

Biao Zhu

List of Publications by Citations

Source: <https://exaly.com/author-pdf/2326775/biao-zhu-publications-by-citations.pdf>

Version: 2024-04-26

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

121
papers

4,837
citations

34
h-index

68
g-index

138
ext. papers

6,643
ext. citations

6.6
avg, IF

6.17
L-index

#	Paper	IF	Citations
121	Variations in satellite-derived phenology in China's temperate vegetation. <i>Global Change Biology</i> , 2006 , 12, 672-685	11.4	505
120	Changes in satellite-derived vegetation growth trend in temperate and boreal Eurasia from 1982 to 2006. <i>Global Change Biology</i> , 2011 , 17, 3228-3239	11.4	451
119	Storage, patterns and controls of soil organic carbon in the Tibetan grasslands. <i>Global Change Biology</i> , 2008 , 14, 1592-1599	11.4	354
118	Shifting plant species composition in response to climate change stabilizes grassland primary production. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 4051-4056	11.5	208
117	Rhizosphere priming effects on soil carbon and nitrogen mineralization. <i>Soil Biology and Biochemistry</i> , 2014 , 76, 183-192	7.5	207
116	Changes in vegetation net primary productivity from 1982 to 1999 in China. <i>Global Biogeochemical Cycles</i> , 2005 , 19, n/a-n/a	5.9	185
115	Impacts of climate and CO ₂ changes on the vegetation growth and carbon balance of Qinghai-Tibetan grasslands over the past five decades. <i>Global and Planetary Change</i> , 2012 , 98-99, 73-80	4.2	171
114	Rhizosphere priming effect increases the temperature sensitivity of soil organic matter decomposition. <i>Global Change Biology</i> , 2011 , 17, 2172-2183	11.4	142
113	A meta-analysis of soil extracellular enzyme activities in response to global change. <i>Soil Biology and Biochemistry</i> , 2018 , 123, 21-32	7.5	134
112	Complementarity in nutrient foraging strategies of absorptive fine roots and arbuscular mycorrhizal fungi across 14 coexisting subtropical tree species. <i>New Phytologist</i> , 2015 , 208, 125-36	9.8	121
111	Climatic control of primary forest structure and DBH-height allometry in Northeast China. <i>Forest Ecology and Management</i> , 2006 , 234, 264-274	3.9	106
110	Forest biomass and root:shoot allocation in northeast China. <i>Forest Ecology and Management</i> , 2008 , 255, 4007-4020	3.9	105
109	NDVI-indicated decline in desertification in China in the past two decades. <i>Geophysical Research Letters</i> , 2005 , 32,	4.9	102
108	Altitudinal changes in carbon storage of temperate forests on Mt Changbai, Northeast China. <i>Journal of Plant Research</i> , 2010 , 123, 439-52	2.6	95
107	Quantifying the response of forest carbon balance to future climate change in Northeastern China: Model validation and prediction. <i>Global and Planetary Change</i> , 2009 , 66, 179-194	4.2	87
106	The carbon budget of terrestrial ecosystems in East Asia over the last two decades. <i>Biogeosciences</i> , 2012 , 9, 3571-3586	4.6	83
105	Forest biomass carbon stocks in China over the past 2 decades: Estimation based on integrated inventory and satellite data. <i>Journal of Geophysical Research</i> , 2005 , 110,		77

