

Temperature sensitivity of soil respiration rates enhanced by warming response

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Disentangling residence time and temperature sensitivity of microbial decomposition in a global soil carbon model. Biogeosciences, 2014, 11, 6999-7008.	3.3	7
2	Geochemistry Articles â€“ September 2014. Organic Geochemistry, 2014, 77, e1-e40.	1.8	0
3	Belowground carbon responses to experimental warming regulated by soil moisture change in an alpine ecosystem of the Qinghaiâ€“Tibet Plateau. Ecology and Evolution, 2015, 5, 4063-4078.	1.9	28
4	Microbial physiology and soil CO ₂ efflux after 9Âyears of soil warming in a temperate forest â€“ no indications for thermal adaptations. Global Change Biology, 2015, 21, 4265-4277.	9.5	104
5	Deep influence of soil microbes. Nature Plants, 2015, 1, 15194.	9.3	7
6	Explicitly representing soil microbial processes in Earth system models. Global Biogeochemical Cycles, 2015, 29, 1782-1800.	4.9	286
7	Vegetation shift from deciduous to evergreen dwarf shrubs in response to selective herbivory offsets carbon losses: evidence from 19Âyears of warming and simulated herbivory in the subarctic tundra. Global Change Biology, 2015, 21, 3696-3711.	9.5	50
8	Long-term reindeer grazing limits warming-induced increases in CO ₂ released by tundra heath soil: potential role of soil C quality. Environmental Research Letters, 2015, 10, 094020.	5.2	7
9	Effects of diurnal temperature variation on microbial community and petroleum hydrocarbon biodegradation in contaminated soils from a subâ€œAâ€œrctic site. Environmental Microbiology, 2015, 17, 4916-4928.	3.8	32
10	Vegetation and elevation influence the timing and magnitude of soil CO ₂ efflux in a humid, topographically complex watershed. Biogeosciences, 2015, 12, 2975-2994.	3.3	12
11	Nonlinear temperature sensitivity of enzyme kinetics explains canceling effectâ€œa case study on loamy haplic Luvisol. Frontiers in Microbiology, 2015, 6, 1126.	3.5	91
12	Biotic interactions mediate soil microbial feedbacks to climate change. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 7033-7038.	7.1	201
13	A warmer climate reduces the bioreactivity of isolated boreal forest soil horizons without increasing the temperature sensitivity of respiratory CO ₂ loss. Soil Biology and Biochemistry, 2015, 84, 177-188.	8.8	24
14	Biochar for Climate Change Mitigation: Tracing the in-situ Priming Effect on a Forest Site. Energy Procedia, 2015, 76, 381-387.	1.8	14
15	Shifts in the microbial community structure explain the response of soil respiration to land-use change but not to climate warming. Soil Biology and Biochemistry, 2015, 89, 123-134.	8.8	63
16	Snapshot of methanogen sensitivity to temperature in Zoige wetland from Tibetan plateau. Frontiers in Microbiology, 2015, 6, 131.	3.5	41
17	Microbial ecology in a future climate: effects of temperature and moisture on microbial communities of two boreal fens. FEMS Microbiology Ecology, 2015, 91, .	2.7	62
18	Positive feedback drives carbon release from soils to atmosphere during Paleocene/Eocene warming. Numerische Mathematik, 2015, 315, 337-361.	1.4	14

#	ARTICLE	IF	CITATIONS
19	Grazing intensity in subarctic tundra affects the temperature adaptation of soil microbial communities. <i>Soil Biology and Biochemistry</i> , 2015, 84, 147-157.	8.8	51
20	Fresh carbon input differentially impacts soil carbon decomposition across natural and managed systems. <i>Ecology</i> , 2015, 96, 2806-2813.	3.2	43
21	Responses to increases in temperature of heterotrophic micro-organisms in soils from the maritime Antarctic. <i>Polar Biology</i> , 2015, 38, 1153-1160.	1.2	6
22	Climate change “Is it the cause or the effect?”. <i>KSCE Journal of Civil Engineering</i> , 2015, 19, 359-365.	1.9	5
23	Water availability and abundance of microbial groups are key determinants of greenhouse gas fluxes in a dryland forest ecosystem. <i>Soil Biology and Biochemistry</i> , 2015, 86, 5-16.	8.8	61
24	Labile substrate availability controls temperature sensitivity of organic carbon decomposition at different soil depths. <i>Biogeochemistry</i> , 2015, 126, 85-98.	3.5	45
25	Divergent responses of organic matter composition to incubation temperature. <i>Geoderma</i> , 2015, 259-260, 279-287.	5.1	3
26	Direct and indirect effects of climate change on soil microbial and soil microbial-plant interactions: What lies ahead?. <i>Ecosphere</i> , 2015, 6, 1-21.	2.2	433
27	Soil carbon storage controlled by interactions between geochemistry and climate. <i>Nature Geoscience</i> , 2015, 8, 780-783.	12.9	509
28	Arctic soil microbial diversity in a changing world. <i>Research in Microbiology</i> , 2015, 166, 796-813.	2.1	41
29	Climate Warming and Soil Carbon in Tropical Forests: Insights from an Elevation Gradient in the Peruvian Andes. <i>BioScience</i> , 2015, 65, 906-921.	4.9	75
30	Influences of Reindeer Grazing on Above- and Belowground Biomass and Soil Carbon Dynamics. <i>Arctic, Antarctic, and Alpine Research</i> , 2015, 47, 495-503.	1.1	19
31	Competitive sorption of microbial metabolites on an iron oxide mineral. <i>Soil Biology and Biochemistry</i> , 2015, 90, 34-41.	8.8	45
32	Stocking Rate and Grazing Season Modify Soil Respiration on the Loess Plateau, China. <i>Rangeland Ecology and Management</i> , 2015, 68, 48-53.	2.3	19
33	Temperature and moisture effects on greenhouse gas emissions from deep active-layer boreal soils. <i>Biogeosciences</i> , 2016, 13, 6669-6681.	3.3	22
34	Vertical and seasonal variations in soil CO ₂ production in a 55-year-old oriental arborvitae (<i>Platycladus orientalis</i>) plantation in China. <i>Forestry Chronicle</i> , 2016, 92, 477-486.	0.6	4
35	Temperature Sensitivity as a Microbial Trait Using Parameters from Macromolecular Rate Theory. <i>Frontiers in Microbiology</i> , 2016, 7, 1821.	3.5	43
37	Ectomycorrhizal fungi slow soil carbon cycling. <i>Ecology Letters</i> , 2016, 19, 937-947.	6.4	224

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38	Shallow snowpack inhibits soil respiration in sagebrush steppe through multiple biotic and abiotic mechanisms. <i>Ecosphere</i> , 2016, 7, e01297.	2.2	10
39	Historical precipitation predictably alters the shape and magnitude of microbial functional response to soil moisture. <i>Global Change Biology</i> , 2016, 22, 1957-1964.	9.5	79
40	Does physiological acclimation to climate warming stabilize the ratio of canopy respiration to photosynthesis?. <i>New Phytologist</i> , 2016, 211, 850-863.	7.3	82
41	Temperature sensitivity of soil microbial communities: An application of macromolecular rate theory to microbial respiration. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2016, 121, 1420-1433.	3.0	41
42	Plant-derived compounds stimulate the decomposition of organic matter in arctic permafrost soils. <i>Scientific Reports</i> , 2016, 6, 25607.	3.3	87
43	Effects of changes in straw chemical properties and alkaline soils on bacterial communities engaged in straw decomposition at different temperatures. <i>Scientific Reports</i> , 2016, 6, 22186.	3.3	34
44	Stronger warming effects on microbial abundances in colder regions. <i>Scientific Reports</i> , 2016, 5, 18032.	3.3	88
45	Changes in interannual climate sensitivities of terrestrial carbon fluxes during the 21st century predicted by CMIP5 Earth System Models. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2016, 121, 903-918.	3.0	17
46	Environmental changes affect the assembly of soil bacterial community primarily by mediating stochastic processes. <i>Global Change Biology</i> , 2016, 22, 198-207.	9.5	87
47	Feedback responses of soil greenhouse gas emissions to climate change are modulated by soil characteristics in dryland ecosystems. <i>Soil Biology and Biochemistry</i> , 2016, 100, 21-32.	8.8	27
48	Investigating the controls on soil organic matter decomposition in tussock tundra soil and permafrost after fire. <i>Soil Biology and Biochemistry</i> , 2016, 99, 108-116.	8.8	23
49	Temperature sensitivity of organic matter decomposition of permafrost-region soils during laboratory incubations. <i>Soil Biology and Biochemistry</i> , 2016, 97, 1-14.	8.8	73
50	Response of soil CO ₂ efflux to precipitation manipulation in a semiarid grassland. <i>Journal of Environmental Sciences</i> , 2016, 45, 207-214.	6.1	15
51	The subzero microbiome: microbial activity in frozen and thawing soils. <i>FEMS Microbiology Ecology</i> , 2016, 92, fiw081.	2.7	90
52	Microbial diversity limits soil heterotrophic respiration and mitigates the respiration response to moisture increase. <i>Soil Biology and Biochemistry</i> , 2016, 98, 180-185.	8.8	29
53	Role of foliar fungal endophytes in litter decomposition among species and population origins. <i>Fungal Ecology</i> , 2016, 21, 50-56.	1.6	15
54	The influence of global climate change on the environmental fate of persistent organic pollutants: A review with emphasis on the Northern Hemisphere and the Arctic as a receptor. <i>Global and Planetary Change</i> , 2016, 146, 89-108.	3.5	118
55	Soil respiration responses to soil physiochemical properties in urban different green-lands: A case study in Hefei, China. <i>International Soil and Water Conservation Research</i> , 2016, 4, 224-229.	6.5	15

