development, 2014, 7, 1335-1355.	1.3	97
69	Comparison of four EVI-based models for estimating gross primary production of maize and soybean croplands and tallgrass prairie under severe drought. Remote Sensing of Environment, 2015, 162, 154-168.	4.6	93
70	Relative contribution of foliar and fine root pine litter to the molecular composition of soil organic matter after in situ degradation. Organic Geochemistry, 2011, 42, 1099-1099.	0.9	91
71	Use of stored carbon reserves in growth of temperate tree roots and leaf buds: analyses using radiocarbon measurements and modeling. Global Change Biology, 2009, 15, 992-1014.	4.2	89
72	Sources and sinks of carbonyl sulfide in an agricultural field in the Southern Great Plains. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 9064-9069.	3.3	88

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73	The Influence of Nutrient Availability on Soil Organic Matter Turnover Estimated by Incubations and Radiocarbon Modeling. Ecosystems, 2005, 8, 352-372.	1.6	87
74	Predicting the impacts of global warming on wildland fire. Climatic Change, 1992, 21, 257-274.	1.7	85
75	Transformation and stabilization of pyrogenic organic matter in a temperate forest field experiment. Global Change Biology, 2014, 20, 1629-1642.	4.2	82
76	Accounting for the water impacts of ethanol production. Environmental Research Letters, 2010, 5, 014020.	2.2	78
77	Measuring and modeling the spectrum of fineâ€root turnover times in three forests using isotopes, minirhizotrons, and the Radix model. Global Biogeochemical Cycles, 2010, 24, .	1.9	78
78	Identifying multiscale zonation and assessing the relative importance of polygon geomorphology on carbon fluxes in an Arctic tundra ecosystem. Journal of Geophysical Research G: Biogeosciences, 2015, 120, 788-808.	1.3	74
79	Methane consumption by montane soils: implications for positive and negative feedback with climatic change. Biogeochemistry, 1996, 32, 53.	1.7	73
80	Influence of clouds and diffuse radiation on ecosystemâ€atmosphere CO₂ and CO¹⁸O exchanges. Journal of Geophysical Research, 2009, 114, .	3.3	71
81	Effects of Soil Moisture on the Responses of Soil Temperatures to Climate Change in Cold Regions*. Journal of Climate, 2013, 26, 3139-3158.	1.2	68
82	Predicting the effect of climate change on wildfire behavior and initial attack success. Climatic Change, 2008, 87, 251-264.	1.7	65
83	Missing feedbacks, asymmetric uncertainties, and the underestimation of future warming. Geophysical Research Letters, 2006, 33, n/a-n/a.	1.5	64
84	Mineral properties, microbes, transport, and plant-input profiles control vertical distribution and age of soil carbon stocks. Soil Biology and Biochemistry, 2017, 107, 244-259.	4.2	64
85	Comparison of soil organic matter dynamics at five temperate deciduous forests with physical fractionation and radiocarbon measurements. Biogeochemistry, 2013, 112, 457-476.	1.7	63
86	An ecosystem-scale radiocarbon tracer to test use of litter carbon by ectomycorrhizal fungi. Soil Biology and Biochemistry, 2006, 38, 1077-1082.	4.2	59
87	Greenhouse Gas Policy Influences Climate via Direct Effects of Land-Use Change. Journal of Climate, 2013, 26, 3657-3670.	1.2	59
88	Litter type control on soil C and N stabilization dynamics in a temperate forest. Global Change Biology, 2015, 21, 1358-1367.	4.2	59
89	Soil Erosion: Data Say C Sink. Science, 2008, 320, 178-179.	6.0	58
90	Association with pedogenic iron and aluminum: effects on soil organic carbon storage and stability in four temperate forest soils. Biogeochemistry, 2017, 133, 333-345.	1.7	57

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91	ForCent model development and testing using the Enriched Background Isotope Study experiment. Journal of Geophysical Research, 2010, 115, .	3.3	56
92	CMIP5 Models Predict Rapid and Deep Soil Warming Over the 21st Century. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2019JG005266.	1.3	56
93	Improving regional soil carbon inventories: Combining the IPCC carbon inventory method with regression kriging. Geoderma, 2012, 189-190, 288-295.	2.3	53
94	Large CO₂ and CH₄ emissions from polygonal tundra during spring thaw in northern Alaska. Geophysical Research Letters, 2017, 44, 504-513.	1.5	53
