Yakov Kuzyakov

List of Publications by Year in descending order

643 papers	51,485 citations	1883 102 h-index	2883 190 g-index
698 all docs	698 docs citations	698 times ranked	24918 citing authors

#	Article	IF	Citations
1	Review of mechanisms and quantification of priming effects. Soil Biology and Biochemistry, 2000, 32, 1485-1498.	4.2	2,216
2	Priming effects: Interactions between living and dead organic matter. Soil Biology and Biochemistry, 2010, 42, 1363-1371.	4.2	1,492
3	Microbial hotspots and hot moments in soil: Concept & review. Soil Biology and Biochemistry, 2015, 83, 184-199.	4.2	1,141
4	Plant and mycorrhizal regulation of rhizodeposition. New Phytologist, 2004, 163, 459-480.	3.5	1,129
5	Mechanisms of real and apparent priming effects and their dependence on soil microbial biomass and community structure: critical review. Biology and Fertility of Soils, 2008, 45, 115-131.	2.3	1,113
6	Competition between roots and microorganisms for nitrogen: mechanisms and ecological relevance. New Phytologist, 2013, 198, 656-669.	3.5	976
7	Carbon input by plants into the soil. Review. Journal of Plant Nutrition and Soil Science, 2000, 163, 421-431.	1.1	923
8	Sources of CO2 efflux from soil and review of partitioning methods. Soil Biology and Biochemistry, 2006, 38, 425-448.	4.2	919
9	Black carbon decomposition and incorporation into soil microbial biomass estimated by 14C labeling. Soil Biology and Biochemistry, 2009, 41, 210-219.	4.2	855
10	Review: Factors affecting rhizosphere priming effects. Journal of Plant Nutrition and Soil Science, 2002, 165, 382.	1.1	851
11	Soil C and N availability determine the priming effect: microbial N mining and stoichiometric decomposition theories. Global Change Biology, 2014, 20, 2356-2367.	4.2	758
12	Biochar stability in soil: metaâ€analysis of decomposition and priming effects. GCB Bioenergy, 2016, 8, 512-523.	2.5	731
13	Active microorganisms in soil: Critical review of estimation criteria and approaches. Soil Biology and Biochemistry, 2013, 67, 192-211.	4.2	657
14	REVIEW: Time lag between photosynthesis and carbon dioxide efflux from soil: a review of mechanisms and controls. Global Change Biology, 2010, 16, 3386-3406.	4.2	561
15	Carbon input by roots into the soil: Quantification of rhizodeposition from root to ecosystem scale. Global Change Biology, 2018, 24, 1-12.	4.2	558
16	Silicon pools and fluxes in soils and landscapesâ€”a review. Journal of Plant Nutrition and Soil Science, 2006, 169, 310-329.	1.1	474
17	Biochar stability in soil: Decomposition during eight years and transformation as assessed by compound-specific 14C analysis. Soil Biology and Biochemistry, 2014, 70, 229-236.	4.2	442
18	Photosynthesis controls of rhizosphere respiration and organic matter decomposition. Soil Biology and Biochemistry, 2001, 33, 1915-1925.	4.2	414

#	Article	IF	Citations
19	Rhizosphere size and shape: Temporal dynamics and spatial stationarity. Soil Biology and Biochemistry, 2019, 135, 343-360.	4.2	356
20	Priming effects in Chernozem induced by glucose and N in relation to microbial growth strategies. Applied Soil Ecology, 2007, 37, 95-105.	2.1	355
21	Sugars in soil and sweets for microorganisms: Review of origin, content, composition and fate. Soil Biology and Biochemistry, 2015, 90, 87-100.	4.2	351
22	Pedogenic carbonates: Forms and formation processes. Earth-Science Reviews, 2016, 157, 1-17.	4.0	348
23	13C fractionation at the rootâ€“microorganismsâ€“soil interface: A review and outlook for partitioning studies. Soil Biology and Biochemistry, 2010, 42, 1372-1384.	4.2	319
24	Climateâ€“land-use interactions shape tropical mountain biodiversity and ecosystem functions. Nature, 2019, 568, 88-92.	13.7	313
25	Long-term manure application increases soil organic matter and aggregation, and alters microbial community structure and keystone taxa. Soil Biology and Biochemistry, 2019, 134, 187-196.	4.2	302
26	Effects of 11 years of conservation tillage on soil organic matter fractions in wheat monoculture in Loess Plateau of China. Soil and Tillage Research, 2009, 106, 85-94.	2.6	299
27	How biochar works, and when it doesn't: A review of mechanisms controlling soil and plant responses to biochar. GCB Bioenergy, 2021, 13, 1731-1764.	2.5	286
28	Rhizosphere bacteriome structure and functions. Nature Communications, 2022, 13, 836.	5.8	280
29	Isolating organic carbon fractions with varying turnover rates in temperate agricultural soils â€“ A comprehensive method comparison. Soil Biology and Biochemistry, 2018, 125, 10-26.	4.2	269
30	Effects of 15Âyears of manure and inorganic fertilizers on soil organic carbon fractions in a wheat-maize system in the North China Plain. Nutrient Cycling in Agroecosystems, 2012, 92, 21-33.	1.1	252
31	Losses of soil carbon by converting tropical forest to plantations: erosion and decomposition estimated by Î´¹³C. Global Change Biology, 2015, 21, 3548-3560.	4.2	252
32	Sources and mechanisms of priming effect induced in two grassland soils amended with slurry and sugar. Soil Biology and Biochemistry, 2006, 38, 747-758.	4.2	240
33	Nutrient acquisition from arable subsoils in temperate climates: A review. Soil Biology and Biochemistry, 2013, 57, 1003-1022.	4.2	239
34	Phosphorus mineralization can be driven by microbial need for carbon. Soil Biology and Biochemistry, 2013, 61, 69-75.	4.2	239
35	Microbial necromass as the source of soil organic carbon in global ecosystems. Soil Biology and Biochemistry, 2021, 162, 108422.	4.2	235
36	Distribution of microbial- and root-derived phosphatase activities in the rhizosphere depending on P availability and C allocation â€“ Coupling soil zymography with 14C imaging. Soil Biology and Biochemistry, 2013, 67, 106-113.	4.2	227

#	Article	IF	Citations
37	Degradation of Tibetan grasslands: Consequences for carbon and nutrient cycles. Agriculture, Ecosystems and Environment, 2018, 252, 93-104.	2.5	227
38	The Kobresia pygmaea ecosystem of the Tibetan highlands â€“ Origin, functioning and degradation of the world's largest pastoral alpine ecosystem. Science of the Total Environment, 2019, 648, 754-771.	3.9	209
39	Effects of six-year biochar amendment on soil aggregation, crop growth, and nitrogen and phosphorus use efficiencies in a rice-wheat rotation. Journal of Cleaner Production, 2020, 242, 118435.	4.6	208
40	Biochar affects soil organic matter cycling and microbial functions but does not alter microbial community structure in a paddy soil. Science of the Total Environment, 2016, 556, 89-97.	3.9	206
41	Carbon and nitrogen recycling from microbial necromass to cope with C:N stoichiometric imbalance by priming. Soil Biology and Biochemistry, 2020, 142, 107720.	4.2	206
42	Contrasting effects of glucose, living roots and maize straw on microbial growth kinetics and substrate availability in soil. European Journal of Soil Science, 2009, 60, 186-197.	1.8	202
43	Dramatic loss of inorganic carbon by nitrogenâ€induced soil acidification in Chinese croplands. Global Change Biology, 2020, 26, 3738-3751.	4.2	200
44	Effect of grazing on carbon stocks and assimilate partitioning in a <scp>T</scp>ibetan montane pasture revealed by ¹³<scp><scp>CO₂</scp></scp> pulse labeling. Global Change Biology, 2012, 18, 528-538.	4.2	198
45	Root and rhizomicrobial respiration: A review of approaches to estimate respiration by autotrophic and heterotrophic organisms in soil. Journal of Plant Nutrition and Soil Science, 2005, 168, 503-520.	1.1	187
46	Regulation of priming effect by soil organic matter stability over a broad geographic scale. Nature Communications, 2019, 10, 5112.	5.8	187
47	Carbon partitioning and below-ground translocation by Lolium perenne. Soil Biology and Biochemistry, 2001, 33, 61-74.	4.2	186
48	Drought effects on microbial biomass and enzyme activities in the rhizosphere of grasses depend on plant community composition. Applied Soil Ecology, 2011, 48, 38-44.	2.1	186
49	Stimulation of microbial extracellular enzyme activities by elevated CO₂ depends on soil aggregate size. Global Change Biology, 2009, 15, 1603-1614.	4.2	185
50	Root exudate components change litter decomposition in a simulated rhizosphere depending on temperature. Plant and Soil, 2007, 290, 293-305.	1.8	182
51	Microbial decomposition of soil organic matter is mediated by quality and quantity of crop residues: mechanisms and thresholds. Biology and Fertility of Soils, 2017, 53, 287-301.	2.3	182
52	Turnover of soil organic matter and of microbial biomass under C3â€“C4 vegetation change: Consideration of 13C fractionation and preferential substrate utilization. Soil Biology and Biochemistry, 2011, 43, 159-166.	4.2	176
53	Model of apparent and real priming effects: Linking microbial activity with soil organic matter decomposition. Soil Biology and Biochemistry, 2010, 42, 1275-1283.	4.2	172
54	Pathways of litter C by formation of aggregates and SOM density fractions: Implications from 13C natural abundance. Soil Biology and Biochemistry, 2014, 71, 95-104.	4.2	172

#	Article	IF	Citations
55	Viruses in soil: Nano-scale undead drivers of microbial life, biogeochemical turnover and ecosystem functions. Soil Biology and Biochemistry, 2018, 127, 305-317.	4.2	172
56	Labile carbon retention compensates for CO₂released by priming in forest soils. Global Change Biology, 2014, 20, 1943-1954.	4.2	171
57	Microbial Growth and Carbon Use Efficiency in the Rhizosphere and Root-Free Soil. PLoS ONE, 2014, 9, e93282.	1.1	169
58	MgO-modified biochar increases phosphate retention and rice yields in saline-alkaline soil. Journal of Cleaner Production, 2019, 235, 901-909.	4.6	163
59	Drought effects on soil carbon and nitrogen dynamics in global natural ecosystems. Earth-Science Reviews, 2021, 214, 103501.	4.0	159
60	Land-use change affects phosphorus fractions in highly weathered tropical soils. Catena, 2017, 149, 385-393.	2.2	155
61	Temperature sensitivity of SOM decomposition is linked with a Kâ€selected microbial community. Global Change Biology, 2021, 27, 2763-2779.	4.2	155
62	Elevated atmospheric CO₂ increases microbial growth rates in soil: results of three CO₂ enrichment experiments. Global Change Biology, 2010, 16, 836-848.	4.2	153
63	Meta-analysis of heavy metal effects on soil enzyme activities. Science of the Total Environment, 2020, 737, 139744.	3.9	152
64	Rhizosphere shape of lentil and maize: Spatial distribution of enzyme activities. Soil Biology and Biochemistry, 2016, 96, 229-237.	4.2	148
65	Microbial uptake of lowâ€molecularâ€weight organic substances outâ€competes sorption in soil. European Journal of Soil Science, 2010, 61, 504-513.	1.8	147
66	Effects of polyacrylamide, biopolymer, and biochar on decomposition of soil organic matter and plant residues as determined by 14C and enzyme activities. European Journal of Soil Biology, 2012, 48, 1-10.	1.4	147
67	Microbial interactions affect sources of priming induced by cellulose. Soil Biology and Biochemistry, 2014, 74, 39-49.	4.2	147
68	Biochars and the plant-soil interface. Plant and Soil, 2015, 395, 1-5.	1.8	145
69	Nitrogen fertilization raises CO₂ efflux from inorganic carbon: A global assessment. Global Change Biology, 2018, 24, 2810-2817.	4.2	145
70	Review and synthesis of the effects of elevated atmospheric CO2 on soil processes: No changes in pools, but increased fluxes and accelerated cycles. Soil Biology and Biochemistry, 2019, 128, 66-78.	4.2	142
71	Fate of low molecular weight organic substances in an arable soil: From microbial uptake to utilisation and stabilisation. Soil Biology and Biochemistry, 2014, 77, 304-313.	4.2	140
72	Decrease of soil organic matter stabilization with increasing inputs: Mechanisms and controls. Geoderma, 2017, 304, 76-82.	2.3	137

#	Article	IF	Citations
73	Agroforestry systems: Metaâ€analysis of soil carbon stocks, sequestration processes, and future potentials. Land Degradation and Development, 2018, 29, 3886-3897.	1.8	137
74	Elevation of atmospheric CO2 and N-nutritional status modify nodulation, nodule-carbon supply, and root exudation of Phaseolus vulgaris L.. Soil Biology and Biochemistry, 2007, 39, 2208-2221.	4.2	134
75	Separating microbial respiration of exudates from root respiration in non-sterile soils: a comparison of four methods. Soil Biology and Biochemistry, 2002, 34, 1621-1631.	4.2	132
76	Effects of 15 years of manure and mineral fertilizers on enzyme activities in particle-size fractions in a North China Plain soil. European Journal of Soil Biology, 2014, 60, 112-119.	1.4	131
77	Contrasting pathways of carbon sequestration in paddy and upland soils. Global Change Biology, 2021, 27, 2478-2490.	4.2	130
78	Three-source-partitioning of microbial biomass and of CO2 efflux from soil to evaluate mechanisms of priming effects. Soil Biology and Biochemistry, 2011, 43, 778-786.	4.2	129
79	Organic carbon burial and sources in soils of coastal mudflat and mangrove ecosystems. Catena, 2020, 187, 104414.	2.2	127
80	Carbohydrate and amino acid composition of dissolved organic matter leached from soil. Soil Biology and Biochemistry, 2007, 39, 2926-2935.	4.2	126
81	Dissolved and colloidal phosphorus fluxes in forest ecosystemsâ€”an almost blind spot in ecosystem research. Journal of Plant Nutrition and Soil Science, 2016, 179, 425-438.	1.1	125
82	Microbial spatial footprint as a driver of soil carbon stabilization. Nature Communications, 2019, 10, 3121.	5.8	124
83	Rice rhizodeposition and its utilization by microbial groups depends on N fertilization. Biology and Fertility of Soils, 2017, 53, 37-48.	2.3	123
84	Rice rhizodeposits affect organic matter priming in paddy soil: The role of N fertilization and plant growth for enzyme activities, CO 2 and CH 4 emissions. Soil Biology and Biochemistry, 2018, 116, 369-377.	4.2	121
85	Longâ€term nitrogen addition modifies microbial composition and functions for slow carbon cycling and increased sequestration in tropical forest soil. Global Change Biology, 2019, 25, 3267-3281.	4.2	121
86	Soil zymography â€“ A novel in situ method for mapping distribution of enzyme activity in soil. Soil Biology and Biochemistry, 2013, 58, 275-280.	4.2	119
87	Contrasting patterns and drivers of soil bacterial and fungal diversity across a mountain gradient. Environmental Microbiology, 2020, 22, 3287-3301.	1.8	119
88	Estimation of rhizodeposition at field scale: upscaling of a 14C labeling study. Plant and Soil, 2013, 364, 273-285.	1.8	118
89	Response of soil organic matter fractions and composition of microbial community to long-term organic and mineral fertilization. Biology and Fertility of Soils, 2017, 53, 523-532.	2.3	118
90	Spatial and temporal dynamics of hotspots of enzyme activity in soil as affected by living and dead rootsâ€”a soil zymography analysis. Plant and Soil, 2014, 379, 67-77.	1.8	117