104	Regulation of priming effect by soil organic matter stability over a broad geographic scale. <i>Nature Communications</i> , 2019 , 10, 5112	17.4	75
103	Plant inter-species effects on rhizosphere priming of soil organic matter decomposition. <i>Soil Biology and Biochemistry</i> , 2013 , 57, 91-99	7.5	71
102	Root litter decomposition slows with soil depth. <i>Soil Biology and Biochemistry</i> , 2018 , 125, 103-114	7.5	61
101	Nitrogen deposition has minor effect on soil extracellular enzyme activities in six Chinese forests. <i>Science of the Total Environment</i> , 2017 , 607-608, 806-815	10.2	59
100	Neutral effect of nitrogen addition and negative effect of phosphorus addition on topsoil extracellular enzymatic activities in an alpine grassland ecosystem. <i>Applied Soil Ecology</i> , 2016 , 107, 205-213	7.5	51
99	Rhizosphere priming effects on soil carbon and nitrogen dynamics among tree species with and without intraspecific competition. <i>New Phytologist</i> , 2018 , 218, 1036-1048	9.8	50
98	Responses of soil respiration and its temperature sensitivity to thinning in a pine plantation. <i>Agricultural and Forest Meteorology</i> , 2013 , 171-172, 57-64	5.8	49
97	Impacts of drying-wetting cycles on rhizosphere respiration and soil organic matter decomposition. <i>Soil Biology and Biochemistry</i> , 2013 , 63, 89-96	7.5	46
96	Effects of nitrogen deposition on soil microbial communities in temperate and subtropical forests in China. <i>Science of the Total Environment</i> , 2017 , 607-608, 1367-1375	10.2	46
95	Nodulated soybean enhances rhizosphere priming effects on soil organic matter decomposition more than non-nodulated soybean. <i>Soil Biology and Biochemistry</i> , 2012 , 51, 56-65	7.5	44
94	A dual isotope approach to isolate soil carbon pools of different turnover times. <i>Biogeosciences</i> , 2013 , 10, 8067-8081	4.6	42
93	Carbon budgets of three temperate forest ecosystems in Dongling Mt., Beijing, China. <i>Science in China Series D: Earth Sciences</i> , 2007 , 50, 92-101		40
92	A global meta-analysis of soil respiration and its components in response to phosphorus addition. <i>Soil Biology and Biochemistry</i> , 2019 , 135, 38-47	7.5	38
91	Changes in soil greenhouse gas fluxes by land use change from primary forest. <i>Global Change Biology</i> , 2020 , 26, 2656	11.4	38
90	Constant and diurnally-varying temperature regimes lead to different temperature sensitivities of soil organic carbon decomposition. <i>Soil Biology and Biochemistry</i> , 2011 , 43, 866-869	7.5	36
89	¹³ C isotope fractionation during rhizosphere respiration of C3 and C4 plants. <i>Plant and Soil</i> , 2011 , 342, 277-287	4.2	35
88	Footprint of temperature changes in the temperate and boreal forest carbon balance. <i>Geophysical Research Letters</i> , 2009 , 36, n/a-n/a	4.9	34
87	Root effects on soil organic carbon: a double-edged sword. <i>New Phytologist</i> , 2021 , 230, 60-65	9.8	32

86	Labile substrate availability controls temperature sensitivity of organic carbon decomposition at different soil depths. <i>Biogeochemistry</i> , 2015 , 126, 85-98	3.8	31
85	Soil microbial carbon and nutrient constraints are driven more by climate and soil physicochemical properties than by nutrient addition in forest ecosystems. <i>Soil Biology and Biochemistry</i> , 2020 , 141, 107657	7.5	30
84	Effects of warming on carbon and nitrogen cycling in alpine grassland ecosystems on the Tibetan Plateau: A meta-analysis. <i>Geoderma</i> , 2020 , 370, 114363	6.7	29
83	Root functional traits are key determinants of the rhizosphere effect on soil organic matter decomposition across 14 temperate hardwood species. <i>Soil Biology and Biochemistry</i> , 2020 , 151, 108019	7.5	28
82	Physico-chemical protection, rather than biochemical composition, governs the responses of soil organic carbon decomposition to nitrogen addition in a temperate agroecosystem. <i>Science of the Total Environment</i> , 2017 , 598, 282-288	10.2	27
81	Nitrogen addition has contrasting effects on particulate and mineral-associated soil organic carbon in a subtropical forest. <i>Soil Biology and Biochemistry</i> , 2020 , 142, 107708	7.5	27
80	Greater variations of rhizosphere effects within mycorrhizal group than between mycorrhizal group in a temperate forest. <i>Soil Biology and Biochemistry</i> , 2018 , 126, 237-246	7.5	27
79	Decadally cycling soil carbon is more sensitive to warming than faster-cycling soil carbon. <i>Global Change Biology</i> , 2015 , 21, 4602-12	11.4	26
78	The response of tree growth to nitrogen and phosphorus additions in a tropical montane rainforest. <i>Science of the Total Environment</i> , 2018 , 618, 1064-1070	10.2	26
77	Responses of arbuscular mycorrhizal fungi to nitrogen addition: A meta-analysis. <i>Global Change Biology</i> , 2020 , 26, 7229-7241	11.4	25
76	Growth responses of trees and understory plants to nitrogen fertilization in a subtropical forest in China. <i>Biogeosciences</i> , 2017 , 14, 3461-3469	4.6	24
75	Global patterns and associated drivers of priming effect in response to nutrient addition. <i>Soil Biology and Biochemistry</i> , 2021 , 153, 108118	7.5	24
74	Changes in soil organic matter stability with depth in two alpine ecosystems on the Tibetan Plateau. <i>Geoderma</i> , 2019 , 351, 153-162	6.7	23
73	The effects of simulated nitrogen deposition on extracellular enzyme activities of litter and soil among different-aged stands of larch. <i>Journal of Plant Ecology</i> , 2014 , 7, 240-249	1.7	23
72	Root exudation as a major competitive fine-root functional trait of 18 coexisting species in a subtropical forest. <i>New Phytologist</i> , 2021 , 229, 259-271	9.8	23
71	Precipitation overrides warming in mediating soil nitrogen pools in an alpine grassland ecosystem on the Tibetan Plateau. <i>Scientific Reports</i> , 2016 , 6, 31438	4.9	22
70	Vegetation and Soil 15N Natural Abundance in Alpine Grasslands on the Tibetan Plateau: Patterns and Implications. <i>Ecosystems</i> , 2013 , 16, 1013-1024	3.9	21
69	Geographical patterns of community-based tree species richness in Chinese mountain forests: the effects of contemporary climate and regional history. <i>Ecography</i> , 2012 , 35, 1134-1146	6.5	21