95	A dual isotope approach to isolate soil carbon pools of different turnover times. Biogeosciences, 2013, 10, 8067-8081.	1.3	52
96	Miscanthus biomass productivity within US croplands and its potential impact on soil organic carbon. GCB Bioenergy, 2013, 5, 391-399.	2.5	51
97	Vulnerability of crops and native grasses to summer drying in the U.S. Southern Great Plains. Agriculture, Ecosystems and Environment, 2015, 213, 209-218.	2.5	51
98	Soil drying and nitrogen availability modulate carbon and water exchange over a range of annual precipitation totals and grassland vegetation types. Global Change Biology, 2009, 15, 3018-3030.	4.2	50
99	Fineâ€root mortality rates in a temperate forest: estimates using radiocarbon data and numerical modeling. New Phytologist, 2009, 184, 387-398.	3.5	49
100	Impacts of climate extremes on gross primary production under global warming. Environmental Research Letters, 2014, 9, 094011.	2.2	49
101	The influence of land cover on surface energy partitioning and evaporative fraction regimes in the U.S. Southern Great Plains. Journal of Geophysical Research D: Atmospheres, 2017, 122, 5793-5807.	1.2	48
102	An open-source database for the synthesis of soil radiocarbon data: International Soil Radiocarbon Database (ISRaD) version 1.0. Earth System Science Data, 2020, 12, 61-76.	3.7	48
103	Biotic and climatic controls on interannual variability in carbon fluxes across terrestrial ecosystems. Agricultural and Forest Meteorology, 2015, 205, 11-22.	1.9	47
104	Acidification of forest soil in Russia: From 1893 to present. Global Biogeochemical Cycles, 2004, 18, n/a-n/a.	1.9	46
105	Ecosystem Feedbacks to Climate Change in California: Development, Testing, and Analysis Using a Coupled Regional Atmosphere and Land Surface Model (WRF3â€“CLM3.5). Earth Interactions, 2011, 15, 1-38.	0.7	46
106	Landâ€atmosphere coupling and climate prediction over the U.S. Southern Great Plains. Journal of Geophysical Research D: Atmospheres, 2016, 121, 12,125.	1.2	46
107	Isotopic insights into methane production, oxidation, and emissions in Arctic polygon tundra. Global Change Biology, 2016, 22, 3487-3502.	4.2	45
108	A multi-year record of airborne CO₂ observations in the US Southern Great Plains. Atmospheric Measurement Techniques, 2013, 6, 751-763.	1.2	44

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109	Long term decomposition: the influence of litter type and soil horizon on retention of plant carbon and nitrogen in soils. Biogeochemistry, 2017, 134, 5-16.	1.7	44
110	Growing season eddy covariance measurements of carbonyl sulfide and CO2 fluxes: COS and CO2 relationships in Southern Great Plains winter wheat. Agricultural and Forest Meteorology, 2014, 184, 48-55.	1.9	43
111	A Portable Eddy Covariance System for the Measurement of Ecosystemâ€“Atmosphere Exchange of CO2, Water Vapor, and Energy. Journal of Atmospheric and Oceanic Technology, 2004, 21, 639-650.	0.5	42
112	Impact of agricultural practice on regional climate in a coupled land surface mesoscale model. Journal of Geophysical Research, 2005, 110, .	3.3	41
113	On the additivity of radiative forcing between land use change and greenhouse gases. Geophysical Research Letters, 2013, 40, 4036-4041.	1.5	41
114	Dynamic Balancing of Isoprene Carbon Sources Reflects Photosynthetic and Photorespiratory Responses to Temperature Stress. Plant Physiology, 2014, 166, 2051-2064.	2.3	41
115	Mathematical Modelling of Arctic Polygonal Tundra with Ecosys: 2. Microtopography Determines How CO₂ and CH₄ Exchange Responds to Changes in Temperature and Precipitation. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 3174-3187.	1.3	41
116	Synthetic iron (hydr)oxide-glucose associations in subsurface soil: Effects on decomposability of mineral associated carbon. Science of the Total Environment, 2018, 613-614, 342-351.	3.9	39
117	Carbon losses from pyrolysed and original wood in a forest soil under natural and increased N deposition. Biogeosciences, 2014, 11, 5199-5213.	1.3	38
118	Mathematical Modelling of Arctic Polygonal Tundra with Ecosys: 1. Microtopography Determines How Active Layer Depths Respond to Changes in Temperature and Precipitation. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 3161-3173.	1.3	38
119	Erosional redistribution of topsoil controls soil nitrogen dynamics. Biogeochemistry, 2017, 132, 37-54.	1.7	37