#	Article	IF	Citations
91	Carbon allocation in grassland communities under drought stress followed by 14CÂpulse labeling. Soil Biology and Biochemistry, 2012, 55, 132-139.	4.2	116
92	Soil aggregation regulates distributions of carbon, microbial community and enzyme activities after 23-year manure amendment. Applied Soil Ecology, 2017, 111, 65-72.	2.1	116
93	Photosynthesis controls of CO2efflux from maize rhizosphere. Plant and Soil, 2004, 263, 85-99.	1.8	115
94	Carbon costs and benefits of Indonesian rainforest conversion to plantations. Nature Communications, 2018, 9, 2388.	5.8	115
95	Effects of polyacrylamide, biopolymer and biochar on the decomposition of <scp>¹⁴C</scp>â€labelled maize residues and on their stabilization in soil aggregates. European Journal of Soil Science, 2013, 64, 488-499.	1.8	114
96	Loss of labile organic carbon from subsoil due to land-use changes inÂsubtropical China. Soil Biology and Biochemistry, 2015, 88, 148-157.	4.2	114
97	Functional response of soil microbial communities to tillage, cover crops and nitrogen fertilization. Applied Soil Ecology, 2016, 108, 147-155.	2.1	114
98	Arbuscular mycorrhiza enhances rhizodeposition and reduces the rhizosphere priming effect on the decomposition of soil organic matter. Soil Biology and Biochemistry, 2020, 140, 107641.	4.2	113
99	Microbial utilization and mineralization of [14C]glucose added in six orders of concentration to soil. Soil Biology and Biochemistry, 2008, 40, 1981-1988.	4.2	112
100	N fertilization decreases soil organic matter decomposition in the rhizosphere. Applied Soil Ecology, 2016, 108, 47-53.	2.1	112
101	Feedstock determines biocharâ€induced soil priming effects by stimulating the activity of specific microorganisms. European Journal of Soil Science, 2018, 69, 521-534.	1.8	112
102	Tree species identity surpasses richness in affecting soil microbial richness and community composition in subtropical forests. Soil Biology and Biochemistry, 2019, 130, 113-121.	4.2	111
103	Earthworm burrows: Kinetics and spatial distribution of enzymes of C-, N- and P- cycles. Soil Biology and Biochemistry, 2016, 99, 94-103.	4.2	110
104	Microbial gross organic phosphorus mineralization can be stimulated by root exudates â€“ A 33P isotopic dilution study. Soil Biology and Biochemistry, 2013, 65, 254-263.	4.2	108
105	Review of estimation of plant rhizodeposition and their contribution to soil organic matter formation. Archives of Agronomy and Soil Science, 2004, 50, 115-132.	1.3	107
106	Root hairs increase rhizosphere extension and carbon input to soil. Annals of Botany, 2018, 121, 61-69.	1.4	107
107	Effect of land-use and elevation on microbial biomass and water extractable carbon in soils of Mt. Kilimanjaro ecosystems. Applied Soil Ecology, 2013, 67, 10-19.	2.1	106
108	Temperature sensitivity and enzymatic mechanisms of soil organic matter decomposition along an altitudinal gradient on Mount Kilimanjaro. Scientific Reports, 2016, 6, 22240.	1.6	106

#	Article	IF	Citations
109	Priming effects in biochar enriched soils using a three-source-partitioning approach: 14C labelling and 13C natural abundance. Soil Biology and Biochemistry, 2017, 106, 28-35.	4.2	106
110	Soil organic matter availability and climate drive latitudinal patterns in bacterial diversity from tropical to cold temperate forests. Functional Ecology, 2018, 32, 61-70.	1.7	106
111	Carbon input and allocation by rice into paddy soils: A review. Soil Biology and Biochemistry, 2019, 133, 97-107.	4.2	106
112	Carbon flows in the rhizosphere of ryegrass (Lolium perenne). Journal of Plant Nutrition and Soil Science, 2001, 164, 381.	1.1	105
113	Carbon cost of collective farming collapse in Russia. Global Change Biology, 2014, 20, 938-947.	4.2	104
114	Urban soils as hot spots of anthropogenic carbon accumulation: Review of stocks, mechanisms and driving factors. Land Degradation and Development, 2018, 29, 1607-1622.	1.8	99
115	Fenton chemistry and reactive oxygen species in soil: Abiotic mechanisms of biotic processes, controls and consequences for carbon and nutrient cycling. Earth-Science Reviews, 2021, 214, 103525.	4.0	99
116	Contribution of Lolium perenne rhizodeposition to carbon turnover of pasture soil. Plant and Soil, 1999, 213, 127-136.	1.8	98
117	Carbon flow into microbial and fungal biomass as a basis for the belowground food web of agroecosystems. Pedobiologia, 2012, 55, 111-119.	0.5	98
118	Plant inter-species effects on rhizosphere priming of soil organic matter decomposition. Soil Biology and Biochemistry, 2013, 57, 91-99.	4.2	98
119	Effect of biochar origin and soil pH on greenhouse gas emissions from sandy and clay soils. Applied Soil Ecology, 2018, 129, 121-127.	2.1	98
120	Turnover and distribution of root exudates of Zea mays. Plant and Soil, 2003, 254, 317-327.	1.8	97
121	Effect of land use and management practices on microbial biomass and enzyme activities in subtropical top-and sub-soils. Applied Soil Ecology, 2017, 113, 22-28.	2.1	96
122	Stability and dynamics of enzyme activity patterns in the rice rhizosphere: Effects of plant growth and temperature. Soil Biology and Biochemistry, 2017, 113, 108-115.	4.2	96
123	Effects of flooding on phosphorus and iron mobilization in highly weathered soils under different land-use types: Short-term effects and mechanisms. Catena, 2017, 158, 161-170.	2.2	96
124	Microbial C:N:P stoichiometry and turnover depend on nutrients availability in soil: A 14C, 15N and 33P triple labelling study. Soil Biology and Biochemistry, 2019, 131, 206-216.	4.2	96
125	Glycoproteins of arbuscular mycorrhiza for soil carbon sequestration: Review of mechanisms and controls. Science of the Total Environment, 2022, 806, 150571.	3.9	96
126	Nutrient addition reduces carbon sequestration in a Tibetan grassland soil: Disentangling microbial and physical controls. Soil Biology and Biochemistry, 2020, 144, 107764.	4.2	95

#	Article	IF	Citations
127	Nitrogen and phosphorus enrichment accelerates soil organic carbon loss in alpine grassland on the Qinghai-Tibetan Plateau. Science of the Total Environment, 2019, 650, 303-312.	3.9	94
128	Response of soil microbial community to afforestation with pure and mixed species. Plant and Soil, 2017, 412, 357-368.	1.8	92
129	From energy to (soil organic) matter. Global Change Biology, 2022, 28, 2169-2182.	4.2	92
130	Glucose uptake by maize roots and its transformation in the rhizosphere. Soil Biology and Biochemistry, 2006, 38, 851-860.	4.2	91
131	Nonlinear temperature sensitivity of enzyme kinetics explains canceling effectâ€"a case study on loamy haplic Luvisol. Frontiers in Microbiology, 2015, 6, 1126.	1.5	91
132	Neoformation of pedogenic carbonates by irrigation and fertilization and their contribution to carbon sequestration in soil. Geoderma, 2016, 262, 12-19.	2.3	91
133	Small but active â€“ pool size does not matter for carbon incorporation in belowâ€ground food webs. Functional Ecology, 2016, 30, 479-489.	1.7	91
134	Decomposition of biogas residues in soil and their effects on microbial growth kinetics and enzyme activities. Biomass and Bioenergy, 2012, 45, 221-229.	2.9	90
135	Soil organic carbon and total nitrogen in intensively managed arable soils. Agriculture, Ecosystems and Environment, 2012, 150, 102-110.	2.5	90
136	Substrate quality affects kinetics and catalytic efficiency of exo-enzymes in rhizosphere and detritusphere. Soil Biology and Biochemistry, 2016, 92, 111-118.	4.2	90
137	Nitrogen fertilization decreases the decomposition of soil organic matter and plant residues in planted soils. Soil Biology and Biochemistry, 2017, 112, 47-55.	4.2	90
138	Effect of Clay Minerals on Immobilization of Heavy Metals and Microbial Activity in a Sewage Sludge-Contaminated Soil (8 pp). Journal of Soils and Sediments, 2005, 5, 245-252.	1.5	89
139	Root-derived carbon in soil respiration and microbial biomass determined by 14C and 13C. Soil Biology and Biochemistry, 2008, 40, 625-637.	4.2	89
140	Carbonate rhizoliths in loess and their implications for paleoenvironmental reconstruction revealed by isotopic composition: Î´13C, 14C. Chemical Geology, 2011, 283, 251-260.	1.4	88
141	Comments on the paper by Kemmitt etÂal. (2008) â€˜Mineralization of native soil organic matter is not regulated by the size, activity or composition of the soil microbial biomass â€“ A new perspectiveâ€™ [Soil Biology & Biochemistry 40, 61â€“73]: The biology of the Regulatory Gate. Soil Biology and Biochemistry, 2009, 41, 435-439.	4.2	87
142	Source determination of lipids in bulk soil and soil density fractions after four years of wheat cropping. Geoderma, 2010, 156, 267-277.	2.3	87
143	Microbial utilization of rice root exudates: 13C labeling and PLFA composition. Biology and Fertility of Soils, 2016, 52, 615-627.	2.3	87
144	Spatial patterns of enzyme activities in the rhizosphere: Effects of root hairs and root radius. Soil Biology and Biochemistry, 2018, 118, 69-78.	4.2	86

#	Article	IF	Citations
145	Temperature selects for static soil enzyme systems to maintain high catalytic efficiency. Soil Biology and Biochemistry, 2016, 97, 15-22.	4.2	85
146	Carbon sequestration under Miscanthus in sandy and loamy soils estimated by natural ¹³C abundance. Journal of Plant Nutrition and Soil Science, 2007, 170, 538-542.	1.1	83
147	Manure over crop residues increases soil organic matter but decreases microbial necromass relative contribution in upland Ultisols: Results of a 27-year field experiment. Soil Biology and Biochemistry, 2019, 134, 15-24.	4.2	82
148	Quantification of priming and CO2 respiration sources following slurry-C incorporation into two grassland soils with different C content. Rapid Communications in Mass Spectrometry, 2003, 17, 2585-2590.	0.7	81
149	Carbon and nitrogen additions induce distinct priming effects along an organic-matter decay continuum. Scientific Reports, 2016, 6, 19865.	1.6	81
150	Soil organic matter priming and carbon balance after straw addition is regulated by long-term fertilization. Soil Biology and Biochemistry, 2019, 135, 383-391.	4.2	81
151	Anaerobic oxidation of methane in paddy soil: Role of electron acceptors and fertilization in mitigating CH4 fluxes. Soil Biology and Biochemistry, 2020, 141, 107685.	4.2	81
152	Carbonate re-crystallization in soil revealed by 14C labeling: Experiment, model and significance for paleo-environmental reconstructions. Geoderma, 2006, 131, 45-58.	2.3	80
153	Spatial distribution and catalytic mechanisms of Î²-glucosidase activity at the root-soil interface. Biology and Fertility of Soils, 2016, 52, 505-514.	2.3	80
154	Comparing carbon and nitrogen stocks in paddy and upland soils: Accumulation, stabilization mechanisms, and environmental drivers. Geoderma, 2021, 398, 115121.	2.3	80
155	Iron oxidation affects nitrous oxide emissions via donating electrons to denitrification in paddy soils. Geoderma, 2016, 271, 173-180.	2.3	78
156	Maize rhizosphere priming: field estimates using 13C natural abundance. Plant and Soil, 2016, 409, 87-97.	1.8	78
157	Carbon partitioning in plant and soil, carbon dioxide fluxes and enzyme activities as affected by cutting ryegrass. Biology and Fertility of Soils, 2002, 35, 348-358.	2.3	77
158	Aggregate size and their disruption affect 14C-labeled glucose mineralization and priming effect. Applied Soil Ecology, 2015, 90, 1-10.	2.1	77
159	Soil nitrogen transformation responses to seasonal precipitation changes are regulated by changes in functional microbial abundance in a subtropical forest. Biogeosciences, 2017, 14, 2513-2525.	1.3	77
160	Pedogenic and microbial interrelations to regional climate and local topography: New insights from a climate gradient (arid to humid) along the Coastal Cordillera of Chile. Catena, 2018, 170, 335-355.	2.2	77
161	Impact of manure on soil biochemical properties: A global synthesis. Science of the Total Environment, 2020, 745, 141003.	3.9	77
162	Water scarcity and oil palm expansion: social views and environmental processes. Ecology and Society, 2016, 21, .	1.0	77