#	ARTICLE	IF	CITATIONS
56	Nitrogen restrictions buffer modeled interactions of water with the carbon cycle. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 218-232.	3.0	5
57	Sensitivity of soil organic matter decomposition to temperature at different depths in permafrost regions on the northern <scp>Q</scp>inghaiâ€<scp>T</scp>ibet <scp>P</scp>lateau. European Journal of Soil Science, 2016, 67, 773-781.	3.9	24
58	Antarctic microbial communities are functionally redundant, adapted and resistant to short term temperature perturbations. Soil Biology and Biochemistry, 2016, 103, 160-170.	8.8	36
59	Long-term ditch-buried straw return alters soil water potential, temperature, and microbial communities in a rice-wheat rotation system. Soil and Tillage Research, 2016, 163, 21-31.	5.6	73
60	Impact of warming on CO2 emissions from streams countered by aquatic photosynthesis. Nature Geoscience, 2016, 9, 758-761.	12.9	67
61	Land cover changes and greenhouse gas emissions in two different soil covers in the Brazilian Caatinga. Science of the Total Environment, 2016, 571, 1048-1057.	8.0	42
62	Managing uncertainty in soil carbon feedbacks to climate change. Nature Climate Change, 2016, 6, 751-758.	18.8	491
63	Litter input decreased the response of soil organic matter decomposition to warming in two subtropical forest soils. Scientific Reports, 2016, 6, 33814.	3.3	21
64	An assessment of US microbiome research. Nature Microbiology, 2016, 1, 15015.	13.3	101
65	Pan-Eurasian Experiment (PEEX): towards a holistic understanding of the feedbacks and interactions in the landâ€“atmosphereâ€“oceanâ€“society continuum in the northern Eurasian region. Atmospheric Chemistry and Physics, 2016, 16, 14421-14461.	4.9	57
66	Soil carbon storage, respiration potential, and organic matter quality across an age and climate gradient in southwestern Greenland. Polar Biology, 2016, 39, 1283-1295.	1.2	12
67	Microbial carbon use efficiency: accounting for population, community, and ecosystem-scale controls over the fate of metabolized organic matter. Biogeochemistry, 2016, 127, 173-188.	3.5	249
68	Bridging the divide: a model-data approach to Polar & Alpine Microbiology. FEMS Microbiology Ecology, 2016, 92, fiw015.	2.7	8
69	UAS-based soil carbon mapping using VIS-NIR (480â€“1000 nm) multi-spectral imaging: Potential and limitations. Geoderma, 2016, 275, 55-66.	5.1	65
70	Priming effect increases with depth in a boreal forest soil. Soil Biology and Biochemistry, 2016, 99, 104-107.	8.8	56
71	Carbon losses in the Alps. Nature Geoscience, 2016, 9, 478-479.	12.9	1
72	Soil labile organic carbon and carbon-cycle enzyme activities under different thinning intensities in Chinese fir plantations. Applied Soil Ecology, 2016, 107, 162-169.	4.3	90
73	Climate Change and Agriculture. , 2016, , 465-489.		5

#	ARTICLE	IF	CITATIONS
74	Fine root growth and contribution to soil carbon in a mixed mature <i>Pinus koraiensis</i> forest. <i>Plant and Soil</i> , 2016, 400, 275-284.	3.7	26
75	Plant water-stress parameterization determines the strength of land-atmosphere coupling. <i>Agricultural and Forest Meteorology</i> , 2016, 217, 61-73.	4.8	26
76	Soil respiration and its temperature sensitivity in agricultural and afforested poplar plantation systems in northern Alberta. <i>Biology and Fertility of Soils</i> , 2016, 52, 629-641.	4.3	27
77	Contrasting temperature responses of dissolved organic carbon and phenols leached from soils. <i>Plant and Soil</i> , 2016, 399, 13-27.	3.7	16
78	Effects of climate warming and elevated CO ₂ on autotrophic nitrification and nitrifiers in dryland ecosystems. <i>Soil Biology and Biochemistry</i> , 2016, 92, 1-15.	8.8	92
79	Nannipieri, P. <i>et al.</i> , 2003. Microbial diversity and soil functions. <i>European Journal of Soil Science</i> , 54, 655-670. <i>European Journal of Soil Science</i> , 2017, 68, 6-11.	3.9	2
80	Uncertain future soil carbon dynamics under global change predicted by models constrained by total carbon measurements. <i>Ecological Applications</i> , 2017, 27, 1001-1009.	3.8	26
81	Long-term warming amplifies shifts in the carbon cycle of experimental ponds. <i>Nature Climate Change</i> , 2017, 7, 209-213.	18.8	66
82	Shrubland primary production and soil respiration diverge along European climate gradient. <i>Scientific Reports</i> , 2017, 7, 43952.	3.3	23
83	Warming enhances old organic carbon decomposition through altering functional microbial communities. <i>ISME Journal</i> , 2017, 11, 1825-1835.	9.8	136
84	Shifts in microbial trophic strategy explain different temperature sensitivity of CO ₂ flux under constant and diurnally varying temperature regimes. <i>FEMS Microbiology Ecology</i> , 2017, 93, .	2.7	38
85	Decoupling of microbial carbon, nitrogen, and phosphorus cycling in response to extreme temperature events. <i>Science Advances</i> , 2017, 3, e1602781.	10.3	143
86	Different Response Patterns of Soil Respiration to a Nitrogen Addition Gradient in Four Types of Land-Use on an Alluvial Island in China. <i>Ecosystems</i> , 2017, 20, 904-916.	3.4	9
87	Decomposition of soil organic carbon influenced by soil temperature and moisture in Andisol and Inceptisol paddy soils in a cold temperate region of Japan. <i>Journal of Soils and Sediments</i> , 2017, 17, 1843-1851.	3.0	25
88	Decoupling direct and indirect effects of temperature on decomposition. <i>Soil Biology and Biochemistry</i> , 2017, 112, 110-116.	8.8	25
89	Enhanced decomposition of stable soil organic carbon and microbial catabolic potentials by long-term field warming. <i>Global Change Biology</i> , 2017, 23, 4765-4776.	9.5	74
90	Q ₁₀ values vary with different kinetic properties of C mineralization. <i>Pedobiologia</i> , 2017, 63, 8-13.	1.2	0
91	The Imperative for Regenerative Agriculture. <i>Science Progress</i> , 2017, 100, 80-129.	1.9	158

#	ARTICLE	IF	CITATIONS
92	Historical climate controls soil respiration responses to current soil moisture. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 6322-6327.	7.1	136
93	Arctic Soil Microbial Sensitivity to Seasonal Dynamics and Climate Change. , 2017, , 275-307.		2
94	Global pattern and controls of soil microbial metabolic quotient. Ecological Monographs, 2017, 87, 429-441.	5.4	106
95	Asymmetric responses of soil heterotrophic respiration to rising and decreasing temperatures. Soil Biology and Biochemistry, 2017, 106, 18-27.	8.8	29
96	Experimental warming reveals positive feedbacks to climate change in the Eurasian Steppe. ISME Journal, 2017, 11, 885-895.	9.8	47
97	Reductive solubilization of arsenic in a mining-impacted river floodplain: Influence of soil properties and temperature. Environmental Pollution, 2017, 231, 722-731.	7.5	24
98	Indicators of climate change adaptation from molecules to ecosystems. Regional Environmental Change, 2017, 17, 2055-2059.	2.9	1
99	Temperature sensitivity of a PLFA-distinguishable microbial community differs between varying and constant temperature regimes. Geoderma, 2017, 308, 54-59.	5.1	21
100	Physical and biogeochemical controls on soil respiration along a topographical gradient in a semiarid forest. Agricultural and Forest Meteorology, 2017, 247, 1-11.	4.8	22
101	Long-Term Release of Carbon Dioxide from Arctic Tundra Ecosystems in Alaska. Ecosystems, 2017, 20, 960-974.	3.4	102
102	Differential responses of soil microbial biomass and carbon-degrading enzyme activities to altered precipitation. Soil Biology and Biochemistry, 2017, 115, 1-10.	8.8	165
103	Biophysical processes supporting the diversity of microbial life in soil. FEMS Microbiology Reviews, 2017, 41, 599-623.	8.6	314
104	Simulating climate change impact on soil carbon sequestration in agro-ecosystem of mid-Himalayan landscape using CENTURY model. Environmental Earth Sciences, 2017, 76, 1.	2.7	12
105	Carbon Inputs from Miscanthus Displace Older Soil Organic Carbon Without Inducing Priming. Bioenergy Research, 2017, 10, 86-101.	3.9	10
106	Are the climatic factors combined with reindeer grazing affecting the soil CO ₂ emissions in subarctic boreal pine forest?. Catena, 2017, 149, 616-622.	5.0	7
107	Soil Greenhouse Gases: Relations to Soil Attributes in a Sugarcane Production Area. Soil Science Society of America Journal, 2017, 81, 1168-1178.	2.2	7
108	Armillaria Pathogenesis under Climate Changes. Forests, 2017, 8, 100.	2.1	40
109	CO ₂ efflux from soils with seasonal water repellency. Biogeosciences, 2017, 14, 4781-4794.	3.3	17

#	ARTICLE	IF	CITATIONS
110	Responses of zinc recovery to temperature and mineral composition during sphalerite bioleaching process. <i>AMB Express</i> , 2017, 7, 190.	3.0	9
111	Respiration from Soil and Ground Cover Vegetation Under Tundra Shrubs. <i>Arctic, Antarctic, and Alpine Research</i> , 2017, 49, 537-550.	1.1	8
112	Effects of carbon turnover time on terrestrial ecosystem carbon storage. <i>Biogeosciences</i> , 2017, 14, 5441-5454.	3.3	28
113	Water response of ecosystem respiration regulates future projection of net ecosystem productivity in a semiarid grassland. <i>Agricultural and Forest Meteorology</i> , 2018, 252, 175-191.	4.8	9
114	Carbon quality and soil microbial property control the latitudinal pattern in temperature sensitivity of soil microbial respiration across Chinese forest ecosystems. <i>Global Change Biology</i> , 2018, 24, 2841-2849.	9.5	104
115	Microbial responses to temperature sensitivity of soil respiration in a dry fallow cover cropping and submerged rice mono-cropping system. <i>Applied Soil Ecology</i> , 2018, 128, 98-108.	4.3	14
116	Temperature sensitivity of soil microbial activity modeled by the square root equation—A unifying model to differentiate between direct temperature effects and microbial community adaptation. <i>Global Change Biology</i> , 2018, 24, 2850-2861.	9.5	51
117	Geothermally warmed soils reveal persistent increases in the respiratory costs of soil microbes contributing to substantial C losses. <i>Biogeochemistry</i> , 2018, 138, 245-260.	3.5	17
118	Interactions Among Abiotic Drivers, Disturbance and Gross Ecosystem Carbon Exchange on Soil Respiration from Subtropical Pine Savannas. <i>Ecosystems</i> , 2018, 21, 1639-1658.	3.4	13
119	Soil respiration and extracellular enzyme production respond differently across seasons to elevated temperatures. <i>Plant and Soil</i> , 2018, 425, 351-361.	3.7	11
120	The responses of microbial temperature relationships to seasonal change and winter warming in a temperate grassland. <i>Global Change Biology</i> , 2018, 24, 3357-3367.	9.5	31
121	Contrasting effects of reindeer grazing on CO ₂ , CH ₄ , and N ₂ O fluxes originating from the northern boreal forest floor. <i>Land Degradation and Development</i> , 2018, 29, 374-381.	3.9	11
122	Prolonged exposure does not increase soil microbial community compositional response to warming along geothermal gradients. <i>FEMS Microbiology Ecology</i> , 2018, 94, .	2.7	29
123	Global negative effects of nitrogen deposition on soil microbes. <i>ISME Journal</i> , 2018, 12, 1817-1825.	9.8	405
124	Subtropical urban turfs: Carbon and nitrogen pools and the role of enzyme activity. <i>Journal of Environmental Sciences</i> , 2018, 65, 18-28.	6.1	13
125	Estimating carbon and showing impacts of drought using satellite data in regression-tree models. <i>International Journal of Remote Sensing</i> , 2018, 39, 374-398.	2.9	8
126	Transplanting boreal soils to a warmer region increases soil heterotrophic respiration as well as its temperature sensitivity. <i>Soil Biology and Biochemistry</i> , 2018, 116, 203-212.	8.8	20
127	Biological attributes of soil cultivated with corn intercropped with <i>Urochloa brizantha</i> in different plant arrangements with and without herbicide application. <i>Agriculture, Ecosystems and Environment</i> , 2018, 254, 35-40.	5.3	12

