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## Persistence of soil organic matter as an ecosystem property

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2081	Microbial cell-envelope fragments and the formation of soil organic matter: a case study from a glacier forefield. <b>2013</b> , 113, 595-612	65

2080	Translocation of metals by trees and fungi regulates pH, soil organic matter turnover and nitrogen availability in acidic forest soils. <b>2013</b> , 63, 142-153	73
2079	An experimental study of charcoal degradation in a boreal forest. <b>2013</b> , 65, 39-49	23
2078	Microbial modulators of soil carbon storage: integrating genomic and metabolic knowledge for global prediction. <b>2013</b> , 21, 641-51	253
2077	Ecosystem-scale measurements of biomass water using cosmic ray neutrons. <b>2013</b> , 40, 3929-3933	46
2076	Connecting the Green and Brown Worlds: Allometric and Stoichiometric Predictability of Above- and Below-Ground Networks. <b>2013</b> , 49, 69-175	74
2075	Potentiostatically Poised Electrodes Mimic Iron Oxide and Interact with Soil Microbial Communities to Alter the Biogeochemistry of Arctic Peat Soils. <b>2013</b> , 3, 318-336	8
2074	The cycling of organic nitrogen through the atmosphere. <b>2013</b> , 368, 20130115	92
2073	Thermal adaptation of decomposer communities in warming soils. <b>2013</b> , 4, 333	189
2072	Food Security Through Better Soil Carbon Management. <b>2013</b> , 63-78	1
2071	Can we model observed soil carbon changes from a dense inventory? A case study over england and wales using three version of orchidee ecosystem model (AR5, AR5-PRIM and O-CN). <b>2013</b> ,	0
2070	CLM4-BeTR, a generic biogeochemical transport and reaction module for CLM4: model development, evaluation, and application. <b>2013</b> , 6, 127-140	45
2069	Sustainability of soil fertility and the use of lignocellulosic crop harvest residues for the production of biofuels: a literature review. <b>2013</b> , 34, 1725-34	10
2068	Soil organic matter quality influences mineralization and GHG emissions in cryosols: a field-based study of sub- to high Arctic. <b>2013</b> , 19, 1126-40	40
2067	Soil Security: Solving the Global Soil Crisis. <b>2013</b> , 4, 434-441	173
2066	The potential for Scottish cultivated topsoils to lose or gain soil organic carbon. <b>2013</b> , 29, 39-47	13
2065	The role of non-crystalline Fe in the increase of SOC after long-term organic manure application to the red soil of southern China. <b>2013</b> , 64, 797-804	48
2064	Catchments on the cusp? Structural and functional change in northern ecohydrology. <b>2013</b> , 27, 766-774	49
2063	Trophic cascade alters ecosystem carbon exchange. <b>2013</b> , 110, 11035-8	61

2062	Heterogeneous global crop yield response to biochar: a meta-regression analysis. <b>2013</b> , 8, 044049	182
2061	Empirical estimates to reduce modeling uncertainties of soil organic carbon in permafrost regions: a review of recent progress and remaining challenges. <b>2013</b> , 8, 035020	54
2060	Biogeochemistry - Pages 491-664. <b>2013</b> , 491-664	
2059	Advection of surface-derived organic carbon fuels microbial reduction in Bangladesh groundwater. <b>2013</b> , 110, 5331-5	81
2058	Hunter-Gatherers, Agriculturalists, and Climate: Insights From a Cross-Disciplinary Review. <b>2013</b> , 209-216	
2057	Fuel moisture influences on fire-altered carbon in masticated fuels: An experimental study. <b>2013</b> , 118, 30-40	27
2056	Root and dissolved organic carbon controls on subsurface soil carbon dynamics: A model approach. <b>2013</b> , 118, 1646-1659	32
2055	Carbon isotopes for estimating soil decomposition and physical mixing in well-drained forest soils. <b>2013</b> , 118, 1532-1545	45
2054	Concurrent increase in 15N and radiocarbon age in soil density fractions. <b>2013</b> , 176, 505-508	3
2053	Chemostratigraphic implications of spatial variation in the Paleocene-Eocene Thermal Maximum carbon isotope excursion, SE Bighorn Basin, Wyoming. <b>2013</b> , 14, 4133-4152	28
2052	Erosion, deposition, and the persistence of soil organic matter: mechanistic considerations and problems with terminology. <b>2013</b> , 38, 908-912	114
2051	Variability of above-ground litter inputs alters soil physicochemical and biological processes: a meta-analysis of litterfall-manipulation experiments. <b>2013</b> , 10, 7423-7433	108
2050	Simulated Impacts of Crop Residue Removal and Tillage on Soil Organic Matter Maintenance. <b>2013</b> , 77, 1349-1356	18
2049	Consumption of residual pyrogenic carbon by wildfire. <b>2013</b> , 22, 1072	34
2048	Can we model observed soil carbon changes from a dense inventory? A case study over England and Wales using three versions of the ORCHIDEE ecosystem model (AR5, AR5-PRIM and O-CN). <b>2013</b> , 6, 2153-2163	11
2047	Examining soil carbon uncertainty in a global model: response of microbial decomposition to temperature, moisture and nutrient limitation. <b>2013</b> , 10, 7095-7108	54
2046	Relationships between Biological and Thermal Indices of Soil Organic Matter Stability Differ with Soil Organic Carbon Level. <b>2013</b> , 77, 2020-2028	45
2045	Quantifying soil carbon stocks and greenhouse gas fluxes in the sugarcane agrosystem: point of view. <b>2013</b> , 70, 361-368	16

2044	Storage and stability of organic carbon in soils as related to depth, occlusion within aggregates, and attachment to minerals. <b>2013</b> , 10, 1675-1691	185
2043	Partiõ de substõcias hõmicas em solos brasileiros. <b>2013</b> , 37, 955-968	4
2042	A dual isotope approach to isolate soil carbon pools of different turnover times. <b>2013</b> , 10, 8067-8081	42
2041	Short- and Long-Term Labile Soil Carbon and Nitrogen Dynamics Reflect Management and Predict Corn Agronomic Performance. <b>2013</b> , 105, 493-502	108
2040	Mean age of carbon in fine roots from temperate forests and grasslands with different management. <b>2013</b> , 10, 4833-4843	35
2039	Does Organic Residue Quality Influence Carbon Retention in a Tropical Sandy Soil?. <b>2013</b> , 77, 1001-1011	28
2038	Causes of variation in soil carbon simulations from CMIP5 Earth system models and comparison with observations. <b>2013</b> , 10, 1717-1736	474
2037	Effects of Reduced Tillage on Crop Yield, Plant Available Nutrients and Soil Organic Matter in a 12-Year Long-Term Trial under Organic Management. <b>2013</b> , 5, 3876-3894	30
2036	Afforestation Effects on Soil Carbon Storage in the United States: A Synthesis. <b>2013</b> , 77, 1035-1047	77
2035	Impacts of watershed processes on exported riverine organic carbon. 174-199	3
2034	Considerations for Sustainable Biomass Production in Quercus-Dominated Forest Ecosystems. <b>2013</b>	2
2033	Soil Drainage Class Influences on Soil Carbon in a New England Forested Watershed. <b>2013</b> , 77, 307-317	12
2032	Changes in Ecosystem Carbon Following Afforestation of Native Sand Prairie. <b>2013</b> , 77, 1613-1624	7
2031	Soil Carbon Dynamics for Irrigated Corn under Two Tillage Systems. <b>2013</b> , 77, 951-963	39
2030	Quantifying Tacit Knowledge about Soil Organic Carbon Stocks Using Soil Taxa and Official Soil Series Descriptions. <b>2013</b> , 77, 1711-1723	8
2029	Soil Temperature following Logging-Debris Manipulation and Aspen Regrowth in Minnesota: Implications for Sampling Depth and Alteration of Soil Processes. <b>2013</b> , 77, 1818-1824	11
2028	Soil and Sediment Carbon and Nitrogen in Mississippi Alluvial Valley and Interior Flatwoods Bottomlands. <b>2014</b> , 78, S248-S260	4
2027	Retention of 15N-Labeled Fertilizer in an Illinois Prairie Soil with Winter Rye. <b>2014</b> , 78, 496-508	15

2026	The implications of microbial and substrate limitation for the fates of carbon in different organic soil horizon types of boreal forest ecosystems: a mechanistically based model analysis. <b>2014</b> , 11, 4477-4491	18
2025	Intra-aggregate Pore Structure Influences Phylogenetic Composition of Bacterial Community in Macroaggregates. <b>2014</b> , 78, 1924-1939	52
2024	Linking stoichiometric homeostasis of microorganisms with soil phosphorus dynamics in wetlands subjected to microcosm warming. <b>2014</b> , 9, e85575	5
2023	Nitrogen and carbon reallocation in fungal mycelia during decomposition of boreal forest litter. <b>2014</b> , 9, e92897	48
2022	A mechanistic study of plant and microbial controls over R* for nitrogen in an annual grassland. <b>2014</b> , 9, e106059	
2021	Bayesian calibration of a soil organic carbon model using $\delta^{14}C$ measurements of soil organic carbon and heterotrophic respiration as joint constraints. <b>2014</b> , 11, 2147-2168	24
2020	Soil-borne microbial functional structure across different land uses. <b>2014</b> , 2014, 216071	5
2019	Long residence times of rapidly decomposable soil organic matter: application of a multi-phase, multi-component, and vertically resolved model (BAMS1) to soil carbon dynamics. <b>2014</b> , 7, 1335-1355	82
2018	Forest Overstory Effect on Soil Organic Carbon Storage: A Meta-analysis. <b>2014</b> , 78, S35-S47	27
2017	Partial coupling and differential regulation of biologically and photochemically labile dissolved organic carbon across boreal aquatic networks. <b>2014</b> , 11, 5969-5985	97
2016	Microbial regulation of global biogeochemical cycles. <b>2014</b> , 5, 103	80
2015	Transferability of a Visible and Near-Infrared Model for Soil Organic Matter Estimation in Riparian Landscapes. <b>2014</b> , 6, 4305-4322	23
2014	Integrating microbial physiology and physio-chemical principles in soils with the Microbial-MIneral Carbon Stabilization (MIMICS) model. <b>2014</b> , 11, 3899-3917	184
2013	Forest conversion to poplar plantation in a Lombardy floodplain (Italy): effects on soil organic carbon stock. <b>2014</b> , 11, 6483-6493	14
2012	Soil Carbon Sequestration Resulting from Biosolids Application. <b>2014</b> , 2014, 1-9	20
2011	Tillage and Residue Management Effects on Soil Carbon and Nitrogen Under Irrigated Continuous Corn. <b>2014</b> , 78, 1987-1996	30
2010	Substrate quality alters the microbial mineralization of added substrate and soil organic carbon. <b>2014</b> , 11, 4665-4678	39
2009	Soil Organic Carbon Storage and Stability in the Aspen-Conifer Ecotone in Montane Forests in Utah, USA. <b>2014</b> , 5, 666-688	12



2008	Old carbon contributes to aquatic emissions of carbon dioxide in the Amazon. <b>2014</b> , 11, 3635-3645	12
2007	Litter Input Controls on Soil Carbon in a Temperate Deciduous Forest. <b>2014</b> , 78, S66	56
2006	Estimating soil organic carbon stocks of Swiss forest soils by robust external-drift kriging. <b>2014</b> , 7, 1197-1210	32
2005	Soil Carbon Dynamics Following Reforestation of Tropical Pastures. <b>2014</b> , 78, 290-296	12
2004	Carbon losses from pyrolysed and original wood in a forest soil under natural and increased N deposition. <b>2014</b> , 11, 5199-5213	31
2003	Meta-analysis of high-latitude nitrogen-addition and warming studies implies ecological mechanisms overlooked by land models. <b>2014</b> , 11, 6969-6983	30
2002	Response of microbial decomposition to spin-up explains CMIP5 soil carbon range until 2100. <b>2014</b> , 7, 2683-2692	25
2001	Implications of carbon saturation model structures for simulated nitrogen mineralization dynamics. <b>2014</b> , 11, 6725-6738	13
2000	Short-term compost application increases rhizosphere soil carbon mineralization and stimulates root growth in long-term continuously cropped cucumber. <b>2014</b> , 175, 269-277	12
1999	Responses of a tundra system to warming using SCAMPS: a stoichiometrically coupled, acclimating microbial-plant-soil model. <b>2014</b> , 84, 151-170	42
1998	Similar composition but differential stability of mineral retained organic matter across four classes of clay minerals. <b>2014</b> , 121, 409-424	50
1997	Impact of fresh organic matter incorporation on PAH fate in a contaminated industrial soil. <b>2014</b> , 497-498, 345-352	12
1996	DOM-Affected Transformation of Contaminants on Mineral Surfaces: A Review. <b>2014</b> , 44, 223-254	54
1995	Trophic chains in the soil. <b>2014</b> , 4, 393-403	13
1994	Dissolved Organic Matter in Aquatic Systems. <b>2014</b> , 125-156	49
1993	Breaking the enzymatic latch: impacts of reducing conditions on hydrolytic enzyme activity in tropical forest soils. <b>2014</b> , 95, 2964-2973	38
1992	Effects of forest expansion on mountain grassland: changes within soil organic carbon fractions. <b>2014</b> , 385, 373-387	30
1991	Sources of variation in simulated ecosystem carbon storage capacity from the 5th Climate Model Intercomparison Project (CMIP5). <b>2014</b> , 66, 22568	13

1990	Variation in soil C and microbial functions across tree canopy projection and open grassland microenvironments. <b>2014</b> , 38, 62-69	20
1989	Land degradation impact on soil organic carbon and nitrogen stocks of sub-tropical humid grasslands in South Africa. <b>2014</b> , 235-236, 372-381	74
1988	Response of microbial decomposition to spin-up explains CMIP5 soil carbon range until 2100. <b>2014</b> ,	5
1987	Multimodel simulations of forest harvesting effects on long-term productivity and CN cycling in aspen forests. <b>2014</b> , 24, 1374-89	22
1986	Soil organic carbon and land use: Processes and potential in Ontario's long-term agro-ecosystem research sites. <b>2014</b> , 94, 317-336	17
1985	Deciphering and predicting spatial and temporal concentrations of arsenic within the Mekong Delta aquifer. <b>2014</b> , 11, 579	23
1984	Full-wave inversion of ground-penetrating radar data for forest litter characterization. <b>2014</b> ,	1
1983	An interdisciplinary assessment of climate engineering strategies. <b>2014</b> , 12, 280-287	23
1982	Digging Into the World Beneath Our Feet: Bridging Across Scales in the Age of Global Change. <b>2014</b> , 95, 96-97	11
1981	Microbial community structure varies across soil organic matter aggregate pools during tropical land cover change. <b>2014</b> , 77, 292-303	138
1980	Micropore characteristics of organic matter pools in cemented and non-cemented podzolic horizons. <b>2014</b> , 65, 763-773	7
1979	Submicron structures provide preferential spots for carbon and nitrogen sequestration in soils. <b>2014</b> , 5, 2947	220
1978	An assessment of subsoil organic carbon stocks in England and Wales. <b>2014</b> , 30, 10-22	17
1977	The myriad surprises of unwanted guests: invasive plants and dynamic soil carbon pools. <b>2014</b> , 203, 1-3	3
1976	Microbial community dynamics alleviate stoichiometric constraints during litter decay. <b>2014</b> , 17, 680-90	221
1975	Impact of rainfall gradient on aboveground biomass and soil organic carbon dynamics of forest covers in Gujarat, India. <b>2014</b> , 29, 1053-1063	10
1974	Impact of phyllosilicate mineralogy on organic carbon stabilization in soils: incomplete knowledge and exciting prospects. <b>2014</b> , 235-236, 382-395	109
1973	Higher temperature sensitivity for stable than for labile soil organic carbon—evidence from incubations of long-term bare fallow soils. <b>2014</b> , 20, 633-40	94

1972	Allometric constraints on, and trade-offs in, belowground carbon allocation and their control of soil respiration across global forest ecosystems. <b>2014</b> , 20, 1674-84	27
1971	Microbe-driven turnover offsets mineral-mediated storage of soil carbon under elevated CO <sub>2</sub> . <b>2014</b> , 4, 1099-1102	216
1970	Biodegradation measurements confirm the predictive value of the O:C-ratio for biochar recalcitrance. <b>2014</b> , 177, 633-637	10
1969	Black carbon accrual during 2000 years of paddy-rice and non-paddy cropping in the Yangtze River Delta, China. <b>2014</b> , 20, 1968-78	40
1968	Hydrograph separation to improve understanding of Dissolved Organic Carbon Dynamics in Headwater catchments. <b>2014</b> , 28, 5354-5366	14
1967	Vertical distribution of charcoal in a sandy soil: evidence from DRIFT spectra and field emission scanning electron microscopy. <b>2014</b> , 65, 751-762	16
1966	How does sonication affect the mineral and organic constituents of soil aggregates? A review. <b>2014</b> , 177, 479-495	51
1965	Simulating effects of changing climate and CO <sub>2</sub> emissions on soil carbon pools at the Hubbard Brook experimental forest. <b>2014</b> , 20, 1643-56	16
1964	Carbon sequestration by Miscanthus energy crops plantations in a broad range semi-arid marginal land in China. <b>2014</b> , 496, 373-380	31
1963	Farmer-led maize biochar trials: Effect on crop yield and soil nutrients under conservation farming. <b>2014</b> , 177, 681-695	69
1962	Effect of multivalent cations, temperature, and aging on SOM thermal properties. <b>2014</b> , 118, 1203-1213	8
1961	Microbial community stratification linked to utilization of carbohydrates and phosphorus limitation in a boreal peatland at Marcell Experimental Forest, Minnesota, USA. <b>2014</b> , 80, 3518-30	79
1960	The inorganic nutrient cost of building soil carbon. <b>2014</b> , 5, 265-268	37
1959	Perspectives on the microbial carbon pump with special reference to microbial respiration and ecosystem efficiency in large estuarine systems. <b>2014</b> , 11, 3887-3898	16
1958	Comparing microbial and chemical kinetics for modelling soil organic carbon decomposition using the DecoChem v1.0 and DecoBio v1.0 models. <b>2014</b> , 7, 1519-1533	10
1957	Modeling radiocarbon dynamics in soils: SoilR version 1.1. <b>2014</b> , 7, 1919-1931	28
1956	CHANGES IN SOIL ORGANIC CARBON UNDER EUCALYPTUS PLANTATIONS IN BRAZIL: A COMPARATIVE ANALYSIS. <b>2014</b> , 25, 428-437	83
1955	Does agricultural crop diversity enhance soil microbial biomass and organic matter dynamics? A meta-analysis. <b>2014</b> , 24, 560-70	356

1954	Soil aggregation and the stabilization of organic carbon as affected by erosion and deposition. <b>2014</b> , 72, 55-65	88
1953	Positive effects of afforestation efforts on the health of urban soils. <b>2014</b> , 313, 266-273	40
1952	Investigating the role of moisture as an environmental constraint in the decomposition of shallow and deep mineral soil organic matter of a temperate coniferous soil. <b>2014</b> , 68, 373-384	43
1951	Combined effect of geomorphic and pedogenic processes on the distribution of soil organic carbon quality along an eroding hillslope on loess soil. <b>2014</b> , 216, 36-47	50
1950	Soil management effects on greenhouse gases production at the macroaggregate scale. <b>2014</b> , 68, 471-481	18
1949	Concentration dynamics and biodegradability of dissolved organic matter in wetland soils subjected to experimental warming. <b>2014</b> , 470-471, 907-16	23
1948	Changes in Organic Carbon Index of Grey Desert Soil in Northwest China After Long-Term Fertilization. <b>2014</b> , 13, 554-561	5
1947	No effects of experimental warming but contrasting seasonal patterns for soil peptidase and glycosidase enzymes in a sub-arctic peat bog. <b>2014</b> , 117, 55-66	22
1946	Nitrogen input quality changes the biochemical composition of soil organic matter stabilized in the fine fraction: a long-term study. <b>2014</b> , 117, 337-350	52
1945	A comment on 'Biochar and its effects on plant productivity and nutrient cycling: a meta-analysis': on the importance of accurate reporting in supporting a fast-moving research field with policy implications. <b>2014</b> , 6, 176-179	18
1944	Impact of long-term application of manure, crop residue, and mineral fertilizer on organic carbon pools and crop yields in a Mollisol. <b>2014</b> , 14, 854-859	25
1943	Paradigm shifts in soil organic matter research affect interpretations of aquatic carbon cycling: transcending disciplinary and ecosystem boundaries. <b>2014</b> , 117, 279-297	149
1942	Micro-scale modeling of pesticide degradation coupled to carbon turnover in the detritosphere: model description and sensitivity analysis. <b>2014</b> , 117, 185-204	15
1941	Linkages between grazing history and herbivore exclusion on decomposition rates in mineral soils of subalpine grasslands. <b>2014</b> , 374, 579-591	21
1940	The geology and land use nexus. <b>2014</b> , 71, 5037-5044	5
1939	Similarities in chemical composition of soil organic matter across a millennia-old paddy soil chronosequence as revealed by advanced solid-state NMR spectroscopy. <b>2014</b> , 50, 571-581	18
1938	Long-term organic carbon turnover rates in natural and semi-natural topsoils. <b>2014</b> , 118, 257-272	25
1937	Measuring the soil-microbial interface: Extraction of extracellular polymeric substances (EPS) from soil biofilms. <b>2014</b> , 72, 163-171	92