#	Article	IF	Citations
163	Carbon fluxes in soil food webs of increasing complexity revealed by 14C labelling and 13C natural abundance. Soil Biology and Biochemistry, 2006, 38, 2390-2400.	4.2	76
164	Microbial response to rhizodeposition depending on water regimes in paddy soils. Soil Biology and Biochemistry, 2013, 65, 195-203.	4.2	76
165	Turnover of microbial groups and cell components in soil: ¹³C analysis of cellular biomarkers. Biogeosciences, 2017, 14, 271-283.	1.3	76
166	Microbial carbon use efficiency, biomass turnover, and necromass accumulation in paddy soil depending on fertilization. Agriculture, Ecosystems and Environment, 2020, 292, 106816.	2.5	76
167	Significance of organic nitrogen acquisition for dominant plant species in an alpine meadow on the Tibet plateau, China. Plant and Soil, 2006, 285, 221-231.	1.8	74
168	Photoassimilate allocation and dynamics of hotspots in roots visualized by ¹⁴C phosphor imaging. Journal of Plant Nutrition and Soil Science, 2011, 174, 12-19.	1.1	74
169	Stimulation of r- vs. K-selected microorganisms by elevated atmospheric CO2 depends on soil aggregate size. FEMS Microbiology Ecology, 2009, 69, 43-52.	1.3	73
170	Hotspots of microbial activity induced by earthworm burrows, old root channels, and their combination in subsoil. Biology and Fertility of Soils, 2016, 52, 1105-1119.	2.3	73
171	Carbon and nitrogen mineralization and enzyme activities in soil aggregate-size classes: Effects of biochar, oyster shells, and polymers. Chemosphere, 2018, 198, 40-48.	4.2	73
172	Deforestation decreases spatial turnover and alters the network interactions in soil bacterial communities. Soil Biology and Biochemistry, 2018, 123, 80-86.	4.2	73
173	Global-change effects on early-stage decomposition processes in tidal wetlands â€“ implications from a global survey using standardized litter. Biogeosciences, 2018, 15, 3189-3202.	1.3	73
174	Rusty sink of rhizodeposits and associated keystone microbiomes. Soil Biology and Biochemistry, 2020, 147, 107840.	4.2	73
175	Plant-mediated CH₄ transport and contribution of photosynthates to methanogenesis at a boreal mire: a ¹⁴C pulse-labeling study. Biogeosciences, 2011, 8, 2365-2375.	1.3	72
176	Dominant plant species shift their nitrogen uptake patterns in response to nutrient enrichment caused by a fungal fairy in an alpine meadow. Plant and Soil, 2011, 341, 495-504.	1.8	72
177	Biochemical pathways of amino acids in soil: Assessment by position-specific labeling and 13C-PLFA analysis. Soil Biology and Biochemistry, 2013, 67, 31-40.	4.2	72
178	Pasture degradation modifies the water and carbon cycles of the Tibetan highlands. Biogeosciences, 2014, 11, 6633-6656.	1.3	72
179	Spatio-temporal patterns of enzyme activities after manure application reflect mechanisms of niche differentiation between plants and microorganisms. Soil Biology and Biochemistry, 2017, 112, 100-109.	4.2	72
180	Effects of biotic and abiotic factors on soil organic matter mineralization: Experiments and structural modeling analysis. European Journal of Soil Biology, 2018, 84, 27-34.	1.4	72

#	Article	IF	Citations
181	Root Effects on Soil Organic Matter Decomposition. Agronomy, 0, , 119-143.	0.2	72
182	Rice paddy soils are a quantitatively important carbon store according to a global synthesis. Communications Earth & Environment, 2021, 2, .	2.6	71
183	Inorganic carbon losses by soil acidification jeopardize global efforts on carbon sequestration and climate change mitigation. Journal of Cleaner Production, 2021, 315, 128036.	4.6	71
184	Effect of fertilization on decomposition of 14C labelled plant residues and their incorporation into soil aggregates. Soil and Tillage Research, 2010, 109, 94-102.	2.6	70
185	Large-scale carbon sequestration in post-agrogenic ecosystems in Russia and Kazakhstan. Catena, 2015, 133, 461-466.	2.2	70
186	C/P stoichiometry of dying rice root defines the spatial distribution and dynamics of enzyme activities in root-detritusphere. Biology and Fertility of Soils, 2019, 55, 251-263.	2.3	70
187	Combined biochar and nitrogen application stimulates enzyme activity and root plasticity. Science of the Total Environment, 2020, 735, 139393.	3.9	70
188	Strong priming of soil organic matter induced by frequent input of labile carbon. Soil Biology and Biochemistry, 2021, 152, 108069.	4.2	70
189	Land use affects soil biochemical properties in Mt. Kilimanjaro region. Catena, 2016, 141, 22-29.	2.2	69
190	Spatioâ€temporal variations determine plantâ€“microbe competition for inorganic nitrogen in an alpine meadow. Journal of Ecology, 2011, 99, 563-571.	1.9	68
191	Hot experience for cold-adapted microorganisms: Temperature sensitivity of soil enzymes. Soil Biology and Biochemistry, 2017, 105, 236-243.	4.2	68
192	Effects of maize roots on aggregate stability and enzyme activities in soil. Geoderma, 2017, 306, 50-57.	2.3	68
193	Contrasting effects of organic and mineral nitrogen challenge the N-Mining Hypothesis for soil organic matter priming. Soil Biology and Biochemistry, 2018, 124, 38-46.	4.2	68
194	C and N in soil organic matter density fractions under elevated atmospheric CO2: Turnover vs. stabilization. Soil Biology and Biochemistry, 2011, 43, 579-589.	4.2	67
195	Biochar has no effect on soil respiration across Chinese agricultural soils. Science of the Total Environment, 2016, 554-555, 259-265.	3.9	67
196	Stoichiometry of carbon, nitrogen, and phosphorus in soil: Effects of agricultural land use and climate at a continental scale. Soil and Tillage Research, 2021, 209, 104903.	2.6	67
197	Soil degradation in oil palm and rubber plantations under land resource scarcity. Agriculture, Ecosystems and Environment, 2016, 232, 110-118.	2.5	66
198	Microbial uptake and utilization of low molecular weight organic substrates in soil depend on carbon oxidation state. Biogeochemistry, 2017, 133, 89-100.	1.7	65

#	Article	IF	Citations
199	Nitrogen fertilization increases rhizodeposit incorporation into microbial biomass and reduces soil organic matter losses. Biology and Fertility of Soils, 2017, 53, 419-429.	2.3	65
200	Labile carbon matters more than temperature for enzyme activity in paddy soil. Soil Biology and Biochemistry, 2019, 135, 134-143.	4.2	65
201	Spatial pattern of enzyme activities depends on root exudate composition. Soil Biology and Biochemistry, 2019, 133, 83-93.	4.2	65
202	Title is missing!. Plant and Soil, 2002, 239, 87-102.	1.8	64
203	Dynamics of Organic C Mineralization and the Mobile Fraction of Heavy Metals in a Calcareous Soil Incubated with Organic Wastes. Water, Air, and Soil Pollution, 2004, 158, 401-418.	1.1	64
204	Chemistry and microbiology of the Critical Zone along a steep climate and vegetation gradient in the Chilean Coastal Cordillera. Catena, 2018, 170, 183-203.	2.2	64
205	Carbonate recrystallization in root-free soil and rhizosphere of Triticum aestivum and Lolium perenne estimated by 14C labeling. Biogeochemistry, 2011, 103, 209-222.	1.7	63
206	Environmental drivers and stoichiometric constraints on enzyme activities in soils from rhizosphere to continental scale. Geoderma, 2019, 337, 973-982.	2.3	63
207	Warming increases hotspot areas of enzyme activity and shortens the duration of hot moments in the root-detritusphere. Soil Biology and Biochemistry, 2017, 107, 226-233.	4.2	62
208	Communityâ€weighted means and functional dispersion of plant functional traits along environmental gradients on Mount Kilimanjaro. Journal of Vegetation Science, 2017, 28, 684-695.	1.1	62
209	Rhizodeposition under drought is controlled by root growth rate and rhizosphere water content. Plant and Soil, 2018, 423, 429-442.	1.8	62
210	Spartina alterniflora invasion controls organic carbon stocks in coastal marsh and mangrove soils across tropics and subtropics. Global Change Biology, 2021, 27, 1627-1644.	4.2	62
211	Increasing contribution of microbial residues to soil organic carbon in grassland restoration chronosequence. Soil Biology and Biochemistry, 2022, 170, 108688.	4.2	62
212	Remediation of a soil contaminated with heavy metals by immobilizing compounds. Journal of Plant Nutrition and Soil Science, 2006, 169, 205-212.	1.1	61
213	Linkages between the soil organic matter fractions and the microbial metabolic functional diversity within a broad-leaved Korean pine forest. European Journal of Soil Biology, 2015, 66, 57-64.	1.4	61
214	Enzyme properties down the soil profile - A matter of substrate quality in rhizosphere and detritusphere. Soil Biology and Biochemistry, 2016, 103, 274-283.	4.2	61
215	Reviews and syntheses: Agropedogenesis â€“ humankind as the sixth soil-forming factor and attractors of agricultural soil degradation. Biogeosciences, 2019, 16, 4783-4803.	1.3	61
216	Spatial distribution of root exudates of five plant species as assessed by14C labeling. Journal of Plant Nutrition and Soil Science, 2006, 169, 360-362.	1.1	60

#	Article	IF	Citations
217	Contribution of rhizomicrobial and root respiration to the CO2 emission from soil (A review). Eurasian Soil Science, 2006, 39, 753-764.	0.5	60
218	Rhizoliths in loess â€“ evidence for post-sedimentary incorporation of root-derived organic matter in terrestrial sediments as assessed from molecular proxies. Organic Geochemistry, 2010, 41, 1198-1206.	0.9	60
219	How to link soil C pools with CO₂ fluxes?. Biogeosciences, 2011, 8, 1523-1537.	1.3	60
220	Long-term effects of nitrogen fertilization on aggregation and localization of carbon, nitrogen and microbial activities in soil. Science of the Total Environment, 2018, 624, 1131-1139.	3.9	60
221	Nutrients in the rhizosphere: A meta-analysis of content, availability, and influencing factors. Science of the Total Environment, 2022, 826, 153908.	3.9	60
222	Sorption affects amino acid pathways in soil: Implications from position-specific labeling of alanine. Soil Biology and Biochemistry, 2014, 72, 180-192.	4.2	59
223	Dynamics of soil organic carbon pools after agricultural abandonment. Geoderma, 2014, 235-236, 191-198.	2.3	58
224	Sensitivity and resistance of soil fertility indicators to land-use changes: New concept and examples from conversion of Indonesian rainforest to plantations. Ecological Indicators, 2016, 67, 49-57.	2.6	58
225	Soil organic matter, nitrogen and pH driven change in bacterial community following forest conversion. Forest Ecology and Management, 2020, 477, 118473.	1.4	58
226	Soil organic carbon decomposition from recently added and older sources estimated by Î´13C values of CO2 and organic matter. Soil Biology and Biochemistry, 2012, 55, 40-47.	4.2	57
227	Deep-C storage: Biological, chemical and physical strategies to enhance carbon stocks in agricultural subsoils. Soil Biology and Biochemistry, 2022, 170, 108697.	4.2	57
228	Labile soil organic matter fractions as influenced by non-flooded mulching cultivation and cropping season in riceâ€“wheat rotation. European Journal of Soil Biology, 2013, 56, 19-25.	1.4	55
229	Drying-rewetting cycles alter carbon and nitrogen mineralization in litter-amended alpine wetland soil. Catena, 2016, 145, 285-290.	2.2	55
230	Rhizosphere priming of barley with and without root hairs. Soil Biology and Biochemistry, 2016, 100, 74-82.	4.2	55
231	Priming effects induced by glucose and decaying plant residues on SOM decomposition: A three-source 13C/14C partitioning study. Soil Biology and Biochemistry, 2018, 121, 138-146.	4.2	55
232	Quantitative soil zymography: Mechanisms, processes of substrate and enzyme diffusion in porous media. Soil Biology and Biochemistry, 2018, 127, 156-167.	4.2	55
233	Regulation of soil phosphorus cycling in grasslands by shrubs. Soil Biology and Biochemistry, 2019, 133, 1-11.	4.2	55
234	Effects of land use intensity on dissolved organic carbon properties and microbial community structure. European Journal of Soil Biology, 2012, 52, 67-72.	1.4	54