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128	New insights into the role of microbial community composition in driving soil respiration rates. <i>Soil Biology and Biochemistry</i> , 2018, 118, 35-41.	8.8	134
129	Can Antarctic lichens acclimatize to changes in temperature?. <i>Global Change Biology</i> , 2018, 24, 1123-1135.	9.5	63
130	Detecting macroecological patterns in bacterial communities across independent studies of global soils. <i>Nature Microbiology</i> , 2018, 3, 189-196.	13.3	136
131	Effects of temperature on phosphorus mobilization in sediments in microcosm experiment and in the field. <i>Applied Geochemistry</i> , 2018, 88, 158-166.	3.0	28
132	Factors controlling soil microbial respiration during the growing season in a mature larch plantation in Northern Japan. <i>Journal of Soils and Sediments</i> , 2018, 18, 661-668.	3.0	10
133	Advances in Crop Environment Interaction. , 2018, , .		7
134	Grazing-induced microbiome alterations drive soil organic carbon turnover and productivity in meadow steppe. <i>Microbiome</i> , 2018, 6, 170.	11.1	119
135	Temperature sensitivity of soil respiration in a low-latitude forest ecosystem varies by season and habitat but is unaffected by experimental warming. <i>Biogeochemistry</i> , 2018, 141, 63-73.	3.5	14
136	Plant-Associated Microbial Interactions in the Soil Environment: Role of Endophytes in Imparting Abiotic Stress Tolerance to Crops. , 2018, , 245-284.		12
137	Future Global Soil Respiration Rates Will Swell Despite Regional Decreases in Temperature Sensitivity Caused by Rising Temperature. <i>Earth's Future</i> , 2018, 6, 1539-1554.	6.3	28
138	Dynamics of soil respiration and microbial communities: Interactive controls of temperature and substrate quality. <i>Soil Biology and Biochemistry</i> , 2018, 127, 60-70.	8.8	47
139	A temperature threshold to identify the driving climate forces of the respiratory process in terrestrial ecosystems. <i>European Journal of Soil Biology</i> , 2018, 89, 1-8.	3.2	5
140	Modelling the diurnal and seasonal dynamics of soil CO ₂ exchange in a semiarid ecosystem with high plantâ€‘interspace heterogeneity. <i>Biogeosciences</i> , 2018, 15, 115-136.	3.3	6
141	Peat decomposability in managed organic soils in relation to land use, organic matter composition and temperature. <i>Biogeosciences</i> , 2018, 15, 703-719.	3.3	45
142	Influences of N deposition on soil microbial respiration and its temperature sensitivity depend on N type in a temperate forest. <i>Agricultural and Forest Meteorology</i> , 2018, 260-261, 240-246.	4.8	22
143	Bacteria Inhabiting Wood of Roots and Stumps in Forest and Arable Soils. <i>Forestry Sciences</i> , 2018, , 319-342.	0.4	3
144	Straw incorporation increases crop yield and soil organic carbon sequestration but varies under different natural conditions and farming practices in China: a system analysis. <i>Biogeosciences</i> , 2018, 15, 1933-1946.	3.3	88
145	Impact of nitrogen additions on soil microbial respiration and temperature sensitivity in native and agricultural ecosystems in the Brazilian Cerrado. <i>Journal of Thermal Biology</i> , 2018, 75, 120-127.	2.5	3

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147	The Importance of Sustained Grassland and Environmental Research: A Case Study From North Wyke Research Station, UK, 1982–2017. <i>Advances in Agronomy</i> , 2018, , 161-235.	5.2	1
148	Short- and long-term warming alters soil microbial community and relates to soil traits. <i>Applied Soil Ecology</i> , 2018, 131, 22-28.	4.3	20
149	Hyperactive soil microbes might weaken the terrestrial carbon sink. <i>Nature</i> , 2018, 560, 32-33.	27.8	19
150	Pathways regulating decreased soil respiration with warming in a biocrust-dominated dryland. <i>Global Change Biology</i> , 2018, 24, 4645-4656.	9.5	35
151	Increasing grassland degradation stimulates the non-growing season CO ₂ emissions from an alpine meadow on the Qinghai–Tibetan Plateau. <i>Environmental Science and Pollution Research</i> , 2018, 25, 26576-26591.	5.3	27
152	Differential responses of carbon-degrading enzyme activities to warming: Implications for soil respiration. <i>Global Change Biology</i> , 2018, 24, 4816-4826.	9.5	131
153	The influence of soil communities on the temperature sensitivity of soil respiration. <i>Nature Ecology and Evolution</i> , 2018, 2, 1597-1602.	7.8	51
154	Understanding the Anthropocene through the lens of landfill microbiomes. <i>Frontiers in Ecology and the Environment</i> , 2018, 16, 354-360.	4.0	7
155	Microbial Modulators and Mechanisms of Soil Carbon Storage. , 2018, , 73-115.		10
156	Climate, Geography, and Soil Abiotic Properties as Modulators of Soil Carbon Storage. , 2018, , 137-165.		3
157	Impact of Global Changes on Soil C Storage—Possible Mechanisms and Modeling Approaches. , 2018, , 245-279.		1
158	Temperature Response of Respiration Across the Heterogeneous Landscape of the Alaskan Arctic Tundra. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2018, 123, 2287-2302.	3.0	8
159	Soil Carbon. , 2018, , 1-28.		8
160	The Legacy Effects of Winter Climate on Microbial Functioning After Snowmelt in a Subarctic Tundra. <i>Microbial Ecology</i> , 2019, 77, 186-190.	2.8	8
161	Decreased soil substrate availability with incubation time weakens the response of microbial respiration to high temperature in an alpine meadow on the Tibetan Plateau. <i>Journal of Soils and Sediments</i> , 2019, 19, 255-262.	3.0	5
162	The sensitivity of soil microbial respiration declined due to crop straw addition but did not depend on the type of crop straw. <i>Environmental Science and Pollution Research</i> , 2019, 26, 30167-30176.	5.3	10
163	Microbial community responses reduce soil carbon loss in Tibetan alpine grasslands under short-term warming. <i>Global Change Biology</i> , 2019, 25, 3438-3449.	9.5	24
164	Tundra microbial community taxa and traits predict decomposition parameters of stable, old soil organic carbon. <i>ISME Journal</i> , 2019, 13, 2901-2915.	9.8	24

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165	Soil warming and nitrogen deposition alter soil respiration, microbial community structure and organic carbon composition in a coniferous forest on eastern Tibetan Plateau. <i>Geoderma</i> , 2019, 353, 283-292.	5.1	42
166	Temperature sensitivity of SOM decomposition governed by aggregate protection and microbial communities. <i>Science Advances</i> , 2019, 5, eaau1218.	10.3	111
167	Temperature sensitivity of soil respiration across multiple time scales in a temperate plantation forest. <i>Science of the Total Environment</i> , 2019, 688, 479-485.	8.0	30
168	Microbial utilization of low molecular weight organic carbon substrates in cultivated peats in response to warming and soil degradation. <i>Soil Biology and Biochemistry</i> , 2019, 139, 107629.	8.8	33
169	Microbial responses to warming enhance soil carbon loss following translocation across a tropical forest elevation gradient. <i>Ecology Letters</i> , 2019, 22, 1889-1899.	6.4	65
170	Phenotypic and Genotypic Diversity Among Symbiotic and Non-symbiotic Bacteria Present in Chickpea Nodules in Morocco. <i>Frontiers in Microbiology</i> , 2019, 10, 1885.	3.5	17
171	The global soil community and its influence on biogeochemistry. <i>Science</i> , 2019, 365, .	12.6	586
172	Research questions to facilitate the future development of European long-term ecosystem research infrastructures: A horizon scanning exercise. <i>Journal of Environmental Management</i> , 2019, 250, 109479.	7.8	13
173	Soil microclimates influence annual carbon loss via heterotrophic soil respiration in maize and switchgrass bioenergy cropping systems. <i>Agricultural and Forest Meteorology</i> , 2019, 279, 107731.	4.8	16
174	Hydrocarbon-Degrading Microbial Communities Are Site Specific, and Their Activity Is Limited by Synergies in Temperature and Nutrient Availability in Surface Ocean Waters. <i>Applied and Environmental Microbiology</i> , 2019, 85, .	3.1	23
175	Plant functional diversity drives carbon storage following vegetation restoration in Loess Plateau, China. <i>Journal of Environmental Management</i> , 2019, 246, 668-678.	7.8	19
176	Scientistsâ€™ warning to humanity: microorganisms and climate change. <i>Nature Reviews Microbiology</i> , 2019, 17, 569-586.	28.6	1,138
177	Increasing microbial carbon use efficiency with warming predicts soil heterotrophic respiration globally. <i>Global Change Biology</i> , 2019, 25, 3354-3364.	9.5	55
178	Disentangling the Effects of Temperature, Moisture, and Substrate Availability on Soil CO ₂ Efflux. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2019, 124, 2060-2075.	3.0	25
179	Drivers of C cycling in three arctic-alpine plant communities. <i>Arctic, Antarctic, and Alpine Research</i> , 2019, 51, 128-147.	1.1	9
180	Long-term impacts of warming drive decomposition and accelerate the turnover of labile, not recalcitrant, carbon. <i>Ecosphere</i> , 2019, 10, e02715.	2.2	21
181	Climate change microbiology â€” problems and perspectives. <i>Nature Reviews Microbiology</i> , 2019, 17, 391-396.	28.6	130
182	Impact of Climate Change on Soil Carbon Exchange, Ecosystem Dynamics, and Plantâ€™Microbe Interactions. , 2019, , 379-413.		9