68	Responses of soil carbon decomposition to drying-rewetting cycles: A meta-analysis. <i>Geoderma</i> , 2020 , 361, 114069	6.7	19
67	Effects of seven-year nitrogen and phosphorus additions on soil microbial community structures and residues in a tropical forest in Hainan Island, China. <i>Geoderma</i> , 2020 , 361, 114034	6.7	19
66	Minor responses of soil microbial biomass, community structure and enzyme activities to nitrogen and phosphorus addition in three grassland ecosystems. <i>Plant and Soil</i> , 2019 , 444, 21-37	4.2	18
65	Asynchronous responses of soil carbon dioxide, nitrous oxide emissions and net nitrogen mineralization to enhanced fine root input. <i>Soil Biology and Biochemistry</i> , 2016 , 92, 67-78	7.5	16
64	Patterns and determinants of soil microbial residues from tropical to boreal forests. <i>Soil Biology and Biochemistry</i> , 2020 , 151, 108059	7.5	16
63	Temperature sensitivity of decomposition of soil organic matter fractions increases with their turnover time. <i>Land Degradation and Development</i> , 2020 , 31, 632-645	4.4	15
62	Nitrogen fertilization has minimal influence on rhizosphere effects of smooth crabgrass (<i>Digitaria ischaemum</i>) and bermudagrass (<i>Cynodon dactylon</i>). <i>Journal of Plant Ecology</i> , 2015 , 8, 390-400	1.7	14
61	Sensitivity of soil carbon dynamics to nitrogen and phosphorus enrichment in an alpine meadow. <i>Soil Biology and Biochemistry</i> , 2020 , 150, 107984	7.5	14
60	A microbial link between elevated CO ₂ and methane emissions that is plant species-specific. <i>Microbial Ecology</i> , 2013 , 66, 621-9	4.4	12
59	Soil priming effect and its responses to nutrient addition along a tropical forest elevation gradient. <i>Global Change Biology</i> , 2021 , 27, 2793-2806	11.4	12
58	Linking root respiration to chemistry and morphology across species. <i>Global Change Biology</i> , 2021 , 27, 190-201	11.4	12
57	Patterns of soil respiration and its temperature sensitivity in grassland ecosystems across China. <i>Biogeosciences</i> , 2018 , 15, 5329-5341	4.6	12
56	The effects of heating, rhizosphere, and depth on root litter decomposition are mediated by soil moisture. <i>Biogeochemistry</i> , 2018 , 137, 267-279	3.8	11
55	A call for international soil experiment networks for studying, predicting, and managing global change impacts. <i>Soil</i> , 2015 , 1, 575-582	5.8	11
54	Effects of nitrogen addition on microbial residues and their contribution to soil organic carbon in China's forests from tropical to boreal zone. <i>Environmental Pollution</i> , 2021 , 268, 115941	9.3	11
53	Changes in microbial biomass, community composition and diversity, and functioning with soil depth in two alpine ecosystems on the Tibetan plateau. <i>Plant and Soil</i> , 2021 , 459, 137-153	4.2	11
52	Dynamics of microbial residues control the responses of mineral-associated soil organic carbon to N addition in two temperate forests. <i>Science of the Total Environment</i> , 2020 , 748, 141318	10.2	10
51	Rhizosphere effects of woody plants on soil biogeochemical processes: A meta-analysis. <i>Soil Biology and Biochemistry</i> , 2021 , 160, 108310	7.5	10