1936	Challenges for Soil Organic Carbon Research. <b>2014</b> , 3-16	19
1935	Buried black soils on the slopes of Mt. Kilimanjaro as a regional carbon storage hotspot. <b>2014</b> , 112, 125-130	29
1934	Nematode food webs associated with native perennial plant species and soil nutrient pools in California riparian oak woodlands. <b>2014</b> , 228-229, 182-191	16
1933	Soil aggregate isolation method affects measures of intra-aggregate extracellular enzyme activity. <b>2014</b> , 69, 54-62	82
1932	Soil organic carbon sequestration in agroforestry systems. A review. <b>2014</b> , 34, 443-454	197
1931	Animating the Carbon Cycle. <b>2014</b> , 17, 344-359	123
1930	Differences in soil organic carbon stocks and fraction distributions between rice paddies and upland cropping systems in China. <b>2014</b> , 14, 89-98	22
1929	Nanoscale structure of organic matter could explain litter decomposition. <b>2014</b> , 117, 313-324	11
1928	Soil Carbon. <b>2014</b> ,	18
1927	Dynamics, Chemistry, and Preservation of Organic Matter in Soils. <b>2014</b> , 157-215	29
1926	Multi-proxy study of soil organic matter dynamics in permafrost peat deposits reveal vulnerability to climate change in the European Russian Arctic. <b>2014</b> , 368, 104-117	64
1925	Modelling soil carbon and nitrogen dynamics using measurable and conceptual soil organic matter pools in APSIM. <b>2014</b> , 186, 94-104	29
1924	Rhizosphere stoichiometry: are C : N : P ratios of plants, soils, and enzymes conserved at the plant species-level?. <b>2014</b> , 201, 505-517	131
1923	Relating microbial community structure to functioning in forest soil organic carbon transformation and turnover. <b>2014</b> , 4, 633-47	85
1922	Transformation and stabilization of pyrogenic organic matter in a temperate forest field experiment. <b>2014</b> , 20, 1629-42	73
1921	The return of an experimentally N-saturated boreal forest to an N-limited state: observations on the soil microbial community structure, biotic N retention capacity and gross N mineralisation. <b>2014</b> , 381, 45-60	27
1920	Evidence for spatially inaccessible labile N from a comparison of soil core extractions and soil pore water lysimetry. <b>2014</b> , 73, 22-32	39
1919	Microbial interactions affect sources of priming induced by cellulose. <b>2014</b> , 74, 39-49	110

1918	Tracking C and N dynamics and stabilization in soil amended with wheat residue and its corresponding bioethanol by-product: a <sup>13</sup> C/ <sup>15</sup> N study. <b>2014</b> , 6, 499-508	5
1917	Soil C and N availability determine the priming effect: microbial N mining and stoichiometric decomposition theories. <b>2014</b> , 20, 2356-67	487
1916	Soil Chemical Insights Provided through Vibrational Spectroscopy. <b>2014</b> , 126, 1-148	120
1915	Ecosystem carbon storage does not vary with mean annual temperature in Hawaiian tropical montane wet forests. <b>2014</b> , 20, 2927-37	32
1914	Soil carbon stock change following afforestation in Northern Europe: a meta-analysis. <b>2014</b> , 20, 2393-405	119
1913	Spatial arrangement of organic compounds on a model mineral surface: implications for soil organic matter stabilization. <b>2014</b> , 48, 79-84	17
1912	The role of soil microbes in the global carbon cycle: tracking the below-ground microbial processing of plant-derived carbon for manipulating carbon dynamics in agricultural systems. <b>2014</b> , 94, 2362-71	232
1911	Mineral soil carbon and nitrogen still low three decades following clearcut harvesting in a typical Acadian Forest stand. <b>2014</b> , 214-215, 62-69	15
1910	Evidence of VX nerve agent use from contaminated white mustard plants. <b>2014</b> , 470, 20140076	19
1909	Long-term stabilization of deep soil carbon by fire and burial during early Holocene climate change. <b>2014</b> , 7, 428-432	53
1908	Does the chemical nature of soil carbon drive the structure and functioning of soil microbial communities?. <b>2014</b> , 70, 54-61	87
1907	Current status, uncertainty and future needs in soil organic carbon monitoring. <b>2014</b> , 468-469, 376-83	117
1906	Changes in water repellency, aggregation and organic matter of a mollic horizon burned in laboratory: Soil depth affected by fire. <b>2014</b> , 213, 400-407	68
1905	Ecology: Good dirt with good friends. <i>Nature</i> , <b>2014</b> , 505, 486-7	50.4 18
1904	Evaluation of simulated estimates of forest ecosystem carbon stocks using ground plot data from Canada's National Forest Inventory. <b>2014</b> , 272, 323-347	33
1903	Thermal acclimation of organic matter decomposition in an artificial forest soil is related to shifts in microbial community structure. <b>2014</b> , 71, 1-12	69
1902	Impacts of organic matter amendments on carbon and nitrogen dynamics in grassland soils. <b>2014</b> , 68, 52-61	114
1901	Mycorrhiza-mediated competition between plants and decomposers drives soil carbon storage. <i>Nature</i> , <b>2014</b> , 505, 543-5	50.4 519

1900	Distinct microbial communities associated with buried soils in the Siberian tundra. <b>2014</b> , 8, 841-53	111
1899	Nitrogen deposition promotes the production of new fungal residues but retards the decomposition of old residues in forest soil fractions. <b>2014</b> , 20, 327-40	44
1898	Organic Matter in the Contemporary Ocean. <b>2014</b> , 151-189	10
1897	Synthesis and modeling perspectives of rhizosphere priming. <b>2014</b> , 201, 31-44	305
1896	Charring and non-additive chemical reactions during ramped pyrolysis: Applications to the characterization of sedimentary and soil organic material. <b>2014</b> , 77, 106-114	24
1895	Databases: Soil observatory lets researchers dig deep. <i>Nature</i> , <b>2014</b> , 509, 427	50.4 2
1894	Soil carbon fractions in grasslands respond differently to various levels of nitrogen enrichments. <b>2014</b> , 384, 401-412	32
1893	Circumpolar assessment of permafrost C quality and its vulnerability over time using long-term incubation data. <b>2014</b> , 20, 641-52	186
1892	A big-microsite framework for soil carbon modeling. <b>2014</b> , 20, 3610-20	46
1891	Isothermal microcalorimetry provides new insight into terrestrial carbon cycling. <b>2014</b> , 48, 4344-52	40
1890	Soil type mediates effects of land use on soil carbon and nitrogen in the Konya Basin, Turkey. <b>2014</b> , 232-234, 517-527	34
1889	Soil organic matter to soil organic carbon ratios of peatland soil substrates. <b>2014</b> , 235-236, 410-417	25
1888	Ectomycorrhizal fungi contribute to soil organic matter cycling in sub-boreal forests. <b>2014</b> , 8, 699-713	98
1887	Biochar application to soil for climate change mitigation by soil organic carbon sequestration. <b>2014</b> , 177, 651-670	114
1886	Insights into the complete and partial photooxidation of black carbon in surface waters. <b>2014</b> , 16, 721-31	58
1885	Resisting climate change. <b>2014</b> , 4, 760-761	3
1884	Substrate concentration constraints on microbial decomposition. <b>2014</b> , 79, 43-49	52
1883	The fate of soil organic carbon upon erosion, transport and deposition in agricultural landscapes â A review of different concepts. <b>2014</b> , 226, 94-105	125

1882	Decomposition patterns for foliar litter – A theory for influencing factors. <b>2014</b> , 78, 222-232	177
1881	Estimation of carbon sequestration by pine ( <i>Pinus sylvestris</i> L.) ecosystems developed on reforested post-mining sites in Poland on differing mine soil substrates. <b>2014</b> , 73, 209-218	53
1880	Accumulation of aliphatic compounds in soil with increasing mean annual temperature. <b>2014</b> , 76, 118-127	47
1879	Stabilizing Chromium from Leather Waste in Biochar. <b>2014</b> , 2, 1864-1870	23
1878	Lability of C in temperate forest soils: Assessing the role of nitrogen addition and tree species composition. <b>2014</b> , 77, 129-140	19
1877	Biodegradable Organic Carbon in Sediments of an Arsenic-Contaminated Aquifer in Bangladesh. <b>2014</b> , 1, 221-225	49
1876	Soil Organic Matter Characterization Using S3 and S4 Signals from Rock-Eval Pyrolysis. <b>2014</b> , 24, 563-574	13
1875	What's in an EEM? Molecular signatures associated with dissolved organic fluorescence in boreal Canada. <b>2014</b> , 48, 10598-606	213
1874	Chemical analysis and molecular models for calcium-oxygen-carbon interactions in black carbon found in fertile Amazonian anthrosoils. <b>2014</b> , 48, 7445-52	44
1873	Impact of Long-Term Fertilization on Community Structure of Ammonia Oxidizing and Denitrifying Bacteria Based on amoA and nirK Genes in a Rice Paddy from Tai Lake Region, China. <b>2014</b> , 13, 2286-2298	17
1872	Recalcitrant and labile carbon pools in a sub-humid tropical soil under different tillage combinations: A case study of rice-wheat system. <b>2014</b> , 143, 116-122	22
1871	Physical and chemical stabilization of soil organic carbon along a 500-year cultivated soil chronosequence originating from estuarine wetlands: Temporal patterns and land use effects. <b>2014</b> , 196, 10-20	25
1870	Factors controlling soil organic carbon persistence along an eroding hillslope on the loess belt. <b>2014</b> , 77, 187-196	21
1869	Assessing soil constituents and labile soil organic carbon by mid-infrared photoacoustic spectroscopy. <b>2014</b> , 77, 41-50	61
1868	High clay content accelerates the decomposition of fresh organic matter in artificial soils. <b>2014</b> , 77, 100-108	66
1867	Can functional group composition of alkaline isolates from black carbon-rich soils be identified on a sub-100 nm scale?. <b>2014</b> , 235-236, 163-169	11
1866	Short-term bioavailability of carbon in soil organic matter fractions of different particle sizes and densities in grassland ecosystems. <b>2014</b> , 497-498, 29-37	39
1865	Assimilation and accumulation of C by fungi and bacteria attached to soil density fractions. <b>2014</b> , 79, 132-139	12



1864	Warming-related increases in soil CO <sub>2</sub> efflux are explained by increased below-ground carbon flux. <b>2014</b> , 4, 822-827	126
1863	Effects of organic components on the relationships between specific surface areas and organic matter in mudrocks. <b>2014</b> , 133, 24-34	27
1862	Decomposition of added and native organic carbon from physically separated fractions of diverse soils. <b>2014</b> , 50, 613-621	17
1861	Relating microfeatures of soil organic matter to C stabilisation: optical microscopy, SEM-EDS, abiotic oxidation. <b>2014</b> , 50, 623-632	6
1860	Insensitivity of Soil Microbial Activity to Temporal Variation in Soil N in Subarctic Tundra: Evidence from Responses to Large Migratory Grazers. <b>2014</b> , 17, 906-917	28
1859	Unexpected Effects of Chitin, Cellulose, and Lignin Addition on Soil Dynamics in a Wet Tropical Forest. <b>2014</b> , 17, 918-930	10
1858	Spatial patterns of biomass and soil attributes in an estuarine mangrove forest (Yingluo Bay, South China). <b>2014</b> , 133, 993-1005	9
1857	Niche partitioning of bacterial communities in biological crusts and soils under grasses, shrubs and trees in the Kalahari. <b>2014</b> , 23, 1709-1733	38
1856	Changes to particulate versus mineral-associated soil carbon after 50 years of litter manipulation in forest and prairie experimental ecosystems. <b>2014</b> , 119, 341-360	77
1855	Factors controlling decomposition rates of fine root litter in temperate forests and grasslands. <b>2014</b> , 382, 203-218	104
1854	Introducing an improved multi-proxy approach for paleoenvironmental reconstruction of loess-paleosol archives applied on the Late Pleistocene Nussloch sequence (SW Germany). <b>2014</b> , 410, 300-315	46
1853	Interactive biotic and abiotic regulators of soil carbon cycling: evidence from controlled climate experiments on peatland and boreal soils. <b>2014</b> , 20, 2971-82	48
1852	Changes in organic carbon in topsoil and subsoil and microbial community composition caused by repeated additions of organic amendments and N fertilisation in a long-term field experiment in Sweden. <b>2014</b> , 189, 110-118	55
1851	Emissions of CH <sub>4</sub> , CO <sub>2</sub> , and N <sub>2</sub> O from soil at a cattle overwintering area as affected by available C and N. <b>2014</b> , 75, 52-62	9
1850	Comparison of the effects of self-assembly and chemical composition on humic acid mineralization. <b>2014</b> , 73, 96-105	12
1849	Pulse-dynamic and monotonic decline patterns of soil respiration in long term laboratory microcosms. <b>2014</b> , 68, 329-336	18
1848	Alterations in forest detritus inputs influence soil carbon concentration and soil respiration in a Central-European deciduous forest. <b>2014</b> , 74, 106-114	62
1847	Short-Term Stabilization of Organic Matter in Physically, Chemically, and Biochemically Protected Pools in Soils Amended with Municipal Wastes. <b>2014</b> , 42, 487-493	7

1846	Stability and storage of soil organic carbon in a heavy-textured Karst soil from south-eastern Australia. <b>2014</b> , 52, 476	17
1845	Transformation of the organic matter of steppe soils of the Trans-Ural region after their conversion into the reserved regime. <b>2014</b> , 47, 236-244	3
1844	Plant litter chemistry and microbial priming regulate the accrual, composition and stability of soil carbon in invaded ecosystems. <b>2014</b> , 203, 110-24	88
1843	Selective extraction of humic acids from an anthropogenic Amazonian dark earth and from a chemically oxidized charcoal. <b>2014</b> , 50, 1223-1232	45
1842	Long-Term Persistence of Dispersants following the Deepwater Horizon Oil Spill. <b>2014</b> , 1, 295-299	74
1841	Physical Disintegration of Biochar: An Overlooked Process. <b>2014</b> , 1, 326-332	177
1840	Transforming plant carbon into soil carbon: Process-level controls on carbon sequestration. <b>2014</b> , 94, 1065-1073	17
1839	Fatty acids promote fulvic acid intercalation by montmorillonite. <b>2014</b> , 97-98, 53-61	9
1838	Fiber-enhanced Raman multigas spectroscopy: a versatile tool for environmental gas sensing and breath analysis. <b>2014</b> , 86, 5278-85	106
1837	Large changes in carbon storage under different land-use regimes in subtropical seasonally dry forests of southern South America. <b>2014</b> , 197, 68-76	30
1836	Seasonal differences in soil CO <sub>2</sub> efflux and carbon storage in Ntwetwe Pan, Makgadikgadi Basin, Botswana. <b>2014</b> , 219-220, 72-81	21
1835	Dissolved black nitrogen (DBN) in freshwater environments. <b>2014</b> , 68, 1-4	20
1834	Fluorescence characteristics of size-fractionated dissolved organic matter: implications for a molecular assembly based structure?. <b>2014</b> , 55, 40-51	89
1833	Perennially and annually frozen soil carbon differ in their susceptibility to decomposition: Analysis of Subarctic earth hummocks by bioassay, XANES and pyrolysis. <b>2014</b> , 68, 106-116	37
1832	Pyrogenic carbon stocks and storage mechanisms in podzolic soils of fire-affected Quebec black spruce forests. <b>2014</b> , 217-218, 118-128	30
1831	Exogenous phosphorus inputs alter complexity of soil-dissolved organic carbon in agricultural riparian wetlands. <b>2014</b> , 95, 572-80	15
1830	Soil moisture induced changes on fine-scale spatial pattern of soil respiration in a semi-arid sandy grassland. <b>2014</b> , 213, 245-254	18
1829	Properties, processes and ecological functions of floodplain, peatland, and paddy soils. <b>2014</b> , 228-229, 1-4	9

1828	The effects of urea fertilization on carbon sequestration in Douglas-fir plantations of the coastal Pacific Northwest. <b>2014</b> , 318, 341-348	6
1827	Mobilization of colloidal carbon during iron reduction in basaltic soils. <b>2014</b> , 221-222, 139-145	65
1826	Soil burial contributes to deep soil organic carbon storage. <b>2014</b> , 69, 251-264	117
1825	Chemical and carbon isotopic dynamics of grass organic matter during litter decompositions: A litterbag experiment. <b>2014</b> , 69, 106-113	21
1824	Comparison of soil derived tetraether membrane lipid distributions and plant-wax $\delta$ compositions for reconstruction of Canadian Arctic temperatures. <b>2014</b> , 404, 78-88	12
1823	Ryegrass-derived pyrogenic organic matter changes organic carbon and nitrogen mineralization in a temperate forest soil. <b>2014</b> , 69, 291-301	82
1822	Lignin decomposition along an Alpine elevation gradient in relation to physicochemical and soil microbial parameters. <b>2014</b> , 20, 2272-85	21
1821	Carbon dynamics in topsoil and subsoil along a cultivated toposequence. <b>2014</b> , 120, 20-28	16
1820	Functional stoichiometry of soil microbial communities after amendment with stabilised organic matter. <b>2014</b> , 76, 170-178	38
1819	Combined influence of fire and salvage logging on carbon and nitrogen storage in boreal forest soil profiles. <b>2014</b> , 326, 133-141	18
1818	Sustainable biochar effects for low carbon crop production: A 5-crop season field experiment on a low fertility soil from Central China. <b>2014</b> , 129, 22-29	63
1817	Natural and Unnatural Organic Matter in the Atmosphere: Recent Perspectives on the High Molecular Weight Fraction of Organic Aerosol. <b>2014</b> , 87-111	1
1816	Priming of soil organic carbon decomposition induced by corn compared to soybean crops. <b>2014</b> , 75, 273-281	50
1815	The role of lignin and cellulose in the carbon-cycling of degraded soils under semiarid climate and their relation to microbial biomass. <b>2014</b> , 75, 152-160	44
1814	Accelerated soil formation due to paddy management on marshlands (Zhejiang Province, China). <b>2014</b> , 228-229, 67-89	62
1813	Integrated crop-livestock systems: Strategies to achieve synergy between agricultural production and environmental quality. <b>2014</b> , 190, 4-8	347
1812	The use of radiocarbon to constrain current and future soil organic matter turnover and transport in a temperate forest. <b>2014</b> , 119, 372-391	22
1811	Impacts of fire on soil organic carbon stocks in a grazed semi-arid tropical Australian savanna: accounting for landscape variability. <b>2014</b> , 36, 359	10

1810	Soil organic matter dynamics under different land use in grasslands in Inner Mongolia (northern China). <b>2014</b> , 11, 5103-5113	15
1809	Assessing five evolving microbial enzyme models against field measurements from a semiarid savannah—What are the mechanisms of soil respiration pulses?. <b>2014</b> , 41, 6428-6434	34
1808	Response of Mineral Soil Carbon to Clear-Cutting in a Northern Hardwood Forest. <b>2014</b> , 78, 309-318	13
1807	Mineralization of Soil Carbon and Nitrogen Following Physical Disturbance: A Laboratory Assessment. <b>2014</b> , 78, 925-935	23
1806	Can Particulate Organic Matter Reveal Emerging Changes in Soil Organic Carbon?. <b>2014</b> , 78, 1279-1290	11
1805	Predicting Tree Species Origin of Soil Organic Carbon with Near-Infrared Reflectance Spectroscopy. <b>2014</b> , 78, S23-S34	3
1804	Soil Organic Carbon Sequestration Rates under Crop Sequence Diversity, Bio-Covers, and No-Tillage. <b>2014</b> , 78, 1726-1733	24
1803	Soil Aggregate Stability in Different Soil Orders Quantified by Low Dispersive Ultrasonic Energy Levels. <b>2014</b> , 78, 713-723	12
1802	Evaluating soil biogeochemistry parameterizations in Earth system models with observations. <b>2014</b> , 28, 211-222	57
1801	Soil nitrogen dynamics within profiles of a managed moist temperate forest chronosequence consistent with long-term harvesting-induced losses. <b>2014</b> , 119, 1309-1321	12
1800	Eos, Transactions, American Geophysical Union Volume 95, Number 11, 18 March 2014. <b>2014</b> , 95, 93-100	
1799	Soil Organic Carbon Mineralization as Affected by Cyclical Temperature Fluctuations in a Karst Region of Southwestern China. <b>2015</b> , 25, 512-523	19
1798	Emission of CO <sub>2</sub> from biochar-amended soils and implications for soil organic carbon. <b>2015</b> , 7, 1294-1304	62
1797	Fine roots are the dominant source of recalcitrant plant litter in sugar maple-dominated northern hardwood forests. <b>2015</b> , 208, 715-26	78
1796	Manganese in the litter fall-forest floor continuum of boreal and temperate pine and spruce forest ecosystems—a review. <b>2015</b> , 358, 248-260	34
1795	Do the invasive trees, <i>Ailanthus altissima</i> and <i>Robinia pseudoacacia</i> , alter litterfall dynamics and soil properties of riparian ecosystems in Central Spain?. <b>2015</b> , 396, 311-324	23
1794	No general soil carbon sequestration under Central European short rotation coppices. <b>2015</b> , 7, 727-740	46
1793	Change in water extractable organic carbon and microbial PLFAs of biochar during incubation with an acidic paddy soil. <b>2015</b> , 53, 763	1