#	ARTICLE	IF	CITATIONS
183	Effects of elevated temperature and elevated CO ₂ on soil nitrification and ammonia-oxidizing microbial communities in field-grown crop. <i>Science of the Total Environment</i> , 2019, 675, 81-89.	8.0	34
184	Temperature sensitivity of soil carbon. , 2019, , 175-208.		7
185	Soil warming effects on tropical forests with highly weathered soils. , 2019, , 385-439.		13
186	Meta-analysis shows positive effects of plant diversity on microbial biomass and respiration. <i>Nature Communications</i> , 2019, 10, 1332.	12.8	184
187	Soil organic carbon dynamics: Impact of land use changes and management practices: A review. <i>Advances in Agronomy</i> , 2019, , 1-107.	5.2	216
188	Temperature sensitivity of biomass-specific microbial exoenzyme activities and CO ₂ efflux is resistant to change across short- and long-term timescales. <i>Global Change Biology</i> , 2019, 25, 1793-1807.	9.5	27
189	Climate warming and tree carbon use efficiency in a whole-tree ¹³ C-CO ₂ tracer study. <i>New Phytologist</i> , 2019, 222, 1313-1324.	7.3	30
190	Soil microbial responses to drought and exotic plants shift carbon metabolism. <i>ISME Journal</i> , 2019, 13, 1776-1787.	9.8	80
191	Soil microbiome: a key player for conservation of soil health under changing climate. <i>Biodiversity and Conservation</i> , 2019, 28, 2405-2429.	2.6	183
192	Modeling anaerobic soil organic carbon decomposition in Arctic polygon tundra: insights into soil geochemical influences on carbon mineralization. <i>Biogeosciences</i> , 2019, 16, 663-680.	3.3	21
193	Elevated temperature increased nitrification activity by stimulating AOB growth and activity in an acidic paddy soil. <i>Plant and Soil</i> , 2019, 445, 71-83.	3.7	24
194	Soil moisture and salinity as main drivers of soil respiration across natural xeromorphic vegetation and agricultural lands in an arid desert region. <i>Catena</i> , 2019, 177, 126-133.	5.0	48
195	Storm Event Nitrogen Dynamics in Waterfowl Impoundments. <i>Water, Air, and Soil Pollution</i> , 2019, 230, 1.	2.4	3
196	Organic carbon quality, composition of main microbial groups, enzyme activities, and temperature sensitivity of soil respiration of an acid paddy soil treated with biochar. <i>Biology and Fertility of Soils</i> , 2019, 55, 185-197.	4.3	82
197	Moisture Is More Important than Temperature for Assembly of Both Potentially Active and Whole Prokaryotic Communities in Subtropical Grassland. <i>Microbial Ecology</i> , 2019, 77, 460-470.	2.8	28
198	The microbiota of technosols resembles that of a nearby forest soil three years after their establishment. <i>Chemosphere</i> , 2019, 220, 600-610.	8.2	9
199	Global synthesis of temperature sensitivity of soil organic carbon decomposition: Latitudinal patterns and mechanisms. <i>Functional Ecology</i> , 2019, 33, 514-523.	3.6	52
200	Al/Fe Mineral Controls on Soil Organic Carbon Stock Across Tibetan Alpine Grasslands. <i>Journal of Geophysical Research C: Biogeosciences</i> , 2019, 124, 247-259.	3.0	48

#	ARTICLE	IF	CITATIONS
201	Combined effects of temperature and precipitation on soil organic carbon changes in the uplands of eastern China. <i>Geoderma</i> , 2019, 337, 1105-1115.	5.1	27
202	Controls on mineral-associated organic matter formation in a degraded Oxisol. <i>Geoderma</i> , 2019, 338, 383-392.	5.1	11
203	Impact of post-fire management on soil respiration, carbon and nitrogen content in a managed hemiboreal forest. <i>Journal of Environmental Management</i> , 2019, 233, 371-377.	7.8	18
204	Soil microbial respiration adapts to ambient temperature in global drylands. <i>Nature Ecology and Evolution</i> , 2019, 3, 232-238.	7.8	89
205	Cross-biome patterns in soil microbial respiration predictable from evolutionary theory on thermal adaptation. <i>Nature Ecology and Evolution</i> , 2019, 3, 223-231.	7.8	100
206	Temporal heterogeneity and temperature response of active ammonia-oxidizing microorganisms in winter in full-scale wastewater treatment plants. <i>Chemical Engineering Journal</i> , 2019, 360, 1542-1552.	12.7	26
207	Effects of the interaction between temperature and revegetation on the microbial degradation of soil dissolved organic matter (DOM) – A DOM incubation experiment. <i>Geoderma</i> , 2019, 337, 812-824.	5.1	48
208	Soil CO ₂ emission, microbial biomass, and microbial respiration of woody and grassy areas in Moscow (Russia). <i>Journal of Soils and Sediments</i> , 2019, 19, 3217-3225.	3.0	20
209	Adaptation of soil microbial growth to temperature: Using a tropical elevation gradient to predict future changes. <i>Global Change Biology</i> , 2019, 25, 827-838.	9.5	86
210	Improvement of Soil Respiration Parameterization in a Dynamic Global Vegetation Model and Its Impact on the Simulation of Terrestrial Carbon Fluxes. <i>Journal of Climate</i> , 2019, 32, 127-143.	3.2	8
211	The effect of human trampling activity on a soil microbial community at the Oulanka Natural Reserve, Finland. <i>Applied Soil Ecology</i> , 2019, 135, 104-112.	4.3	9
212	Temperature sensitivity of soil heterotrophic respiration is altered by carbon substrate along the development of <i>Quercus Mongolica</i> forest in northeast China. <i>Applied Soil Ecology</i> , 2019, 133, 52-61.	4.3	15
213	Spectroscopic measurements and imaging of soil colour for field scale estimation of soil organic carbon. <i>Geoderma</i> , 2020, 357, 113972.	5.1	46
214	Phosphorus rather than nitrogen enhances CO ₂ emissions in tropical forest soils: Evidence from a laboratory incubation study. <i>European Journal of Soil Science</i> , 2020, 71, 495-510.	3.9	21
215	Biogeographic variation in temperature sensitivity of decomposition in forest soils. <i>Global Change Biology</i> , 2020, 26, 1873-1885.	9.5	49
216	Temperature changes affect multi-trophic interactions among pines, mycorrhizal fungi, and soil nematodes in a microcosm experiment. <i>Pedobiologia</i> , 2020, 78, 150595.	1.2	16
217	Space-Based Observations for Understanding Changes in the Arctic-Boreal Zone. <i>Reviews of Geophysics</i> , 2020, 58, e2019RG000652.	23.0	39
218	Warming Effects on Topsoil Organic Carbon and C:N:P Stoichiometry in a Subtropical Forested Landscape. <i>Forests</i> , 2020, 11, 66.	2.1	5

#	ARTICLE	IF	CITATIONS
219	Crop rotation and sequence effects on temporal variation of CO ₂ emissions after long-term no-till application. <i>Science of the Total Environment</i> , 2020, 709, 136107.	8.0	6
220	Spatial patterns in soil organic matter dynamics are shaped by mycorrhizosphere interactions in a treeline forest. <i>Plant and Soil</i> , 2020, 447, 521-535.	3.7	8
221	Temperature sensitivity of soil organic matter mineralization decreases with long-term N fertilization: Evidence from four Q ₁₀ estimation approaches. <i>Land Degradation and Development</i> , 2020, 31, 683-693.	3.9	29
222	Permafrost degradation enhances the risk of mercury release on Qinghai-Tibetan Plateau. <i>Science of the Total Environment</i> , 2020, 708, 135127.	8.0	35
223	Soil carbon loss with warming: New evidence from carbon-degrading enzymes. <i>Global Change Biology</i> , 2020, 26, 1944-1952.	9.5	141
224	Integrative environmental modeling of soil carbon fractions based on a new latent variable model approach. <i>Science of the Total Environment</i> , 2020, 711, 134566.	8.0	6
225	Temperature sensitivity of decomposition decreases with increasing soil organic matter stability. <i>Science of the Total Environment</i> , 2020, 704, 135460.	8.0	47
226	Plant and soil traits driving soil fungal community due to tree plantation on the Loess Plateau. <i>Science of the Total Environment</i> , 2020, 708, 134560.	8.0	33
227	Responses of wetland soil bacterial community and edaphic factors to two-year experimental warming and <i>Spartina alterniflora</i> invasion in Chongming Island. <i>Journal of Cleaner Production</i> , 2020, 250, 119502.	9.3	17
228	Short-term temperature history affects mineralization of fresh litter and extant soil organic matter, irrespective of agricultural management. <i>Soil Biology and Biochemistry</i> , 2020, 150, 107985.	8.8	7
229	Soil salinity changes the temperature sensitivity of soil carbon dioxide and nitrous oxide emissions. <i>Catena</i> , 2020, 195, 104912.	5.0	16
230	Gene-informed decomposition model predicts lower soil carbon loss due to persistent microbial adaptation to warming. <i>Nature Communications</i> , 2020, 11, 4897.	12.8	67
231	Tree planting in organic soils does not result in net carbon sequestration on decadal timescales. <i>Global Change Biology</i> , 2020, 26, 5178-5188.	9.5	61
232	Wild boar grubbing causes organic carbon loss from both top- and sub-soil in an oak forest in central China. <i>Forest Ecology and Management</i> , 2020, 464, 118059.	3.2	14
233	Multi-year incubation experiments boost confidence in model projections of long-term soil carbon dynamics. <i>Nature Communications</i> , 2020, 11, 5864.	12.8	18
234	The thermal response of soil microbial methanogenesis decreases in magnitude with changing temperature. <i>Nature Communications</i> , 2020, 11, 5733.	12.8	35
235	The Carbon Cycle of Terrestrial Ecosystems. , 2020, , 141-182.		4
236	Dynamics of Microbial Community Structure and Ecological Functions in Estuarine Intertidal Sediments. <i>Frontiers in Marine Science</i> , 2020, 7, .	2.5	17

#	ARTICLE	IF	CITATIONS
237	Rising Temperature May Trigger Deep Soil Carbon Loss Across Forest Ecosystems. <i>Advanced Science</i> , 2020, 7, 2001242.	11.2	42
238	Depth dependence of temperature sensitivity of soil carbon dioxide, nitrous oxide and methane emissions. <i>Soil Biology and Biochemistry</i> , 2020, 149, 107956.	8.8	18
239	Soil carbon loss by experimental warming in a tropical forest. <i>Nature</i> , 2020, 584, 234-237.	27.8	132
240	Soil Microbial Respiration in Subtaiga and Forest-Steppe Ecosystems of European Russia: Field and Laboratory Approaches. <i>Eurasian Soil Science</i> , 2020, 53, 1492-1501.	1.6	13
241	Carbon budgets for soil and plants respond to long-term warming in an Alaskan boreal forest. <i>Biogeochemistry</i> , 2020, 150, 345-353.	3.5	7
242	Rapid loss of leguminous species in the semi-arid grasslands of northern China under climate change and mowing from 1982 to 2011. <i>Journal of Arid Land</i> , 2020, 12, 752-765.	2.3	7
243	Soil carbon release responses to long-term versus short-term climatic warming in an arid ecosystem. <i>Biogeosciences</i> , 2020, 17, 781-792.	3.3	9
244	Organic amendment increases soil respiration in a greenhouse vegetable production system through decreasing soil organic carbon recalcitrance and increasing carbon-degrading microbial activity. <i>Journal of Soils and Sediments</i> , 2020, 20, 2877-2892.	3.0	13
245	Effects of warming on soil respiration during the non-growing seasons in a semiarid temperate steppe. <i>Journal of Plant Ecology</i> , 2020, 13, 288-294.	2.3	25
246	Non-monotonic and distinct temperature responses of respiration of soil microbial functional groups. <i>Soil Biology and Biochemistry</i> , 2020, 148, 107902.	8.8	8
247	Functional and Structural Responses of Arctic and Alpine Soil Prokaryotic and Fungal Communities Under Freeze-Thaw Cycles of Different Frequencies. <i>Frontiers in Microbiology</i> , 2020, 11, 982.	3.5	31
248	Effects of grazing exclusion on soil respiration components in an alpine meadow on the north-eastern Qinghai-Tibet Plateau. <i>Catena</i> , 2020, 194, 104750.	5.0	19
249	Compositional variations of active autotrophic bacteria in paddy soils with elevated CO ₂ and temperature. <i>Soil Ecology Letters</i> , 2020, 2, 295-307.	4.5	6
250	Impacts of forest thinning on soil microbial community structure and extracellular enzyme activities: A global meta-analysis. <i>Soil Biology and Biochemistry</i> , 2020, 149, 107915.	8.8	43
251	Disentangling the direct and indirect effects of cropland abandonment on soil microbial activity in grassland soil at different depths. <i>Catena</i> , 2020, 194, 104774.	5.0	9
252	Constraints on microbial communities, decomposition and methane production in deep peat deposits. <i>PLoS ONE</i> , 2020, 15, e0223744.	2.5	13
253	Spatial variation of carbon turnover time and carbon uptake in a Chinese desert steppe ecosystem. <i>Ecological Indicators</i> , 2020, 112, 106120.	6.3	3
254	Substrate availability and soil microbes drive temperature sensitivity of soil organic carbon mineralization to warming along an elevation gradient in subtropical Asia. <i>Geoderma</i> , 2020, 364, 114198.	5.1	41