#	Article	IF	Citations
235	Allocation and dynamics of assimilated carbon in rice-soil system depending on water management. Plant and Soil, 2013, 363, 273-285.	1.8	54
236	Land Use and Precipitation Affect Organic and Microbial Carbon Stocks and the Specific Metabolic Quotient in Soils of Eleven Ecosystems of Mt. Kilimanjaro, Tanzania. Land Degradation and Development, 2016, 27, 592-602.	1.8	54
237	Manure and Mineral Fertilizer Effects on Crop Yield and Soil Carbon Sequestration: A Metaâ€Analysis and Modeling Across China. Global Biogeochemical Cycles, 2018, 32, 1659-1672.	1.9	54
238	Stimulation of ammonia oxidizer and denitrifier abundances by nitrogen loading: Poor predictability for increased soil N₂O emission. Global Change Biology, 2022, 28, 2158-2168.	4.2	54
239	Fast incorporation of root-derived lipids and fatty acids into soil â€“ Evidence from a short term multiple pulse labelling experiment. Organic Geochemistry, 2010, 41, 1049-1055.	0.9	53
240	Nitrogen acquisition by plants and microorganisms in a temperate grassland. Scientific Reports, 2016, 6, 22642.	1.6	53
241	Initial utilization of rhizodeposits with rice growth in paddy soils: Rhizosphere and N fertilization effects. Geoderma, 2019, 338, 30-39.	2.3	53
242	Organic nitrogen uptake by plants: reevaluation by position-specific labeling of amino acids. Biogeochemistry, 2015, 125, 359-374.	1.7	52
243	Effects of peat decomposition on Î´13C and Î´15N depth profiles of Alpine bogs. Catena, 2019, 178, 1-10.	2.2	52
244	Divergence in fungal abundance and community structure between soils under long-term mineral and organic fertilization. Soil and Tillage Research, 2020, 196, 104491.	2.6	52
245	Comparative efficacy of ZnSO4 and Zn-EDTA application for fertilization of rice (Oryza sativaL.). Archives of Agronomy and Soil Science, 2005, 51, 253-264.	1.3	51
246	Effect of Immobilizing Substances and Salinity on Heavy Metals Availability to Wheat Grown on Sewage Sludge-Contaminated Soil. Soil and Sediment Contamination, 2005, 14, 329-344.	1.1	51
247	Influence of defoliation on CO2 efflux from soil and microbial activity in a Mediterranean grassland. Agriculture, Ecosystems and Environment, 2010, 136, 87-96.	2.5	51
248	Soil Phosphorus Bioavailability and Recycling Increased with Stand Age in Chinese Fir Plantations. Ecosystems, 2020, 23, 973-988.	1.6	51
249	Organic matter stabilization in aggregates and density fractions in paddy soil depending on long-term fertilization: Tracing of pathways by 13C natural abundance. Soil Biology and Biochemistry, 2020, 149, 107931.	4.2	51
250	A novel method for separating root-derived organic compounds from root respiration in non-sterilized soils. Journal of Plant Nutrition and Soil Science, 2001, 164, 511.	1.1	51
251	Sorption, microbial uptake and decomposition of acetate in soil: Transformations revealed by position-specific 14C labeling. Soil Biology and Biochemistry, 2010, 42, 186-192.	4.2	50
252	Biogeochemical transformations of amino acids in soil assessed by position-specific labelling. Plant and Soil, 2013, 373, 385-401.	1.8	50

#	Article	IF	Citations
253	The effect of plastic mulch on the fate of urea-N in rain-fed maize production in a semiarid environment as assessed by 15N-labeling. European Journal of Agronomy, 2015, 70, 71-77.	1.9	50
254	Biochemistry of hexose and pentose transformations in soil analyzed by position-specific labeling and 13C-PLFA. Soil Biology and Biochemistry, 2015, 80, 199-208.	4.2	50
255	Labile carbon and nitrogen additions affect soil organic matter decomposition more strongly than temperature. Applied Soil Ecology, 2017, 114, 152-160.	2.1	50
256	Mechanisms of carbon sequestration and stabilization by restoration of arable soils after abandonment: A chronosequence study on Phaeozems and Chernozems. Geoderma, 2019, 354, 113882.	2.3	50
257	Saving the face of soil aggregates. Global Change Biology, 2019, 25, 3574-3577.	4.2	50
258	Microbial metabolic response to winter warming stabilizes soil carbon. Global Change Biology, 2021, 27, 2011-2028.	4.2	50
259	Paddy soils have a much higher microbial biomass content than upland soils: A review of the origin, mechanisms, and drivers. Agriculture, Ecosystems and Environment, 2022, 326, 107798.	2.5	50
260	Direct incorporation of fatty acids into microbial phospholipids in soils: Position-specific labeling tells the story. Geochimica Et Cosmochimica Acta, 2016, 174, 211-221.	1.6	49
261	Organic matter chemistry and bacterial community structure regulate decomposition processes in post-fire forest soils. Soil Biology and Biochemistry, 2021, 160, 108311.	4.2	49
262	Phosphorus addition decreases plant lignin but increases microbial necromass contribution to soil organic carbon in a subalpine forest. Global Change Biology, 2022, 28, 4194-4210.	4.2	49
263	Effect of nitrogen fertilisation on below-ground carbon allocation in lettuce. Journal of the Science of Food and Agriculture, 2002, 82, 1432-1441.	1.7	48
264	Ammonium versus nitrate nutrition of Zea mays and Lupinus albus: Effect on root-derived CO2 efflux. Soil Biology and Biochemistry, 2008, 40, 2835-2842.	4.2	48
265	Rolling in the deep: Priming effects in earthworm biopores in topsoil and subsoil. Soil Biology and Biochemistry, 2017, 114, 59-71.	4.2	48
266	Contribution of soil inorganic carbon to atmospheric CO₂: More important than previously thought. Global Change Biology, 2019, 25, e1-e3.	4.2	48
267	Rhizosphere hotspots: Root hairs and warming control microbial efficiency, carbon utilization and energy production. Soil Biology and Biochemistry, 2020, 148, 107872.	4.2	48
268	Metagenomic insights into soil microbial communities involved in carbon cycling along an elevation climosequences. Environmental Microbiology, 2021, 23, 4631-4645.	1.8	48
269	Qualitative assessment of rhizodeposits in non-sterile soil by analytical pyrolysis. Journal of Plant Nutrition and Soil Science, 2003, 166, 719-723.	1.1	47
270	Nitrogen Uptake in an Alpine Kobresia Pasture on the Tibetan Plateau: Localization by 15N Labeling and Implications for a Vulnerable Ecosystem. Ecosystems, 2015, 18, 946-957.	1.6	47

#	Article	IF	Citations
271	Phosphorus fractions in subtropical soils depending on land use. European Journal of Soil Biology, 2018, 87, 17-24.	1.4	47
272	Carbon and nitrogen availability in paddy soil affects rice photosynthate allocation, microbial community composition, and priming: combining continuous 13C labeling with PLFA analysis. Plant and Soil, 2019, 445, 137-152.	1.8	47
273	Soil carbonates: The unaccounted, irrecoverable carbon source. Geoderma, 2021, 384, 114817.	2.3	47
274	Biopore history determines the microbial community composition in subsoil hotspots. Biology and Fertility of Soils, 2017, 53, 573-588.	2.3	46
275	Reduced tillage and increased residue retention increase enzyme activity and carbon and nitrogen concentrations in soil particle size fractions in a long-term field experiment on Loess Plateau in China. Soil and Tillage Research, 2019, 194, 104296.	2.6	46
276	Forest conversion to plantations: A metaâ€analysis of consequences for soil and microbial properties and functions. Global Change Biology, 2021, 27, 5643-5656.	4.2	46
277	Initial soil formation by biocrusts: Nitrogen demand and clay protection control microbial necromass accrual and recycling. Soil Biology and Biochemistry, 2022, 167, 108607.	4.2	46
278	Effects of aggregation processes on distribution of aggregate size fractions and organic C content of a long-term fertilized soil. European Journal of Soil Biology, 2010, 46, 365-370.	1.4	45
279	Medium-term response of microbial community to rhizodeposits of white clover and ryegrass and tracing of active processes induced by 13C and 15N labelled exudates. Soil Biology and Biochemistry, 2014, 76, 22-33.	4.2	45
280	Extreme rainfall and snowfall alter responses of soil respiration to nitrogen fertilization: a 3â€year field experiment. Global Change Biology, 2017, 23, 3403-3417.	4.2	45
281	Fertilization effects on microbial community composition and aggregate formation in salineâ€alkaline soil. Plant and Soil, 2021, 463, 523-535.	1.8	45
282	Stoichiometric regulation of priming effects and soil carbon balance by microbial life strategies. Soil Biology and Biochemistry, 2022, 169, 108669.	4.2	45
283	Light affects competition for inorganic and organic nitrogen between maize and rhizosphere microorganisms. Plant and Soil, 2008, 304, 59-72.	1.8	44
284	Differentiation of plant derived organic matter in soil, loess and rhizoliths based on n-alkane molecular proxies. Biogeochemistry, 2013, 112, 23-40.	1.7	44
285	Nutrient limitation of alpine plants: Implications from leaf NÂ:ÂP stoichiometry and leaf Î´¹⁵N. Journal of Plant Nutrition and Soil Science, 2014, 177, 378-387.	1.1	44
286	Six months of L. terrestris L. activity in root-formed biopores increases nutrient availability, microbial biomass and enzyme activity. Applied Soil Ecology, 2017, 120, 135-142.	2.1	44
287	Contrasting responses of phosphatase kinetic parameters to nitrogen and phosphorus additions in forest soils. Functional Ecology, 2018, 32, 106-116.	1.7	44
288	Carbon sequestration and turnover in soil under the energy crop Miscanthus: repeated ¹³C natural abundance approach and literature synthesis. GCB Bioenergy, 2018, 10, 262-271.	2.5	44

#	Article	IF	Citations
289	Soil quality indices for metal(loid) contamination: An enzymatic perspective. Land Degradation and Development, 2020, 31, 2700-2719.	1.8	44
290	How do microbial communities in top- and subsoil respond to root litter addition under field conditions?. Soil Biology and Biochemistry, 2016, 103, 28-38.	4.2	43
291	Carbon and Nitrogen Losses from Soil Depend on Degradation of Tibetan Kobresia Pastures. Land Degradation and Development, 2017, 28, 1253-1262.	1.8	43
292	Soil microorganisms can overcome respiration inhibition by coupling intra- and extracellular metabolism: 13C metabolic tracing reveals the mechanisms. ISME Journal, 2017, 11, 1423-1433.	4.4	43
293	Labile organic matter intensifies phosphorous mobilization in paddy soils by microbial iron (III) reduction. Geoderma, 2019, 352, 185-196.	2.3	43
294	Rice rhizodeposition promotes the build-up of organic carbon in soil via fungal necromass. Soil Biology and Biochemistry, 2021, 160, 108345.	4.2	43
295	Microorganisms maintain C:N stoichiometric balance by regulating the priming effect in long-term fertilized soils. Applied Soil Ecology, 2021, 167, 104033.	2.1	43
296	The role of amino acids and nucleic bases in turnover of nitrogen and carbon in soil humic fractions. European Journal of Soil Science, 1997, 48, 121-130.	1.8	42
297	Effects of nitrogen and intensive mixing on decomposition of 14C-labelled maize (Zea mays L.) residue in soils of different land use types. Soil and Tillage Research, 2007, 96, 114-123.	2.6	42
298	Pedogenic carbonate formation: Recrystallization versus migrationâ€"Process rates and periods assessed by ¹⁴C labeling. Global Biogeochemical Cycles, 2012, 26, .	1.9	42
299	Aggregate size and glucose level affect priming sources: A three-source-partitioning study. Soil Biology and Biochemistry, 2016, 97, 199-210.	4.2	42
300	Effect of clipping and shading on C allocation and fluxes in soil under ryegrass and alfalfa estimated by 14C labelling. Applied Soil Ecology, 2013, 64, 228-236.	2.1	41
301	Lasting effect of soil warming on organic matter decomposition depends on tillage practices. Soil Biology and Biochemistry, 2016, 95, 243-249.	4.2	41
302	Carbon budget and greenhouse gas balance during the initial years after rice paddy conversion to vegetable cultivation. Science of the Total Environment, 2018, 627, 46-56.	3.9	41
303	Root exudate chemistry affects soil carbon mobilization via microbial community reassembly. Fundamental Research, 2022, 2, 697-707.	1.6	41
304	Root uptake of N-containing and N-free low molecular weight organic substances by maize: A 14C/15N tracer study. Soil Biology and Biochemistry, 2008, 40, 2237-2245.	4.2	40
305	Silicon uptake by wheat: Effects of Si pools and pH. Journal of Plant Nutrition and Soil Science, 2013, 176, 551-560.	1.1	40
306	Effects of biochar amendment on greenhouse gas emissions, net ecosystem carbon budget and properties of an acidic soil under intensive vegetable production. Soil Use and Management, 2015, 31, 375-383.	2.6	40

#	Article	IF	Citations
307	Substrate quality affects microbialâ€•and enzyme activities in rooted soil. Journal of Plant Nutrition and Soil Science, 2016, 179, 39-47.	1.1	40
308	Spatial patterns of extracellular enzymes: Combining X-ray computed micro-tomography and 2D zymography. Soil Biology and Biochemistry, 2019, 135, 411-419.	4.2	40
309	Divergent mineralization of hydrophilic and hydrophobic organic substrates and their priming effect in soils depending on their preferential utilization by bacteria and fungi. Biology and Fertility of Soils, 2021, 57, 65-76.	2.3	40
310	Oxygen and redox potential gradients in the rhizosphere of alfalfa grown on a loamy soil. Journal of Plant Nutrition and Soil Science, 2015, 178, 278-287.	1.1	39
311	Teatime on Mount Kilimanjaro: Assessing climate and landâ€use effects on litter decomposition and stabilization using the Tea Bag Index. Land Degradation and Development, 2018, 29, 2321-2329.	1.8	39
312	The persistence of bacterial diversity and ecosystem multifunctionality along a disturbance intensity gradient in karst soil. Science of the Total Environment, 2020, 748, 142381.	3.9	39
313	Resistance of microbial community and its functional sensitivity in the rhizosphere hotspots to drought. Soil Biology and Biochemistry, 2021, 161, 108360.	4.2	39
314	Phosphatase activity and acidification in lupine and maize rhizosphere depend on phosphorus availability and root properties: Coupling zymography with planar optodes. Applied Soil Ecology, 2021, 167, 104029.	2.1	39
315	Fate of fertilizer 15N in intensive ridge cultivation with plastic mulching under a monsoon climate. Nutrient Cycling in Agroecosystems, 2013, 95, 57-72.	1.1	38
316	Weaker priming and mineralisation of low molecular weight organic substances in paddy than in upland soil. European Journal of Soil Biology, 2017, 83, 9-17.	1.4	38
317	Interactions between biochar and litter priming: A three-source 14C and Î´13C partitioning study. Soil Biology and Biochemistry, 2017, 104, 49-58.	4.2	38
318	Interactive priming effect of labile carbon and crop residues on SOM depends on residue decomposition stage: Three-source partitioning to evaluate mechanisms. Soil Biology and Biochemistry, 2018, 126, 179-190.	4.2	38
319	Decreased rhizodeposition, but increased microbial carbon stabilization with soil depth down to 3.6Âm. Soil Biology and Biochemistry, 2020, 150, 108008.	4.2	38
320	Nitrogen rhizodeposition by legumes and its fate in agroecosystems: A field study and literature review. Land Degradation and Development, 2021, 32, 410-419.	1.8	38
321	Depth effects on bacterial community assembly processes in paddy soils. Soil Biology and Biochemistry, 2022, 165, 108517.	4.2	38
322	Precipitation balances deterministic and stochastic processes of bacterial community assembly in grassland soils. Soil Biology and Biochemistry, 2022, 168, 108635.	4.2	38
323	CO2 efflux by rapid decomposition of low molecular organic substances in soils. Sciences of Soils, 1998, 3, 11-22.	0.8	37
324	Plant uptake of dual-labeled organic N biased by inorganic C uptake: Results of a triple labeling study. Soil Biology and Biochemistry, 2010, 42, 524-527.	4.2	37