1792	Soil organic matter characterization of temperate peatland soil with FTIR-spectroscopy: effects of mire type and drainage intensity. <b>2015</b> , 66, 847-858	43
1791	Soil organic matter composition and quality across fire severity gradients in coniferous and deciduous forests of the southern boreal region. <b>2015</b> , 120, 1124-1141	32
1790	Positive priming of terrestrially derived dissolved organic matter in a freshwater microcosm system. <b>2015</b> , 42, 5460-5467	72
1789	Soil mulching significantly enhances yields and water and nitrogen use efficiencies of maize and wheat: a meta-analysis. <b>2015</b> , 5, 16210	176
1788	Long-term rice cultivation stabilizes soil organic carbon and promotes soil microbial activity in a salt marsh derived soil chronosequence. <b>2015</b> , 5, 15704	28
1787	Protection of soil carbon within macro-aggregates depends on intra-aggregate pore characteristics. <b>2015</b> , 5, 16261	70
1786	Does metal pollution matter with C retention by rice soil?. <b>2015</b> , 5, 13233	12
1785	Soil Organic Matter Functional Group Composition in Relation to Organic Carbon, Nitrogen, and Phosphorus Fractions in Organically Managed Tomato Fields. <b>2015</b> , 79, 772-782	63
1784	Short-term parasite-infection alters already the biomass, activity and functional diversity of soil microbial communities. <b>2014</b> , 4, 6895	11
1783	Exometabolite niche partitioning among sympatric soil bacteria. <b>2015</b> , 6, 8289	120
1782	The role of bottom-up and top-down interactions in determining microbial and fungal diversity and function. 260-287	10
1781	Biogeochemical Processes Underpin Ecosystem Services. <b>2015</b> , 79-99	2
1780	What happens to soil organic carbon as coastal marsh ecosystems change in response to increasing salinity? An exploration using ramped pyrolysis. <b>2015</b> , 16, 2322-2335	21
1779	Soil Instrumental Methods. <b>2015</b> , 1-27	1
1778	Ferrous iron electron transfer and Fe exchange: effect of organic carbon. <b>2015</b> , 12, 52	19
1777	Pyrogenic Organic Matter in Japanese Andosols: Occurrence, Transformation, and Function. <b>2015</b> , 29-62	4
1776	Biochar and Soil Carbon Sequestration. <b>2015</b> , 175-197	11
1775	Mineralizable Nitrogen Responds Differently to Manure Type in Contrasting Soil Textures. <b>2015</b> , 79, 1396-1405	13

1774	Plant Species Rather Than Climate Greatly Alters the Temporal Pattern of Litter Chemical Composition During Long-Term Decomposition. <b>2015</b> , 5, 15783	10
1773	Controls on Soil Carbon Stocks in El Yunque National Forest, Puerto Rico. <b>2015</b> , 79, 294-304	21
1772	Comparative characterization of the fractional and group composition of humus in embryozems of technogenic landscapes in the mountain forest zone of the Kuznetsk basin. <b>2015</b> , 8, 789-797	0
1771	Assessment of changes in different fractions of the organic carbon in a soil amended by nanozeolite and some plant residues: incubation study. <b>2015</b> , 4, 239-247	2
1770	Soil carbon sequestration in cool-temperate dryland pastures: mechanisms and management options. <b>2015</b> , 53, 349	9
1769	Variable Temperature Infrared Spectroscopy Investigations of Benzoic Acid Desorption from Sodium and Calcium Montmorillonite Clays. <b>2015</b> , 69, 1381-9	5
1768	Non-additive effects of species mixing on litter mass loss and chemical properties in a Mongolian pine plantation of Northeast China. <b>2015</b> , 396, 339-351	11
1767	Peatland vascular plant functional types affect methane dynamics by altering microbial community structure. <b>2015</b> , 103, 925-934	69
1766	Living and dead soil organic matter under different land uses on a Mediterranean island. <b>2015</b> , 66, 298-310	4
1765	Decadally cycling soil carbon is more sensitive to warming than faster-cycling soil carbon. <b>2015</b> , 21, 4602-12	26
1764	Explicitly representing soil microbial processes in Earth system models. <b>2015</b> , 29, 1782-1800	197
1763	Soil organic carbon across scales. <b>2015</b> , 21, 3561-74	79
1762	Observations of $^{14}\text{CO}_2$ in ecosystem respiration from a temperate deciduous forest in Northern Wisconsin. <b>2015</b> , 120, 600-616	5
1761	Simple measures of climate, soil properties and plant traits predict national-scale grassland soil carbon stocks. <b>2015</b> , 52, 1188-1196	65
1760	Long-term effects of tillage, nutrient application and crop rotation on soil organic matter quality assessed by NMR spectroscopy. <b>2015</b> , 31, 358-366	29
1759	Constraining a coupled erosion and soil organic carbon model using hillslope-scale patterns of carbon stocks and pool composition. <b>2015</b> , 120, 452-465	12
1758	Large-scale identification of hot spots for soil carbon demand under climate change and bioenergy production. <b>2015</b> , 178, 199-208	10
1757	Inverse Modeling of $\text{CO}_2$ Evolved During Laboratory Soil Incubation to Link Modeled Pools in CENTURY With Measured Soil Properties. <b>2015</b> , 180, 28-32	3

1756	Negative priming of native soil organic carbon mineralization by oilseed biochars of contrasting quality. <b>2015</b> , 66, 714-721	29
1755	Long-term reindeer grazing limits warming-induced increases in CO <sub>2</sub> released by tundra heath soil: potential role of soil C quality. <b>2015</b> , 10, 094020	4
1754	Climate impact of beef: an analysis considering multiple time scales and production methods without use of global warming potentials. <b>2015</b> , 10, 085002	25
1753	Vulnerability of Soil and Its Associated Organic Matter to Degradation in a Subtropical Region: A Study From S Paulo State, Brazil. <b>2015</b> , 24, 65-90	3
1752	Representing life in the Earth system with soil microbial functional traits in the MIMICS model. <b>2015</b> , 8, 1789-1808	114
1751	Convergent modelling of past soil organic carbon stocks but divergent projections. <b>2015</b> , 12, 4373-4383	36
1750	Chemical footprints of anthropogenic nitrogen deposition on recent soil C : N ratios in Europe. <b>2015</b> , 12, 4113-4119	24
1749	Soil Health and Related Ecosystem Services in Organic Agriculture. <b>2015</b> , 4, 116	18
1748	Vertical partitioning and controlling factors of gradient-based soil carbon dioxide fluxes in two contrasted soil profiles along a loamy hillslope. <b>2015</b> , 12, 4637-4649	12
1747	Observation-based modelling of permafrost carbon fluxes with accounting for deep carbon deposits and thermokarst activity. <b>2015</b> , 12, 3469-3488	87
1746	Soil redistribution and weathering controlling the fate of geochemical and physical carbon stabilization mechanisms in soils of an eroding landscape. <b>2015</b> , 12, 1357-1371	27
1745	Interacting effects of climate and agriculture on fluvial DOM in temperate and subtropical catchments. <b>2015</b> , 19, 2377-2394	25
1744	Dynamic C and N stocks âkey factors controlling the C gas exchange of maize in heterogenous peatland. <b>2015</b> , 12, 2737-2752	14
1743	Storage and transformation of organic matter fractions in cryoturbated permafrost soils across the Siberian Arctic. <b>2015</b> , 12, 4525-4542	67
1742	Nitrogen Nutrition of Trees in Temperate ForestsâThe Significance of Nitrogen Availability in the Pedosphere and Atmosphere. <b>2015</b> , 6, 2820-2835	59
1741	Vegetation and elevation influence the timing and magnitude of soil CO <sub>2</sub> efflux in a humid, topographically complex watershed. <b>2015</b> , 12, 2975-2994	9
1740	Carbon Cycling, Climate Regulation, and Disturbances in Canadian Forests: Scientific Principles for Management. <b>2015</b> , 4, 83-118	2
1739	Litter decomposition rate and soil organic matter quality in a patchwork heathland of southern Norway. <b>2015</b> , 1, 207-216	18

1738	Plant growth-promoting bacteria as inoculants in agricultural soils. <b>2015</b> , 38, 401-19	486
1737	Organic Carbon Accumulation in Topsoil Following Afforestation with Willow: Emphasis on Leaf Litter Decomposition and Soil Organic Matter Quality. <b>2015</b> , 6, 769-793	9
1736	Enhanced Soil Carbon Storage under Agroforestry and Afforestation in Subtropical China. <b>2015</b> , 6, 2307-2323	11
1735	The Role of Plant-Microbe Interactions and Their Exploitation for Phytoremediation of Air Pollutants. <b>2015</b> , 16, 25576-604	83
1734	Utilizing colored dissolved organic matter to derive dissolved black carbon export by arctic rivers. <b>2015</b> , 3,	58
1733	Microbial carbon recycling – an underestimated process controlling soil carbon dynamics – Part 1: A long-term laboratory incubation experiment. <b>2015</b> , 12, 5929-5940	19
1732	Differences in SOM decomposition and temperature sensitivity among soil aggregate size classes in a temperate grasslands. <b>2015</b> , 10, e0117033	15
1731	Properties of soil pore space regulate pathways of plant residue decomposition and community structure of associated bacteria. <b>2015</b> , 10, e0123999	72
1730	Depth-Dependent Mineral Soil CO <sub>2</sub> Production Processes: Sensitivity to Harvesting-Induced Changes in Soil Climate. <b>2015</b> , 10, e0134171	5
1729	Macro-particle charcoal C content following prescribed burning in a mixed-conifer forest, Sierra Nevada, California. <b>2015</b> , 10, e0135014	12
1728	Influence of Tree Species Composition and Community Structure on Carbon Density in a Subtropical Forest. <b>2015</b> , 10, e0136984	23
1727	Living Shorelines: Coastal Resilience with a Blue Carbon Benefit. <b>2015</b> , 10, e0142595	71
1726	Plant growth conditions alter phytolith carbon. <b>2015</b> , 6, 753	24
1725	Characteristics and Functions of Labile Organic Carbon in Coastal Wetland Soils of the Mississippi River Deltaic Plain. <b>2015</b> , 315-336	0
1724	BIOCHAR: PYROGENIC CARBON FOR AGRICULTURAL USE - A CRITICAL REVIEW. <b>2015</b> , 39, 321-344	105
1723	The regulation by phenolic compounds of soil organic matter dynamics under a changing environment. <b>2015</b> , 2015, 825098	50
1722	Microbial carbon recycling: an underestimated process controlling soil carbon dynamics – Part 2: A C<sub>3</sub>-C<sub>4</sub> vegetation change field labelling experiment. <b>2015</b> , 12, 6291-6299	7
1721	Chemical Indicators of Cryoturbation and Microbial Processing throughout an Alaskan Permafrost Soil Depth Profile. <b>2015</b> , 79, 783-793	20



1720	Microbiological and faunal soil attributes of coffee cultivation under different management systems in Brazil. <b>2015</b> , 75, 894-905	7
1719	An Economic Assessment of Soil Carbon Sequestration with Biochar in Germany. <b>2015</b> ,	1
1718	Controls on terrestrial carbon feedbacks by productivity versus turnover in the CMIP5 Earth System Models. <b>2015</b> , 12, 5211-5228	58
1717	Distribution of black carbon in ponderosa pine forest floor and soils following the High Park wildfire. <b>2015</b> , 12, 3029-3039	36
1716	Absence of a priming effect on dissolved organic carbon degradation in lake water. <b>2015</b> , 60, 159-168	65
1715	Biodiversity conservation under energy limitation: Possible consequences of human productivity appropriation for species richness, ecosystem functioning, and food production. <b>2015</b> , 16, 146-149	11
1714	Chemical footprints of anthropogenic nitrogen deposition on recent soil C : N ratios in Europe. <b>2015</b> ,	3
1713	Humic acid adsorption onto cationic cellulose nanofibers for bioinspired removal of copper(II) and a positively charged dye. <b>2015</b> , 11, 5294-300	60
1712	Long-term forest soil warming alters microbial communities in temperate forest soils. <b>2015</b> , 6, 104	187
1711	Sub-surface soil carbon changes affects biofuel greenhouse gas emissions. <b>2015</b> , 81, 31-34	15
1710	Carbon availability regulates soil respiration response to nitrogen and temperature. <b>2015</b> , 88, 158-164	53
1709	Loss of labile organic carbon from subsoil due to land-use changes in subtropical China. <b>2015</b> , 88, 148-157	75
1708	Soil organic matter and the extracellular microbial matrix show contrasting responses to C and N availability. <b>2015</b> , 88, 257-267	37
1707	Exploring the multiplicity of soil-human interactions: organic carbon content, agro-forest landscapes and the Italian local communities. <b>2015</b> , 187, 283	2
1706	Fungal traits that drive ecosystem dynamics on land. <b>2015</b> , 79, 243-62	266
1705	Persistence of dissolved organic matter in lakes related to its molecular characteristics. <b>2015</b> , 8, 454-457	288
1704	Investigating microbial transformations of soil organic matter: synthesizing knowledge from disparate fields to guide new experimentation. <b>2015</b> , 1, 313-330	19
1703	Representing life in the Earth system with soil microbial functional traits in the MIMICS model. <b>2015</b> ,	18

1702	Balancing the environmental benefits of reforestation in agricultural regions. <b>2015</b> , 17, 301-317	84
1701	Current developments in soil organic matter modeling and the expansion of model applications: a review. <b>2015</b> , 10, 123004	113
1700	Influence and Significance of Mineral Surface on Organic Matter Occurrence in Shale. <b>2015</b> , 89, 180-181	5
1699	Hydration and diffusion processes shape microbial community organization and function in model soil aggregates. <b>2015</b> , 51, 9804-9827	72
1698	Impacts of endophyte infection of ryegrass on rhizosphere metabolome and microbial community. <b>2015</b> , 66, 1049	5
1697	Social dynamics within decomposer communities lead to nitrogen retention and organic matter build-up in soils. <b>2015</b> , 6, 8960	58
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1695	The Importance of Ectomycorrhizal Networks for Nutrient Retention and Carbon Sequestration in Forest Ecosystems. <b>2015</b> , 69-90	3
1694	Pervasive and strong effects of plants on soil chemistry: a meta-analysis of individual plant 'Zinke' effects. <b>2015</b> , 282, 20151001	69
1693	Differences in fertilization impacts on organic carbon content and stability in a paddy and an upland soil in subtropical China. <b>2015</b> , 397, 189-200	18
1692	Effect of dairy manure type on the carbon balance of mowed grassland in Nasu, Japan: comparison between manure slurry plus synthetic fertilizer plots and farmyard manure plus synthetic fertilizer plots. <b>2015</b> , 61, 736-746	9
1691	Microorganisms and their substrate utilization patterns in topsoil and subsoil layers of two silt loams, differing in soil organic C accumulation due to colluvial processes. <b>2015</b> , 91, 310-317	31
1690	Influence of different tree-harvesting intensities on forest soil carbon stocks in boreal and northern temperate forest ecosystems. <b>2015</b> , 351, 9-19	77
1689	NanoSIMS investigation of glycine-derived C and N retention with soil organo-mineral associations. <b>2015</b> , 125, 303-313	15
1688	Impact of soil and water conservation on soil organic carbon content in a catchment of the middle Han River, China. <b>2015</b> , 74, 6503-6510	13
1687	Annual burning of a tallgrass prairie inhibits C and N cycling in soil, increasing recalcitrant pyrogenic organic matter storage while reducing N availability. <b>2015</b> , 21, 2321-33	48
1686	Priming of soil organic matter decomposition scales linearly with microbial biomass response to litter input in steppe vegetation. <b>2015</b> , 124, 649-657	48
1685	Incipient changes of lignin and substituted fatty acids under N addition in a Chinese forest soil. <b>2015</b> , 79, 14-20	11

1684	Pyrolytic appraisal of the lignin signature in soil humic acids: Assessment of its usefulness as carbon sequestration marker. <b>2015</b> , 113, 107-115	18
1683	Modeling the Dynamics of Soil Organic Matter and Nutrient Cycling. <b>2015</b> , 505-537	10
1682	Carbon Cycling: The Dynamics and Formation of Organic Matter. <b>2015</b> , 339-382	24
1681	Surficial gains and subsoil losses of soil carbon and nitrogen during secondary forest development. <b>2015</b> , 21, 986-96	77
1680	The importance of tree species and soil taxonomy to modeling forest soil carbon stocks in Canada. <b>2015</b> , 4, 114-125	12
1679	Soil organic carbon stocks and CO <sub>2</sub> effluxes of native and exotic pine plantations in subtropical China. <b>2015</b> , 128, 167-173	23
1678	Climate-Change Effects on Soils: Accelerated Weathering, Soil Carbon, and Elemental Cycling. <b>2015</b> , 131, 111-172	18
1677	Priming of the decomposition of ageing soil organic matter: concentration dependence and microbial control. <b>2015</b> , 29, 285-296	42
1676	Revisiting the hypothesis that fungal-to-bacterial dominance characterizes turnover of soil organic matter and nutrients. <b>2015</b> , 85, 457-472	87
1675	Effects of nitrogen fertilizer on the composition of maize roots and their decomposition at different soil depths. <b>2015</b> , 67, 43-50	12
1674	Moving beyond the black-box: fungal traits, community structure, and carbon sequestration in forest soils. <b>2015</b> , 205, 1378-1380	32
1673	Contrasting regimes for organic matter degradation in the East Siberian Sea and the Laptev Sea assessed through microbial incubations and molecular markers. <b>2015</b> , 170, 11-22	19
1672	Pre-aged soil organic carbon as a major component of the Yellow River suspended load: Regional significance and global relevance. <b>2015</b> , 414, 77-86	107
1671	Distinctive organic matter pools among particle-size fractions detected by solid-state <sup>13</sup> C-NMR, <sup>13</sup> C and <sup>15</sup> N analyses only after strong dispersion in an allophanic Andisol. <b>2015</b> , 61, 242-248	10
1670	Metabolic theory predicts whole-ecosystem properties. <b>2015</b> , 112, 2617-22	78
1669	Changes in root architecture under elevated concentrations of CO <sub>2</sub> and nitrogen reflect alternate soil exploration strategies. <b>2015</b> , 205, 1153-1163	34
1668	Management of crop water under drought: a review. <b>2015</b> , 35, 401-442	245
1667	Characterization of natural organic matter in bentonite clays for potential use in deep geological repositories for used nuclear fuel. <b>2015</b> , 54, 43-53	18

1666	Soil carbon dynamics following land-use change varied with temperature and precipitation gradients: evidence from stable isotopes. <b>2015</b> , 21, 2762-2772	70
1665	Soil warming and nitrogen deposition alter soil organic matter composition at the molecular-level. <b>2015</b> , 123, 391-409	54
1664	Carbon accumulates in organo-mineral complexes after long-term liquid dairy manure application. <b>2015</b> , 202, 108-119	24
1663	No evidence of aquatic priming effects in hyporheic zone microcosms. <b>2014</b> , 4, 5187	55
1662	Organic matter decomposition: bridging the gap between RockEval pyrolysis and chemical characterization (CPMAS 13C NMR). <b>2015</b> , 122, 101-111	31
1661	Comparison of organic matter composition in agricultural versus forest affected headwaters with special emphasis on organic nitrogen. <b>2015</b> , 49, 2081-90	56
1660	Distinct temperature sensitivity of soil carbon decomposition in forest organic layer and mineral soil. <b>2014</b> , 4, 6512	23
1659	Stable isotope ratios of nonexchangeable hydrogen in organic matter of soils and plants along a 2100-km climosequence in Argentina: New insights into soil organic matter sources and transformations?. <b>2015</b> , 152, 54-71	7
1658	Mineral-Organic Associations: Formation, Properties, and Relevance in Soil Environments. <b>2015</b> , 130, 1-140	495
1657	The roles of inoculants' carbon source use in the biocontrol of potato scab disease. <b>2015</b> , 61, 257-62	3
1656	Soil microbial community composition does not predominantly determine the variance of heterotrophic soil respiration across four subtropical forests. <b>2015</b> , 5, 7854	21
1655	Invasive Earthworms Deplete Key Soil Inorganic Nutrients (Ca, Mg, K, and P) in a Northern Hardwood Forest. <b>2015</b> , 18, 89-102	43
1654	Impact of Exotic Earthworms on Organic Carbon Sorption on Mineral Surfaces and Soil Carbon Inventories in a Northern Hardwood Forest. <b>2015</b> , 18, 16-29	20
1653	Climatic patterns modulate ecosystem and soil respiration responses to fertilization in an alpine meadow on the Tibetan Plateau, China. <b>2015</b> , 30, 3-13	21
1652	Soil aggregate stability to predict organic carbon outputs from soils. <b>2015</b> , 243-244, 205-213	95
1651	Predicting the long-term fate of buried organic carbon in colluvial soils. <b>2015</b> , 29, 65-79	19
1650	Drying and substrate concentrations interact to inhibit decomposition of carbon substrates added to combusted Inceptisols from a boreal forest. <b>2015</b> , 51, 525-533	6
1649	Ectomycorrhizal fungi - potential organic matter decomposers, yet not saprotrophs. <b>2015</b> , 205, 1443-1447	379

1648	Litter type control on soil C and N stabilization dynamics in a temperate forest. <b>2015</b> , 21, 1358-67	46
1647	Plant-soil feedbacks and the partial recovery of soil spatial patterns on abandoned well pads in a sagebrush shrubland. <b>2015</b> , 25, 3-10	11
1646	The Role of Critical Zone Observatories in Critical Zone Science. <b>2015</b> , 15-78	41
1645	Soil Geochemistry in the Critical Zone: Influence on Atmosphere, Surface- and Groundwater Composition. <b>2015</b> , 173-201	5
1644	Predicting soil organic matter stability in agricultural fields through carbon and nitrogen stable isotopes. <b>2015</b> , 88, 29-38	36
1643	In situ visualisation and characterisation of the capacity of highly reactive minerals to preserve soil organic matter (SOM) in colloids at submicron scale. <b>2015</b> , 138, 225-32	33
1642	Towards a mechanistic understanding of carbon stabilization in manganese oxides. <b>2015</b> , 6, 7628	69
1641	Engineering soil organic matter quality: Biodiesel Co-Product (BCP) stimulates exudation of nitrogenous microbial biopolymers. <b>2015</b> , 259-260, 205-212	4
1640	Individual-based modeling of soil organic matter in NetLogo: Transparent, user-friendly, and open. <b>2015</b> , 71, 39-45	25
1639	Control of climate and litter quality on leaf litter decomposition in different climatic zones. <b>2015</b> , 128, 791-802	12
1638	Relating the biological stability of soil organic matter to energy availability in deep tropical soil profiles. <b>2015</b> , 89, 162-171	21
1637	Land use change effects on carbon and nitrogen stocks in the Pyrenees during the last 150 years: A modeling approach. <b>2015</b> , 312, 322-334	12
1636	Effects of forest management on productivity and carbon sequestration: A review and hypothesis. <b>2015</b> , 355, 124-140	110
1635	Metabolising old soil carbon: Simply a matter of simple organic matter?. <b>2015</b> , 88, 128-136	27
1634	Contribution of sorption, DOC transport and microbial interactions to the <sup>14</sup> C age of a soil organic carbon profile: Insights from a calibrated process model. <b>2015</b> , 88, 390-402	91
1633	Advanced solvent based methods for molecular characterization of soil organic matter by high-resolution mass spectrometry. <b>2015</b> , 87, 5206-15	120
1632	Plant growth improvement mediated by nitrate capture in co-composted biochar. <b>2015</b> , 5, 11080	200
1631	The compositional evolution of dissolved and particulate organic matter along the lower Amazon River—Bidos to the ocean. <b>2015</b> , 177, 244-256	58