#	ARTICLE	IF	CITATIONS
255	The stoichiometry of soil microbial biomass determines metabolic quotient of nitrogen mineralization. <i>Environmental Research Letters</i> , 2020, 15, 034005.	5.2	21
256	Compensatory Thermal Adaptation of Soil Microbial Respiration Rates in Global Croplands. <i>Global Biogeochemical Cycles</i> , 2020, 34, e2019GB006507.	4.9	13
257	Temperature Sensitivity (Q ₁₀) of Soil Basal Respiration as a Function of Available Carbon Substrate, Temperature, and Moisture. <i>Eurasian Soil Science</i> , 2020, 53, 377-382.	1.6	8
258	Temperature-induced iron (III) reduction results in decreased dissolved organic carbon export in subalpine wetland soils, Colorado, USA. <i>Geochimica Et Cosmochimica Acta</i> , 2020, 280, 148-160.	3.9	13
259	Increased temperatures alter viable microbial biomass, ammonia oxidizing bacteria and extracellular enzymatic activities in Antarctic soils. <i>FEMS Microbiology Ecology</i> , 2020, 96, .	2.7	13
260	Stand ages adjust fluctuating patterns of soil respiration and decrease temperature sensitivity after revegetation. <i>Soil Science Society of America Journal</i> , 2020, 84, 760-774.	2.2	10
261	Changes in soil micro- and macro-aggregate associated carbon storage following straw incorporation. <i>Catena</i> , 2020, 190, 104555.	5.0	14
262	Bioclimate and arbuscular mycorrhizal fungi regulate continental biogeographic variations in effect of nitrogen deposition on the temperature sensitivity of soil organic carbon decomposition. <i>Land Degradation and Development</i> , 2021, 32, 936-945.	3.9	5
263	Nonadditive and Legacy Effects of Spring and Autumn Warming on Soil Respiration in an Old-Field Grassland. <i>Ecosystems</i> , 2021, 24, 421-433.	3.4	7
264	Warming and elevated CO ₂ interactively affect the photosynthetic carbon of maize plant retained in major farming soils. <i>Archives of Agronomy and Soil Science</i> , 2021, 67, 474-486.	2.6	7
265	Crop production, water pollution, or climate change mitigation—Which drives socially optimal fertilization management most?. <i>Agricultural Systems</i> , 2021, 186, 102985.	6.1	9
266	Home-field advantage in soil respiration and its resilience to drying and rewetting cycles. <i>Science of the Total Environment</i> , 2021, 750, 141736.	8.0	6
267	Contrasting patterns of microbial community and enzyme activity between rhizosphere and bulk soil along an elevation gradient. <i>Catena</i> , 2021, 196, 104921.	5.0	59
268	Abiotic and biotic effects of long-term straw retention on reactive nitrogen runoff losses in a rice-wheat cropping system in the Yangtze Delta region. <i>Agriculture, Ecosystems and Environment</i> , 2021, 305, 107162.	5.3	18
269	Effects of drought and rainfall events on soil autotrophic respiration and heterotrophic respiration. <i>Agriculture, Ecosystems and Environment</i> , 2021, 308, 107267.	5.3	32
270	Temperature adaptation of soil microbial respiration in alpine, boreal and tropical soils: An application of the square root (Ratkowsky) model. <i>Global Change Biology</i> , 2021, 27, 1281-1292.	9.5	26
271	Effects of burned and unburned sugarcane harvesting systems on soil CO ₂ emission and soil physical, chemical, and microbiological attributes. <i>Catena</i> , 2021, 196, 104903.	5.0	12
272	Functional response of the soil microbial community to biochar applications. <i>GCB Bioenergy</i> , 2021, 13, 269-281.	5.6	56

#	ARTICLE	IF	CITATIONS
273	Climate change and agriculture. , 2021, , 661-686.		9
274	Adsorption: An Important Phenomenon in Controlling Soil Properties and Carbon Stabilization. , 2021, , 205-241.		0
275	Temporal changes in global soil respiration since 1987. Nature Communications, 2021, 12, 403.	12.8	57
276	Estimates of energy partitioning, evapotranspiration, and net ecosystem exchange of CO ₂ for an urban lawn and a tallgrass prairie in the Denver metropolitan area under contrasting conditions. Urban Ecosystems, 2021, 24, 1201-1220.	2.4	7
277	No evidence for increased loss of old carbon in a temperate organic soil after 13Âyears of simulated climatic warming despite increased CO ₂ emissions. Global Change Biology, 2021, 27, 1836-1847.	9.5	6
278	Microbial metabolic response to winter warming stabilizes soil carbon. Global Change Biology, 2021, 27, 2011-2028.	9.5	50
279	Warming effects on wood decomposition depend on fungal assembly history. Journal of Ecology, 2021, 109, 1919-1930.	4.0	7
280	High microbial diversity stabilizes the responses of soil organic carbon decomposition to warming in the subsoil on the Tibetan Plateau. Global Change Biology, 2021, 27, 2061-2075.	9.5	77
281	Management scheme influence and nitrogen addition effects on soil CO ₂ , CH ₄ , and N ₂ O fluxes in a Moso bamboo plantation. Forest Ecosystems, 2021, 8, .	3.1	11
282	Gradient Internal Standard Method for Absolute Quantification of Microbial Amplicon Sequencing Data. MSystems, 2021, 6, .	3.8	11
283	Prediction of Soil Organic Carbon under Different Land Use Types Using Sentinel-1/2 Data in a Small Watershed. Remote Sensing, 2021, 13, 1229.	4.0	27
284	Extreme heat events heighten soil respiration. Scientific Reports, 2021, 11, 6632.	3.3	9
285	Contribution of soil microbial necromass to SOC stocks during vegetation recovery in a subtropical karst ecosystem. Science of the Total Environment, 2021, 761, 143945.	8.0	31
286	Impact of Seasonal Variations on the Colonial Populations of Bacteria and Fungi in Soil and on Buried Plant Stems. Journal of BP Koirala Institute of Health Sciences, 2021, 5, 110-119.	0.0	1
287	Temperature sensitivity of SOM decomposition is linked with a K-selected microbial community. Global Change Biology, 2021, 27, 2763-2779.	9.5	155
288	Warming homogenizes apparent temperature sensitivity of ecosystem respiration. Science Advances, 2021, 7, .	10.3	28
290	Shotgun metagenomics reveals distinct functional diversity and metabolic capabilities between 12â€000-year-old permafrost and active layers on Muot da Barba Peider (Swiss Alps). Microbial Genomics, 2021, 7, .	2.0	7
293	Responses of soil organic carbon to climate change in the Qilian Mountains and its future projection. Journal of Hydrology, 2021, 596, 126110.	5.4	31

#	ARTICLE	IF	CITATIONS
294	Can moisture affect temperature dependences of microbial growth and respiration?. <i>Soil Biology and Biochemistry</i> , 2021, 156, 108223.	8.8	51
295	How do soil microbes exert impact on soil respiration and its temperature sensitivity?. <i>Environmental Microbiology</i> , 2021, 23, 3048-3058.	3.8	13
297	Temperature Increases Soil Respiration Across Ecosystem Types and Soil Development, But Soil Properties Determine the Magnitude of This Effect. <i>Ecosystems</i> , 2022, 25, 184-198.	3.4	17
298	Factors and pathways regulating the release and transformation of arsenic mediated by reduction processes of dissimilated iron and sulfate. <i>Science of the Total Environment</i> , 2021, 768, 144697.	8.0	12
299	Predicting Soil Respiration from Plant Productivity (NDVI) in a Sub-Arctic Tundra Ecosystem. <i>Remote Sensing</i> , 2021, 13, 2571.	4.0	6
300	The relationships of present vegetation, bacteria, and soil properties with soil organic matter characteristics in moist acidic tundra in Alaska. <i>Science of the Total Environment</i> , 2021, 772, 145386.	8.0	15
301	Warming and straw application increased soil respiration during the different growing seasons by changing crop biomass and leaf area index in a winter wheat-soybean rotation cropland. <i>Geoderma</i> , 2021, 391, 114985.	5.1	16
302	Soil Bacterial Community Composition in <i>Cryptomeria japonica</i> Plantation at Different Times after Clear-Cutting. <i>Forests</i> , 2021, 12, 754.	2.1	2
303	Evidence for large microbial-mediated losses of soil carbon under anthropogenic warming. <i>Nature Reviews Earth & Environment</i> , 2021, 2, 507-517.	29.7	85
304	Invasibility and recoverability of a plant community following invasion depend on its successional stages. <i>Soil Ecology Letters</i> , 2022, 4, 171-185.	4.5	5
305	Drought legacies mediated by trait trade-offs in soil microbiomes. <i>Ecosphere</i> , 2021, 12, e03562.	2.2	21
306	Soil yeast abundance and diversity assessment in a hot climatic region, semi-arid ecosystem. <i>Iranian Journal of Microbiology</i> , 2021, 13, 418-424.	0.8	0
307	Annual to decadal temperature adaptation of the soil bacterial community after translocation across an elevation gradient in the Andes. <i>Soil Biology and Biochemistry</i> , 2021, 158, 108217.	8.8	14
308	Varying soil respiration under long-term warming and clipping due to shifting carbon allocation toward below-ground. <i>Agricultural and Forest Meteorology</i> , 2021, 304-305, 108408.	4.8	10
309	Disproportionate microbial responses to decadal drainage on a Siberian floodplain. <i>Global Change Biology</i> , 2021, 27, 5124-5140.	9.5	8
310	Linking soil organic carbon mineralization with soil microbial and substrate properties under warming in permafrost peatlands of Northeastern China. <i>Catena</i> , 2021, 203, 105348.	5.0	26
311	Soil profile connectivity can impact microbial substrate use, affecting how soil CO ₂ and CH ₄ effluxes are controlled by temperature. <i>Biogeosciences</i> , 2021, 18, 4755-4772.	3.3	2
312	Decoupling of microbial community dynamics and functions in Arctic peat soil exposed to short term warming. <i>Molecular Ecology</i> , 2021, 30, 5094-5104.	3.9	11