50	Terrestrial carbon sinks in China and around the world and their contribution to carbon neutrality.. <i>Science China Life Sciences</i> , 2022 , 1	8.5	9
49	Linking absorptive roots and their functional traits with rhizosphere priming of tree species. <i>Soil Biology and Biochemistry</i> , 2020 , 150, 107997	7.5	9
48	Tropical forest soils serve as substantial and persistent methane sinks. <i>Scientific Reports</i> , 2019 , 9, 16799	4.9	9
47	Inventory-based estimation of aboveground net primary production in Japan's forests from 1980 to 2005. <i>Biogeosciences</i> , 2011 , 8, 2099-2106	4.6	8
46	Light intensity controls rhizosphere respiration rate and rhizosphere priming effect of soybean and sunflower. <i>Rhizosphere</i> , 2019 , 9, 97-105	3.5	8
45	Arbuscular mycorrhizal trees cause a higher carbon to nitrogen ratio of soil organic matter decomposition via rhizosphere priming than ectomycorrhizal trees. <i>Soil Biology and Biochemistry</i> , 2021 , 157, 108246	7.5	7
44	Plant and microbial regulations of soil carbon dynamics under warming in two alpine swamp meadow ecosystems on the Tibetan Plateau. <i>Science of the Total Environment</i> , 2021 , 790, 148072	10.2	7
43	Plant Debris and Its Contribution to Ecosystem Carbon Storage in Successional Larix gmelinii Forests in Northeastern China. <i>Forests</i> , 2017 , 8, 191	2.8	6
42	Microbial-accessibility-dependent electron shuttling of in situ solid-phase organic matter in soils. <i>Geoderma</i> , 2019 , 338, 1-4	6.7	6
41	Changes of soil organic matter stability along altitudinal gradients in Tibetan alpine grassland. <i>Plant and Soil</i> , 2021 , 458, 21-40	4.2	6
40	Inconsistent responses of soil microbial community structure and enzyme activity to nitrogen and phosphorus additions in two tropical forests. <i>Plant and Soil</i> , 2021 , 460, 453-468	4.2	6
39	Soil enzymatic responses to multiple environmental drivers in the Tibetan grasslands: Insights from two manipulative field experiments and a meta-analysis. <i>Pedobiologia</i> , 2018 , 71, 50-58	1.7	6
38	Arbuscular mycorrhizal fungi reduce soil nitrous oxide emission. <i>Geoderma</i> , 2021 , 402, 115179	6.7	6
37	Root phosphatase aligns with the collaboration gradient of the root economics space. <i>New Phytologist</i> , 2021 ,	9.8	5
36	Measuring rhizosphere effects of two tree species in a temperate forest: A comprehensive method comparison. <i>Rhizosphere</i> , 2019 , 10, 100153	3.5	4
35	Linking rhizosphere respiration rate of three grassland species with root nitrogen concentration. <i>Geoderma</i> , 2019 , 346, 84-90	6.7	4
34	Resource enrichment combined with biomass removal maintains plant diversity and community stability in a long-term grazed grassland. <i>Journal of Plant Ecology</i> , 2020 , 13, 611-620	1.7	4
33	Particulate organic carbon is more vulnerable to nitrogen addition than mineral-associated organic carbon in soil of an alpine meadow. <i>Plant and Soil</i> , 2021 , 458, 93-103	4.2	4