1630	Phosphorus fractions and organic matter chemistry under different land use on Humic Cambisols in Southern Brazil. <b>2015</b> , 5, 140-149	10
1629	Deciphering sedimentary organic matter sources: Insights from radiocarbon measurements and NMR spectroscopy. <b>2015</b> , 60, 739-753	6
1628	Ecological interpretations of nitrogen isotope ratios of terrestrial plants and soils. <b>2015</b> , 396, 1-26	291
1627	Temperature response of soil organic matter mineralisation in arctic soil profiles. <b>2015</b> , 88, 236-246	35
1626	Effects of environmental and biotic factors on carbon isotopic fractionation during decomposition of soil organic matter. <b>2015</b> , 5, 11043	38
1625	Selective stabilization of aliphatic organic carbon by iron oxide. <b>2015</b> , 5, 11214	63
1624	From humic substances to soil organic matter—microbial contributions. In honour of Konrad Haider and James P. Martin for their outstanding research contribution to soil science. <b>2015</b> , 15, 1865-1881	33
1623	A general mathematical framework for representing soil organic matter dynamics. <b>2015</b> , 85, 505-524	57
1622	Are interactions between organic compounds and nanoscale weathering minerals the key drivers of carbon storage in soils?. <b>2015</b> , 49, 3997-8	39
1621	Biochar stimulates plant growth but not fruit yield of processing tomato in a fertile soil. <b>2015</b> , 207, 163-170	115
1620	Long-term controls on soil organic carbon with depth and time: A case study from the Cowlitz River Chronosequence, WA USA. <b>2015</b> , 247-248, 73-87	72
1619	Plant-associated fungal communities in the light of metaomics. <b>2015</b> , 75, 1-25	120
1618	Reconstruction of environmental changes during the late glacial and Holocene reflected in a soil-sedimentary sequence from the lower Selenga River valley, Lake Baikal region, Siberia, assessed by lipid molecular proxies. <b>2015</b> , 365, 190-202	7
1617	Will changes in climate and land use affect soil organic matter composition? Evidence from an ecotonal climosequence. <b>2015</b> , 253-254, 48-60	21
1616	Ten-year results of seedling growth on calcareous soils in the interior of British Columbia, Canada. <b>2015</b> , 346, 65-80	2
1615	Plant species effects on nutrient cycling: revisiting litter feedbacks. <b>2015</b> , 30, 357-63	270
1614	Mineral soil carbon pool responses to forest clearing in Northeastern hardwood forests. <b>2015</b> , 7, 1283-1293	20
1613	Microbial contribution to SOM quantity and quality in density fractions of temperate arable soils. <b>2015</b> , 81, 311-322	82

1612	Significance of microbial asynchronous anabolism to soil carbon dynamics driven by litter inputs. <b>2015</b> , 5, 9575	22
1611	Fresh carbon input differentially impacts soil carbon decomposition across natural and managed systems. <b>2015</b> , 96, 2806-13	25
1610	Nitrogen limitation on land: how can it occur in Earth system models?. <b>2015</b> , 21, 1777-93	88
1609	Soil-specific effects of urea addition on mineralization of aromatic and proteinaceous components of humic-like substances in three agricultural soils. <b>2015</b> , 51, 615-623	2
1608	Effect of the Relative Abundance of Conifers Versus Hardwoods on Soil $\delta^{13}C$ Enrichment with Soil Depth in Eastern Canadian forests. <b>2015</b> , 18, 629-642	10
1607	Long-term development of soil organic carbon and nitrogen stocks after shelterwood- and clear-cutting in a mountain forest in the Bavarian Limestone Alps. <b>2015</b> , 134, 623-640	14
1606	Climatic and landscape influences on soil moisture are primary determinants of soil carbon fluxes in seasonally snow-covered forest ecosystems. <b>2015</b> , 123, 447-465	37
1605	A new conceptual model on the fate and controls of fresh and pyrolyzed plant litter decomposition. <b>2015</b> , 124, 27-44	56
1604	Catalytic kinetics and activation energy of soil peroxidases across ecosystems of differing lignin chemistries. <b>2015</b> , 124, 113-129	17
1603	Subtropical giant podzol chronosequence reveals that soil carbon stabilisation is not governed by litter quality. <b>2015</b> , 124, 205-217	9
1602	After the flood: changing dissolved organic carbon bioavailability and bacterial growth following inflows to estuaries. <b>2015</b> , 124, 219-233	20
1601	Practical applications of thermogravimetry in soil science. <b>2015</b> , 120, 471-480	15
1600	Soil microbial community composition rather than litter quality is linked with soil organic carbon chemical composition in plantations in subtropical China. <b>2015</b> , 15, 1094-1103	25
1599	Variations of soil aggregates and soil organic carbon mineralization across forest types on the northern slope of Changbai Mountain. <b>2015</b> , 35, 1-7	62
1598	Water-soluble organic acids in cryomorphic peat soils of the southeastern Bolshozemelkaya tundra. <b>2015</b> , 48, 250-256	8
1597	Variation in stocks and distribution of organic C in soils across 21 eastern Canadian temperate and boreal forests. <b>2015</b> , 345, 29-38	26
1596	Carbon sequestration in a limestone quarry mine soil amended with sewage sludge. <b>2015</b> , 31, 270-278	11
1595	Effects of climate extremes on the terrestrial carbon cycle: concepts, processes and potential future impacts. <b>2015</b> , 21, 2861-80	454

1594	Quantification of refractory organic material in Amazon mudbanks of the French Guiana Coast. <b>2015</b> , 363, 93-101	8
1593	Parent material and vegetation influence soil microbial community structure following 30-years of rock weathering and pedogenesis. <b>2015</b> , 69, 383-94	19
1592	The molecular composition of dissolved organic matter in forest soils as a function of pH and temperature. <b>2015</b> , 10, e0119188	52
1591	Two decades of warming increases diversity of a potentially lignolytic bacterial community. <b>2015</b> , 6, 480	50
1590	Molecular chemistry in humic Ferralsols from Brazilian Cerrado and forest biomes indicates a major contribution from black carbon in the subsoil. <b>2015</b> , 113, 518-528	15
1589	Permafrost carbon-climate feedback is sensitive to deep soil carbon decomposability but not deep soil nitrogen dynamics. <b>2015</b> , 112, 3752-7	190
1588	Lignin decomposition is sustained under fluctuating redox conditions in humid tropical forest soils. <b>2015</b> , 21, 2818-2828	46
1587	Organic acid induced release of nutrients from metal-stabilized soil organic matter – The unbutton model. <b>2015</b> , 84, 168-176	136
1586	Association of soil organic carbon with physically separated soil fractions in different land uses of Costa Rica. <b>2015</b> , 65, 448-459	
1585	Effects of litter traits, soil biota, and soil chemistry on soil carbon stocks at a common garden with 14 tree species. <b>2015</b> , 123, 313-327	61
1584	Effects of Cultivation and Alternative Vineyard Management Practices on Soil Carbon Storage in Diverse Mediterranean Landscapes: A Review of the Literature. <b>2015</b> , 39, 516-550	14
1583	Aggregate dynamics and associated soil organic matter in topsoils of two 2,000-year paddy soil chronosequences. <b>2015</b> , 15, 510-522	11
1582	Ecosystems in four dimensions. <b>2015</b> , 206, 883-885	13
1581	The priming effect of soluble carbon inputs in organic and mineral soils from a temperate forest. <b>2015</b> , 178, 1239-50	36
1580	Plant diversity increases soil microbial activity and soil carbon storage. <b>2015</b> , 6, 6707	575
1579	Mineral protection of soil carbon counteracted by root exudates. <b>2015</b> , 5, 588-595	443
1578	Labile, recalcitrant, microbial carbon and nitrogen and the microbial community composition at two <i>Abies faxoniana</i> forest elevations under elevated temperatures. <b>2015</b> , 91, 1-13	46
1577	Microbial physiology and necromass regulate agricultural soil carbon accumulation. <b>2015</b> , 91, 279-290	150



1576	Labile substrate availability controls temperature sensitivity of organic carbon decomposition at different soil depths. <b>2015</b> , 126, 85-98	31
1575	Decomposition by ectomycorrhizal fungi alters soil carbon storage in a simulation model. <b>2015</b> , 6, art29	25
1574	Redefining fine roots improves understanding of below-ground contributions to terrestrial biosphere processes. <b>2015</b> , 207, 505-18	593
1573	Ancient low-molecular-weight organic acids in permafrost fuel rapid carbon dioxide production upon thaw. <b>2015</b> , 112, 13946-51	155
1572	Divergent responses of organic matter composition to incubation temperature. <b>2015</b> , 259-260, 279-287	2
1571	Agricultural intensification and the functional capacity of soil microbes on smallholder African farms. <b>2015</b> , 52, 744-752	31
1570	Living roots magnify the response of soil organic carbon decomposition to temperature in temperate grassland. <b>2015</b> , 21, 1368-75	18
1569	Mechanisms of soil carbon accrual and storage in bioenergy cropping systems. <b>2015</b> , 7, 161-174	77
1568	Bioenergy crop greenhouse gas mitigation potential under a range of management practices. <b>2015</b> , 7, 366-374	52
1567	When do grazers accelerate or decelerate soil carbon and nitrogen cycling in tundra? A test of theory on grazing effects in fertile and infertile habitats. <b>2015</b> , 124, 593-602	29
1566	Mineralization of organic matter in gray forest soil and typical chernozem with degraded structure due to physical impacts. <b>2015</b> , 48, 1136-1148	4
1565	Benthic-pelagic coupling of nutrients and dissolved organic matter composition in an intertidal sandy beach. <b>2015</b> , 176, 150-163	52
1564	How does crop residue removal affect soil organic carbon and yield? A hierarchical analysis of management and environmental factors. <b>2015</b> , 81, 345-355	29
1563	Managing soil carbon stocks to enhance the resilience of urban ecosystems. <b>2015</b> , 6, 35-50	48
1562	Permafrost thaw and resulting soil moisture changes regulate projected high-latitude CO <sub>2</sub> and CH <sub>4</sub> emissions. <b>2015</b> , 10, 094011	165
1561	Formation of soil organic matter via biochemical and physical pathways of litter mass loss. <b>2015</b> , 8, 776-779	615
1560	Major mechanisms contributing to the macrofauna-mediated slow down of litter decomposition. <b>2015</b> , 91, 23-31	25
1559	Fate of Soil Organic Carbon and Polycyclic Aromatic Hydrocarbons in a Vineyard Soil Treated with Biochar. <b>2015</b> , 49, 11037-44	34

1558	Simulating Forest Recovery Following Disturbances: Vegetation Dynamics and Biogeochemistry. <b>2015</b> , 263-285	2
1557	Maize lines with different nitrogen use efficiency select bacterial communities with different $\beta$ -glucosidase-encoding genes and glucosidase activity in the rhizosphere. <b>2015</b> , 51, 995-1004	31
1556	Soil aggregate size mediates the impacts of cropping regimes on soil carbon and microbial communities. <b>2015</b> , 91, 169-181	107
1555	Competitive sorption of microbial metabolites on an iron oxide mineral. <b>2015</b> , 90, 34-41	28
1554	The contentious nature of soil organic matter. <i>Nature</i> , <b>2015</b> , 528, 60-8	50.4 1532
1553	Are above- and below-ground phenology in sync?. <b>2015</b> , 205, 1054-61	111
1552	Arbuscular mycorrhizal fungi reduce decomposition of woody plant litter while increasing soil aggregation. <b>2015</b> , 81, 323-328	101
1551	Microbial degradation of terrigenous dissolved organic matter and potential consequences for carbon cycling in brown-water streams. <b>2014</b> , 4, 4981	113
1550	Rhizosphere processes are quantitatively important components of terrestrial carbon and nutrient cycles. <b>2015</b> , 21, 2082-94	283
1549	Riverine DOM. <b>2015</b> , 509-533	67
1548	Revisiting molecular characteristics responsive for the aromaticity of soil humic acids. <b>2015</b> , 15, 781-791	21
1547	Reasons Behind the Long-Term Stability of Dissolved Organic Matter. <b>2015</b> , 369-388	50
1546	Soil respiration is not limited by reductions in microbial biomass during long-term soil incubations. <b>2015</b> , 81, 304-310	40
1545	The use of solid-phase fluorescence spectroscopy in the characterisation of organic matter transformations. <b>2015</b> , 134, 453-459	17
1544	Indicators for soil organic matter quality in no-till soils under perennial crops in Central Sweden. <b>2015</b> , 148, 74-84	6
1543	Rhizosphere priming can promote mobilisation of N-rich compounds from soil organic matter. <b>2015</b> , 81, 236-243	93
1542	Surveying the carbon pools of mountain soils: A comparison of physical fractionation and Rock-Eval pyrolysis. <b>2015</b> , 241-242, 279-288	23
1541	Dry-rewetting cycles regulate wheat carbon rhizodeposition, stabilization and nitrogen cycling. <b>2015</b> , 81, 195-203	59

1540	Soil management guidelines in Spain and Portugal related to EU Soil Protection Strategy based on analysis of soil databases. <b>2015</b> , 126, 146-154	8
1539	Salt effects on the soil microbial decomposer community and their role in organic carbon cycling: A review. <b>2015</b> , 81, 108-123	227
1538	Soil aggregation: Influence on microbial biomass and implications for biological processes. <b>2015</b> , 80, A3-A9	129
1537	Decomposition of distinct organic matter pools is regulated by moisture status in structured wetland soils. <b>2015</b> , 81, 28-37	19
1536	Optimization of method to quantify soil organic matter dynamics and carbon sequestration potential in volcanic ash soils. <b>2015</b> , 123, 27-47	11
1535	Methods for Studying Soil Organic Matter: Nature, Dynamics, Spatial Accessibility, and Interactions with Minerals. <b>2015</b> , 383-419	9
1534	Pyrogenic organic matter production from wildfires: a missing sink in the global carbon cycle. <b>2015</b> , 21, 1621-33	156
1533	Soil carbon balance following conversion of grassland to oil palm. <b>2015</b> , 7, 263-272	20
1532	Non-Invasive Forest Litter Characterization Using Full-Wave Inversion of Microwave Radar Data. <b>2015</b> , 53, 828-840	10
1531	Beyond carbon sequestration: soil as conduit of solar energy. <b>2015</b> , 66, 19-32	50
1530	Humus balances of different farm production systems in main production areas in Austria. <b>2015</b> , 178, 25-34	6
1529	Untargeted soil metabolomics methods for analysis of extractable organic matter. <b>2015</b> , 80, 189-198	87
1528	Large differences in estimates of soil organic carbon turnover in density fractions by using single and repeated radiocarbon inventories. <b>2015</b> , 239-240, 168-178	25
1527	Characterization of chemical&physical, structural and morphological properties of biochars from biowastes produced at different temperatures. <b>2015</b> , 15, 792-804	79
1526	The way forward in biochar research: targeting trade-offs between the potential wins. <b>2015</b> , 7, 1-13	177
1525	Effects of tree species and topography on fine and small root decomposition rates of three common tree species ( <i>Alnus glutinosa</i> , <i>Picea orientalis</i> and <i>Pinus sylvestris</i> ) in Turkey. <b>2015</b> , 335, 71-86	26
1524	Temperature sensitivity of heterotrophic soil CO <sub>2</sub> production increases with increasing carbon substrate uptake rate. <b>2015</b> , 80, 45-52	32
1523	Interactive effects of elevated CO <sub>2</sub> and nitrogen deposition on fatty acid molecular and isotope composition of above- and belowground tree biomass and forest soil fractions. <b>2015</b> , 21, 473-86	24

1522	Effects of straw return and regional factors on spatio-temporal variability of soil organic matter in a high-yielding area of northern China. <b>2015</b> , 145, 78-86	27
1521	Low stabilization of aboveground crop residue carbon in sandy soils of Swedish long-term experiments. <b>2015</b> , 237-238, 246-255	77
1520	Predominant control of moisture on soil organic carbon mineralization across a broad range of arid and semiarid ecosystems on the Mongolia plateau. <b>2015</b> , 30, 1683-1699	20
1519	Climate change impacts on the Alpine ecosystem: an overview with focus on the soil. <b>2016</b> , 61, 496-514	18
1518	The adsorption of fungal ice-nucleating proteins on mineral dusts: a terrestrial reservoir of atmospheric ice-nucleating particles. <b>2016</b> ,	2
1517	Parametrization consequences of constraining soil organic matter models by total carbon and radiocarbon using long-term field data. <b>2016</b> , 13, 3003-3019	11
1516	Carbon and Nitrogen Stocks and Humic Fractions in Brazilian Organosols. <b>2016</b> , 40,	2
1515	Soil indicators to assess the effectiveness of restoration strategies in dryland ecosystems. <b>2016</b> , 7, 397-414	83
1514	Assessment of Carbon Stocks in the Topsoil Using Random Forest and Remote Sensing Images. <b>2016</b> , 45, 1910-1918	17
1513	Iron-bound organic carbon in forest soils: quantification and characterization. <b>2016</b> , 13, 4777-4788	79
1512	Gone or just out of sight? The apparent disappearance of aromatic litter components in soils. <b>2016</b> ,	
1511	Spatial and seasonal contrasts of sedimentary organic matter in floodplain lakes of the central Amazon basin. <b>2016</b> , 13, 467-482	6
1510	Addressing numerical challenges in introducing a reactive transport code into a land surface model: a biogeochemical modeling proof-of-concept with CLM-BFLOTRAN 1.0. <b>2016</b> , 9, 927-946	8
1509	Unambiguous evidence of old soil carbon in grass biosilica particles. <b>2016</b> , 13, 1269-1286	25
1508	Time since death and decay rate constants of Norway spruce and European larch deadwood in subalpine forests determined using dendrochronology and radiocarbon dating. <b>2016</b> , 13, 1537-1552	23
1507	Changes in soil carbon and nutrients following 6 years of litter removal and addition in a tropical semi-evergreen rain forest. <b>2016</b> , 13, 6183-6190	21
1506	Gone or just out of sight? The apparent disappearance of aromatic litter components in soils. <b>2016</b> , 2, 325-335	28
1505	Microbial activity promoted with organic carbon accumulation in macroaggregates of paddy soils under long-term rice cultivation. <b>2016</b> , 13, 6565-6586	17

1504	Projecting the release of carbon from permafrost soils using a perturbed parameter ensemble modelling approach. <b>2016</b> , 13, 2123-2136	32
1503	Paleosols can promote root growth of recent vegetation â case study from the sandy soilâsediment sequence Rakt, the Netherlands. <b>2016</b> , 2, 537-549	2
1502	Upscaling methane emission hotspots in boreal peatlands. <b>2016</b> , 9, 915-926	10
1501	Towards a representation of priming on soil carbon decomposition in the global land biosphere model ORCHIDEE (version 1.9.5.2). <b>2016</b> , 9, 841-855	19
1500	. <b>2016</b> ,	9
1499	Variability in $\delta^{14}C$ contents of soil organic matter at the plot and regional scale across climatic and geologic gradients. <b>2016</b> , 13, 3427-3439	16
1498	Hydrogen dynamics in soil organic matter as determined by $\delta^{13}C$ and $\delta^2H$ labeling experiments. <b>2016</b> , 13, 6587-6598	9
1497	Organic Carbon Convergence in Diverse Soils toward Steady State: A 21-Year Field Bioassay. <b>2016</b> , 80, 1653-1662	6
1496	Impact of agricultural management on bacterial laccase-encoding genes with possible implications for soil carbon storage in semi-arid Mediterranean olive farming. <b>2016</b> , 4, e2257	2
1495	Permafrost Sub-grid Heterogeneity of Soil Properties Key for 3-D Soil Processes and Future Climate Projections. <b>2016</b> , 4,	13
1494	The significance of soils and soil science towards realization of the United Nations Sustainable Development Goals. <b>2016</b> , 2, 111-128	795
1493	Soil fauna: key to new carbon models. <b>2016</b> , 2, 565-582	101
1492	Soil properties and not inputs control carbon : nitrogen : phosphorus ratios in cropped soils in the long term. <b>2016</b> , 2, 83-99	26
1491	Soil fauna: key to new carbon models. <b>2016</b> ,	4
1490	FORUM paper: The significance of soils and soil science towards realization of the UN sustainable development goals (SDGs). <b>2016</b> ,	9
1489	Temperature and moisture effects on greenhouse gas emissions from deep active-layer boreal soils. <b>2016</b> , 13, 6669-6681	14
1488	Comparing models of microbialâsubstrate interactions and their response to warming. <b>2016</b> , 13, 1733-1752	22
1487	Dissolved Organic and Inorganic Carbon Flow Paths in an Amazonian Transitional Forest. <b>2016</b> , 3,	12