#	ARTICLE	IF	CITATIONS
313	Carbon emissions in hydromorphic soils from an estuarine floodplain forest in the Amazon River. Brazilian Journal of Environmental Sciences (Online), 2021, 56, 413-423.	0.4	0
315	Soil microbial sensitivity to temperature remains unchanged despite community compositional shifts along geothermal gradients. Global Change Biology, 2021, 27, 6217-6231.	9.5	25
316	Compositional Shift of Bacterial, Archaeal, and Fungal Communities Is Dependent on Trophic Lifestyles in Rice Paddy Soil. Frontiers in Microbiology, 2021, 12, 719486.	3.5	5
317	Temporal Variations Rather than Long-Term Warming Control Extracellular Enzyme Activities and Microbial Community Structures in the High Arctic Soil. Microbial Ecology, 2022, 84, 168-181.	2.8	3
318	Legacy effect of warming on the heterotrophic respiration of alpine grassland on the Qinghai-Tibet Plateau. Applied Soil Ecology, 2021, 166, 104093.	4.3	3
319	Key microorganisms mediate soil carbon-climate feedbacks in forest ecosystems. Science Bulletin, 2021, 66, 2036-2044.	9.0	14
320	Global consistency in response of terrestrial ecosystem respiration to temperature. Agricultural and Forest Meteorology, 2021, 308-309, 108576.	4.8	3
321	Plant inputs mediate the linkage between soil carbon and net nitrogen mineralization. Science of the Total Environment, 2021, 790, 148208.	8.0	16
322	Biochar improved soil health and mitigated greenhouse gas emission from controlled irrigation paddy field: Insights into microbial diversity. Journal of Cleaner Production, 2021, 318, 128595.	9.3	42
323	Changes in organic C stability within soil aggregates under different fertilization patterns in a greenhouse vegetable field. Journal of Integrative Agriculture, 2021, 20, 2758-2771.	3.5	10
324	The effect of tillage management on microbial functions in a maize crop at different slope positions. Geoderma, 2021, 401, 115171.	5.1	9
325	Effects of experimental fire in combination with climate warming on greenhouse gas fluxes in Arctic tundra soils. Science of the Total Environment, 2021, 795, 148847.	8.0	8
326	How habitat moisture condition affects the decomposition of fine woody debris from different species. Catena, 2022, 208, 105765.	5.0	10
327	Highly reflective algae for enhancing climate change resilience in rice production. Food and Energy Security, 2021, 10, e272.	4.3	0
328	Impact of Climate Change on Soil Microbial Community. , 2019, , 31-41.		9
329	Arctic Vegetation Cover: Patterns, Processes and Expected Change. , 2015, , 117-132.		4
330	Comparison of soil microbial community between planted woodland and natural grass vegetation on the Loess Plateau. Forest Ecology and Management, 2020, 460, 117817.	3.2	31
333	Response of Methanogens in Arctic Sediments to Temperature and Methanogenic Substrate Availability. PLoS ONE, 2015, 10, e0129733.	2.5	69

#	ARTICLE	IF	CITATIONS
334	The Role of Microbial Community Composition in Controlling Soil Respiration Responses to Temperature. PLoS ONE, 2016, 11, e0165448.	2.5	41
335	Use of data mining techniques to classify soil CO ₂ emission induced by crop management in sugarcane field. PLoS ONE, 2018, 13, e0193537.	2.5	9
336	Carbon stock in aboveground biomass of vegetation at the High Tatra Mts. twelve years after disturbance. Central European Forestry Journal, 2017, 63, 142-151.	0.8	5
337	Vascular plants affect properties and decomposition of moss-dominated peat, particularly at elevated temperatures. Biogeosciences, 2020, 17, 4797-4813.	3.3	16
340	Improving Yasso15 soil carbon model estimates with ensemble adjustment Kalman filter state data assimilation. Geoscientific Model Development, 2020, 13, 5959-5971.	3.6	18
341	Temperature sensitivity of anaerobic methane oxidation versus methanogenesis in paddy soil: Implications for the CH ₄ balance under global warming. Global Change Biology, 2022, 28, 654-664.	9.5	19
342	Multiple pollutants stress the coastal ecosystem with climate and anthropogenic drivers. Journal of Hazardous Materials, 2022, 424, 127570.	12.4	28
343	Scale dependence in functional equivalence and difference in the soil microbiome. Soil Biology and Biochemistry, 2021, 163, 108451.	8.8	3
344	Environmental Biophysics and CO ₂ Emission in Bare Peatland for Sustainable Biomass Production. Jurnal Ilmu Pertanian Indonesia, 2016, 21, 146-151.	0.3	0
346	Soil Microbial Ecology and Its Role in Soil Carbon Sequestration in Sustainable Agroecosystems Under Climate Change. , 2020, , 249-291.		1
351	Soil Management and Conservation: An Approach to Mitigate and Ameliorate Soil Contamination. , 0, , .		0
352	Effects of nitrogen addition and precipitation alteration on soil respiration and its components in a saline-alkaline grassland. Geoderma, 2022, 406, 115541.	5.1	14
353	The Role of Endophytic Insect-Pathogenic Fungi in Biotic Stress Management. , 2020, , 379-400.		2
358	Warming increases soil respiration in a carbon-rich soil without changing microbial respiratory potential. Biogeosciences, 2020, 17, 4405-4420.	3.3	7
359	Cunninghamia lanceolata and understory ferns had positive rhizosphere effects on the temperature sensitivity of soil microbial respiration in a subtropical forest. Geoderma, 2022, 408, 115593.	5.1	5
360	Soil heterotrophic respiration in response to rising temperature and moisture along an altitudinal gradient in a subtropical forest ecosystem, Southwest China. Science of the Total Environment, 2022, 816, 151643.	8.0	2
361	Soil burial reduces decomposition and offsets erosion-induced soil carbon losses in the Indian Himalaya. Global Change Biology, 2022, 28, 1643-1658.	9.5	10
362	Impacts of Landscape Evolution on Heterotrophic Carbon Loss in Intensively Managed Landscapes. Frontiers in Water, 2021, 3, .	2.3	1

#	ARTICLE	IF	CITATIONS
363	Shelterbelt farmland-afforestation induced SOC accrual with higher temperature stability: Cross-sites 1Âm soil profiles analysis in NE China. <i>Science of the Total Environment</i> , 2022, 814, 151942.	8.0	10
364	Spatial variation of residual total petroleum hydrocarbons and ecological risk in oilfield soils. <i>Chemosphere</i> , 2022, 291, 132916.	8.2	3
365	Exclusion of Plant Input Affects the Temperature Sensitivity of Soil Carbon Decomposition. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
366	Highly spatial variation of soil microbial respiration and temperature sensitivity in a subtropical forest. <i>Science of the Total Environment</i> , 2022, 808, 152197.	8.0	2
367	Plant-microbial linkages underpin carbon sequestration in contrasting mountain tundra vegetation types. <i>Soil Biology and Biochemistry</i> , 2022, 165, 108530.	8.8	15
368	Soil microbial respiration in forest ecosystems along a north-south transect of eastern China: Evidence from laboratory experiments. <i>Catena</i> , 2022, 211, 105980.	5.0	11
369	Changing thermal sensitivity of bacterial communities and soil enzymes in a bog peat in spring, summer and autumn. <i>Applied Soil Ecology</i> , 2022, 173, 104382.	4.3	7
370	Temperature Sensitivity of Soil Organic Matter Decomposition and Microbial Functional Diversity in Urban Parks Along Latitudinal Gradient. <i>Moscow University Soil Science Bulletin</i> , 2021, 76, 208-216.	0.7	0
371	Consistent responses of microbial C and N metabolic processes to elevated CO2 across global terrestrial ecosystems. <i>Journal of Soils and Sediments</i> , 2022, 22, 403-408.	3.0	1
372	How Does Land Consolidation Affect Soil Fungal Community Structure? Take Heavy Metal Contaminated Areas in Eastern China for Example. <i>Land</i> , 2022, 11, 142.	2.9	2
373	Thermal adaptation occurs in the respiration and growth of widely distributed bacteria. <i>Global Change Biology</i> , 2022, 28, 2820-2829.	9.5	15
374	Effect Mechanism of Land Consolidation on Soil Bacterial Community: A Case Study in Eastern China. <i>International Journal of Environmental Research and Public Health</i> , 2022, 19, 845.	2.6	3
375	Temperature thresholds drive the global distribution of soil fungal decomposers. <i>Global Change Biology</i> , 2022, 28, 2779-2789.	9.5	30
376	Microbial communities in soil macro-aggregates with less connected networks respire less across successional and geographic gradients. <i>European Journal of Soil Biology</i> , 2022, 108, 103378.	3.2	8
377	Duff burning from wildfires in a moist region: different impacts on PM<sub>2.5</sub> and ozone. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 597-624.	4.9	4
378	Interference of Climate Change on Plant-Microbe Interaction: Present and Future Prospects. <i>Frontiers in Agronomy</i> , 2022, 3, .	3.3	15
379	Assessing thermal acclimation of soil microbial respiration using macromolecular rate theory. <i>Biogeochemistry</i> , 2022, 158, 131-141.	3.5	10
380	Microbial assemblies associated with temperature sensitivity of soil respiration along an altitudinal gradient. <i>Science of the Total Environment</i> , 2022, 820, 153257.	8.0	13