32	Root and mycorrhizal strategies for nutrient acquisition in forests under nitrogen deposition: A meta-analysis. <i>Soil Biology and Biochemistry</i> , 2021 , 163, 108418	7.5	4
31	Rhizosphere Effects of Maize and Wheat Increase Soil Organic and Inorganic Carbon Release in Carbonate-Rich Soils: A Three-Source 13C Partitioning Study. <i>Frontiers in Environmental Science</i> , 2021 , 9,	4.8	3
30	The rhizosphere effect on soil gross nitrogen mineralization: A meta-analysis. <i>Soil Ecology Letters</i> ,1	2.7	3
29	Responses of soil microbial biomass carbon and dissolved organic carbon to drying-rewetting cycles: A meta-analysis. <i>Catena</i> , 2021 , 207, 105610	5.8	3
28	Effects of nitrogen fertilization on pot-grown wheat photosynthate partitioning within intensively farmed soil determined by 13C pulse-labeling. <i>Journal of Plant Nutrition and Soil Science</i> , 2019 , 182, 896-907	3.7	2
27	Changes in soil total, microbial and enzymatic C-N-P contents and stoichiometry with depth and latitude in forest ecosystems. <i>Science of the Total Environment</i> , 2021 , 151583	10.2	2
26	Warming has a minor effect on surface soil organic carbon in alpine meadow ecosystems on the Qinghai-Tibetan Plateau. <i>Global Change Biology</i> , 2021 ,	11.4	2
25	Techniques and methods for field warming manipulation experiments in terrestrial ecosystems. <i>Chinese Journal of Plant Ecology</i> , 2020 , 44, 330-339	1.2	2
24	Plateau pika offsets the positive effects of warming on soil organic carbon in an alpine swamp meadow on the Tibetan Plateau. <i>Catena</i> , 2021 , 204, 105417	5.8	2
23	Plant inputs mediate the linkage between soil carbon and net nitrogen mineralization. <i>Science of the Total Environment</i> , 2021 , 790, 148208	10.2	2
22	Decreasing microbial phosphorus limitation increases soil carbon release. <i>Geoderma</i> , 2022 , 419, 115868	6.7	2
21	Methodological clarification for estimating the input of plant-derived carbon in soils under elevated CO ₂ based on a 13C-enriched CO ₂ labeling experiment. <i>Plant and Soil</i> , 2019 , 440, 569-580	4.2	1
20	Resistant soil organic carbon is more vulnerable to priming by root exudate fractions than relatively active soil organic carbon. <i>Plant and Soil</i> ,1	4.2	1
19	Nitrogen deposition stimulates decomposition via changes in the structure and function of litter food webs. <i>Soil Biology and Biochemistry</i> , 2022 , 166, 108522	7.5	1
18	Contrasting effects of warming and N deposition on soil microbial functional genes in a subtropical forest. <i>Geoderma</i> , 2022 , 408, 115588	6.7	1
17	Variation of C and N enrichments in different plant components of labeled winter wheat (L.). <i>PeerJ</i> , 2019 , 7, e7738	3.1	1
16	Seasonal changes in soil properties, microbial biomass and enzyme activities across the soil profile in two alpine ecosystems. <i>Soil Ecology Letters</i> ,1	2.7	1
15	Does calculation method affect the nutrient-addition effect on priming?. <i>Geoderma</i> , 2021 , 393, 115040	6.7	1

14	Warming and grazing interact to affect root dynamics in an alpine meadow. <i>Plant and Soil</i> , 2021 , 459, 109-124	4.2	1
13	Aboveground litter properties determined the POC Root functional traits mediate rhizosphere soil carbon stability in a subtropical forest. <i>Soil Biology and Biochemistry</i> , 2021 , 108431	7.5	1
12	Soil N ₂ O emissions are more sensitive to phosphorus addition and plant presence than to nitrogen addition and arbuscular mycorrhizal fungal inoculation. <i>Rhizosphere</i> , 2021 , 19, 100414	3.5	1
11	Effects of nitrogen and phosphorus enrichment on soil NO emission from natural ecosystems: A global meta-analysis.. <i>Environmental Pollution</i> , 2022 , 118993	9.3	1
10	Phosphorus addition decreases plant lignin but increases microbial necromass contribution to soil organic carbon in a subalpine forest.. <i>Global Change Biology</i> , 2022 ,	11.4	1
9	Loss of soil microbial residue carbon by converting a tropical forest to tea plantation. <i>Science of the Total Environment</i> , 2021 , 151742	10.2	0
8	Drying-rewetting rather than sieving stimulates soil respiration. <i>Pedosphere</i> , 2022 , 32, 359-363	5	0
7	Mycorrhizal mycelial respiration: A substantial component of soil respired CO ₂ . <i>Soil Biology and Biochemistry</i> , 2021 , 163, 108454	7.5	0
6	Nitrogen addition stimulates priming effect in a subtropical forest soil. <i>Soil Biology and Biochemistry</i> , 2021 , 160, 108339	7.5	0
5	Climate warming in an alpine meadow: differential responses of soil faunal vs. microbial effects on litter decomposition. <i>Biology and Fertility of Soils</i> , 2022 , 58, 509-514	6.1	0
4	Responses of soil microbial carbon use efficiency to warming: Review and prospects. <i>Soil Ecology Letters</i> ,1	2.7	0
3	Resistant soil carbon is more vulnerable to priming effect than active soil carbon. <i>Soil Biology and Biochemistry</i> , 2022 , 168, 108619	7.5	0
2	The influence of aboveground and belowground species composition on spatial turnover in nutrient pools in alpine grasslands. <i>Global Ecology and Biogeography</i> , 2022 , 31, 486-500	6.1	0
1	Influencing factors and partitioning methods of carbonate contribution to CO ₂ emissions from calcareous soils. <i>Soil Ecology Letters</i> ,	2.7	0