#	Article	IF	Citations
325	Rhizodeposition of maize: Shortâ€term carbon budget and composition. Journal of Plant Nutrition and Soil Science, 2010, 173, 67-79.	1.1	37
326	Microbial and enzymes response to nutrient additions in soils of Mt. Kilimanjaro region depending on land use. European Journal of Soil Biology, 2015, 69, 33-40.	1.4	37
327	Incorporation of rice straw carbon into dissolved organic matter and microbial biomass along a 100-year paddy soil chronosequence. Applied Soil Ecology, 2018, 130, 84-90.	2.1	37
328	Microbial functional changes mark irreversible course of Tibetan grassland degradation. Nature Communications, 2022, 13, 2681.	5.8	37
329	Thermal stability of soil organic matter pools and their Î´13C values after C3â€“C4 vegetation change. Soil Biology and Biochemistry, 2007, 39, 1173-1180.	4.2	36
330	Root-derived respiration and non-structural carbon of rice seedlings. European Journal of Soil Biology, 2008, 44, 22-29.	1.4	36
331	Nitrogen uptake and utilisation as a competition factor between invasive Duchesnea indica and native Fragaria vesca. Plant and Soil, 2010, 331, 105-114.	1.8	36
332	Soil microbial biomass and its activity estimated by kinetic respiration analysis â€“ Statistical guidelines. Soil Biology and Biochemistry, 2012, 45, 102-112.	4.2	36
333	Plant traits regulating N capture define microbial competition in the rhizosphere. European Journal of Soil Biology, 2014, 61, 41-48.	1.4	36
334	Annual litterfall dynamics and nutrient deposition depending on elevation and land use at Mt. Kilimanjaro. Biogeosciences, 2015, 12, 5635-5646.	1.3	36
335	Simulated leaf litter addition causes opposite priming effects on natural forest and plantation soils. Biology and Fertility of Soils, 2018, 54, 925-934.	2.3	36
336	Root trait plasticity and plant nutrient acquisition in phosphorus limited soil. Journal of Plant Nutrition and Soil Science, 2019, 182, 945-952.	1.1	36
337	Coupling zymography with pH mapping reveals a shift in lupine phosphorus acquisition strategy driven by cluster roots. Soil Biology and Biochemistry, 2019, 135, 420-428.	4.2	36
338	Biochar effects on crop yields and nitrogen loss depending on fertilization. Science of the Total Environment, 2020, 702, 134423.	3.9	36
339	Carbon balance in the soils of abandoned lands in Moscow region. Eurasian Soil Science, 2007, 40, 51-58.	0.5	35
340	Effect of temperature and rhizosphere processes on pedogenic carbonate recrystallization: Relevance for paleoenvironmental applications. Geoderma, 2011, 166, 57-65.	2.3	35
341	N fluxes in an agricultural catchment under monsoon climate: A budget approach at different scales. Agriculture, Ecosystems and Environment, 2012, 161, 101-111.	2.5	35
342	Nitrous oxide emissions from an agro-pastoral ecotone of northern China depending on land uses. Agriculture, Ecosystems and Environment, 2015, 213, 241-251.	2.5	35

#	Article	IF	Citations
343	Contrasting effects of aged and fresh biochars on glucose-induced priming and microbial activities in paddy soil. Journal of Soils and Sediments, 2016, 16, 191-203.	1.5	35
344	â€œNon-metabolizableâ€•glucose analogue shines new light on priming mechanisms: Triggering of microbial metabolism. Soil Biology and Biochemistry, 2017, 107, 68-76.	4.2	35
345	Soil microorganisms exhibit enzymatic and priming response to root mucilage under drought. Soil Biology and Biochemistry, 2018, 116, 410-418.	4.2	35
346	Straw and biochar strongly affect functional diversity of microbial metabolism in paddy soils. Journal of Integrative Agriculture, 2019, 18, 1474-1485.	1.7	35
347	Nitrogen fixation and crop productivity enhancements coâ€driven by intercrop root exudates and key rhizosphere bacteria. Journal of Applied Ecology, 2021, 58, 2243-2255.	1.9	35
348	Species richness is more important for ecosystem functioning than species turnover along an elevational gradient. Nature Ecology and Evolution, 2021, 5, 1582-1593.	3.4	35
349	Root and mycorrhizal strategies for nutrient acquisition in forests under nitrogen deposition: A meta-analysis. Soil Biology and Biochemistry, 2021, 163, 108418.	4.2	35
350	New approaches for evaluation of soil health, sensitivity and resistance to degradation. Frontiers of Agricultural Science and Engineering, 2020, 7, 282.	0.9	35
351	C and N allocation in soil under ryegrass and alfalfa estimated by 13C and 15N labelling. Plant and Soil, 2013, 368, 581-590.	1.8	34
352	Nitrogen pools and cycles in Tibetan Kobresia pastures depending on grazing. Biology and Fertility of Soils, 2018, 54, 569-581.	2.3	34
353	Dominant extracellular enzymes in priming of SOM decomposition depend on temperature. Geoderma, 2019, 343, 187-195.	2.3	34
354	Longâ€term active restoration of extremely degraded alpine grassland accelerated turnover and increased stability of soil carbon. Global Change Biology, 2020, 26, 7217-7228.	4.2	34
355	DNA Stable-Isotope Probing Delineates Carbon Flows from Rice Residues into Soil Microbial Communities Depending on Fertilization. Applied and Environmental Microbiology, 2020, 86, .	1.4	34
356	Biochar induces mineralization of soil recalcitrant components by activation of biochar responsive bacteria groups. Soil Biology and Biochemistry, 2022, 172, 108778.	4.2	34
357	Assimilate partitioning affects 13C fractionation of recently assimilated carbon in maize. Plant and Soil, 2006, 284, 319-333.	1.8	33
358	Soil Organic Carbon in a Changing World. Pedosphere, 2017, 27, 789-791.	2.1	33
359	DNA-based determination of soil microbial biomass in alkaline and carbonaceous soils of semi-arid climate. Journal of Arid Environments, 2018, 150, 54-61.	1.2	33
360	Functional soil organic matter fractions in response to long-term fertilization in upland and paddy systems in South China. Catena, 2018, 162, 270-277.	2.2	33

#	Article	IF	Citations
361	Allocation of assimilated carbon in paddies depending on rice age, chase period and N fertilization: Experiment with 13CO2 labelling and literature synthesis. Plant and Soil, 2019, 445, 113-123.	1.8	33
362	Fate and transport of urea-N in a rain-fed ridge-furrow crop system with plastic mulch. Soil and Tillage Research, 2019, 186, 214-223.	2.6	33
363	Soil carbon balance by priming differs with single versus repeated addition of glucose and soil fertility level. Soil Biology and Biochemistry, 2020, 148, 107913.	4.2	33
364	Response of root respiration and root exudation to alterations in root C supply and demand in wheat. Plant and Soil, 2007, 291, 131-141.	1.8	32
365	Carbon pools and fluxes in a Tibetan alpine Kobresia pygmaea pasture partitioned by coupled eddy-covariance measurements and 13CO2 pulse labeling. Science of the Total Environment, 2015, 505, 1213-1224.	3.9	32
366	Recovery of organic matter and microbial biomass after abandonment of degraded agricultural soils: the influence of climate. Land Degradation and Development, 2019, 30, 1861-1874.	1.8	32
367	Functional Soil Organic Matter Fractions, Microbial Community, and Enzyme Activities in a Mollisol Under 35ÂYears Manure and Mineral Fertilization. Journal of Soil Science and Plant Nutrition, 2019, 19, 430-439.	1.7	32
368	An iron-dependent burst of hydroxyl radicals stimulates straw decomposition and CO2 emission from soil hotspots: Consequences of Fenton or Fenton-like reactions. Geoderma, 2020, 375, 114512.	2.3	32
369	Active metabolic pathways of anaerobic methane oxidation in paddy soils. Soil Biology and Biochemistry, 2021, 156, 108215.	4.2	32
370	Effect of clay minerals on extractability of heavy metals and sewage sludge mineralization in soil. Chemistry and Ecology, 2004, 20, 123-135.	0.6	31
371	Effect of land use types on decomposition of 14C-labelled maize residue (Zea mays L.). European Journal of Soil Biology, 2009, 45, 123-130.	1.4	31
372	Response of long-, medium- and short-term processes of the carbon budget to overgrazing-induced crusts in the Tibetan Plateau. Biogeochemistry, 2012, 111, 187-201.	1.7	31
373	Turnover and availability of soil organic carbon under different <scp>M</scp>editerranean landâ€uses as estimated by <scp>¹³C</scp> natural abundance. European Journal of Soil Science, 2013, 64, 466-475.	1.8	31
374	Spatial distribution and turnover of root-derived carbon in alfalfa rhizosphere depending on top- and subsoil properties and mycorrhization. Plant and Soil, 2014, 380, 101-115.	1.8	31
375	Spatiotemporal patterns of enzyme activities in the rhizosphere: effects of plant growth and root morphology. Biology and Fertility of Soils, 2018, 54, 819-828.	2.3	31
376	Tight coupling of fungal community composition with soil quality in a Chinese fir plantation chronosequence. Land Degradation and Development, 2021, 32, 1164-1178.	1.8	31
377	Arbuscular mycorrhizal fungi and goethite promote carbon sequestration via hyphal-aggregate mineral interactions. Soil Biology and Biochemistry, 2021, 162, 108417.	4.2	31
378	Maize genotype-specific exudation strategies: An adaptive mechanism to increase microbial activity in the rhizosphere. Soil Biology and Biochemistry, 2021, 162, 108426.	4.2	31

#	Article	IF	Citations
379	Diversified cropping systems benefit soil carbon and nitrogen stocks by increasing aggregate stability: Results of three fractionation methods. Science of the Total Environment, 2022, 824, 153878.	3.9	31
380	Use of molecular ratios to identify changes in fatty acid composition of MiscanthusÃ—giganteus (Greef) Tj ETQq0 0 0 rgBT /Overlock 10 Geochemistry, 2012, 46, 1-11.	0.9	30
381	Tibetan sedges sequester more carbon belowground than grasses: a 13C labeling study. Plant and Soil, 2018, 426, 287-298.	1.8	30
382	Transpiration on the rebound in lowland Sumatra. Agricultural and Forest Meteorology, 2019, 274, 160-171.	1.9	30
383	Effects of drying/rewetting on soil aggregate dynamics and implications for organic matter turnover. Biology and Fertility of Soils, 2020, 56, 893-905.	2.3	30
384	Shift from dormancy to microbial growth revealed by RNA:DNA ratio. Ecological Indicators, 2018, 85, 603-612.	2.6	30
385	Synergy of saprotrophs with mycorrhiza for litter decomposition and hotspot formation depends on nutrient availability in the rhizosphere. Geoderma, 2022, 410, 115662.	2.3	30
386	Linkages between the temperature sensitivity of soil respiration and microbial life strategy are dependent on sampling season. Soil Biology and Biochemistry, 2022, 172, 108758.	4.2	30
387	Fate of Organic and Inorganic Nitrogen in Crusted and Nonâ€€rusted Kobresia Grasslands. Land Degradation and Development, 2017, 28, 166-174.	1.8	29
388	Microbial Metabolism in Soil at Subzero Temperatures: Adaptation Mechanisms Revealed by Position-Specific 13C Labeling. Frontiers in Microbiology, 2017, 8, 946.	1.5	29
389	Depth rather than microrelief controls microbial biomass and kinetics of C-, N-, P- and S-cycle enzymes in peatland. Geoderma, 2018, 324, 67-76.	2.3	29
390	Microbial processing of plant residues in the subsoil â€“ The role of biopores. Soil Biology and Biochemistry, 2018, 125, 309-318.	4.2	29
391	Temperature sensitivity of soil organic matter mineralization decreases with longâ€€term N fertilization: Evidence from four Q₁₀ estimation approaches. Land Degradation and Development, 2020, 31, 683-693.	1.8	29
392	Substrate control of sulphur utilisation and microbial stoichiometry in soil: Results of 13C, 15N, 14C, and 35S quad labelling. ISME Journal, 2021, 15, 3148-3158.	4.4	29
393	Stem labeling results in different patterns of ¹⁴C rhizorespiration and ¹⁵N distribution in plants compared to natural assimilation pathways. Journal of Plant Nutrition and Soil Science, 2011, 174, 732-741.	1.1	28
394	CaCO 3 recrystallization in saline and alkaline soils. Geoderma, 2016, 282, 1-8.	2.3	28
395	Decadal Nitrogen Fertilization Decreases Mineralâ€Associated and Subsoil Carbon: A 32â€Year Study. Land Degradation and Development, 2017, 28, 1463-1472.	1.8	28
396	Vegetation restoration stimulates soil carbon sequestration and stabilization in a subtropical area of southern China. Catena, 2019, 181, 104098.	2.2	28