#	ARTICLE	IF	CITATIONS
381	Seasonal Changes in Soil Respiration with An Elevation Gradient in <i>Abies nephrolepis</i> (Trautv.) Maxim. Forests in North China. <i>Phyton</i> , 2022, 91, 1-14.	0.7	0
382	Modeling Soil Organic Carbon Changes under Alternative Climatic Scenarios and Soil Properties Using DNDC Model at a Semi-Arid Mediterranean Environment. <i>Climate</i> , 2022, 10, 23.	2.8	5
383	Distinctive pattern and mechanism of precipitation changes affecting soil microbial assemblages in the Eurasian steppe. <i>IScience</i> , 2022, 25, 103893.	4.1	4
384	Plant Endophytes and Arbuscular Mycorrhizal Fungi Alter the Decomposition of <i>Achnatherum Sibiricum</i> Litter. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
386	Does asymmetric birch effect phenomenon matter for environmental sustainability of agriculture in Tunisia?. <i>Environment, Development and Sustainability</i> , 0, , 1.	5.0	1
387	Soil enzymes in response to climate warming: Mechanisms and feedbacks. <i>Functional Ecology</i> , 2022, 36, 1378-1395.	3.6	44
388	Low carbon availability in paleosols nonlinearly attenuates temperature sensitivity of soil organic matter decomposition. <i>Global Change Biology</i> , 2022, 28, 4180-4193.	9.5	10
389	Climate change induces carbon loss of arable mineral soils in boreal conditions. <i>Global Change Biology</i> , 2022, 28, 3960-3973.	9.5	20
390	Plant/soil-microbial fuel cell operation effects in the biological activity of bioelectrochemical systems. <i>Energy Sources, Part A: Recovery, Utilization and Environmental Effects</i> , 2022, 44, 2715-2729.	2.3	4
392	A simultaneous assessment of multiple ecosystem services and disservices in vineyards and orchards on Terceira Island, Azores. <i>Agriculture, Ecosystems and Environment</i> , 2022, 330, 107909.	5.3	9
393	Increasing temperature weakens the positive effect of genetic diversity on population growth. <i>Ecology and Evolution</i> , 2021, 11, 17810-17816.	1.9	2
394	Organic Carbon Mineralization and Bacterial Community of Active Layer Soils Response to Short-Term Warming in the Great Hingã€™an Mountains of Northeast China. <i>Frontiers in Microbiology</i> , 2021, 12, 802213.	3.5	18
407	Extracellular Enzyme Stoichiometry Reveals Soil Microbial Carbon and Phosphorus Limitations in the Yimeng Mountain Area, China. <i>Forests</i> , 2022, 13, 692.	2.1	2
408	Evaluation of carbon mineralization and its temperature sensitivity in different soil aggregates and moisture regimes: A 21-year tillage experiment. <i>Science of the Total Environment</i> , 2022, 837, 155566.	8.0	10
409	Soil Organic Matter Quality, Rather than Quantity, Drives Spatial Variation of Soil Microbial Basal Respiration in Boreal Forests. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
410	Unexpected microbial metabolic responses to elevated temperatures and nitrogen addition in subarctic soils under different land uses. <i>Biogeochemistry</i> , 2022, 160, 105-125.	3.5	5
411	Linkages between the temperature sensitivity of soil respiration and microbial life strategy are dependent on sampling season. <i>Soil Biology and Biochemistry</i> , 2022, 172, 108758.	8.8	30
412	Effects of organic fertilization on functional microbial communities associated with greenhouse gas emissions in paddy soils. <i>Environmental Research</i> , 2022, 213, 113706.	7.5	11

#	ARTICLE	IF	CITATIONS
413	Soil CO ₂ Emission Largely Dominates the Total Ecosystem CO ₂ Emission at Canadian Boreal Forest. <i>Frontiers in Environmental Science</i> , 0, 10, .	3.3	0
414	Optimal growth temperature of Arctic soil bacterial communities increases under experimental warming. <i>Global Change Biology</i> , 2022, 28, 6050-6064.	9.5	16
415	Research characteristics and hotspots of the relationship between soil microorganisms and vegetation: A bibliometric analysis. <i>Ecological Indicators</i> , 2022, 141, 109145.	6.3	12
416	Long-term warming increased microbial carbon use efficiency and turnover rate under conservation tillage system. <i>Soil Biology and Biochemistry</i> , 2022, 172, 108770.	8.8	14
417	An overlooked mechanism underlying the attenuated temperature response of soil heterotrophic respiration. <i>Journal of the Royal Society Interface</i> , 2022, 19, .	3.4	1
418	Land Use, Microorganisms, and Soil Organic Carbon: Putting the Pieces Together. <i>Diversity</i> , 2022, 14, 638.	1.7	4
419	Der Einsatz von Mulchen bei verschiedenen Bodenbearbeitungsbedingungen reduziert den Ausstoß von Treibhausgasen – ein Überblick. <i>Gesunde Pflanzen</i> , 2023, 75, 455-477.	3.0	2
420	Determining The Main Controlling Factors of Nitrogen Diffusion Fluxes at Sediment-water Interface by Grey Correlation Analysis. <i>Water Resources Management</i> , 2022, 36, 4951-4964.	3.9	5
421	Exclusion of plant input affects the temperature sensitivity of soil organic carbon decomposition. <i>Ecological Indicators</i> , 2022, 142, 109274.	6.3	2
422	Intensive land-based activities increase the potential risk of benzo[<i>a</i>]pyrene (BaP) to aquatic ecosystems and human health in coastal areas of China. <i>Journal of Cleaner Production</i> , 2022, 371, 133571.	9.3	6
423	Microbial biofortification: A sustainable route to grow nutrient-rich crops under changing climate. <i>Field Crops Research</i> , 2022, 287, 108662.	5.1	13
424	Optimal soil water content and temperature sensitivity differ among heterotrophic and autotrophic respiration from oasis agroecosystems. <i>Geoderma</i> , 2022, 425, 116071.	5.1	2
425	Plant endophytes and arbuscular mycorrhizal fungi alter the decomposition of <i>Achnatherum sibiricum</i> litter. <i>Applied Soil Ecology</i> , 2022, 180, 104616.	4.3	6
426	Dual regulatory effects of microplastics and heat waves on river microbial carbon metabolism. <i>Journal of Hazardous Materials</i> , 2023, 441, 129879.	12.4	6
427	Low soil moisture suppresses the thermal compensatory response of microbial respiration. <i>Global Change Biology</i> , 2023, 29, 874-889.	9.5	9
428	New opportunities in plant microbiome engineering for increasing agricultural sustainability under stressful conditions. <i>Frontiers in Plant Science</i> , 0, 13, .	3.6	56
429	A global synthesis of patterns in soil organic matter and temperature sensitivity along the altitudinal gradient. <i>Frontiers in Environmental Science</i> , 0, 10, .	3.3	3
430	Microbial respiratory thermal adaptation is regulated by rK strategy dominance. <i>Ecology Letters</i> , 2022, 25, 2489-2499.	6.4	13

#	ARTICLE	IF	CITATIONS
431	Plant-soil-enzyme C-N-P stoichiometry and microbial nutrient limitation responses to plant-soil feedbacks during community succession: A 3-year pot experiment in China. <i>Frontiers in Plant Science</i> , 0, 13, .	3.6	1
432	Habitat-specific responses of soil organic matter decomposition to <i>Spartina alterniflora</i> invasion along China's coast. <i>Ecological Applications</i> , 2024, 34, .	3.8	1
433	Soil Microbiome: A Treasure Trove for Soil Health Sustainability under Changing Climate. <i>Land</i> , 2022, 11, 1887.	2.9	11
434	Impact of no-tillage on soil quality and crop yield in Asia: A meta-analysis. <i>Land Degradation and Development</i> , 2023, 34, 1004-1018.	3.9	5
435	Temperature Sensitivity of Topsoil Organic Matter Decomposition Does Not Depend on Vegetation Types in Mountains. <i>Plants</i> , 2022, 11, 2765.	3.5	4
436	Effects of elevated CO_2 and warming on the root-associated microbiota in an agricultural ecosystem. <i>Environmental Microbiology</i> , 2022, 24, 6252-6266.	3.8	4
437	Optimizing duration of incubation experiments for understanding soil carbon decomposition. <i>Geoderma</i> , 2022, 428, 116225.	5.1	2
438	Enhancement of saturated fatty acid content in soil microbial membranes across natural and experimental warming gradients. <i>Soil Biology and Biochemistry</i> , 2023, 176, 108866.	8.8	1
439	Optimizing strategies to reduce the future carbon footprint of maize under changing climate. <i>Resources, Conservation and Recycling</i> , 2023, 188, 106714.	10.8	11
440	Legacy effect of constant and diurnally oscillating temperatures on soil respiration and microbial community structure. <i>European Journal of Soil Science</i> , 2022, 73, .	3.9	1
441	Temperature legacies predict microbial metabolic quotient across forest biomes. <i>Global Ecology and Biogeography</i> , 2023, 32, 107-119.	5.8	8
442	Earthworms regulate plants' effects on soil microbial nutrient limitations: Examinations with contrasting soils and moisture. <i>Journal of Environmental Management</i> , 2023, 329, 117061.	7.8	1
443	Global change factors regulate the apparent thermal acclimation of soil respiration: A meta-analysis. <i>Applied Soil Ecology</i> , 2023, 183, 104741.	4.3	0
444	Latent functional diversity may accelerate microbial community responses to temperature fluctuations. <i>ELife</i> , 0, 11, .	6.0	5
445	Soil properties and molecular compositions of soil organic matter in four different Arctic regions. <i>Journal of Ecology and Environment</i> , 0, 46, .	1.6	0
446	Growing season average temperature range is the optimal choice for Q10 incubation experiments of SOM decomposition. <i>Ecological Indicators</i> , 2022, 145, 109749.	6.3	2
447	Carbon Dioxide Efflux of Bare Soil as a Function of Soil Temperature and Moisture Content under Weather Conditions of Warm, Temperate, Dry Climate Zone. <i>Agronomy</i> , 2022, 12, 3050.	3.0	3
448	Varied response of carbon dioxide emissions to warming in oxic, anoxic and transitional soil layers in a drained peatland. <i>Communications Earth & Environment</i> , 2022, 3, .	6.8	3

#	ARTICLE	IF	CITATIONS
449	Nitrogen enrichment enhances thermal acclimation of soil microbial respiration. <i>Biogeochemistry</i> , 2023, 162, 343-357.	3.5	3
450	Long-Term Changes in Organic Matter Content and Soil Moisture Determine the Degree of Root and Soil Respiration. <i>Plants</i> , 2023, 12, 251.	3.5	6
451	Temperature fluctuation promotes the thermal adaptation of soil microbial respiration. <i>Nature Ecology and Evolution</i> , 0, , .	7.8	1
452	Loss of soil organic matter in the mining landscape and its implication to climate change. <i>Arabian Journal of Geosciences</i> , 2023, 16, .	1.3	5
453	Spatial heterogeneity and influence mechanisms on soil respiration in an old-growth tropical montane rainforest with complex terrain. <i>Frontiers in Ecology and Evolution</i> , 0, 10, .	2.2	0
454	Determining changes in microbial nutrient limitations in bamboo soils under different management practices via enzyme stoichiometry. <i>Catena</i> , 2023, 223, 106939.	5.0	4
455	Responses of Soil Organic Carbon Decomposition and Temperature Sensitivity to N and P Fertilization in Different Soil Aggregates in a Subtropical Forest. <i>Forests</i> , 2023, 14, 72.	2.1	3
456	Temperature effect on erosion-induced disturbances to soil organic carbon cycling. <i>Nature Climate Change</i> , 0, , .	18.8	1
457	Daily Variation on Soil Moisture and Temperature on Three Restinga Plant Formations. <i>Air, Soil and Water Research</i> , 2023, 16, 117862212311541.	2.5	0
458	Role of ambient climate in the response of soil respiration to different grassland management measures. <i>Agricultural and Forest Meteorology</i> , 2023, 334, 109439.	4.8	3
459	Seasonal precipitation regulates magnitude and direction of the effect of nitrogen addition on net ecosystem CO ₂ exchange in saline-alkaline grassland of northern China. <i>Science of the Total Environment</i> , 2023, 877, 162907.	8.0	5
460	Temperature sensitivity of soil organic carbon respiration along a forested elevation gradient in the Rwenzori Mountains, Uganda. <i>Biogeosciences</i> , 2023, 20, 719-735.	3.3	6
461	Major Impact of Global Climate Change in Atmospheric, Hydrospheric and Lithospheric Context. , 2023, , 35-55.		1
462	Soil microbial communities regulate the threshold effect of salinity stress on SOM decomposition in coastal salt marshes. <i>Fundamental Research</i> , 2023, 3, 868-879.	3.3	4
463	Forest microbiome and global change. <i>Nature Reviews Microbiology</i> , 2023, 21, 487-501.	28.6	33
464	Litter inputs exert greater influence over soil respiration and its temperature sensitivity than roots in a coniferous forest in north-south transition zone. <i>Science of the Total Environment</i> , 2023, 886, 164009.	8.0	1
465	Contextualized response of carbon-use efficiency to warming at the plant and ecosystem levels. <i>Science of the Total Environment</i> , 2023, 885, 163777.	8.0	1
466	The role of soil temperature in mediterranean vineyards in a climate change context. <i>Frontiers in Plant Science</i> , 0, 14, .	3.6	5