1486	Methane Emission in a Specific Riparian-Zone Sediment Decreased with Bioelectrochemical Manipulation and Corresponded to the Microbial Community Dynamics. <b>2015</b> , 6, 1523	9
1485	Belowground Response to Drought in a Tropical Forest Soil. I. Changes in Microbial Functional Potential and Metabolism. <b>2016</b> , 7, 525	63
1484	Resource Partitioning between Bacteria, Fungi, and Protists in the Detritosphere of an Agricultural Soil. <b>2016</b> , 7, 1524	85
1483	The Effect of Harvest on Forest Soil Carbon: A Meta-Analysis. <b>2016</b> , 7, 308	75
1482	Improving Farming Practices for Sustainable Soil Use in the Humid Tropics and Rainforest Ecosystem Health. <b>2016</b> , 8, 841	11
1481	Analysis of Soil Structure Turnover with Garnet Particles and X-Ray Microtomography. <b>2016</b> , 11, e0159948	23
1480	Soil Respiration and Bacterial Structure and Function after 17 Years of a Reciprocal Soil Transplant Experiment. <b>2016</b> , 11, e0150599	33
1479	Identification of the Core Set of Carbon-Associated Genes in a Bioenergy Grassland Soil. <b>2016</b> , 11, e0166578	11
1478	Soil Functional Zone Management: A Vehicle for Enhancing Production and Soil Ecosystem Services in Row-Crop Agroecosystems. <b>2016</b> , 7, 65	25
1477	New strategies for submicron characterization the carbon binding of reactive minerals in long-term contrasting fertilized soils: implications for soil carbon storage. <b>2016</b> , 13, 3607-3618	34
1476	Responses of bacterial community and functional marker genes of nitrogen cycling to biochar, compost and combined amendments in soil. <b>2016</b> , 100, 8583-91	110
1475	Does tree species composition affect soil CO <sub>2</sub> emission and soil organic carbon storage in plantations?. <b>2016</b> , 30, 2071-2080	6
1474	Seventy years of continuous encroachment substantially increases 'blue carbon' capacity as mangroves replace intertidal salt marshes. <b>2016</b> , 22, 1097-109	130
1473	The hidden season: growing season is 50% longer below than above ground along an arctic elevation gradient. <b>2016</b> , 209, 978-86	67
1472	Redox Effects on Organic Matter Storage in Coastal Sediments During the Holocene: A Biomarker/Proxy Perspective. <b>2016</b> , 44, 295-319	33
1471	Ecosystem Engineers in a Self-organized Soil. <b>2016</b> , 181, 91-109	94
1470	Microbial community dynamics in soil aggregates shape biogeochemical gas fluxes from soil profiles - upscaling an aggregate biophysical model. <b>2016</b> , 22, 3141-56	77
1469	Microbial and Enzyme Activities of Saline and Sodict Soils. <b>2016</b> , 27, 706-718	146

1468	Variations in soil carbon sequestration and their determinants along a precipitation gradient in seasonally dry tropical forest ecosystems. <b>2016</b> , 22, 1942-56	68
1467	Variability in Soil Nitrogen Retention Across Forest, Urban, and Agricultural Land Uses. <b>2016</b> , 19, 1345-1361	11
1466	Using litter chemistry controls on microbial processes to partition litter carbon fluxes with the Litter Decomposition and Leaching (LIDEL) model. <b>2016</b> , 100, 160-174	30
1465	Microscale decoupling of sediment oxygen consumption and microbial biomass in an oligotrophic lake. <b>2016</b> , 61, 1477-1491	
1464	Changes in soil respiration components and their specific respiration along three successional forests in the subtropics. <b>2016</b> , 30, 1466-1474	23
1463	Lignin biomarkers signatures of common plants and soils of Eastern Canada. <b>2016</b> , 129, 133-148	18
1462	The impact of chemical pollution on the resilience of soils under multiple stresses: A conceptual framework for future research. <b>2016</b> , 568, 1076-1085	26
1461	Understanding deep roots and their functions in ecosystems: an advocacy for more unconventional research. <b>2016</b> , 118, 621-635	130
1460	Enhanced terrestrial carbon preservation promoted by reactive iron in deltaic sediments. <b>2016</b> , 43, 1149-1157	52
1459	The reactivity of plant-derived organic matter and the potential importance of priming effects along the lower Amazon River. <b>2016</b> , 121, 1522-1539	60
1458	Carbon dynamics in aboveground biomass of co-dominant plant species in a temperate grassland ecosystem: same or different?. <b>2016</b> , 210, 471-84	9
1457	Estimating heterotrophic respiration at large scales: challenges, approaches, and next steps. <b>2016</b> , 7, e01380	26
1456	Vegetation change impacts on soil organic carbon chemical composition in subtropical forests. <b>2016</b> , 6, 29607	28
1455	In situ characterization of forest litter using ground-penetrating radar. <b>2016</b> , 121, 879-894	8
1454	Direct evidence for microbial-derived soil organic matter formation and its ecophysiological controls. <b>2016</b> , 7, 13630	572
1453	Replacing time with space: using laboratory fires to explore the effects of repeated burning on black carbon degradation. <b>2016</b> , 25, 242	17
1452	Comparison of Permanganate-Oxidizable Carbon and Mineralizable Carbon for Assessment of Organic Matter Stabilization and Mineralization. <b>2016</b> , 80, 1352-1364	120
1451	Differential controls on soil carbon density and mineralization among contrasting forest types in a temperate forest ecosystem. <b>2016</b> , 6, 22411	8

1450	Impact of Restoration and Management on Aggregation and Organic Carbon Accumulation in Urban Grasslands. <b>2016</b> , 80, 992-1002	5
1449	Decomposition and stabilisation of Norway spruce needle-derived material in Alpine soils using a <sup>13</sup> C-labelling approach in the field. <b>2016</b> , 131, 321-338	11
1448	Soil Microbial Metabolomics. <b>2016</b> , 147-198	6
1447	Differential effects of conifer and broadleaf litter inputs on soil organic carbon chemical composition through altered soil microbial community composition. <b>2016</b> , 6, 27097	25
1446	Microbial Metabolomics. <b>2016</b> ,	12
1445	Exometabolomics for Linking Soil Carbon Dynamics to Microbial Communities. <b>2016</b> , 119-145	
1444	Factors controlling soil organic carbon stability along a temperate forest altitudinal gradient. <b>2016</b> , 6, 18783	35
1443	Uptake of ammonium and soluble reactive phosphorus in forested streams: influence of dissolved organic matter composition. <b>2016</b> , 131, 355-372	5
1442	Organic carbon and total nitrogen dynamics of reclaimed soils following intensive agricultural use in eastern China. <b>2016</b> , 235, 193-203	25
1441	Long-term management changes topsoil and subsoil organic carbon and nitrogen dynamics in a temperate agricultural system. <b>2016</b> , 67, 421-430	52
1440	Limitations and Potential of Spectral Subtractions in Fourier-Transform Infrared Spectroscopy of Soil Samples. <b>2016</b> , 80, 10-26	18
1439	Biochar in European Soils and Agriculture. <b>2016</b> ,	27
1438	Physical long-term regeneration dynamics of soil organic matter as followed by <sup>1</sup> H solid-state NMR methods. <b>2016</b> , 13, 50	7
1437	Carbon and nitrogen additions induce distinct priming effects along an organic-matter decay continuum. <b>2016</b> , 6, 19865	57
1436	Anaerobic decomposition of humic substances by Clostridium from the deep subsurface. <b>2016</b> , 6, 18990	23
1435	Relationships between labile soil organic matter and nematode communities in a California oak woodland. <b>2016</b> , 18, 1231-1245	10
1434	Distribution of fatty acids in the alpine grassland soils of the Qinghai-Tibetan Plateau. <b>2016</b> , 59, 1329-1338	2
1433	Soil microbial carbon use efficiency and biomass turnover in a long-term fertilization experiment in a temperate grassland. <b>2016</b> , 97, 168-175	117



1432	Soil Microbes: The Invisible Managers of Soil Fertility. <b>2016</b> , 1-16	6
1431	Revisiting the 'Gadgil effect': do interguild fungal interactions control carbon cycling in forest soils?. <b>2016</b> , 209, 1382-94	202
1430	A review on the role of organic inputs in maintaining the soil carbon pool of the terrestrial ecosystem. <b>2016</b> , 167, 214-27	49
1429	Climate-smart soils. <i>Nature</i> , <b>2016</b> , 532, 49-57	50.4 883
1428	Photodegradation alleviates the lignin bottleneck for carbon turnover in terrestrial ecosystems. <b>2016</b> , 113, 4392-7	98
1427	Towards a global assessment of pyrogenic carbon from vegetation fires. <b>2016</b> , 22, 76-91	189
1426	Contribution of Microbial Inoculants to Soil Carbon Sequestration and Sustainable Agriculture. <b>2016</b> , 101-113	9
1425	Biochar persistence, priming and microbial responses to pyrolysis temperature series. <b>2016</b> , 52, 749-761	38
1424	Vertical distribution of carbon and nitrogen stable isotope ratios in topsoils across a temperate rainforest dune chronosequence in New Zealand. <b>2016</b> , 129, 37-51	6
1423	Occurrence of stable and mobile organic matter in the clay-sized fraction of shale: Significance for petroleum geology and carbon cycle. <b>2016</b> , 160-161, 1-10	36
1422	Investigating the controls on soil organic matter decomposition in tussock tundra soil and permafrost after fire. <b>2016</b> , 99, 108-116	21
1421	Enhanced extractability of cutin- and suberin-derived organic matter with demineralization implies physical protection over chemical recalcitrance in soil. <b>2016</b> , 97, 111-121	28
1420	Toward a Predictive Understanding of Earth's Microbiomes to Address 21st Century Challenges. <b>2016</b> , 7,	98
1419	Ecological stoichiometry controls the transformation and retention of plant-derived organic matter to humus in response to nitrogen fertilisation. <b>2016</b> , 99, 117-127	25
1418	Quantitative Identification of Biogenic Nonextractable Pesticide Residues in Soil by (14)C-Analysis. <b>2016</b> , 50, 6415-22	26
1417	Radiocarbon and Climate Change. <b>2016</b> ,	14
1416	Preparation for Radiocarbon Analysis. <b>2016</b> , 279-315	3
1415	Fire enhances solubility of biogenic silica. <b>2016</b> , 572, 1289-1296	19

1414	Winter legume cover-crop root decomposition and N release dynamics under disking and roller-crimping termination approaches. <b>2016</b> , 31, 214-229	19
1413	Ectomycorrhizal fungi decompose soil organic matter using oxidative mechanisms adapted from saprotrophic ancestors. <b>2016</b> , 209, 1705-19	190
1412	Tree species influences on soil carbon dynamics revealed with natural abundance <sup>13</sup> C techniques. <b>2016</b> , 400, 285-296	7
1411	Effects of applying flue gas desulfurization gypsum and humic acid on soil physicochemical properties and rapeseed yield of a saline-sodic cropland in the eastern coastal area of China. <b>2016</b> , 16, 38-50	22
1410	Occurrence and sources of natural and anthropogenic lipid tracers in surface soils from arid urban areas of Saudi Arabia. <b>2016</b> , 208, 696-703	8
1409	Temperature sensitivity of organic matter decomposition of permafrost-region soils during laboratory incubations. <b>2016</b> , 97, 1-14	63
1408	Ecological state of peat plateaus in northeastern European Russia. <b>2016</b> , 47, 125-132	13
1407	Terrestrial and marine perspectives on modeling organic matter degradation pathways. <b>2016</b> , 22, 121-36	34
1406	Surface soil organic carbon in temperate and subtropical oriental oak stands of East China. <b>2016</b> , 46, 621-628	4
1405	Going where no grains have gone before: From early to mid-succession. <b>2016</b> , 223, 223-238	80
1404	Iron addition to soil specifically stabilized lignin. <b>2016</b> , 98, 95-98	43
1403	The nature and dynamics of soil organic matter: Plant inputs, microbial transformations, and organic matter stabilization. <b>2016</b> , 98, 109-126	271
1402	Soil heterotrophic respiration is insensitive to changes in soil water content but related to microbial access to organic matter. <b>2016</b> , 274, 68-78	35
1401	Asymmetric and symmetric warming increases turnover of litter and unprotected soil C in grassland mesocosms. <b>2016</b> , 128, 217-231	8
1400	Patterns of woody plant-derived soil carbon losses and persistence after brush management in a semi-arid grassland. <b>2016</b> , 406, 277-293	13
1399	Unique Organic Matter and Microbial Properties in the Rhizosphere of a Wetland Soil. <b>2016</b> , 50, 4169-77	28
1398	Sedimentary Factors are Key Predictors of Carbon Storage in SE Australian Saltmarshes. <b>2016</b> , 19, 865-880	60
1397	Understory plant functional groups and litter species identity are stronger drivers of litter decomposition than warming along a boreal forest post-fire successional gradient. <b>2016</b> , 98, 159-170	40

1396	Rapid fine root C and N mineralization in a northern temperate forest soil. <b>2016</b> , 128, 187-200	13
1395	Network analysis reveals functional redundancy and keystone taxa amongst bacterial and fungal communities during organic matter decomposition in an arable soil. <b>2016</b> , 97, 188-198	326
1394	Tracing the source of soil organic matter eroded from temperate forest catchments using carbon and nitrogen isotopes. <b>2016</b> , 445, 172-184	60
1393	Limits to soil carbon stability; Deep, ancient soil carbon decomposition stimulated by new labile organic inputs. <b>2016</b> , 98, 85-94	72
1392	Microbial mineralization of pyrogenic organic matter in different mineral systems. <b>2016</b> , 98, 18-26	12
1391	Biomarker records of palaeoenvironmental variations in subtropical Southern Africa since the late Pleistocene: Evidences from a coastal peatland. <b>2016</b> , 451, 1-12	20
1390	Sources of variability in fatty acid (FA) biomarkers in the application of compound-specific stable isotopes (CSSIs) to soil and sediment fingerprinting and tracing: A review. <b>2016</b> , 565, 8-27	65
1389	Microbial regulation of the soil carbon cycle: evidence from gene-enzyme relationships. <b>2016</b> , 10, 2593-2604	178
1388	The fate of plant wax lipids in a model forest ecosystem under elevated CO <sub>2</sub> concentration and increased nitrogen deposition. <b>2016</b> , 98, 131-140	9
1387	Thermogravimetry-mass spectrometry investigations of montmorillonite interlayer water perturbations caused by aromatic acid adsorbates. <b>2016</b> , 126, 1157-1166	5
1386	Factors influencing the molecular composition of soil organic matter in New Zealand grasslands. <b>2016</b> , 232, 290-301	13
1385	Soil microbial community resistance to drought and links to C stabilization in an Australian grassland. <b>2016</b> , 103, 171-180	50
1384	Resource stoichiometry mediates soil C loss and nutrient transformations in forest soils. <b>2016</b> , 108, 248-257	21
1383	Disturbance intensity and dominant cover type influence rate of boreal soil carbon change: A Canadian multi-regional analysis. <b>2016</b> , 381, 48-62	17
1382	Slowed decomposition in ectomycorrhizal ecosystems is independent of plant chemistry. <b>2016</b> , 102, 52-54	20
1381	On the behaviour, mechanistic modelling and interaction of biochar and crop fertilizers in aqueous solutions. <b>2016</b> , 2, 133-142	32
1380	The energetic and chemical signatures of persistent soil organic matter. <b>2016</b> , 130, 1-12	68
1379	Modeling coupled pesticide degradation and organic matter turnover: From gene abundance to process rates. <b>2016</b> , 103, 349-364	14

1378	The C:N:P:S stoichiometry of soil organic matter. <b>2016</b> , 130, 117-131	102
1377	The contribution of ericoid plants to soil nitrogen chemistry and organic matter decomposition in boreal forest soil. <b>2016</b> , 103, 394-404	29
1376	Impact of fulvic acids on bio-methanogenic treatment of municipal solid waste incineration leachate. <b>2016</b> , 106, 71-78	50
1375	DOM composition and transformation in boreal forest soils: The effects of temperature and organic-horizon decomposition state. <b>2016</b> , 121, 2727-2744	51
1374	Tree taxa and pyrolysis temperature interact to control the efficacy of pyrogenic organic matter formation. <b>2016</b> , 130, 103-116	16
1373	Engineering practice of mechanical soil aeration for the remediation of volatile organic compound-contaminated sites in China: Advantages and challenges. <b>2016</b> , 10, 1	9
1372	Radiocarbon constraints imply reduced carbon uptake by soils during the 21st century. <b>2016</b> , 353, 1419-1424	119
1371	Effects of biochar addition to estuarine sediments. <b>2016</b> , 16, 2482-2491	10
1370	Microbial turnover of above and belowground litter components in shrublands. <b>2016</b> , 59, 229-232	2
1369	Molecular fate of root and shoot litter on incorporation and decomposition in earthworm casts. <b>2016</b> , 101, 1-10	21
1368	Soil organic carbon stocks in permafrost-affected soils in West Greenland. <b>2016</b> , 282, 147-159	12
1367	Molecular composition of soil organic matter with land-use change along a bi-continental mean annual temperature gradient. <b>2016</b> , 573, 470-480	25
1366	Beyond microbes: Are fauna the next frontier in soil biogeochemical models?. <b>2016</b> , 102, 40-44	66
1365	Stability of soil organic carbon and potential carbon sequestration at eroding and deposition sites. <b>2016</b> , 16, 1705-1717	14
1364	Substrate quality influences organic matter accumulation in the soil silt and clay fraction. <b>2016</b> , 103, 138-148	41
1363	Dissolved organic matter as a terminal electron acceptor in the microbial oxidation of steroid estrogen. <b>2016</b> , 218, 26-33	25
1362	Linking temperature sensitivity of soil CO <sub>2</sub> release to substrate, environmental, and microbial properties across alpine ecosystems. <b>2016</b> , 30, 1310-1323	72
1361	Carbon sequestration and distribution in soil aggregate fractions under <i>Miscanthus</i> and giant reed in the Mediterranean area. <b>2016</b> , 163, 235-242	15

1360	Lytic Polysaccharide Monooxygenases: The Microbial Power Tool for Lignocellulose Degradation. <b>2016</b> , 21, 926-936	117
1359	Local-scale determinants of elemental stoichiometry of soil in an old-growth temperate forest. <b>2016</b> , 408, 401-414	6
1358	Soil organic carbon of mangrove forests (Rhizophora and Avicennia) of the Venezuelan Caribbean coast. <b>2016</b> , 100, 51-61	11
1357	Dynamics of soil organic matter based on new Rock-Eval indices. <b>2016</b> , 284, 185-203	33
1356	Managing uncertainty in soil carbon feedbacks to climate change. <b>2016</b> , 6, 751-758	291
1355	Functional Cellulose Nanofiber Filters with Enhanced Flux for the Removal of Humic Acid by Adsorption. <b>2016</b> , 4, 4582-4590	43
1354	Interpreting vegetation change in tropical arid ecosystems from sediment molecular fossils and their stable isotope compositions: A baseline study from the Pilbara region of northwest Australia. <b>2016</b> , 459, 495-507	7
1353	The enzymatic and physiological response of the microbial community in semiarid soil to carbon compounds from plants. <b>2016</b> , 67, 456-469	13
1352	Assessing ecological integrity: A multi-scale structural and functional approach using Structural Equation Modeling. <b>2016</b> , 71, 258-269	27
1351	Drivers of temperature sensitivity of decomposition of soil organic matter along a mountain altitudinal gradient in the Western Carpathians. <b>2016</b> , 31, 609-615	11
1350	Relationships Among pH, Minerals, and Carbon in Soils from Tundra to Boreal Forest Across Alaska. <b>2016</b> , 19, 1092-1103	11
1349	Stress differentially causes roots of tree seedlings to exude carbon. <b>2017</b> , 37, 154-164	36
1348	Future C loss in mid-latitude mineral soils: climate change exceeds land use mitigation potential in France. <b>2016</b> , 6, 35798	22
1347	Organic carbon characteristics in Swedish forest soil trace post-depositional carbon dynamics. <b>2016</b> , 67, 492-503	2
1346	Evidence of a union between organic carbon and water content in soil. <b>2016</b> , 96, 305-316	21
1345	Dissolved Organic Matter in Stream Ecosystems: Forms, Functions, and Fluxes of Watershed Tea. <b>2016</b> , 241-320	17
1344	Carbon quality and nutrient status drive the temperature sensitivity of organic matter decomposition in subtropical peat soils. <b>2016</b> , 131, 103-119	37
1343	Accelerated soil carbon turnover under tree plantations limits soil carbon storage. <b>2016</b> , 6, 19693	25

1342	Belowground carbon flux links biogeochemical cycles and resource-use efficiency at the global scale. <b>2016</b> , 19, 1419-1428	56
1341	Carbohydrate metabolism in ectomycorrhizal symbiosis. <b>2016</b> , 159-177	1
1340	Soil organic matter decomposition mechanisms in ectomycorrhizal fungi. <b>2016</b> , 257-275	6
1339	Fungal ecology in boreal forest ecosystems. <b>2016</b> , 387-404	7
1338	Biochar affects carbon composition and stability in soil: a combined spectroscopy-microscopy study. <b>2016</b> , 6, 25127	56
1337	The adsorption of fungal ice-nucleating proteins on mineral dusts: a terrestrial reservoir of atmospheric ice-nucleating particles. <b>2016</b> , 16, 7879-7887	60
1336	Characterization, Quantification and Compound-specific Isotopic Analysis of Pyrogenic Carbon Using Benzene Polycarboxylic Acids (BPCA). <b>2016</b> ,	13
1335	In memoriam Prof. F.J. Stevenson and the Question of humic substances in soil. <b>2016</b> , 3,	23
1334	Increased wintertime CO <sub>2</sub> loss as a result of sustained tundra warming. <b>2016</b> , 121, 249-265	63
1333	Effects of compositional changes on reactivity continuum and decomposition kinetics of lake dissolved organic matter. <b>2016</b> , 121, 1733-1746	29
1332	Mycorrhizal and saprotrophic fungal guilds compete for the same organic substrates but affect decomposition differently. <b>2016</b> , 30, 1967-1978	117
1331	Afforestation impacts microbial biomass and its natural ( <sup>13</sup> C and ( <sup>15</sup> N abundance in soil aggregates in central China. <b>2016</b> , 568, 52-56	12
1330	Soil carbon storage, respiration potential, and organic matter quality across an age and climate gradient in southwestern Greenland. <b>2016</b> , 39, 1283-1295	9
1329	Are oxygen limitations under recognized regulators of organic carbon turnover in upland soils?. <b>2016</b> , 127, 157-171	164
1328	Microbial carbon use efficiency: accounting for population, community, and ecosystem-scale controls over the fate of metabolized organic matter. <b>2016</b> , 127, 173-188	172
1327	Microbial acclimation triggered loss of soil carbon fractions in subtropical wetlands subjected to experimental warming in a laboratory study. <b>2016</b> , 406, 101-116	5
1326	Linking molecular size, composition and carbon turnover of extractable soil microbial compounds. <b>2016</b> , 100, 66-73	23
1325	It's all about functionality: How can metaproteomics help us to discuss the attributes of ecological relevance in soil?. <b>2016</b> , 144, 159-61	22