120	Observationally derived rise in methane surface forcing mediated by water vapour trends. Nature Geoscience, 2018, 11, 238-243.	5.4	37
121	Carbon, water, and heat flux responses to experimental burning and drought in a tallgrass prairie. Agricultural and Forest Meteorology, 2012, 166-167, 169-174.	1.9	36
122	Conifer seedling recruitment across a gradient from forest to alpine tundra: effects of species, provenance, and site. Plant Ecology and Diversity, 2013, 6, 307-318.	1.0	36
123	Metabolic capabilities mute positive response to direct and indirect impacts of warming throughout the soil profile. Nature Communications, 2021, 12, 2089.	5.8	36
124	The changing faces of soil organic matter research. European Journal of Soil Science, 2018, 69, 23-30.	1.8	35
125	Warming promotes loss of subsoil carbon through accelerated degradation of plant-derived organic matter. Soil Biology and Biochemistry, 2021, 156, 108185.	4.2	35
126	Substantial hysteresis in emergent temperature sensitivity of global wetland CH4 emissions. Nature Communications, 2021, 12, 2266.	5.8	34

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127	14C evidence that millennial and fast-cycling soil carbon are equally sensitive to warming. Nature Climate Change, 2019, 9, 467-471.	8.1	31
128	Plant responsiveness to variation in precipitation and nitrogen is consistent across the compositional diversity of a California annual grassland. Journal of Vegetation Science, 2009, 20, 860-870.	1.1	30
129	U.S. emissions of HFCâ€134a derived for 2008â€“2012 from an extensive flaskâ€air sampling network. Journal of Geophysical Research D: Atmospheres, 2015, 120, 801-825.	1.2	30
130	Pathways and transformations of dissolved methane and dissolved inorganic carbon in Arctic tundra watersheds: Evidence from analysis of stable isotopes. Global Biogeochemical Cycles, 2015, 29, 1893-1910.	1.9	30
131	Regional CO₂ and latent heat surface fluxes in the Southern Great Plains: Measurements, modeling, and scaling. Journal of Geophysical Research, 2009, 114, .	3.3	29
132	Effect of grassland vegetation type on the responses of hydrological processes to seasonal precipitation patterns. Journal of Hydrology, 2011, 410, 51-61.	2.3	29
133	Separating the effects of phenology and diffuse radiation on gross primary productivity in winter wheat. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 1903-1915.	1.3	28
134	Informing Natureâ€based Climate Solutions for the United States with the bestâ€available science. Global Change Biology, 2022, 28, 3778-3794.	4.2	28
135	How much carbon can be added to soil by sorption?. Biogeochemistry, 2021, 152, 127-142.	1.7	27
136	Automated analysis of13C/12C ratios in CO2 and dissolved inorganic carbon for ecological and environmental applications. Rapid Communications in Mass Spectrometry, 2003, 17, 2675-2682.	0.7	26
137	A multi-scale comparison of modeled and observed seasonal methane emissions in northern wetlands. Biogeosciences, 2016, 13, 5043-5056.	1.3	24
138	Carbon and energy fluxes in cropland ecosystems: a model-data comparison. Biogeochemistry, 2016, 129, 53-76.	1.7	24
139	Using ARM Observations to Evaluate Climate Model Simulations of Landâ€Atmosphere Coupling on the U.S. Southern Great Plains. Journal of Geophysical Research D: Atmospheres, 2017, 122, 11,524.	1.2	24
140	Representing winter wheat in the Community Land Model (version 4.5). Geoscientific Model Development, 2017, 10, 1873-1888.	1.3	24
141	Using boundary layer equilibrium to reduce uncertainties in transport models and CO₂ flux inversions. Atmospheric Chemistry and Physics, 2011, 11, 9631-9641.	1.9	23
142	Toward improved model structures for analyzing priming: potential pitfalls of using bulk turnover time. Global Change Biology, 2015, 21, 4298-4302.	4.2	23
143	Evaluating temporal controls on greenhouse gas (GHG) fluxes in an Arctic tundra environment: An entropy-based approach. Science of the Total Environment, 2019, 649, 284-299.	3.9	23
144	Climatically driven loss of calcium in steppe soil as a sink for atmospheric carbon. Global Biogeochemical Cycles, 2008, 22, .	1.9	22

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145	Incorporating Land-Use Requirements and Environmental Constraints in Low-Carbon Electricity Planning for California. Environmental Science & Technology, 2015, 49, 2013-2021.	4.6	22