#	Article	IF	Citations
397	Contrasting patterns and drivers of soil fungal communities in subtropical deciduous and evergreen broadleaved forests. Applied Microbiology and Biotechnology, 2019, 103, 5421-5433.	1.7	28
398	Increase of soil nitrogen availability and recycling with stand age of Chinese-fir plantations. Forest Ecology and Management, 2021, 480, 118643.	1.4	28
399	Iron-reducing bacteria decompose lignin by electron transfer from soil organic matter. Science of the Total Environment, 2021, 761, 143194.	3.9	28
400	Effect of C3â€“C4 Vegetation Change on Î´13C and Î´15N Values of Soil Organic Matter Fractions Separated by Thermal Stability. Plant and Soil, 2006, 283, 229-238.	1.8	27
401	Effect of plant communities on aggregate composition and organic matter stabilisation in young soils. Plant and Soil, 2015, 387, 265-275.	1.8	27
402	Shifts in microbial communities with increasing soil fertility across a chronosequence of paddy cultivation in subtropical China. Applied Soil Ecology, 2017, 120, 153-159.	2.1	27
403	Post-agricultural restoration: Implications for dynamics of soil organic matter pools. Catena, 2019, 181, 104096.	2.2	27
404	Temperature sensitivity (Q) of stable, primed and easily available organic matter pools during decomposition in paddy soil. Applied Soil Ecology, 2021, 157, 103752.	2.1	27
405	Long-term warming and elevated CO2 increase ammonia-oxidizing microbial communities and accelerate nitrification in paddy soil. Applied Soil Ecology, 2021, 166, 104063.	2.1	27
406	Maize root exudate composition alters rhizosphere bacterial community to control hotspots of hydrolase activity in response to nitrogen supply. Soil Biology and Biochemistry, 2022, 170, 108717.	4.2	27
407	Using natural13C abundances to differentiate between three CO2 sources during incubation of a grassland soil amended with slurry and sugar. Journal of Plant Nutrition and Soil Science, 2004, 167, 669-677.	1.1	26
408	Soil organic matter mineralization and residue decomposition of spring wheat grown under elevated CO2 atmosphere. Agriculture, Ecosystems and Environment, 2008, 123, 63-68.	2.5	26
409	Effect of CO2 concentration on the initial recrystallization rate of pedogenic carbonate â€” Revealed by 14C and 13C labeling. Geoderma, 2010, 155, 351-358.	2.3	26
410	Glucose decomposition and its incorporation into soil microbial biomass depending on land use in Mt. Kilimanjaro ecosystems. European Journal of Soil Biology, 2014, 62, 74-82.	1.4	26
411	Allocation of freshly assimilated carbon into primary and secondary metabolites after in situ13C pulse labelling of Norway spruce (Picea abies). Tree Physiology, 2015, 35, tpv083.	1.4	26
412	Preferential uptake of hydrophilic and hydrophobic compounds by bacteria and fungi in upland and paddy soils. Soil Biology and Biochemistry, 2020, 148, 107879.	4.2	26
413	Network analysis reveals bacterial and fungal keystone taxa involved in straw and soil organic matter mineralization. Applied Soil Ecology, 2022, 173, 104395.	2.1	26
414	Respiration costs associated with nitrate reduction as estimated by 14CO2 pulse labeling of corn at various growth stages. Plant and Soil, 2010, 329, 433-445.	1.8	25

#	Article	IF	Citations
415	Integrated management systems and N fertilization: effect on soil organic matter in rice-rapeseed rotation. Plant and Soil, 2013, 372, 53-63.	1.8	25
416	How â€œhotâ€•are hotspots: Statistically localizing the high-activity areas on soil and rhizosphere images. Rhizosphere, 2020, 16, 100259.	1.4	25
417	Synergy effect of peroxidase enzymes and Fenton reactions greatly increase the anaerobic oxidation of soil organic matter. Scientific Reports, 2020, 10, 11289.	1.6	25
418	Soil organic matter formation is controlled by the chemistry and bioavailability of organic carbon inputs across different land uses. Science of the Total Environment, 2021, 770, 145307.	3.9	25
419	Bacterial communities drive the resistance of soil multifunctionality to land-use change in karst soils. European Journal of Soil Biology, 2021, 104, 103313.	1.4	25
420	Electrostatic method to separate roots from soil. Journal of Plant Nutrition and Soil Science, 2001, 164, 541.	1.1	24
421	Three-source partitioning of CO2 efflux from soil planted with maize by 13C natural abundance fails due to inactive microbial biomass. Soil Biology and Biochemistry, 2006, 38, 2772-2781.	4.2	24
422	Improved RP-HPLC and anion-exchange chromatography methods for the determination of amino acids and carbohydrates in soil solutions. Journal of Plant Nutrition and Soil Science, 2008, 171, 917-926.	1.1	24
423	Carbon isotopes as proof for plant uptake of organic nitrogen: Relevance of inorganic carbon uptake. Soil Biology and Biochemistry, 2009, 41, 1586-1587.	4.2	24
424	Fluxes of root-derived carbon into the nematode micro-food web of an arable soil. Food Webs, 2016, 9, 32-38.	0.5	24
425	Effects of nitrate and sulfate on greenhouse gas emission potentials from microform-derived peats of a boreal peatland: A 13C tracer study. Soil Biology and Biochemistry, 2016, 100, 182-191.	4.2	24
426	Riparian wetland properties counter the effect of land-use change on soil carbon stocks after rainforest conversion to plantations. Catena, 2021, 196, 104941.	2.2	24
427	Regulation of soil phosphorus availability and composition during forest succession in subtropics. Forest Ecology and Management, 2021, 502, 119706.	1.4	24
428	Threeâ€source partitioning of CO₂ efflux from maize field soil by ¹³C natural abundance. Journal of Plant Nutrition and Soil Science, 2009, 172, 487-499.	1.1	23
429	Effects of anionic polyacrylamide on maize growth: a short term 14C labeling study. Plant and Soil, 2012, 350, 311-322.	1.8	23
430	Fate of 14C-labeled dissolved organic matter in paddy and upland soils in responding to moisture. Science of the Total Environment, 2014, 488-489, 268-274.	3.9	23
431	Carbon input and partitioning in subsoil by chicory and alfalfa. Plant and Soil, 2016, 406, 29-42.	1.8	23
432	Rhizosphere engineering: Innovative improvement of root environment. Rhizosphere, 2017, 3, 176-184.	1.4	23

#	Article	IF	Citations
433	Belowground carbon allocation and dynamics under rice cultivation depends on soil organic matter content. Plant and Soil, 2017, 410, 247-258.	1.8	23
434	The above-belowground coupling of the C cycle: fast and slow mechanisms of C transfer for root and rhizomicrobial respiration. Plant and Soil, 2017, 410, 73-85.	1.8	23
435	Conversion of Tibetan grasslands to croplands decreases accumulation of microbially synthesized compounds in soil. Soil Biology and Biochemistry, 2018, 123, 10-20.	4.2	23
436	Bacterial community succession in paddy soil depending on rice fertilization. Applied Soil Ecology, 2019, 144, 92-97.	2.1	23
437	To shake or not to shake: 13C-based evidence on anaerobic methane oxidation in paddy soil. Soil Biology and Biochemistry, 2019, 133, 146-154.	4.2	23
438	Ferrous Wheel Hypothesis: Abiotic nitrate incorporation into dissolved organic matter. Geochimica Et Cosmochimica Acta, 2019, 245, 514-524.	1.6	23
439	In situ methods of plant-microbial interactions for nitrogen in rhizosphere. Rhizosphere, 2020, 13, 100186.	1.4	23
440	Soil-plant co-stimulation during forest vegetation restoration in a subtropical area of southern China. Forest Ecosystems, 2020, 7, .	1.3	23
441	Poreâ€scale view of microbial turnover: Combining <scp>¹⁴C</scp> imaging, <scp>Î¼CT</scp> and zymography after adding soluble carbon to soil pores of specific sizes. European Journal of Soil Science, 2021, 72, 593-607.	1.8	23
442	Assessing and mapping urban soils as geochemical barriers for contamination by heavy metal(loid)s in Moscow megapolis. Journal of Environmental Quality, 2021, 50, 22-37.	1.0	23
443	Nitrogen addition to soil affects microbial carbon use efficiency: Metaâ€analysis of similarities and differences in <scp>¹³C</scp> and <scp>¹⁸O</scp> approaches. Global Change Biology, 2022, 28, 4977-4988.	4.2	23
444	CH4 and CO2 production below two contrasting peatland micro-relief forms: An inhibitor and Î´13C study. Science of the Total Environment, 2017, 586, 142-151.	3.9	22
445	Annual methane uptake from different land uses in an agro-pastoral ecotone of northern China. Agricultural and Forest Meteorology, 2017, 236, 67-77.	1.9	22
446	Mapping the footprint of nematodes in the rhizosphere: Cluster root formation and spatial distribution of enzyme activities. Soil Biology and Biochemistry, 2017, 115, 213-220.	4.2	22
447	Spatial heterogeneity of microbial community and enzyme activities in a broad-leaved Korean pine mixed forest. European Journal of Soil Biology, 2018, 88, 65-72.	1.4	22
448	Integrating Aquatic and Terrestrial Perspectives to Improve Insights Into Organic Matter Cycling at the Landscape Scale. Frontiers in Earth Science, 2019, 7, .	0.8	22
449	Effect of nitrogen fertilizer on rice photosynthate allocation and carbon input in paddy soil. European Journal of Soil Science, 2019, 70, 786-795.	1.8	22
450	Understory ferns alter soil carbon chemistry and increase carbon storage during reforestation with native pine on previously degraded sites. Soil Biology and Biochemistry, 2019, 132, 80-92.	4.2	22

#	Article	IF	Citations
451	Afforestation of loess soils: Old and new organic carbon in aggregates and density fractions. Catena, 2019, 177, 49-56.	2.2	22
452	From rock eating to vegetarian ecosystems â€" Disentangling processes of phosphorus acquisition across biomes. Geoderma, 2021, 388, 114827.	2.3	22
453	T4-like Phages Reveal the Potential Role of Viruses in Soil Organic Matter Mineralization. Environmental Science & Technology, 2021, 55, 6440-6448.	4.6	22
454	Plant and soil elemental C:N:P ratios are linked to soil microbial diversity during grassland restoration on the Loess Plateau, China. Science of the Total Environment, 2022, 806, 150557.	3.9	22
455	Priming effects in soils across Europe. Global Change Biology, 2022, 28, 2146-2157.	4.2	22
456	Microbial growth rates, carbon use efficiency and enzyme activities during post-agricultural soil restoration. Catena, 2022, 214, 106226.	2.2	22
457	Effects of rhizosphere wettability on microbial biomass, enzyme activities and localization. Rhizosphere, 2018, 7, 35-42.	1.4	21
458	Drivers of soil carbon stabilization in oil palm plantations. Land Degradation and Development, 2019, 30, 1904-1915.	1.8	21
459	Impacts of green manure amendment on detritus micro-food web in a double-rice cropping system. Applied Soil Ecology, 2019, 138, 32-36.	2.1	21
460	Priming alters soil carbon dynamics during forest succession. Biology and Fertility of Soils, 2019, 55, 339-350.	2.3	21
461	Easily mineralizable carbon in manureâ€based biochar added to a soil influences N₂O emissions and microbialâ€N cycling genes. Land Degradation and Development, 2019, 30, 406-416.	1.8	21
462	Calibration of 2â€D soil zymography for correct analysis of enzyme distribution. European Journal of Soil Science, 2019, 70, 715-726.	1.8	21
463	Temperature sensitivity of decomposition of soil organic matter fractions increases with their turnover time. Land Degradation and Development, 2020, 31, 632-645.	1.8	21
464	Conversion of coastal marshes to croplands decreases organic carbon but increases inorganic carbon in saline soils. Land Degradation and Development, 2020, 31, 1099-1109.	1.8	21
465	Plant intraspecific competition and growth stage alter carbon and nitrogen mineralization in the rhizosphere. Plant, Cell and Environment, 2021, 44, 1231-1242.	2.8	21
466	Time-lapse approach to correct deficiencies of 2D soil zymography. Soil Biology and Biochemistry, 2021, 157, 108225.	4.2	21
467	Responses of ecosystem carbon dioxide fluxes to soil moisture fluctuations in a moist Kenyan savanna. Journal of Tropical Ecology, 2010, 26, 605-618.	0.5	20
468	Prime time for microbes. Nature Climate Change, 2011, 1, 295-297.	8.1	20

#	Article	IF	Citations
469	Responses of Soil Enzyme Activities and Microbial Community Composition to Moisture Regimes in Paddy Soils Under Long-Term Fertilization Practices. Pedosphere, 2018, 28, 323-331.	2.1	20
470	Towards a conversion factor for soil microbial phosphorus. European Journal of Soil Biology, 2018, 87, 1-8.	1.4	20
471	Intensified Precipitation Seasonality Reduces Soil Inorganic N Content in a Subtropical Forest: Greater Contribution of Leaching Loss Than N₂O Emissions. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 494-508.	1.3	20
472	Conversion of cropland to natural vegetation boosts microbial and enzyme activities in soil. Science of the Total Environment, 2020, 743, 140829.	3.9	20
473	15N-tracer approach to assess nitrogen cycling processes: Nitrate reduction, anammox and denitrification in different pH cropland soils. Catena, 2020, 193, 104611.	2.2	20
474	Molybdenum Bioavailability and Asymbiotic Nitrogen Fixation in Soils are Raised by Iron (Oxyhydr)oxide-Mediated Free Radical Production. Environmental Science & Technology, 2021, 55, 14979-14989.	4.6	20
475	Vulnerability and driving factors of soil inorganic carbon stocks in Chinese croplands. Science of the Total Environment, 2022, 825, 154087.	3.9	20
476	Maize phenology alters the distribution of enzyme activities in soil: Field estimates. Applied Soil Ecology, 2018, 125, 233-239.	2.1	19
477	C:N stoichiometry of stable and labile organic compounds determine priming patterns. Geoderma, 2020, 362, 114122.	2.3	19
478	Waterlogging increases organic carbon decomposition in grassland soils. Soil Biology and Biochemistry, 2020, 148, 107927.	4.2	19
479	Secondary soil salinization in urban lawns: Microbial functioning, vegetation state, and implications for carbon balance. Land Degradation and Development, 2020, 31, 2591-2604.	1.8	19
480	Soil organic matter turnover depending on land use change: Coupling C/N ratios, <scp>^{13}C,</scp> and lignin biomarkers. Land Degradation and Development, 2021, 32, 1591-1605.	1.8	19
481	Effects of rotational and continuous overgrazing on newly assimilated C allocation. Biology and Fertility of Soils, 2021, 57, 193-202.	2.3	19
482	Plant carbon investment in fine roots and arbuscular mycorrhizal fungi: A cross-biome study on nutrient acquisition strategies. Science of the Total Environment, 2021, 781, 146748.	3.9	19
483	Carbon pool and sequestration in former arable Chernozems depending on restoration period. Ekologija (Vilnius, Lithuania), 2008, 54, 232-238.	0.2	19
484	Temperature sensitivity of anaerobic methane oxidation versus methanogenesis in paddy soil: Implications for the CH₄ balance under global warming. Global Change Biology, 2022, 28, 654-664.	4.2	19
485	Land use change decreases soil carbon stocks in Tibetan grasslands. Plant and Soil, 2015, 395, 231-241.	1.8	18
486	Effects of grazing on the acquisition of nitrogen by plants and microorganisms in an alpine grassland on the Tibetan plateau. Plant and Soil, 2017, 416, 297-308.	1.8	18