1324	Protein-Mineral Interactions: Molecular Dynamics Simulations Capture Importance of Variations in Mineral Surface Composition and Structure. <b>2016</b> , 32, 6194-209	22
1323	Methodological uncertainty in estimating carbon turnover times of soil fractions. <b>2016</b> , 100, 118-124	30
1322	Effect of the endogeic earthworm <i>Aporrectodea tuberculata</i> on aggregation and carbon redistribution in uninvaded forest soil columns. <b>2016</b> , 100, 192-200	24
1321	The role of microarthropods in emerging models of soil organic matter. <b>2016</b> , 102, 37-39	37
1320	Heterogeneity of carbon loss and its temperature sensitivity in East-European subarctic tundra soils. <b>2016</b> , 92,	9
1319	Practical application of thermogravimetry in soil science. <b>2016</b> , 123, 2441-2450	13
1318	Temporal variations of soil respiration at multiple timescales in a spruce-fir valley forest, northeastern China. <b>2016</b> , 16, 2385-2394	8
1317	Soil carbon dynamics and climate change: current agro-environmental perspectives and future dimensions. <b>2016</b> , 1, 315-322	16
1316	Confidence in soil carbon predictions undermined by the uncertainties in observations and model parameterisation. <b>2016</b> , 80, 26-32	14
1315	Organic nitrogen storage in mineral soil: Implications for policy and management. <b>2016</b> , 551-552, 116-26	77
1314	Linking microbial immobilization of fertilizer nitrogen to in situ turnover of soil microbial residues in an agro-ecosystem. <b>2016</b> , 229, 40-47	19
1313	Changes in SOM composition and stability to microbial degradation over time in response to wood chip ash fertilisation. <b>2016</b> , 99, 179-186	12
1312	Plant & Microbial and mineral contributions to amino acid and protein organic matter accumulation during 4000 years of pedogenesis. <b>2016</b> , 100, 42-50	8
1311	Shifts in taxonomic and functional microbial diversity with agriculture: How fragile is the Brazilian Cerrado?. <b>2016</b> , 16, 42	47
1310	Successional patterns along soil development gradients formed by glacier retreat in the Maritime Antarctic, King George Island. <b>2016</b> , 89,	20
1309	Potential carbon emissions dominated by carbon dioxide from thawed permafrost soils. <b>2016</b> , 6, 950-953	211
1308	Organic matter losses in German Alps forest soils since the 1970s most likely caused by warming. <b>2016</b> , 9, 543-548	51
1307	Effect of different fertilization modes on soil organic carbon sequestration in acid soils. <b>2016</b> , 66, 647-652	8

1306	Carbon losses in the Alps. <b>2016</b> , 9, 478-479	1
1305	In situ roots decompose faster than shoots left on the soil surface under subtropical no-till conditions. <b>2016</b> , 52, 853-865	12
1304	The role of poorly crystalline iron oxides in the stability of soil aggregate-associated organic carbon in a rice-wheat cropping system. <b>2016</b> , 279, 1-10	43
1303	Opposing effects of different soil organic matter fractions on crop yields. <b>2016</b> , 26, 2072-2085	20
1302	The properties and functions of biochars in forest ecosystems. <b>2016</b> , 16, 2005-2020	34
1301	Tamm Review: Sequestration of carbon from coarse woody debris in forest soils. <b>2016</b> , 377, 1-15	59
1300	Toward more realistic projections of soil carbon dynamics by Earth system models. <b>2016</b> , 30, 40-56	251
1299	Dual, differential isotope labeling shows the preferential movement of labile plant constituents into mineral-bonded soil organic matter. <b>2016</b> , 22, 2301-12	70
1298	Ethiopian agriculture has greater potential for carbon sequestration than previously estimated. <b>2016</b> , 22, 3739-3749	17
1297	Carbon sequestration potential in perennial bioenergy crops: the importance of organic matter inputs and its physical protection. <b>2016</b> , 8, 111-121	63
1296	Evaluation of optical techniques for characterising soil organic matter quality in agricultural soils. <b>2016</b> , 155, 450-460	28
1295	Bacterial and fungal colonization and decomposition of submerged plant litter: consequences for biogenic silica dissolution. <b>2016</b> , 92,	11
1294	Soil formation and its implications for stabilization of soil organic matter in the riparian zone. <b>2016</b> , 139, 9-18	30
1293	Climate Change and Agriculture. <b>2016</b> , 465-489	3
1292	Quantification of soil carbon from bulk soil samples to predict the aggregate-carbon fractions within using near- and mid-infrared spectroscopic techniques. <b>2016</b> , 267, 207-214	16
1291	Millennia-old organic carbon in a boreal paleosol: chemical properties and their link to mineralizable carbon fraction. <b>2016</b> , 16, 85-94	5
1290	Partitioning of carbon sources among functional pools to investigate short-term priming effects of biochar in soil: A (13)C study. <b>2016</b> , 547, 30-38	21
1289	Modelling soil organic carbon 2. Changes under a range of cropping and grazing farming systems in eastern Australia. <b>2016</b> , 265, 164-175	15



1288	Character of Humic Substances as a Predictor for Goethite Nanoparticle Reactivity and Aggregation. <b>2016</b> , 50, 1200-8	38
1287	Relative availability of inorganic N-pools shifts under land use change: An unexplored variable in soil carbon dynamics. <b>2016</b> , 64, 228-236	38
1286	Effect of pedogenic processes and formation factors on organic matter stabilization in alpine forest soils. <b>2016</b> , 263, 151-160	22
1285	Bioengineering Applications of Carbon Nanostructures. <b>2016</b> ,	4
1284	Changes of soil C stocks and stability after 70-year afforestation in the Northeast USA. <b>2016</b> , 401, 319-329	17
1283	Carbon input from <sup>13</sup> C-labelled soybean residues in particulate organic carbon fractions in a Mollisol. <b>2016</b> , 52, 331-339	28
1282	Functional implications of the pH-trait distribution of the microbial community in a re-inoculation experiment across a pH gradient. <b>2016</b> , 93, 69-78	22
1281	Changes in organic carbon concentration and organic matter compound of erosion-delivered soil aggregates. <b>2016</b> , 75, 1	7
1280	Comparison of Three Commercial Carrier Ampholytes for Soil Science Applications in Isoelectric Focusing. <b>2016</b> , 47, 77-86	
1279	Beryllium-7 and lead-210 chronometry of modern soil processes: The Linked Radionuclide Accumulation model, LRC. <b>2016</b> , 180, 109-125	12
1278	Organic input quality is more important than its quantity: C turnover coefficients in different cropping systems. <b>2016</b> , 77, 138-145	27
1277	Studying the importance of soil organic matter: An educational proposal for secondary education. <b>2016</b> , 27, 37-42	2
1276	Data-driven Critical Zone science: A new paradigm. <b>2016</b> , 568, 587-593	21
1275	Stimulation of soil organic nitrogen pool: The effect of plant and soil organic matter degrading enzymes. <b>2016</b> , 96, 97-106	37
1274	Importance of carbon fractionation for the estimation of carbon sequestration in reclaimed coalmine soils—a case study from Jharia coalfields, Jharkhand, India. <b>2016</b> , 90, 135-140	26
1273	Forest floor chemical transformations in a boreal forest fire and their correlations with temperature and heating duration. <b>2016</b> , 264, 71-80	57
1272	Plastic mulching in agriculture. Trading short-term agronomic benefits for long-term soil degradation?. <b>2016</b> , 550, 690-705	590
1271	Phospholipid <sup>13</sup> C stable isotopic probing during decomposition of wheat residues. <b>2016</b> , 98, 65-74	24

1270	Differences in activity and N demand between bacteria and fungi in a microcosm incubation experiment with selective inhibition. <b>2016</b> , 99, 29-39	18
1269	Peatland types influence the inhibitory effects of a humic substance analog on methane production. <b>2016</b> , 265, 131-140	21
1268	Molecular characterization of soil organic matter from native vegetation-pasture-sugarcane transitions in Brazil. <b>2016</b> , 548-549, 450-462	14
1267	Microbial carbon use efficiency and biomass turnover times depending on soil depth – Implications for carbon cycling. <b>2016</b> , 96, 74-81	173
1266	Altered soil carbon dynamics under different land-use regimes in subtropical seasonally-dry forests of central Argentina. <b>2016</b> , 403, 375-387	18
1265	Climate, soil texture, and soil types affect the contributions of fine-fraction-stabilized carbon to total soil organic carbon in different land uses across China. <b>2016</b> , 172, 2-9	44
1264	Biochar has no effect on soil respiration across Chinese agricultural soils. <b>2016</b> , 554-555, 259-65	51
1263	Influence of hydrological, biogeochemical and temperature transients on subsurface carbon fluxes in a flood plain environment. <b>2016</b> , 127, 367-396	57
1262	Novel insights from NMR spectroscopy into seasonal changes in the composition of dissolved organic matter exported to the Bering Sea by the Yukon River. <b>2016</b> , 181, 72-88	22
1261	Optimizing Available Network Resources to Address Questions in Environmental Biogeochemistry. <b>2016</b> , 66, 317-326	16
1260	Long-term doubling of litter inputs accelerates soil organic matter degradation and reduces soil carbon stocks. <b>2016</b> , 127, 1-14	57
1259	Biochar as an Exceptional Bioresource for Energy, Agronomy, Carbon Sequestration, Activated Carbon and Specialty Materials. <b>2016</b> , 7, 201-235	182
1258	Soil-like Patterns Inside the Rocks: Structure, Genesis, and Research Techniques. <b>2016</b> , 205-222	4
1257	Erosion, deposition and soil carbon: A review of process-level controls, experimental tools and models to address C cycling in dynamic landscapes. <b>2016</b> , 154, 102-122	238
1256	Belowground carbon allocation patterns as determined by the in-growth soil core <sup>13</sup> C technique across different ecosystem types. <b>2016</b> , 263, 140-150	16
1255	The decomposition of ectomycorrhizal fungal necromass. <b>2016</b> , 93, 38-49	100
1254	CQESTR Simulated Changes in Soil Organic Carbon under Residue Management Practices in Continuous Corn Systems. <b>2016</b> , 9, 23-30	12
1253	Redefining the inert organic carbon pool. <b>2016</b> , 92, 149-152	21

1252	Soil Organic Matter. <b>2016</b> , 55-86	4
1251	Long-term tillage, rotation and perennialization effects on particulate and aggregate soil organic matter. <b>2016</b> , 155, 371-380	79
1250	The effect of composition on stability ((14)C activity) of soil organic matter fractions from the albic and black soils. <b>2016</b> , 541, 92-100	3
1249	Soil organic matter fractions as affected by tillage and soil texture under semiarid Mediterranean conditions. <b>2016</b> , 155, 381-389	58
1248	Effects of mineral characteristics on content, composition, and stability of organic matter fractions separated from seven forest topsoils of different pedogenesis. <b>2016</b> , 263, 1-7	28
1247	Source-to-sink sedimentary systems and global carbon burial: A river runs through it. <b>2016</b> , 153, 30-42	73
1246	Greater soil C inputs accelerate loss of C in cropping systems with low N input. <b>2016</b> , 400, 93-105	17
1245	Chemical and structural properties of dissolved black carbon released from biochars. <b>2016</b> , 96, 759-767	154
1244	Impact of soybean stover- and pine needle-derived biochars on Pb and As mobility, microbial community, and carbon stability in a contaminated agricultural soil. <b>2016</b> , 166, 131-9	113
1243	Carbon Mineralization in Peatlands: Does the Soil Microbial Community Composition Matter?. <b>2016</b> , 33, 151-162	6
1242	Secondary environmental impacts of remedial alternatives for sediment contaminated with hydrophobic organic contaminants. <b>2016</b> , 304, 352-9	17
1241	Contrasting temperature responses of dissolved organic carbon and phenols leached from soils. <b>2016</b> , 399, 13-27	14
1240	Soil organic matter amendments in date palm groves of the Middle Eastern and North African region: a mini-review. <b>2016</b> , 8, 77-92	15
1239	Soil organic matter in crop rotations under no-till. <b>2016</b> , 155, 45-53	59
1238	Tree species identity influences the vertical distribution of labile and recalcitrant carbon in a temperate deciduous forest soil. <b>2016</b> , 359, 352-360	25
1237	Spatial metrics as indicators of biodegradation benefits from bacterial dispersal networks. <b>2016</b> , 60, 54-63	13
1236	Highly stable rice-straw-derived charcoal in 3700-year-old ancient paddy soil: evidence for an effective pathway toward carbon sequestration. <b>2016</b> , 23, 1007-14	5
1235	Biochar stability in soil: meta-analysis of decomposition and priming effects. <b>2016</b> , 8, 512-523	498

1234	Roles of reversible and irreversible aggregation in sugar processing. <b>2017</b> , 57, 1206-1214	1
1233	Carbon cycle perturbation expressed in terrestrial Permian–Triassic boundary sections in South China. <b>2017</b> , 148, 272-285	34
1232	Contrasting dissolved organic matter quality in groundwater in Holocene and Pleistocene aquifers and implications for influencing arsenic mobility. <b>2017</b> , 77, 194-205	57
1231	Nitrogen Dynamics in Two Created Riparian Wetlands over Space and Time. <b>2017</b> , 22,	4
1230	Origin and availability of organic matter leading to arsenic mobilisation in aquifers of the Red River Delta, Vietnam. <b>2017</b> , 77, 184-193	28
1229	Below-ground biological responses to pyrogenic organic matter and litter inputs in grasslands. <b>2017</b> , 31, 260-269	10
1228	Land-use contrasts reveal instability of subsoil organic carbon. <b>2017</b> , 23, 955-965	46
1227	Legumes Functional Group Promotes Soil Organic Carbon and Nitrogen Storage by Increasing Plant Diversity. <b>2017</b> , 28, 1336-1344	68
1226	Elevated CO and temperature increase soil C losses from a soybean-maize ecosystem. <b>2017</b> , 23, 435-445	28
1225	Belowground impacts of perennial grass cultivation for sustainable biofuel feedstock production in the tropics. <b>2017</b> , 9, 694-709	16
1224	Biochemical quality and accumulation of soil organic matter in an age sequence of Cunninghamia lanceolata plantations in southern China. <b>2017</b> , 17, 2218-2229	8
1223	Pollen, phytolith and starch analyses of dryland soils from Easter Island (Rapa Nui) show widespread vegetation clearance and Polynesian-introduced crops. <b>2017</b> , 41, 339-350	20
1222	Differences in soluble organic carbon chemistry in pore waters sampled from different pore size domains. <b>2017</b> , 107, 133-143	72
1221	Nannipieri, P. et al., 2003. Microbial diversity and soil functions. European Journal of Soil Science, 54, 655–670. <b>2017</b> , 68, 6-11	1
1220	Fertilization alters microbial community composition and functional patterns by changing the chemical nature of soil organic carbon: A field study in a Halosol. <b>2017</b> , 292, 17-24	26
1219	Impact of root diversity upon coupling between soil C and N accumulation and bacterial community dynamics and activity: Result of a 30 year rotation experiment. <b>2017</b> , 292, 87-95	19
1218	Interactions of soil particulate organic matter chemistry and microbial community composition mediating carbon mineralization in karst soils. <b>2017</b> , 107, 85-93	27
1217	Tannins can slow-down but also speed-up soil enzymatic activity in boreal forest. <b>2017</b> , 107, 60-67	32

1216	Functional properties of soils formed from biochemical ripening of dredged sediments—subsidence mitigation in delta areas. <b>2017</b> , 17, 286-298	6
1215	Regional variation in the temperature sensitivity of soil organic matter decomposition in China's forests and grasslands. <b>2017</b> , 23, 3393-3402	58
1214	Advanced solid-state NMR spectroscopy of natural organic matter. <b>2017</b> , 100, 17-51	87
1213	A Three-Dimensional View on Soil Biogeochemistry: A Dataset for a Forested Headwater Catchment. <b>2017</b> , 46, 210-218	15
1212	Sorption of Alanine changes microbial metabolism in addition to availability. <b>2017</b> , 292, 128-134	11
1211	Priming of soil organic matter: Chemical structure of added compounds is more important than the energy content. <b>2017</b> , 108, 41-54	61
1210	Applying population and community ecology theory to advance understanding of belowground biogeochemistry. <b>2017</b> , 20, 231-245	54
1209	Erosion of organic carbon from the Andes and its effects on ecosystem carbon dioxide balance. <b>2017</b> , 122, 449-469	21
1208	Short organic carbon turnover time and narrow <sup>14</sup> C age spectra in early Holocene wetland paleosols. <b>2017</b> , 18, 142-155	9
1207	Changes in Primary Production and Carbon Sequestration after Plant Invasions. <b>2017</b> , 17-31	4
1206	Real-Time Soil CO <sub>2</sub> Respiration Rate Determination and the Comparison between the Infrared Gas Analyzer and Microrespirometer (MicroRes <sup>2</sup> ) Methods. <b>2017</b> , 48, 214-221	4
1205	Soil Ca alters processes contributing to C and N retention in the O <sub>a</sub> /A horizon of a northern hardwood forest. <b>2017</b> , 132, 343-357	17
1204	Plant, microbial and ecosystem carbon use efficiencies interact to stabilize microbial growth as a fraction of gross primary production. <b>2017</b> , 214, 1518-1526	35
1203	Irrigating-continuous cropping with <i>Bacillus subtilis</i> D9 fortified waste water could control the <i>Fusarium</i> wilt of <i>Artemisia selengensis</i> . <b>2017</b> , 113, 127-134	5
1202	A molecular zoom into soil Humeome by a direct sequential chemical fractionation of soil. <b>2017</b> , 586, 807-816	42
1201	Effects of temperature on graphene oxide deposition and transport in saturated porous media. <b>2017</b> , 331, 28-35	37
1200	How the structure of agro-food systems shapes nitrogen, phosphorus, and carbon fluxes: The generalized representation of agro-food system applied at the regional scale in France. <b>2017</b> , 586, 42-55	65
1199	The relationships of soil total nitrogen concentrations, pools and C:N ratios with climate, vegetation types and nitrate deposition in temperate and boreal forests of eastern Canada. <b>2017</b> , 152, 163-172	47

1198	Soil carbon response to woody plant encroachment: importance of spatial heterogeneity and deep soil storage. <b>2017</b> , 105, 1738-1749	29
1197	Estimating soil carbon dynamics in intercrop and sole crop agroecosystems using the Century model. <b>2017</b> , 180, 241-251	6
1196	Elevated carbon dioxide and temperature alters aggregate specific methane consumption in a tropical vertisol. <b>2017</b> , 155, 1191-1202	1
1195	The whole-soil carbon flux in response to warming. <b>2017</b> , 355, 1420-1423	223
1194	Plant traits, stoichiometry and microbes as drivers of decomposition in the rhizosphere in a temperate grassland. <b>2017</b> , 105, 1750-1765	39
1193	Diversified cropping systems support greater microbial cycling and retention of carbon and nitrogen. <b>2017</b> , 240, 66-76	40
1192	A review of carbon dynamics and assessment methods in the miombo woodlands. <b>2017</b> , 79, 95-102	6
1191	Assessing soil carbon vulnerability in the Western USA by geospatial modeling of pyrogenic and particulate carbon stocks. <b>2017</b> , 122, 354-369	14
1190	Research progress on aging of organic pollutants in geosorbents: a review. <b>2017</b> , 36, 27-43	9
1189	Changes in Soil Organic Carbon After Five Years of Biowaste Compost Application in a Mediterranean Vegetable Cropping System. <b>2017</b> , 27, 328-337	5
1188	Pyrogenic carbon distribution in mineral topsoils of the northeastern United States. <b>2017</b> , 296, 69-78	6
1187	Liquid Cell TEM for Studying Environmental and Biological Mineral Systems. 316-333	0
1186	Long-term stabilization of crop residues and soil organic carbon affected by residue quality and initial soil pH. <b>2017</b> , 587-588, 502-509	32
1185	Al-/Fe-(hydr)oxides-organic carbon associations in Oxisols - From ecosystems to submicron scales. <b>2017</b> , 154, 63-72	23
1184	Root phenology unresponsive to earlier snowmelt despite advanced above-ground phenology in two subarctic plant communities. <b>2017</b> , 31, 1493-1502	15
1183	Aggregation controls the stability of lignin and lipids in clay-sized particulate and mineral associated organic matter. <b>2017</b> , 132, 307-324	77
1182	Mineral properties, microbes, transport, and plant-input profiles control vertical distribution and age of soil carbon stocks. <b>2017</b> , 107, 244-259	50
1181	Soil-soil solution distribution coefficient of soil organic matter is a key factor for that of radioiodide in surface and subsurface soils. <b>2017</b> , 169-170, 131-136	15