146	Mechanistic Modeling of Microtopographic Impacts on CO₂ and CH₄ Fluxes in an Alaskan Tundra Ecosystem Using the CLMâ€Microbe Model. Journal of Advances in Modeling Earth Systems, 2019, 11, 4288-4304.	1.3	22
147	Seasonal and interannual variability in ¹³C composition of ecosystem carbon fluxes in the U.S. Southern Great Plains. Tellus, Series B: Chemical and Physical Meteorology, 2022, 63, 181.	0.8	21
148	Direct and indirect effects of climatic variations on the interannual variability in net ecosystem exchange across terrestrial ecosystems. Tellus, Series B: Chemical and Physical Meteorology, 2022, 68, 30575.	0.8	21
149	The effects of heating, rhizosphere, and depth on root litter decomposition are mediated by soil moisture. Biogeochemistry, 2018, 137, 267-279.	1.7	21
150	Linking leaf transcript levels to whole plant analyses provides mechanistic insights to the impact of warming and altered water availability in an annual grass. Global Change Biology, 2011, 17, 1577-1594.	4.2	16
151	Soil Organic Matter Temperature Sensitivity Cannot be Directly Inferred From Spatial Gradients. Global Biogeochemical Cycles, 2019, 33, 761-776.	1.9	16
152	Evapotranspiration across plant types and geomorphological units in polygonal Arctic tundra. Journal of Hydrology, 2017, 553, 816-825.	2.3	15
153	Modeling Climate Change Impacts on an Arctic Polygonal Tundra: 2. Changes in CO₂ and CH₄ Exchange Depend on Rates of Permafrost Thaw as Affected by Changes in Vegetation and Drainage. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 1323-1341.	1.3	15
154	A call for international soil experiment networks for studying, predicting, and managing global change impacts. Soil, 2015, 1, 575-582.	2.2	12
155	Response to Comment on â€œThe whole-soil carbon flux in response to warmingâ€• Science, 2018, 359, .	6.0	10
156	Dynamics of CO2 and H2O fluxes in Johnson grass in the U.S. Southern Great Plains. Science of the Total Environment, 2020, 739, 140077.	3.9	10
157	Scientists unearth clues to soil contamination by comparing old and new soil samples. Eos, 2000, 81, 53.	0.1	9
158	Radiocarbon measurements of ecosystem respiration and soil pore-space CO₂ in UtqiaÄ¡vik (Barrow), Alaska. Earth System Science Data, 2018, 10, 1943-1957.	3.7	9
159	Using respiration quotients to track changing sources of soil respiration seasonally and with experimental warming. Biogeosciences, 2020, 17, 3045-3055.	1.3	7
160	The 2020 emissions reduction impact of urban water conservation in California. Journal of Water and Climate Change, 2012, 3, 151-162.	1.2	6
161	Dispersal and fire limit Arctic shrub expansion. Nature Communications, 2022, 13, .	5.8	6
162	Annual grassland resource pools and fluxes: sensitivity to precipitation and dry periods on two contrasting soils. Ecosphere, 2012, 3, art70-art70.	1.0	5

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163	Biases in regional carbon budgets from covariation of surface fluxes and weather in transport model inversions. Atmospheric Chemistry and Physics, 2014, 14, 1571-1585.	1.9	4
164	ANALYZING LOCALIZED CLIMATE IMPACTS WITH THE CHANGED CLIMATE FIRE MODELING SYSTEM. Natural Resource Modelling, 1990, 4, 229-253.	0.8	3
165	The response of heterotrophic activity and carbon cycling to nitrogen additions and warming in two tropical soils. Global Change Biology, 2012, 18, 400-400.	4.2	3
166	Does vapor pressure deficit drive the seasonality of Î´13 C of the net landâ€atmosphere CO 2 exchange across the United States?. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 1969-1987.	1.3	3
167	Constructing a database of terrestrial radiocarbon measurements. Eos, 2011, 92, 376-376.	0.1	1
168	Precipitation and Soil Impacts on Partitioning of Subsurface Moisture in Avena barbata. Vadose Zone Journal, 2011, 10, 437-449.	1.3	1
169	Influence of Tundra Polygon Type and Climate Variability on CO₂ and CH₄ Fluxes Near Utqiagvik, Alaska. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2021JG006262.	1.3	1
170	Radiometric validation of satellite vegetation indices using flux tower measurements. , 2014, , .		0
171	Influence of Warming on Plant- and Microorganism-Derived Soil Organic Matter in a Coniferous Temperate Forest. , 2019, , .		0