#	Article	IF	Citations
487	The tree species matters: Belowground carbon input and utilization in the myco-rhizosphere. European Journal of Soil Biology, 2017, 81, 100-107.	1.4	18
488	Nitrogen turnover and greenhouse gas emissions in a tropical alpine ecosystem, Mt. Kilimanjaro, Tanzania. Plant and Soil, 2017, 411, 243-259.	1.8	18
489	Food for microorganisms: Position-specific 13 C labeling and 13 C-PLFA analysis reveals preferences for sorbed or necromass C. Geoderma, 2018, 312, 86-94.	2.3	18
490	Glucose and ribose stabilization in soil: Convergence and divergence of carbon pathways assessed by position-specific labeling. Soil Biology and Biochemistry, 2019, 131, 54-61.	4.2	18
491	The effect of microorganisms on soil carbonate recrystallization and abiotic CO2 uptake of soil. Catena, 2020, 192, 104592.	2.2	18
492	Letter-to-the-Editor: Does acidification really increase soil carbon in croplands? How statistical analyses of large datasets might mislead the conclusions. Geoderma, 2021, 384, 114806.	2.3	18
493	Accumulation of organic compounds in paddy soils after biochar application is controlled by iron hydroxides. Science of the Total Environment, 2021, 764, 144300.	3.9	18
494	Transformations of N derived from straw under long-term conventional and no-tillage soils: A 15N labelling study. Science of the Total Environment, 2021, 786, 147428.	3.9	18
495	Impact of forest fire on soil properties (review). , 2018, , 13-23.		18
496	C:P stoichiometric imbalance between soil and microorganisms drives microbial phosphorus turnover in the rhizosphere. Biology and Fertility of Soils, 2022, 58, 421-433.	2.3	18
497	Metabolic pathways of CO2 fixing microorganisms determined C-fixation rates in grassland soils along the precipitation gradient. Soil Biology and Biochemistry, 2022, 172, 108764.	4.2	18
498	Improved Î´¹³ C analysis of amino sugars in soil by ion chromatography-oxidation-isotope ratio mass spectrometry. Rapid Communications in Mass Spectrometry, 2014, 28, 569-576.	0.7	17
499	Gross Nitrogen Dynamics in the Mycorrhizosphere of an Organic Forest Soil. Ecosystems, 2016, 19, 284-295.	1.6	17
500	Allocation and dynamics of C and N within plant-soil system of ash and beech. Journal of Plant Nutrition and Soil Science, 2016, 179, 376-387.	1.1	17
501	Hydrolase kinetics to detect temperature-related changes in the rates of soil organic matter decomposition. European Journal of Soil Biology, 2017, 81, 108-115.	1.4	17
502	Alteration process during the post-agricultural restoration of Luvisols of the temperate broad-leaved forest in Russia. Catena, 2018, 171, 602-612.	2.2	17
503	Rhizosphere microbiome modulated effects of biochar on ryegrass 15N uptake and rhizodeposited 13C allocation in soil. Plant and Soil, 2021, 463, 359-377.	1.8	17
504	Higher free-living N2 fixation at rock-soil interfaces than topsoils during vegetation recovery in karst soils. Soil Biology and Biochemistry, 2021, 159, 108286.	4.2	17

#	Article	IF	Citations
505	The flux of root-derived carbon via fungi and bacteria into soil microarthropods (Collembola) differs markedly between cropping systems. Soil Biology and Biochemistry, 2021, 160, 108336.	4.2	17
506	Accelerated microbial activity, turnover and efficiency in the drilosphere is depth dependent. Soil Biology and Biochemistry, 2020, 147, 107852.	4.2	17
507	A new rapid microâ€method for the molecularâ€chemical characterization of rhizodeposits by fieldâ€ionization mass spectrometry. Rapid Communications in Mass Spectrometry, 2008, 22, 1230-1234.	0.7	16
508	Growth rates of rhizosphere microorganisms depend on competitive abilities of plants and N supply. Plant Biosystems, 2010, 144, 408-413.	0.8	16
509	Partitioning NEE for absolute C input into various ecosystem pools by combining results from eddy-covariance, atmospheric flux partitioning and 13CO2 pulse labeling. Plant and Soil, 2015, 390, 61-76.	1.8	16
510	Does repeated biochar incorporation induce further soil priming effect?. Journal of Soils and Sediments, 2018, 18, 128-135.	1.5	16
511	Persistence of soil microbial function at the rockâ€soil interface in degraded karst topsoils. Land Degradation and Development, 2020, 31, 251-265.	1.8	16
512	Contribution of the Fenton reaction and ligninolytic enzymes to soil organic matter mineralisation under anoxic conditions. Science of the Total Environment, 2021, 760, 143397.	3.9	16
513	Shrubs magnify soil phosphorus depletion in Tibetan meadows: Conclusions from C:N:P stoichiometry and deep soil profiles. Science of the Total Environment, 2021, 785, 147320.	3.9	16
514	Soil pore architecture and rhizosphere legacy define N2O production in root detritusphere. Soil Biology and Biochemistry, 2022, 166, 108565.	4.2	16
515	Microbial community mediates hydroxyl radical production in soil slurries by iron redox transformation. Water Research, 2022, 220, 118689.	5.3	16
516	Soil health evaluation approaches along a reclamation consequence in Hangzhou Bay, China. Agriculture, Ecosystems and Environment, 2022, 337, 108045.	2.5	16
517	Separation of root and microbial respiration: Comparison of three methods. Eurasian Soil Science, 2007, 40, 775-784.	0.5	15
518	Bicarbonate as tracer for assimilated C and homogeneity of 14C and 15N distribution in plants by alternative labeling approaches. Plant and Soil, 2013, 371, 191-198.	1.8	15
519	Incorporation of root C and fertilizer N into the food web of an arable field: Variations with functional group and energy channel. Food Webs, 2016, 9, 39-45.	0.5	15
520	The Potential for Soils to Mitigate Climate Change Through Carbon Sequestration. Developments in Soil Science, 2018, 35, 61-92.	0.5	15
521	Warming exerts greater impacts on subsoil than topsoil CO2 efflux in a subtropical forest. Agricultural and Forest Meteorology, 2018, 263, 137-146.	1.9	15
522	Impact of sea level change on coastal soil organic matter, priming effects and prokaryotic community assembly. FEMS Microbiology Ecology, 2019, 95, .	1.3	15

#	Article	IF	Citations
523	Extreme-duration drought impacts on soil CO2 efflux are regulated by plant species composition. Plant and Soil, 2019, 439, 357-372.	1.8	15
524	Responses of C-, N- and P-acquiring hydrolases to P and N fertilizers in a subtropical Chinese fir plantation depend on soil depth. Applied Soil Ecology, 2020, 150, 103465.	2.1	15
525	Mitigation of carbon dioxide by accelerated sequestration from long-term biochar amended paddy soil. Soil and Tillage Research, 2021, 209, 104955.	2.6	15
526	Mechanisms of rhizosphere priming effects and their ecological significance. Chinese Journal of Plant Ecology, 2014, 38, 62-75.	0.3	15
527	Investigation of the effects of the conversion of forests and rangeland to cropland on fertility and soil functions in mountainous semi-arid landscape. Catena, 2022, 210, 105951.	2.2	15
528	Can the reductive dissolution of ferric iron in paddy soils compensate phosphorus limitation of rice plants and microorganisms?. Soil Biology and Biochemistry, 2022, 168, 108653.	4.2	15
529	Priming Effects in Relation to Soil Conditions â€“ Mechanisms. Encyclopedia of Earth Sciences Series, 2011, , 657-667.	0.1	14
530	Cation exchange retards shell carbonate recrystallization: consequences for dating and paleoenvironmental reconstructions. Catena, 2016, 142, 134-138.	2.2	14
531	Effects of biochar and polyacrylamide on decomposition of soil organic matter and 14C-labeled alfalfa residues. Journal of Soils and Sediments, 2017, 17, 611-620.	1.5	14
532	Legume and Non-legume Trees Increase Soil Carbon Sequestration in Savanna. Ecosystems, 2017, 20, 989-999.	1.6	14
533	Responses of Degraded Tibetan Kobresia Pastures to N Addition. Land Degradation and Development, 2018, 29, 303-314.	1.8	14
534	Soil phosphorus accumulation changes with decreasing temperature along a 2300 m altitude gradient. Agriculture, Ecosystems and Environment, 2020, 301, 107050.	2.5	14
535	Effects of plastic film mulch biodegradability on nitrogen in the plant-soil system. Science of the Total Environment, 2022, 833, 155220.	3.9	14
536	Three sources of CO2 efflux from soil partitioned by13C natural abundance in an incubation study. Rapid Communications in Mass Spectrometry, 2005, 19, 1417-1423.	0.7	13
537	Theoretical background for partitioning of root and rhizomicrobial respiration by Î´13C of microbial biomass. European Journal of Soil Biology, 2005, 41, 1-9.	1.4	13
538	Identification of labile and stable pools of organic matter in an agrogray soil. Eurasian Soil Science, 2011, 44, 628-640.	0.5	13
539	Sorption of Alanine changes microbial metabolism in addition to availability. Geoderma, 2017, 292, 128-134.	2.3	13
540	Land use and fertilisation affect priming in tropical andosols. European Journal of Soil Biology, 2018, 87, 9-16.	1.4	13

#	Article	IF	Citations
541	Carbon budgets of top- and subsoil food webs in an arable system. Pedobiologia, 2018, 69, 29-33.	0.5	13
542	Metabolic tracing unravels pathways of fungal and bacterial amino sugar formation in soil. European Journal of Soil Science, 2019, 70, 421-430.	1.8	13
543	Effects of land use and elevation on the functional characteristics of soil enzymes at Mt. Kilimanjaro. European Journal of Soil Biology, 2020, 97, 103167.	1.4	13
544	Lower microbial carbon use efficiency reduces cellulose-derived carbon retention in soils amended with compost versus mineral fertilizers. Soil Biology and Biochemistry, 2021, 156, 108227.	4.2	13
545	High frequency of extreme precipitation increases Stipa grandis biomass by altering plant and microbial nitrogen acquisition. Biology and Fertility of Soils, 2022, 58, 63-75.	2.3	13
546	Plant lipid composition is not affected by shortâ€term isotopic (¹³C) pulseâ€labelling experiments. Journal of Plant Nutrition and Soil Science, 2009, 172, 445-453.	1.1	12
547	Comparison of net ecosystem CO2 exchange in cropland and grassland with an automated closed chamber system. Nutrient Cycling in Agroecosystems, 2014, 98, 113-124.	1.1	12
548	Labelling plants in the Chernobyl way: A new 137Cs and 14C foliar application approach to investigate rhizodeposition and biopore reuse. Plant and Soil, 2017, 417, 301-315.	1.8	12
549	Carbon allocation and fate in paddy soil depending on phosphorus fertilization and water management: results of ¹³C continuous labelling of rice. Canadian Journal of Soil Science, 2018, 98, 469-483.	0.5	12
550	Phenological Stage, Plant Biomass, and Drought Stress Affect Microbial Biomass and Enzyme Activities in the Rhizosphere of Enteropogon macrostachyus. Pedosphere, 2019, 29, 259-265.	2.1	12
551	Increased soil organic matter after 28Âyears of nitrogen fertilization only with plastic film mulching is controlled by maize root biomass. Science of the Total Environment, 2022, 810, 152244.	3.9	12
552	Recrystallization of shell carbonate in soil: 14 C labeling, modeling and relevance for dating and paleo-reconstructions. Geoderma, 2016, 282, 87-95.	2.3	11
553	Beech trees fuel soil animal food webs via root-derived nitrogen. Basic and Applied Ecology, 2017, 22, 28-35.	1.2	11
554	Nitrogen-inputs regulate microbial functional and genetic resistance and resilience to dryingâ€“rewetting cycles, with implications for crop yields. Plant and Soil, 2019, 441, 301-315.	1.8	11
555	Differentiating microbial taxonomic and functional responses to physical disturbance in bulk and rhizosphere soils. Land Degradation and Development, 2020, 31, 2858-2871.	1.8	11
556	A soil sampling design for arable land quality observation by using <scp>SPCOSAâ€“CLHS</scp> hybrid approach. Land Degradation and Development, 2021, 32, 4889-4906.	1.8	11
557	Microbial tradeoffs in internal and external use of resources regulated by phosphorus and carbon availability. European Journal of Soil Biology, 2021, 106, 103353.	1.4	11
558	Formation of mineral N (NH4+, NO3â€”) during mineralization of organic matter from coal refuse material and municipal sludge. Journal of Plant Nutrition and Soil Science, 2000, 163, 73-80.	1.1	10