1180	Plant Functional Traits: Soil and Ecosystem Services. <b>2017</b> , 22, 385-394	203
1179	Increasing soil carbon storage: mechanisms, effects of agricultural practices and proxies. A review. <b>2017</b> , 37, 1	170
1178	Electrophoretic Separation of Humic Acids Isolated from Tropical Soils Through Modified Denaturing Polyacrylamide Gel Electrophoresis. <b>2017</b> , 6, 179-184	
1177	Mineral Availability as a Key Regulator of Soil Carbon Storage. <b>2017</b> , 51, 4960-4969	111
1176	Climate legacies drive global soil carbon stocks in terrestrial ecosystems. <b>2017</b> , 3, e1602008	59
1175	Warming enhances old organic carbon decomposition through altering functional microbial communities. <b>2017</b> , 11, 1825-1835	80
1174	Physico-chemical protection, rather than biochemical composition, governs the responses of soil organic carbon decomposition to nitrogen addition in a temperate agroecosystem. <b>2017</b> , 598, 282-288	27
1173	Microbial energy and matter transformation in agricultural soils. <b>2017</b> , 111, 176-192	46
1172	Cover crop root contributions to soil carbon in a no-till corn bioenergy cropping system. <b>2017</b> , 9, 1252-1263	82
1171	Biopore history determines the microbial community composition in subsoil hotspots. <b>2017</b> , 53, 573-588	32
1170	Spatial controls of topsoil and subsoil organic carbon turnover under C3&C4 vegetation change. <b>2017</b> , 303, 44-51	12
1169	Reconstruction of Historic Forest Cover Changes Indicates Minor Effects on Carbon Stocks in Swiss Forest Soils. <b>2017</b> , 20, 1512-1528	16
1168	Soil carbon loss regulated by drought intensity and available substrate: A meta-analysis. <b>2017</b> , 112, 90-99	63
1167	Is it possible to determine formation processes of organic deposits through polysaccharides? Pilot study from the prehistoric site in Brandš nad Labem, Czech Republic. <b>2017</b> , 27, 1273-1280	
1166	Remediation of Soils Polluted with Inorganic Contaminants: Role of Organic Amendments. <b>2017</b> , 313-337	3
1165	Plant litter chemistry alters the content and composition of organic carbon associated with soil mineral and aggregate fractions in invaded ecosystems. <b>2017</b> , 23, 4002-4018	45
1164	Decadal soil carbon accumulation across Tibetan permafrost regions. <b>2017</b> , 10, 420-424	80
1163	Using stable isotopes to explore root-microbe-mineral interactions in soil. <b>2017</b> , 3, 244-253	49

1162	Understanding carbon storage in volcanic soils under selectively logged temperate rainforests. <b>2017</b> , 302, 76-88	23
1161	Thermodynamically controlled preservation of organic carbon in floodplains. <b>2017</b> , 10, 415-419	129
1160	Molecular, isotopic and radiocarbon evidence for broomcorn millet cropping in Northeast France since the Bronze Age. <b>2017</b> , 110, 13-24	6
1159	Review and analysis of strengths and weaknesses of agro-ecosystem models for simulating C and N fluxes. <b>2017</b> , 598, 445-470	106
1158	Soil aggregation and associated microbial communities modify the impact of agricultural management on carbon content. <b>2017</b> , 19, 3070-3086	99
1157	Towards the co-ordination of terrestrial ecosystem protocols across European research infrastructures. <b>2017</b> , 7, 3967-3975	9
1156	Plant-soil interaction affects the mineralization of soil organic carbon: evidence from 73-year-old plantations with three coniferous tree species in subtropical Australia. <b>2017</b> , 17, 985-995	6
1155	Metrics for evaluating the ecological benefits of decreased nitrogen deposition. <b>2017</b> , 212, 454-463	16
1154	The phytolith carbon sequestration concept: Fact or fiction? A comment on "Occurrence, turnover and carbon sequestration potential of phytoliths in terrestrial ecosystems by Song et al. doi: 10.1016/j.earscirev.2016.04.007" <b>2017</b> , 164, 251-255	18
1153	Microbial community and associated enzymes activity influence soil carbon chemical composition in Eucalyptus urophylla plantation with mixing N <sub>2</sub> -fixing species in subtropical China. <b>2017</b> , 414, 199-212	15
1152	Reconciling opposing soil processes in row-crop agroecosystems via soil functional zone management. <b>2017</b> , 236, 99-107	14
1151	Ecosystem Assembly: A Mission for Terrestrial Earth System Science. <b>2017</b> , 20, 69-77	9
1150	Modelling the dynamic physical protection of soil organic carbon: Insights into carbon predictions and explanation of the priming effect. <b>2017</b> , 23, 5273-5283	21
1149	The impacts of organic amendments: Do they confer stability against drought on the soil microbial community?. <b>2017</b> , 113, 173-183	43
1148	Production of Hydrogen Peroxide in Groundwater at Rifle, Colorado. <b>2017</b> , 51, 7881-7891	36
1147	Shrub encroachment by green alder on subalpine pastures: Changes in mineral soil organic carbon characteristics. <b>2017</b> , 157, 35-46	8
1146	Changes in soil C and N stocks and C:N stoichiometry 21 years after land use change on an arable mineral topsoil. <b>2017</b> , 303, 19-26	21
1145	Using community trait-distributions to assign microbial responses to pH changes and Cd in forest soils treated with wood ash. <b>2017</b> , 112, 153-164	45



1144	Soil organic carbon dynamics jointly controlled by climate, carbon inputs, soil properties and soil carbon fractions. <b>2017</b> , 23, 4430-4439	164
1143	Is the rate of mineralization of soil organic carbon under microbiological control?. <b>2017</b> , 112, 127-139	37
1142	Terrestrially derived glomalin-related soil protein quality as a potential ecological indicator in a peri-urban watershed. <b>2017</b> , 189, 315	2
1141	Biochar research activities and their relation to development and environmental quality. A meta-analysis. <b>2017</b> , 37, 1	13
1140	The influence of weathering and soil organic matter on Zn isotopes in soils. <b>2017</b> , 466, 140-148	21
1139	Seasonal switchgrass ecotype contributions to soil organic carbon, deep soil microbial community composition and rhizodeposit uptake during an extreme drought. <b>2017</b> , 112, 191-203	23
1138	Humic supramolecular structures have polar surfaces and unpolar cores in native soil. <b>2017</b> , 183, 437-443	11
1137	Invasion effects of <i>Chromolaena odorata</i> on soil carbon and nitrogen fractions in a tropical savanna. <b>2017</b> , 8, e01831	6
1136	Long term decomposition: the influence of litter type and soil horizon on retention of plant carbon and nitrogen in soils. <b>2017</b> , 134, 5-16	30
1135	Effects of complexation between organic matter (OM) and clay mineral on OM pyrolysis. <b>2017</b> , 212, 1-15	50
1134	Preface: Special issue SOM 2015. <b>2017</b> , 304, 1-3	
1133	Application of DRIFTS, C NMR, and py-MBMS to Characterize the Effects of Soil Science Oxidation Assays on Soil Organic Matter Composition in a Mollic Xerofluvent. <b>2017</b> , 71, 1506-1518	10
1132	Greenhouse Gas Mitigation under Agriculture and Livestock Landuse. <b>2017</b> , 343-394	3
1131	Is demineralization with dilute hydrofluoric acid a viable method for isolating mineral stabilized soil organic matter?. <b>2017</b> , 304, 4-11	11
1130	Changes in substrate availability drive carbon cycle response to chronic warming. <b>2017</b> , 110, 68-78	44
1129	Importance of lateral flux and its percolation depth on organic carbon export in Arctic tundra soil: Implications from a soil leaching experiment. <b>2017</b> , 122, 796-810	15
1128	Old before your time: Ancient carbon incorporation in contemporary aquatic foodwebs. <b>2017</b> , 62, 1682-1700	32
1127	Prediction of soil organic carbon in an intensively managed reclamation zone of eastern China: A comparison of multiple linear regressions and the random forest model. <b>2017</b> , 592, 704-713	86

1126	Arctic Soil Microbial Sensitivity to Seasonal Dynamics and Climate Change. <b>2017</b> , 275-307	2
1125	Direct Visualization of Aggregate Morphology and Dynamics in a Model Soil OrganicâMineral System. <b>2017</b> , 4, 186-191	15
1124	Exposure to dairy manure leads to greater antibiotic resistance and increased mass-specific respiration in soil microbial communities. <b>2017</b> , 284,	23
1123	The effect of Ferralsol mineralogy on the distribution of organic C across aggregate size fractions under native vegetation and no-tillage agriculture. <b>2017</b> , 33, 328-338	7
1122	Contrast effect of long-term fertilization on SOC and SIC stocks and distribution in different soil particle-size fractions. <b>2017</b> , 17, 1054-1063	19
1121	Unraveling signatures of biogeochemical processes and the depositional setting in the molecular composition of pore water DOM across different marine environments. <b>2017</b> , 207, 57-80	54
1120	Soil sensors: detailed insight into research updates, significance, and future prospects. <b>2017</b> , 561-594	8
1119	Predator community composition is linked to soil carbon retention across a human land use gradient. <b>2017</b> , 98, 1256-1265	17
1118	Metal mobilization from metallurgical wastes by soil organic acids. <b>2017</b> , 178, 197-211	28
1117	Modeling Soil Aggregation at the Early Pedogenesis Stage From the Parent Material of a Mollisol Under Different Agricultural Practices. <b>2017</b> , 181-214	8
1116	Quantifying the Incipient Development of Soil Structure and Functions Within a Glacial Forefield Chronosequence. <b>2017</b> , 215-239	7
1115	Spectroscopic investigation of soil organic matter composition for shelterbelt agroforestry systems. <b>2017</b> , 298, 1-13	34
1114	Seasonal hydrology and permafrost disturbance impacts on dissolved organic matter composition in High Arctic headwater catchments. <b>2017</b> , 3, 378-405	29
1113	Microbial Proteins and Soil Carbon Sequestration. <b>2017</b> , 131-139	2
1112	Carbon and Energy Sources of Mycorrhizal Fungi: Obligate Symbionts or Latent Saprotrophs?. <b>2017</b> , 357-374	8
1111	Immobilization of Carbon in Mycorrhizal Mycelial Biomass and Secretions. <b>2017</b> , 413-440	5
1110	Mycorrhizal Interactions With Saprotrophs and Impact on Soil Carbon Storage. <b>2017</b> , 441-460	9
1109	Soil Organic Carbon Accumulation in Abandoned Croplands on the Loess Plateau. <b>2017</b> , 28, 1519-1527	29

1108	40 years of succession or mulching of abandoned grassland affect phosphorus fractions in soil. <b>2017</b> , 237, 66-74	4
1107	Biogeochemical nature of grassland soil organic matter under plant communities with two nitrogen sources. <b>2017</b> , 415, 189-201	9
1106	Erosional redistribution of topsoil controls soil nitrogen dynamics. <b>2017</b> , 132, 37-54	25
1105	Comparison of process-based models to quantify nutrient flows and greenhouse gas emissions associated with milk production. <b>2017</b> , 237, 31-44	14
1104	Modification of the weak nitric acid digestion method for the quantification of black carbon in organic matrices. <b>2017</b> , 103, 136-139	11
1103	Gypsum application increases the carbon stock in soil under sugar cane in the Cerrado region of Brazil. <b>2017</b> , 55, 38	1
1102	Environmental life cycle assessments of producing maize, grass-clover, ryegrass and winter wheat straw for biorefinery. <b>2017</b> , 142, 3859-3871	33
1101	Changes in biochar physical and chemical properties: Accelerated biochar aging in an acidic soil. <b>2017</b> , 115, 209-219	88
1100	Integrated nutrient management in wheat grown in a northeast India soil: Impacts on soil organic carbon fractions in relation to grain yield. <b>2017</b> , 168, 81-91	28
1099	Turnover of the Soil Organic Matter Amino Acid Fraction Investigated by <sup>13</sup> C and <sup>14</sup> C Signatures of Carboxyl Carbon. <b>2017</b> , 59, 473-481	3
1098	Contrasting patterns of carbon sequestration between Gilbertiodendron dewevrei monodominant forests and Scorodophloeus zenkeri mixed forests in the Central Congo basin. <b>2017</b> , 414, 309-326	10
1097	Impact of compost and manure on the ripening of dredged sediments. <b>2017</b> , 17, 567-577	5
1096	The carbon quality-temperature hypothesis does not consistently predict temperature sensitivity of soil organic matter mineralization in soils from two manipulative ecosystem experiments. <b>2017</b> , 136, 249-260	11
1095	Modeling Global Soil Carbon and Soil Microbial Carbon by Integrating Microbial Processes into the Ecosystem Process Model TRIPLEX-GHG. <b>2017</b> , 9, 2368-2384	35
1094	Shrub-encroachment induced alterations in input chemistry and soil microbial community affect topsoil organic carbon in an Inner Mongolian grassland. <b>2017</b> , 136, 311-324	16
1093	Microbial community-level regulation explains soil carbon responses to long-term litter manipulations. <b>2017</b> , 8, 1223	63
1092	Soil Carbon Dynamics Under Changing Climate—A Research Transition from Absolute to Relative Roles of Inorganic Nitrogen Pools and Associated Microbial Processes: A Review. <b>2017</b> , 27, 792-806	17
1091	Soil Organic Carbon in a Changing World. <b>2017</b> , 27, 789-791	23

1090	Weaker priming and mineralisation of low molecular weight organic substances in paddy than in upland soil. <b>2017</b> , 83, 9-17	22
1089	Long-term pattern and magnitude of soil carbon feedback to the climate system in a warming world. <b>2017</b> , 358, 101-105	299
1088	Can Soil Organic Carbon Fractions Be Used as Functional Indicators of Wetlands?. <b>2017</b> , 37, 1195-1205	8
1087	Effect of biogas digestate, animal manure and mineral fertilizer application on nitrogen flows in biogas feedstock production. <b>2017</b> , 91, 63-73	11
1086	Maintaining connectivity: understanding the role of root order and mycelial networks in fine root decomposition of woody plants. <b>2017</b> , 420, 19-36	27
1085	Effects of human land use on the terrestrial and aquatic sources of fluvial organic matter in a temperate river basin (The Meuse River, Belgium). <b>2017</b> , 136, 191-211	60
1084	Labile carbon 'primes' fungal use of nitrogen from submerged leaf litter. <b>2017</b> , 93,	16
1083	The role of macro-aggregation in regulating enzymatic depolymerization of soil organic nitrogen. <b>2017</b> , 115, 100-108	3
1082	Competition and surface conditioning alter the adsorption of phenolic and amino acids on soil minerals. <b>2017</b> , 68, 667-677	13
1081	The mechanisms of organic carbon protection and dynamics of C-saturation in Oxisols vary with particle-size distribution. <b>2017</b> , 68, 726-739	12
1080	<sup>14</sup> C mean residence time and its relationship with thermal stability and molecular composition of soil organic matter: A case study of deciduous and coniferous forest types. <b>2017</b> , 308, 1-8	12
1079	Stabilized Silver Nanoparticles and Nanoclusters Agn in Humic-Based Bioactive Nanocomposites. <b>2017</b> , 28, 3067-3074	9
1078	Pedotransfer functions for predicting organic carbon in subsurface horizons of European soils. <b>2017</b> , 68, 716-725	4
1077	Temperature sensitivity and priming of organic matter with different stabilities in a Vertisol with aged biochar. <b>2017</b> , 115, 346-356	33
1076	Three decades following afforestation are sufficient to yield <sup>13</sup> C depth profiles. <b>2017</b> , 180, 643-647	3
1075	Organic carbon characteristics in density fractions of soils with contrasting mineralogies. <b>2017</b> , 218, 215-236	30
1074	The Ecology of Soil Carbon: Pools, Vulnerabilities, and Biotic and Abiotic Controls. <b>2017</b> , 48, 419-445	329
1073	Onsite cavity enhanced Raman spectrometry for the investigation of gas exchange processes in the Earth's critical zone. <b>2017</b> , 142, 3360-3369	31

1072	Dissolved organic matter retention in volcanic soils with contrasting mineralogy: a column sorption experiment. <b>2017</b> , 135, 293-306	3
1071	Soil organic matter molecular composition and state of decomposition in three locations of the European Arctic. <b>2017</b> , 135, 277-292	8
1070	An optical method for carbon dioxide isotopes and mole fractions in small gas samples: Tracing microbial respiration from soil, litter, and lignin. <b>2017</b> , 31, 1938-1946	13
1069	Developing a molecular picture of soil organic matter-mineral interactions by quantifying organo-mineral binding. <b>2017</b> , 8, 396	95
1068	Contrasting fates of organic matter in locations having different organic matter inputs and bottom water O <sub>2</sub> concentrations. <b>2017</b> , 198, 63-72	6
1067	Responses of microbial biomass carbon and nitrogen to experimental warming: A meta-analysis. <b>2017</b> , 115, 265-274	41
1066	The effect of different organic materials amendment on soil bacteria communities in barren sandy loam soil. <b>2017</b> , 24, 24019-24028	23
1065	Limited long-term effects of moderate livestock grazing and prescribed early fire on soil and root processes in Sudanian savanna-woodlands, West Africa. <b>2017</b> , 306, 18-27	6
1064	Application rate and plant species affect the ecological safety of sewage sludge as a landscape soil amendment. <b>2017</b> , 27, 138-147	9
1063	Response of soil microbial community composition and function to a bottomland forest restoration intensity gradient. <b>2017</b> , 119, 317-326	41
1062	Tamm Review: On the nature of the nitrogen limitation to plant growth in Fennoscandian boreal forests. <b>2017</b> , 403, 161-185	103
1061	Compound-specific short-chain carboxylic acids identified in a peat dissolved organic matter using high-resolution liquid chromatography-mass spectrometry. <b>2017</b> , 111, 9-12	5
1060	Nutritional support of inland aquatic food webs by aged carbon and organic matter. <b>2017</b> , 2, 131-149	13
1059	Deep Yedoma permafrost: A synthesis of depositional characteristics and carbon vulnerability. <b>2017</b> , 172, 75-86	135
1058	The importance of anabolism in microbial control over soil carbon storage. <b>2017</b> , 2, 17105	567
1057	Changes in quality and quantity of soil organic matter stocks resulting from wastewater irrigation in formerly forested land. <b>2017</b> , 306, 99-107	19
1056	Geochemical analyses reveal the importance of environmental history for blue carbon sequestration. <b>2017</b> , 122, 1789-1805	24
1055	Two dimensional NMR spectroscopy for molecular characterization of soil organic matter: Application to boreal soils and litter. <b>2017</b> , 113, 184-195	9

1054	Long-term litter manipulation alters soil organic matter turnover in a temperate deciduous forest. <b>2017</b> , 607-608, 865-875	33
1053	Physical access for residue-mineral interactions controls organic carbon retention in an Oxisol soil. <b>2017</b> , 7, 6317	9
1052	Iron-mediated mineralogical control of organic matter accumulation in tropical soils. <b>2017</b> , 306, 206-216	64
1051	Microbial association with the dynamics of particulate organic carbon in response to the amendment of elevated CO <sub>2</sub> -derived wheat residue into a Mollisol. <b>2017</b> , 607-608, 972-981	17
1050	Carbon accrual rates, vegetation and nutrient dynamics in a regularly burned coppice woodland in Germany. <b>2017</b> , 9, 1140-1150	10
1049	Repeated annual drought has minor long-term influence on $\delta^{13}C$ and alkane composition of plant and soil in model grassland and heathland ecosystems. <b>2017</b> , 180, 516-527	3
1048	Evidence from nuclear magnetic resonance spectroscopy of the processes of soil organic carbon accumulation under long-term fertilizer management. <b>2017</b> , 68, 703-715	14
1047	High potential for temperate viruses to drive carbon cycling in chemoautotrophy-dominated shallow-water hydrothermal vents. <b>2017</b> , 19, 4432-4446	14
1046	Biophysical processes supporting the diversity of microbial life in soil. <b>2017</b> , 41, 599-623	184
1045	Effect of wheat and Miscanthus straw biochars on soil enzymatic activity, ecotoxicity, and plant yield. <b>2017</b> , 31, 367-375	22
1044	Stable isotopes of carbon and nitrogen help to predict the belowground communities at a regional scale. <b>2017</b> , 7, 7276	5
1043	Potential Benefits of Biochar in Agricultural Soils: A Review. <b>2017</b> , 27, 645-661	92
1042	Chemical changes in detrital matter upon digestive processes in a sesarmid crab feeding on mangrove leaf litter. <b>2017</b> , 803, 307-315	6
1041	Empirical Evidence of Soil Carbon Changes in Bioenergy Cropping Systems. <b>2017</b> , 99-114	
1040	Soil Organic Matter/Carbon Dynamics in Contrasting Tillage and Land Management Systems: A Case for Smallholder Farmers with Degraded and Marginal Soils. <b>2017</b> , 48, 2013-2031	3
1039	Permafrost Organic Carbon Mobilization From the Watershed to the Colville River Delta: Evidence From $^{14}C$ Ramped Pyrolysis and Lignin Biomarkers. <b>2017</b> , 44, 11,491	16
1038	Manganese availability is negatively associated with carbon storage in northern coniferous forest humus layers. <b>2017</b> , 7, 15487	29
1037	Potential contributions of root decomposition to the nitrogen cycle in arctic forest and tundra. <b>2017</b> , 7, 11021-11032	4