#	ARTICLE	IF	CITATIONS
467	Impact of 30 years precipitation regime differences on forest soil physiology and microbial assemblages. <i>Frontiers in Forests and Global Change</i> , 0, 6, .	2.3	3
468	Differential temperature sensitivity of intracellular metabolic processes and extracellular soil enzyme activities. <i>Biogeosciences</i> , 2023, 20, 2207-2219.	3.3	0
469	Patterns and determinants of soil CO ₂ efflux in major forest types of Central Himalayas, India. <i>Environmental Monitoring and Assessment</i> , 2023, 195, .	2.7	0
470	Ecological restoration of sloping land using straw checkerboard barriers seeded with winter cover crops. <i>Ecological Engineering</i> , 2023, 193, 106994.	3.6	0
471	Variation in Temperature Dependences across Europe Reveals the Climate Sensitivity of Soil Microbial Decomposers. <i>Applied and Environmental Microbiology</i> , 2023, 89, .	3.1	5
472	Are carbon-storing soils more sensitive to climate change? A laboratory evaluation for agricultural temperate soils. <i>Soil Biology and Biochemistry</i> , 2023, 183, 109043.	8.8	3
473	Effects of atrazine on microbial metabolic limitations in black soils: Evidence from enzyme stoichiometry. <i>Chemosphere</i> , 2023, 334, 139045.	8.2	2
474	Evidence for nontraditional <i>mcr</i> -containing archaea contributing to biological methanogenesis in geothermal springs. <i>Science Advances</i> , 2023, 9, .	10.3	4
475	Effects of Water Table Fluctuation on Greenhouse Gas Emissions from Wetland Soils in the Peruvian Amazon. <i>Wetlands</i> , 2023, 43, .	1.5	1
476	Labile substrate input weakens the memory effect of soil microbial functions under global warming. <i>Catena</i> , 2023, 232, 107381.	5.0	3
477	Warming-dominated climate change impacts on soil organic carbon fractions and aggregate stability in Mollisols. <i>Geoderma</i> , 2023, 438, 116618.	5.1	1
479	Endogeneity in climate-econometric modeling: epistemological and normative implications. <i>Journal of Environmental Economics and Policy</i> , 0, , 1-14.	2.5	0
480	Immediate changes in soil chemical and biological fertility and short-term changes in soil biological activity following bench terrace construction for eucalypt reforestation. <i>Catena</i> , 2023, 233, 107462.	5.0	2
482	Biochar for Sustainable Crop Production. <i>Clean Energy Production Technologies</i> , 2023, , 227-256.	0.5	0
483	Thermal adaptation of microbial respiration persists throughout long-term soil carbon decomposition. <i>Ecology Letters</i> , 2023, 26, 1803-1814.	6.4	1
484	Dominant influence of plants on soil microbial carbon cycling functions during natural restoration of degraded karst vegetation. <i>Journal of Environmental Management</i> , 2023, 345, 118889.	7.8	1
485	Persulfate pretreatment facilitates decomposition of maize straw in soils and accumulation of straw residues with high adsorption capacity. <i>Chemical Engineering Journal</i> , 2023, 475, 145956.	12.7	0
486	Abundance, diversity and physiological preferences of comammox <i>Nitrospira</i> in urban groundwater. <i>Science of the Total Environment</i> , 2023, 904, 167333.	8.0	1

#	ARTICLE	IF	CITATIONS
487	Mapping turnover of dissolved organic carbon in global topsoil. Science of the Total Environment, 2024, 906, 167621.	8.0	0
488	The Soil Respiration of Coal Mine Heapsâ€™ Novel Ecosystems in Relation to Biomass and Biotic Parameters. Energies, 2023, 16, 7083.	3.1	1
489	Nitrogen deposition raises temperature sensitivity of soil organic matter decomposition in subtropical forest. Science of the Total Environment, 2024, 907, 167925.	8.0	0
491	Temperature sensitivity of methanogenesis and anaerobic methane oxidation in thermokarst lakes modulated by surrounding vegetation on the Qinghai-Tibet Plateau. Science of the Total Environment, 2024, 907, 167962.	8.0	0
492	Divergent Responses of Temperature Sensitivity to Rising Incubation Temperature in Warmed and Un-Warmed Soil: A Mesocosm Experiment from a Subtropical Plantation. Forests, 2023, 14, 2164.	2.1	0
493	The soil microbiome governs the response of microbial respiration to warming across the globe. Nature Climate Change, 2023, 13, 1382-1387.	18.8	5
496	Impact of Land Uses on Soil Organic Carbon Dynamics in the Indian Himalayan Region. , 2023, , 55-75.		0
497	Macroecology Differentiation Between Bacteria and Fungi in Topsoil Across the United States. Global Biogeochemical Cycles, 2023, 37, .	4.9	0
498	Microbial carbon use efficiency and soil organic carbon stocks across an elevational gradient in the Peruvian Andes. Applied Soil Ecology, 2024, 195, 105228.	4.3	1
499	Decoupling of soil carbon mineralization and microbial community composition across a climate gradient on the Tibetan Plateau. Geoderma, 2024, 441, 116736.	5.1	1
501	The forest, the cicadas and the holey fluxes: Periodical cicada impacts on soil respiration depends on tree mycorrhizal type. Ecology Letters, 2024, 27, .	6.4	0
502	Microbially mediated mechanisms underlie soil carbon accrual by conservation agriculture under decade-long warming. Nature Communications, 2024, 15, .	12.8	2
503	Endophytes: role in maintaining plant health under stress conditions. , 2024, , 105-132.		0
504	Characteristics of bacterial community and extracellular enzymes in response to atrazine application in black soil. Environmental Pollution, 2024, 343, 123286.	7.5	2
505	Drought may exacerbate dryland soil inorganic carbon loss under warming climate conditions. Nature Communications, 2024, 15, .	12.8	0
506	Temperature Matters More than Fertilization for Straw Decomposition in the Soil of Greenhouse Vegetable Field. Agronomy, 2024, 14, 233.	3.0	0
507	Elucidating the impacts of microplastics on soil greenhouse gas emissions through automatic machine learning frameworks. Science of the Total Environment, 2024, 916, 170308.	8.0	0
508	The influence of forest-to-cropland conversion on temperature sensitivity of soil microbial respiration across tropical to temperate zones. Soil Biology and Biochemistry, 2024, 191, 109322.	8.8	0

#	ARTICLE	IF	CITATIONS
509	Soil nitrogen availability drives the response of soil microbial biomass to warming. <i>Science of the Total Environment</i> , 2024, 917, 170505.	8.0	1
510	Temperature sensitivity of organic carbon decomposition in lake sediments is mediated by chemodiversity. <i>Global Change Biology</i> , 2024, 30, .	9.5	0
511	Experimental warming accelerates positive soil priming in a temperate grassland ecosystem. <i>Nature Communications</i> , 2024, 15, .	12.8	0
512	Unveiling the dynamic relationship of viruses and/or symbiotic bacteria with plant resilience in abiotic stress. <i>Stress Biology</i> , 2024, 4, .	3.1	0
513	Heterogeneity of soil CO ₂ efflux from local parks across an urban landscape. <i>Landscape Ecology</i> , 2024, 39, .	4.2	0
514	Restoring farmland to forest increases phosphorus limitation based on microbial and soil C:N:P stoichiometry-a synthesis across China. <i>Forest Ecology and Management</i> , 2024, 556, 121745.	3.2	0
515	Spatial variation in stability of wheat (<i>Triticum aestivum</i> L.) straw phytolith-occluded carbon in China. <i>Science of the Total Environment</i> , 2024, 920, 170909.	8.0	0
516	Stronger compensatory thermal adaptation of soil microbial respiration with higher substrate availability. <i>ISME Journal</i> , 2024, 18, .	9.8	0
517	Twenty Years of Progress, Challenges, and Opportunities in Measuring and Understanding Soil Respiration. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2024, 129, .	3.0	0
518	Soil warming increases the number of growing bacterial taxa but not their growth rates. <i>Science Advances</i> , 2024, 10, .	10.3	0
519	Global patterns of the interactive effects of N and P enrichment on terrestrial microbial biomass. <i>Ecological Indicators</i> , 2024, 160, 111771.	6.3	0
520	Future Direction of Environmental Conservation and Soil Regeneration. <i>Earth and Environmental Sciences Library</i> , 2024, , 371-389.	0.4	0
522	Dissolved organic nitrogen is a key to improving the biological treatment potential of landfill leachate. <i>Water Research</i> , 2024, 254, 121403.	11.3	0
523	Effect of Five Seed-Coating Agents on the Germination Rate and the Evaluation of Control Effect on the Damping-Off Disease of Sugar Beet. <i>Sugar Tech</i> , 0, , .	1.8	0
524	30Âm Resolution Global Maps of Forest Soil Respiration and Its Changes From 2000 to 2020. <i>Earth's Future</i> , 2024, 12, .	6.3	0
525	Soil acidification drives the negative effects of nitrogen enrichment on soil microbial biomass at the global scale. <i>Plant and Soil</i> , 0, , .	3.7	0
526	Drought effects on soil greenhouse gas fluxes in a boreal and a temperate forest. <i>Biogeochemistry</i> , 2024, 167, 155-175.	3.5	0
527	A positive feedback to climate change: The effect of temperature on the respiration of key woodâ€decomposing fungi does not decline with time. <i>Global Change Biology</i> , 2024, 30, .	9.5	0

#	ARTICLE	IF	CITATIONS
528	The potential of soil microbiomes in alleviating climate change-associated stresses on crop plants. , 2024, , 81-111.		0