#	Article	IF	Citations
559	Below-ground partitioning (14C) and isotopic fractionation (Î´13C) of carbon recently assimilated by maize. Isotopes in Environmental and Health Studies, 2005, 41, 237-248.	0.5	10
560	Response to the comments by Peter HÃ¶gberg, Nina Buchmann and David J. Read on the review â€˜Sources of CO2 efflux from soil and review of partitioning methodsâ€™ (Soil Biology & Biochemistry 38,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 7 2999-3000.	4.2	10
561	Effect of cactus pear cultivation after Mediterranean maquis on soil carbon stock, Î´13C spatial distribution and root turnover. Catena, 2014, 118, 84-90.	2.2	10
562	Carbon budget by priming in a biochar-amended soil. European Journal of Soil Biology, 2016, 76, 26-34.	1.4	10
563	Root-Derived Short-Chain Suberin Diacids from Rice and Rape Seed in a Paddy Soil under Rice Cultivar Treatments. PLoS ONE, 2015, 10, e0127474.	1.1	10
564	Catalytic efficiency of soil enzymes explains temperature sensitivity: Insights from physiological theory. Science of the Total Environment, 2022, 822, 153365.	3.9	10
565	Low carbon availability in paleosols nonlinearly attenuates temperature sensitivity of soil organic matter decomposition. Global Change Biology, 2022, 28, 4180-4193.	4.2	10
566	Fungal key players of cellulose utilization: Microbial networks in aggregates of long-term fertilized soils disentangled using 13C-DNA-stable isotope probing. Science of the Total Environment, 2022, 832, 155051.	3.9	10
567	Title is missing!. Journal of Plant Nutrition and Soil Science, 1999, 162, 171-177.	1.1	9
568	The rates of organic matter renewal in gray forest soils and chernozems. Eurasian Soil Science, 2008, 41, 1378-1386.	0.5	9
569	Structural and physiological adaptations of soil microorganisms to freezing revealed by position-specific labeling and compound-specific 13C analysis. Biogeochemistry, 2019, 143, 207-219.	1.7	9
570	Direct evidence for thickening nanoscale organic films at soil biogeochemical interfaces and its relevance to organic matter preservation. Environmental Science: Nano, 2020, 7, 2747-2758.	2.2	9
571	Root-o-Mat: A novel tool for 2D image processing of root-soil interactions and its application in soil zymography. Soil Biology and Biochemistry, 2021, 157, 108236.	4.2	9
572	Interkingdom plant-microbial ecological networks under selective and clear cutting of tropical rainforest. Forest Ecology and Management, 2021, 491, 119182.	1.4	9
573	Diurnal dynamics can modify plantâ€“microbial competition for N uptake via C allocation. Biology and Fertility of Soils, 2021, 57, 949-958.	2.3	9
574	Belowground allocation and fate of tree assimilates in plantâ€“soilâ€“microorganisms system: 13C labeling and tracing under field conditions. Geoderma, 2021, 404, 115296.	2.3	9
575	Precipitation Partitioningâ€”Hydrologic Highways Between Microbial Communities of the Plant Microbiome?. , 2020, , 229-252.		9
576	Microbial iron reduction compensates for phosphorus limitation in paddy soils. Science of the Total Environment, 2022, 837, 155810.	3.9	9

#	Article	IF	Citations
577	Processes of Soil Carbon Dynamics and Ecosystem Carbon Cycling in a Changing World. , 2012, , 395-428.		8
578	Visualization of Enzyme Activities in Earthworm Biopores by In Situ Soil Zymography. Methods in Molecular Biology, 2017, 1626, 229-238.	0.4	8
579	Effects of rain shortage on carbon allocation, pools and fluxes in a Mediterranean shrub ecosystem â€“ a 13C labelling field study. Science of the Total Environment, 2018, 627, 1242-1252.	3.9	8
580	When the Mediterranean becomes harsh: Heat pulses strongly affect C allocation in plant-soil-atmosphere continuum in Eucalyptus camaldulensis. Environmental and Experimental Botany, 2019, 162, 181-191.	2.0	8
581	Visualization and quantification of root exudation using 14C imaging: challenges and uncertainties. Plant and Soil, 2019, 437, 473-485.	1.8	8
582	Post-agricultural restoration of soil organic carbon pools across a climate gradient. Catena, 2021, 200, 105138.	2.2	8
583	Forest vegetation in western Romania in relation to climate variables: Does community composition reflect modelled tree species distribution?. Annals of Forest Research, 2014, 59, .	0.6	8
584	Priming effects in the rhizosphere and root detritusphere of two wet-grassland graminoids. Plant and Soil, 2022, 472, 105-126.	1.8	8
585	In-situ 13CO2 labeling to trace carbon fluxes in plant-soil-microorganism systems: Review and methodological guideline. Rhizosphere, 2021, 20, 100441.	1.4	8
586	Biological Crusts to Increase Soil Carbon Sequestration: New Challenges in a New Environment. Biology, 2021, 10, 1190.	1.3	8
587	Preface: Arable Land Quality: Observation, Estimation, Optimization, and Application. Land, 2022, 11, 947.	1.2	8
588	Effects of atmospheric CO2 enrichment on Î´13C, Î´15N values and turnover times of soil organic matter pools isolated by thermal techniques. Plant and Soil, 2007, 297, 15-28.	1.8	7
589	Effect of heavy metals contamination on root-derived and organic matter-derived CO2 efflux from soil planted with Zea mays. European Journal of Soil Biology, 2008, 44, 501-508.	1.4	7
590	Pedogenic carbonate recrystallization assessed by isotopic labeling: a comparison of ¹³C and ¹⁴C tracers. Journal of Plant Nutrition and Soil Science, 2011, 174, 809-817.	1.1	7
591	Suppression of soil organic matter decomposition by gasoline and diesel as assessed by 13C natural abundance. European Journal of Soil Biology, 2016, 73, 8-14.	1.4	7
592	Rapid decrease of soil carbon after abandonment of subtropical paddy fields. Plant and Soil, 2017, 415, 203-214.	1.8	7
593	Ash and fire, char, and biochar in the environment. Land Degradation and Development, 2018, 29, 2040-2044.	1.8	7
594	Facts to acidificationâ€induced carbonate losses from Chinese croplands. Global Change Biology, 2021, 27, e7.	4.2	7

#	Article	IF	Citations
595	Three source-partitioning of CO2 fluxes based on a dual-isotope approach to investigate interactions between soil organic carbon, glucose and straw. Science of the Total Environment, 2022, 811, 152163.	3.9	7
596	Plantâ€“microbial competition for amino acids depends on soil acidity and the microbial community. Plant and Soil, 2022, 475, 457-471.	1.8	7
597	Thermal stability of soil organic matter pools and their turnover times calculated by Î´13C under elevated CO2and two levels of N fertilisationâ€. Isotopes in Environmental and Health Studies, 2008, 44, 365-376.	0.5	6
598	Optimization of 14C liquid scintillation counting of plant and soil lipids to trace short term formation, translocation and degradation of lipids. Journal of Radioanalytical and Nuclear Chemistry, 2010, 284, 99-108.	0.7	6
599	Direct phloem transport and pressure concentration waves in linking shoot and rhizosphere activity.. Plant and Soil, 2012, 351, 23-30.	1.8	6
600	To shake or not to shake: Silicone tube approach for incubation studies on CH4 oxidation in submerged soils. Science of the Total Environment, 2019, 657, 893-901.	3.9	6
601	Compositional variations of active autotrophic bacteria in paddy soils with elevated CO2 and temperature. Soil Ecology Letters, 2020, 2, 295-307.	2.4	6
602	Annual greenhouse gas emissions from sheepfolds and cattle sheds. Soil Use and Management, 2022, 38, 369-380.	2.6	6
603	Belowground interplant carbon transfer promotes soil carbon gains in diverse plant communities. Soil Biology and Biochemistry, 2021, 159, 108297.	4.2	6
604	Microbial Communities and Functions in the Rhizosphere of Disease-Resistant and Susceptible Camellia spp.. Frontiers in Microbiology, 2021, 12, 732905.	1.5	6
605	Divergent responses of aggregate stability to long-term mineral and organic amendments between upland and paddy soils. Journal of Soils and Sediments, 2022, 22, 2969-2981.	1.5	6
606	Does long-term warming affect C and N allocation in a Mediterranean shrubland ecosystem? Evidence from a 13C and 15N labeling field study. Environmental and Experimental Botany, 2017, 141, 170-180.	2.0	5
607	Effects of Elevated CO2 in the Atmosphere on Soil C and N Turnover. Developments in Soil Science, 2018, , 207-219.	0.5	5
608	Ashes to ashes: Characterization of organic matter in Andosols along a 3400â€¯m elevation transect at Mount Kilimanjaro using analytical pyrolysis. Catena, 2019, 180, 271-281.	2.2	5
609	The Î´¹³C, Î´¹⁸O and Î”₄₇records in biogenic, pedogenic and geogenic carbonate types from paleosol-loess sequence and their paleoenvironmental meaning. Quaternary Research, 2021, 101, 256-272.	1.0	5
610	Soil properties and root traits jointly shape fine-scale spatial patterns of bacterial community and metabolic functions within a Korean pine forest. PeerJ, 2021, 9, e10902.	0.9	5
611	Î´2H and Î´18O in Precipitation and Water Vapor Disentangle Seasonal Wind Directions on the Loess Plateau. Sustainability, 2021, 13, 6938.	1.6	5
612	Aboveground and Belowground Plant Traits Explain Latitudinal Patterns in Topsoil Fungal Communities From Tropical to Cold Temperate Forests. Frontiers in Microbiology, 2021, 12, 633751.	1.5	5

#	Article	IF	Citations
613	Sources and intensity of CH4 production in paddy soils depend on iron oxides and microbial biomass. Biology and Fertility of Soils, 2022, 58, 181-191.	2.3	5
614	Carbonâ€“Phosphorus Coupling Governs Microbial Effects on Nutrient Acquisition Strategies by Four Crops. Frontiers in Plant Science, 0, 13, .	1.7	5
615	Assessing the stability of soil organic matter by fractionation and 13C isotope techniques. Eurasian Soil Science, 2015, 48, 157-168.	0.5	4
616	Carbon Sources in Fruit Carbonate of Buglossoides arvensis and Consequences for ¹⁴C Dating. Radiocarbon, 2017, 59, 141-150.	0.8	4
617	Interactive effects of biochar and polyacrylamide on decomposition of maize rhizodeposits: implications from 14C labeling and microbial metabolic quotient. Journal of Soils and Sediments, 2017, 17, 621-631.	1.5	4
618	Tussock microhabitats increase nitrogen uptake by plants in an alpine wetland. Plant and Soil, 2021, 466, 569-580.	1.8	4
619	Nitrite-dependent anaerobic oxidation decreases methane emissions from peatlands. Soil Biology and Biochemistry, 2022, 169, 108658.	4.2	4
620	Mineralization of â€œnon-metabolizableâ€•glucose analogues in soil: potential chemosensory mimics of glucose. Journal of Plant Nutrition and Soil Science, 2017, 180, 165-168.	1.1	3
621	Land Degradation & Development : A new and bright future. Land Degradation and Development, 2018, 29, 2775-2777.	1.8	3
622	A novel belowground in-situ gas labeling approach: CH4 oxidation in deep peat using passive diffusion chambers and 13C excess. Science of the Total Environment, 2022, 806, 150457.	3.9	3
623	Reply to: â€œVariables in the effect of land use on soil extrapore enzymatic activity and carbon stabilizationâ€•by Glenn (2020). Nature Communications, 2020, 11, 6427.	5.8	3
624	Fate of phosphorus fertilizer in acidic Cambisol assessed using 33P isotope labeling technique. Annals of Tropical Research, 2019, , 32-42.	0.1	3
625	Fertilization effects on soil microbial composition and nutrient availability in integrated rice-livestock production systems. Applied Soil Ecology, 2022, 174, 104420.	2.1	3
626	Moderate grazing increases newly assimilated carbon allocation belowground. Rhizosphere, 2022, 22, 100547.	1.4	3
627	Soil acidification induced by intensive agricultural use depending on climate. Journal of Soils and Sediments, 2022, 22, 2604-2607.	1.5	3
628	Oxidation of methane and dehydrogenase activity in a Mollic Gleysol. Zeitschrift Fur Pflanzenernahrung Und Bodenkunde = Journal of Plant Nutrition and Plant Science, 1998, 161, 697-698.	0.4	2
629	Soils of an Early Medieval (4thâ€“6th Centuries) Settlement in the Middle Tobol Region and their Paleogeographic Implication. Archaeology, Ethnology and Anthropology of Eurasia, 2012, 40, 134-143.	0.1	2
630	Nitrogen fertilization modifies organic transformations and coatings on soil biogeochemical interfaces through microbial polysaccharides synthesis. Scientific Reports, 2019, 9, 18684.	1.6	2

#	Article	IF	Citations
631	NITROGEN UPTAKE AND NITROGEN LOSSES IN FIELD TRIALS WITH CARROTS. Acta Horticulturae, 1996, , 95-104.	0.1	2
632	Effect of long-term fertilisation on enzyme activities and microbial community composition in the rice rhizosphere. Acta Agriculturae Scandinavica - Section B Soil and Plant Science, 2022, 72, 454-462.	0.3	2
633	Different responses of ash and beech on nitrate versus ammonium leaf labeling. Journal of Plant Nutrition and Soil Science, 2017, 180, 446-453.	1.1	1
634	Plant species and plant neighbor identity affect associations between plant assimilated C inputs and soil pores. Geoderma, 2022, 407, 115565.	2.3	1
635	Management extensification in oil palm plantations reduces SOC decomposition. Soil Biology and Biochemistry, 2022, 165, 108535.	4.2	1
636	Nitrogen Gain and Loss Along an Ecosystem Sequence: From Semi-desert to Rainforest. Frontiers in Soil Science, 2022, 2, .	0.8	1
637	Sedge replacement by grasses accelerates litter decomposition and decreases organic matter formation in alpine meadow soils. Land Degradation and Development, 0, , .	1.8	1
638	Zeitreihenanalyse der Temperaturdynamik eines Sandbodens. Archives of Agronomy and Soil Science, 1996, 40, 379-386.	1.3	0
639	The third international conference â€œEmission and Sinks of Greenhouse Gases in Northern Eurasiaâ€• Eurasian Soil Science, 2008, 41, 554-559.	0.5	0
640	Preface: Special issue SOM 2015. Geoderma, 2017, 304, 1-3.	2.3	0
641	Inventory of Spatio-Temporal Methane Emissions from Livestock and Poultry Farming in Beijing. Sustainability, 2019, 11, 3858.	1.6	0
642	Total and Labelled CO2 Emission and 14C Partitioning as Affected by Streptomycin and Benomyl. , 2002, , 84-89.		0
643	The effect of fertilizer type on nitrogen uptake by maize from recently formed soil organic matter #. Journal of Plant Nutrition and Soil Science, 2022, 185, 168-176.	1.1	0