1036	Mineral surface-reactive metabolites secreted during fungal decomposition contribute to the formation of soil organic matter. <b>2017</b> , 19, 5117-5129	23
1035	Depth trends of soil organic matter C:N and 15N natural abundance controlled by association with minerals. <b>2017</b> , 136, 237-248	31
1034	Altered nature of terrestrial organic matter transferred to aquatic systems following deforestation in the Amazon. <b>2017</b> , 87, 136-145	6
1033	Effect of humic acids on the metabolism of <i>Chlorella vulgaris</i> in a model experiment. <b>2017</b> , 50, 1294-1300	3
1032	Solid-State 13C Nuclear Magnetic Resonance Spectroscopic Characterization of Soil Organic Matter Fractions in a Forest Ecosystem Subjected to Prescribed Burning and Thinning. <b>2017</b> , 27, 901-911	8
1031	Chemistry and spectroscopic properties of surface horizons of Arctic soils under different types of tundra vegetation – A case study from the Fuglebergsletta coastal plain (SW Spitsbergen). <b>2017</b> , 156, 325-337	16
1030	High stocks, but slow recovery, of ecosystem carbon in southern oceanic tussock grasslands. <b>2017</b> , 40, 1617-1628	5
1029	Soil organic carbon stock in relation to aggregate size and stability under tree-based cropping systems in Typic Ustochrepts. <b>2017</b> , 92, 275	5
1028	SoilChip-XPS integrated technique to study formation of soil biogeochemical interfaces. <b>2017</b> , 113, 71-79	14
1027	The diversity of methoxyphenols released by pyrolysis-gas chromatography as predictor of soil carbon storage. <b>2017</b> , 1508, 130-137	11
1026	Forest-type shift and subsequent intensive management affected soil organic carbon and microbial community in southeastern China. <b>2017</b> , 136, 689-697	24
1025	Effects of habitat constraints on soil microbial community function. <b>2017</b> , 7, 4280	37
1024	Effect of temperature and moisture on the mineralization and humification of leaf litter in a model incubation experiment. <b>2017</b> , 50, 422-431	14
1023	Evolutionary history of versatile-lipases from Agaricales through reconstruction of ancestral structures. <b>2017</b> , 18, 12	7
1022	Geochemistry. <b>2017</b> , 1-36	
1021	Accelerated benzene polycarboxylic acid analysis by liquid chromatography-time-of-flight-mass spectrometry for the determination of petrogenic and pyrogenic carbon. <b>2017</b> , 1510, 57-65	15
1020	The temperature sensitivity of organic carbon mineralization is affected by exogenous carbon inputs and soil organic carbon content. <b>2017</b> , 81, 69-75	21
1019	Dynamics of soil organic carbon in density fractions during post-agricultural succession over two lithology types, southwest China. <b>2017</b> , 201, 199-206	18

1018	Influence of land use and lithology on sources and ages of nutritional resources for stream macroinvertebrates: a multi-isotopic approach. <b>2017</b> , 79, 925-939	9
1017	Dynamics of ferrihydrite-bound organic carbon during microbial Fe reduction. <b>2017</b> , 212, 221-233	63
1016	An invasive wetland grass primes deep soil carbon pools. <b>2017</b> , 23, 2104-2116	46
1015	The muddle of ages, turnover, transit, and residence times in the carbon cycle. <b>2017</b> , 23, 1763-1773	71
1014	Microbial utilization of mineral-associated nitrogen in soils. <b>2017</b> , 104, 185-196	21
1013	Dinner in the dark: Illuminating drivers of soil organic matter decomposition. <b>2017</b> , 105, 45-48	52
1012	Labile carbon input determines the direction and magnitude of the priming effect. <b>2017</b> , 109, 7-13	71
1011	The interactions of composting and biochar and their implications for soil amendment and pollution remediation: a review. <b>2017</b> , 37, 754-764	246
1010	Can earthworms simultaneously enhance decomposition and stabilization of plant residue carbon?. <b>2017</b> , 105, 12-24	65
1009	Soil aggregate stability and aggregate-associated carbon and nitrogen in natural restoration grassland and Chinese red pine plantation on the Loess Plateau. <b>2017</b> , 149, 253-260	62
1008	Mineral controls on soil organic C stabilization in alpine and subalpine soils in the Central Pyrenees: Insights from wet oxidation methods, mineral dissolution treatment and radiocarbon dating. <b>2017</b> , 149, 363-373	8
1007	Functional Composition of Tree Communities Changed Topsoil Properties in an Old Experimental Tropical Plantation. <b>2017</b> , 20, 861-871	9
1006	Forest management scenarios in a changing climate: trade-offs between carbon, timber, and old forest. <b>2017</b> , 27, 503-518	48
1005	Effect of ecosystem type and fire on chemistry of WEOM as measured by LDI-TOF-MS and NMR. <b>2017</b> , 162, 589-596	3
1004	Repeated application of organic waste affects soil organic matter composition: Evidence from thermal analysis, FTIR-PAS, amino sugars and lignin biomarkers. <b>2017</b> , 104, 117-127	51
1003	Soil porosity in physically separated fractions and its role in SOC protection. <b>2017</b> , 17, 70-84	10
1002	Plant species richness negatively affects root decomposition in grasslands. <b>2017</b> , 105, 209-218	35
1001	Romul_Hum model of soil organic matter formation coupled with soil biota activity. I. Problem formulation, model description, and testing. <b>2017</b> , 345, 113-124	23



1000	Anthropogenic N deposition increases soil organic matter accumulation without altering its biochemical composition. <b>2017</b> , 23, 933-944	71
999	The macromolecular organic composition of plant and microbial residues as inputs to soil organic matter: Fourteen years on. <b>2017</b> , 105, A3-A8	115
998	Comparison of plant and bacterial communities between a subtropical landfill topsoil 15 years after restoration and a natural area. <b>2017</b> , 63, 49-57	19
997	Sensitivity of soil carbon fractions and their specific stabilization mechanisms to extreme soil warming in a subarctic grassland. <b>2017</b> , 23, 1316-1327	46
996	Investigating the biochar effects on C-mineralization and sequestration of carbon in soil compared with conventional amendments using the stable isotope ( $\delta^{13}\text{C}$ ) approach. <b>2017</b> , 9, 1085-1099	56
995	Roles of composts in soil based on the assessment of humification degree of fulvic acids. <b>2017</b> , 72, 473-480	52
994	Controlling factors for the stability of subsoil carbon in a Dystric Cambisol. <b>2017</b> , 304, 40-48	37
993	Disappearance and alteration process of charcoal fragments in cumulative soils studied using Raman spectroscopy. <b>2017</b> , 285, 164-172	13
992	Opportunities for enhancing yield and soil carbon sequestration while reducing N <sub>2</sub> O emissions in rainfed cropping systems. <b>2017</b> , 232, 400-410	8
991	A review: Potential and challenges of biologically activated carbon to remove natural organic matter in drinking water purification process. <b>2017</b> , 167, 120-138	138
990	Deforestation impacts on soil organic carbon stocks in the Semiarid Chaco Region, Argentina. <b>2017</b> , 575, 1056-1065	47
989	Thermal oxidation does not fractionate soil organic carbon with differing biological stabilities. <b>2017</b> , 180, 18-26	15
988	Expanding the role of reactive transport models in critical zone processes. <b>2017</b> , 165, 280-301	145
987	Effects of slope exposure on soil physico-chemical and microbiological properties along an altitudinal climosequence in the Italian Alps. <b>2017</b> , 575, 1041-1055	48
986	Mass, nutrient pool, and mineralization of litter and fine roots in a tropical mountain cloud forest. <b>2017</b> , 575, 876-886	16
985	Spatial and temporal dynamics of the soil charcoal pool in relation to fire history in a boreal forest landscape. <b>2017</b> , 47, 28-35	8
984	Soil pores and their contributions to soil carbon processes. <b>2017</b> , 287, 31-39	68
983	Romul_Hum model of soil organic matter formation coupled with soil biota activity. III. Parameterisation of earthworm activity. <b>2017</b> , 345, 140-149	16

982	Costimulation of soil glycosidase activity and soil respiration by nitrogen addition. <b>2017</b> , 23, 1328-1337	90
981	The solubility of carbon inputs affects the priming of soil organic matter. <b>2017</b> , 410, 129-138	14
980	Fine roots branch orders of <i>Abies faxoniana</i> respond differentially to warming in a subalpine coniferous forest ecosystem. <b>2017</b> , 91, 955-966	5
979	Paramagnetic bioactive silver- and gold-containing nanocomposites based on humic substances. <b>2017</b> , 10, 1650077	3
978	Adsorptive fractionation of dissolved organic matter (DOM) by mineral soil: Macroscale approach and molecular insight. <b>2017</b> , 103, 113-124	78
977	The MICE facility - a new tool to study plant-soil C cycling with a holistic approach. <b>2017</b> , 53, 286-297	3
976	Strong stabilisation properties of humic substance matrixes for silver bionanocomposites. <b>2017</b> , 12, 418-421	8
975	Both canopy and understory traits act as response-effect traits in fire-managed forests. <b>2017</b> , 8, e02036	5
974	Increased precipitation accelerates soil organic matter turnover associated with microbial community composition in topsoil of alpine grassland on the eastern Tibetan Plateau. <b>2017</b> , 63, 811-821	9
973	Ice wedge degradation and CO <sub>2</sub> and CH <sub>4</sub> emissions in the Tuktoyaktuk Coastlands, NT. <b>2017</b> ,	3
972	Carbon Sequestration Potential Promoted by Oxalate Extractable Iron Oxides through Organic Fertilization. <b>2017</b> , 81, 1359-1370	14
971	Methodological Challenges and General Criteria for Assessing and Designing Local Sustainable Agri-Food Systems: A Socio-Ecological Approach at Landscape Level. <b>2017</b> , 27-67	7
970	Different composition and distribution patterns of mineral-protected versus hydrolyzable lipids in shrubland soils. <b>2017</b> , 122, 2206-2218	17
969	Soil Organic Carbon Stocks Under Different Agroforestry Systems of North-Eastern Regions of India. <b>2017</b> , 299-316	
968	The Mechanisms and Time Factor of the Enzyme Structure of a Paleosoil. <b>2017</b> , 62, 1022-1029	8
967	Characterization of natural organic matter in low-carbon sediments: Extraction and analytical approaches. <b>2017</b> , 114, 12-22	23
966	Tropical Dry Deciduous Forest: Research Trends and Emerging Features. <b>2017</b> ,	5
965	Productivity and Nutrient Cycling. <b>2017</b> , 111-147	

964	Introduction. <b>2017</b> , 1-12	
963	Diverse Soil Carbon Dynamics Expressed at the Molecular Level. <b>2017</b> , 44, 11,840-11,850	25
962	Importance of soil organic carbon in near-surface soil water content estimation: A simple model comparison in dry-end Canadian Prairie soils. <b>2017</b> , 42, 364-377	2
961	The effects of burning and grazing on soil carbon dynamics in managed Peruvian tropical montane grasslands. <b>2017</b> , 14, 5633-5646	3
960	Carbon degradation in agricultural soils flooded with seawater after managed coastal realignment. <b>2017</b> , 14, 4375-4389	13
959	Model predictions of long-lived storage of organic carbon in river deposits. <b>2017</b> ,	1
958	Maximizing Soil Carbon Sequestration: Assessing Procedural Barriers to Carbon Management in Cultivated Tropical Perennial Grass Systems. <b>2017</b> ,	0
957	Advances in Scanning Transmission X-Ray Microscopy for Elucidating Soil Biogeochemical Processes at the Submicron Scale. <b>2017</b> , 46, 1166-1174	17
956	Ecologically Based Nutrient Management. <b>2017</b> , 203-257	7
955	NMR of Soil Organic Matter. <b>2017</b> , 170-174	5
954	Molecular and Microscopic Insights into the Formation of Soil Organic Matter in a Red Pine Rhizosphere. <b>2017</b> , 1, 4	9
953	What Agriculture Can Learn from Native Ecosystems in Building Soil Organic Matter: A Review. <b>2017</b> , 9, 578	50
952	Molecular and Optical Properties of Tree-Derived Dissolved Organic Matter in Throughfall and Stemflow from Live Oaks and Eastern Red Cedar. <b>2017</b> , 5,	36
951	Molecular Determinants of Dissolved Organic Matter Reactivity in Lake Water. <b>2017</b> , 5,	27
950	Where Carbon Goes When Water Flows: Carbon Cycling across the Aquatic Continuum. <b>2017</b> , 4,	112
949	Muddy Waters: Unintentional Consequences of Blue Carbon Research Obscure Our Understanding of Organic Carbon Dynamics in Seagrass Ecosystems. <b>2017</b> , 4,	15
948	Microscale Insight into Microbial Seed Banks. <b>2016</b> , 7, 2040	17
947	Microbial Community Dynamics in Soil Depth Profiles Over 120,000 Years of Ecosystem Development. <b>2017</b> , 8, 874	27

946	Balanced Fertilization Decreases Environmental Filtering on Soil Bacterial Community Assemblage in North China. <b>2017</b> , 8, 2376	22
945	Construction of Viable Soil Defined Media Using Quantitative Metabolomics Analysis of Soil Metabolites. <b>2017</b> , 8, 2618	12
944	Response of Deep Soil Carbon Pools to Forest Management in a Highly Productive Andisol. <b>2017</b> , 81, 970-978	8
943	Soil water content drives spatiotemporal patterns of CO <sub>2</sub> and N <sub>2</sub> O emissions from a Mediterranean riparian forest soil. <b>2017</b> , 14, 4195-4208	28
942	ORCHIDEE-SOM: Modeling soil organic carbon (SOC) and dissolved organic carbon (DOC) dynamics along vertical soil profiles in Europe. <b>2017</b> ,	1
941	Field-Based Estimates of Global Warming Potential in Bioenergy Systems of Hawaii: Crop Choice and Deficit Irrigation. <b>2017</b> , 12, e0168510	9
940	Anaerobic microsites have an unaccounted role in soil carbon stabilization. <b>2017</b> , 8, 1771	160
939	Assessment of regional changes for enhancing water availability. <b>2017</b> , 6,	
938	Short-term carbon input increases microbial nitrogen demand, but not microbial nitrogen mining, in a set of boreal forest soils. <b>2017</b> , 136, 261-278	14
937	Leaf litter diversity positively affects the decomposition of plant polyphenols. <b>2017</b> , 419, 305-317	11
936	Biochar: The Black Diamond for Soil Sustainability, Contamination Control and Agricultural Production. <b>2017</b> ,	10
935	Technical note: An inverse method to relate organic carbon reactivity to isotope composition from serial oxidation. <b>2017</b> , 14, 5099-5114	23
934	Opportunities and limitations related to the application of plant-derived lipid molecular proxies in soil science. <b>2017</b> ,	1
933	Organic Carbon and Physical Properties in Sandy Soil after Conversion from Degraded Pasture to Eucalyptus in the Brazilian Cerrado. <b>2017</b> , 41,	4
932	Thinning of Beech Forests Stocking on Shallow Calcareous Soil Maintains Soil C and N Stocks in the Long Run. <b>2017</b> , 8, 167	4
931	Opportunities and limitations related to the application of plant-derived lipid molecular proxies in soil science. <b>2017</b> , 3, 211-234	36
930	Aggregate Stability in Soil with Humic and Histic Horizons in a Toposequence under Araucaria Forest. <b>2017</b> , 41,	6
929	A Dataset for Three-Dimensional Distribution of 39 Elements Including Plant Nutrients and Other Metals and Metalloids in the Soils of a Forested Headwater Catchment. <b>2017</b> , 46, 1510-1518	5

928	Solid-State <sup>13</sup> C Nuclear Magnetic Resonance (NMR) Analysis of Soil Organic Matter. <b>2017</b> ,	1
927	Model predictions of long-lived storage of organic carbon in river deposits. <b>2017</b> , 5, 711-730	37
926	Effects of Different Land-Use Systems on Soil Aggregates: A Case Study of the Loess Plateau (Northern China). <b>2017</b> , 9, 1349	22
925	Effect of Mineral Nitrogen on Transfer of <sup>13</sup> C-Carbon from Eucalyptus Harvest Residue Components to Soil Organic Matter Fractions. <b>2017</b> , 41,	1
924	Tracking the fate of fresh carbon in the Arctic tundra: Will shrub expansion alter responses of soil organic matter to warming?. <b>2018</b> , 120, 134-144	30
923	Alteration of rocks by endolithic organisms is one of the pathways for the beginning of soils on Earth. <b>2018</b> , 8, 3367	40
922	References. <b>2018</b> , 313-359	
921	Storage and export of soil carbon and mineral surface area along an erosional gradient in the Sierra Nevada, California. <b>2018</b> , 321, 151-163	8
920	The Temperature Sensitivity (Q <sub>10</sub> ) of Soil Respiration: Controlling Factors and Spatial Prediction at Regional Scale Based on Environmental Soil Classes. <b>2018</b> , 32, 306-323	73
919	Initial Soil Organic Matter Content Influences the Storage and Turnover of Litter, Root and Soil Carbon in Grasslands. <b>2018</b> , 21, 1377-1389	10
918	Links Between Heathland Fungal Biomass Mineralization, Melanization, and Hydrophobicity. <b>2018</b> , 76, 762-770	7
917	References. 292-319	
916	Nitrogen-rich compounds constitute an increasing proportion of organic matter with depth in Oi-Oe-Oa-A horizons of temperate forests. <b>2018</b> , 323, 1-12	6
915	Dryland soils in northern China sequester carbon during the early 2000s warming hiatus period. <b>2018</b> , 32, 1620-1630	12
914	n-Alkan-2-one biomarkers as a proxy for palaeoclimate reconstruction in the Mfabeni fen, South Africa. <b>2018</b> , 120, 75-85	7
913	Relationship between Molecular Components and Reducing Capacities of Humic Substances. <b>2018</b> , 2, 330-339	37
912	The increase of soil organic carbon as proposed by the "4/1000 initiative" is strongly limited by the status of soil development - A case study along a substrate age gradient in Central Europe. <b>2018</b> , 628-629, 840-847	15
911	Plant and microbial biomarkers suggest mechanisms of soil organic carbon accumulation in a Mojave Desert ecosystem under elevated CO <sub>2</sub> . <b>2018</b> , 120, 48-57	11

910	Carbon quality and soil microbial property control the latitudinal pattern in temperature sensitivity of soil microbial respiration across Chinese forest ecosystems. <b>2018</b> , 24, 2841-2849	57
909	Soil organic carbon and mineral interactions on climatically different hillslopes. <b>2018</b> , 322, 71-80	14
908	Tree taxa and pyrolysis temperature interact to control pyrogenic organic matter induced native soil organic carbon priming. <b>2018</b> , 119, 174-183	4
907	Managing soil microbiology: realising opportunities for the productive land-based sectors. <b>2018</b> , 61, 358-376	4
906	Relationships between soil macroaggregation and humic carbon in a sandy loam soil following conservation tillage. <b>2018</b> , 18, 688-696	7
905	Climate-dependent topographic effects on pyrogenic soil carbon in southeastern Australia. <b>2018</b> , 322, 121-130	7
904	Structural evidence for soil organic matter turnover following glucose addition and microbial controls over soil carbon change at different horizons of a Mollisol. <b>2018</b> , 119, 63-73	10
903	Mapping the vertical distribution of maize roots in China in relation to climate and soil texture. <b>2018</b> , 11, 899-908	5
902	Plant community responses to increased precipitation and belowground litter addition: Evidence from a 5-year semiarid grassland experiment. <b>2018</b> , 8, 4587-4597	4
901	Soil organic carbon stocks in topsoil and subsoil controlled by parent material, carbon input in the rhizosphere, and microbial-derived compounds. <b>2018</b> , 122, 19-30	109
900	Shallow ponds are biogeochemically distinct habitats in salt marsh ecosystems. <b>2018</b> , 63, 1622-1642	8
899	Economics- and policy-driven organic carbon input enhancement dominates soil organic carbon accumulation in Chinese croplands. <b>2018</b> , 115, 4045-4050	162
898	Shifting plant species composition in response to climate change stabilizes grassland primary production. <b>2018</b> , 115, 4051-4056	208
897	Responses of soil organic carbon turnover to nitrogen deposition are associated with nitrogen input rates: Derived from soil C evidences. <b>2018</b> , 238, 500-507	7
896	Dynamics and driving factors of the organic carbon fractions in agricultural land reclaimed from coastal wetlands in eastern China. <b>2018</b> , 89, 639-647	27
895	Composition and molecular scale structure of nanophases formed by precipitation of biotite weathering products. <b>2018</b> , 229, 53-64	10
894	Global effects of plant litter alterations on soil CO <sub>2</sub> to the atmosphere. <b>2018</b> , 24, 3462-3471	45
893	Tree mycorrhizal type predicts within-site variability in the storage and distribution of soil organic matter. <b>2018</b> , 24, 3317-3330	91

892	Vascular plant-mediated controls on atmospheric carbon assimilation and peat carbon decomposition under climate change. <b>2018</b> , 24, 3911-3921	25
891	Critical transition in critical zone of intensively managed landscapes. <b>2018</b> , 22, 10-19	49
890	Simultaneous enantiomeric analysis of eight pesticides in soils and river sediments by chiral liquid chromatography-tandem mass spectrometry. <b>2018</b> , 204, 210-219	35
889	Global patterns of dead fine root stocks in forest ecosystems. <b>2018</b> , 45, 1378-1394	9
888	Carbon storage in China's terrestrial ecosystems: A synthesis. <b>2018</b> , 8, 2806	42
887	Soil mineral assemblage and substrate quality effects on microbial priming. <b>2018</b> , 322, 38-47	29
886	Domestic pig uprooting emerges as an undesirable disturbance on vegetation and soil properties in a plateau wetland ecosystem. <b>2018</b> , 26, 509-523	6
885	Rooting strategies in a subtropical savanna: a landscape-scale three-dimensional assessment. <b>2018</b> , 186, 1127-1135	5
884	Seasonal variations of Q10 soil respiration and its components in the temperate forest ecosystems, northeastern China. <b>2018</b> , 85, 36-42	10
883	Redox interface-associated organo-mineral interactions: A mechanism for C sequestration under a rice-wheat cropping system. <b>2018</b> , 120, 12-23	31
882	Does P-deficiency fertilization alter chemical compositions of fulvic acids? Insights from long-term field studies on two contrasting soils: A Fluvisol and an Anthrosol. <b>2018</b> , 178, 189-197	2
881	The role of organo-clay associations in limiting organic matter decay: Insights from the Dajiuhe peat soil, central China. <b>2018</b> , 320, 149-160	25
880	Unifying Concepts Linking Dissolved Organic Matter Composition to Persistence in Aquatic Ecosystems. <b>2018</b> , 52, 2538-2548	105
879	Soil-borne fungi challenge the concept of long-term biochemical recalcitrance of pyrochar. <b>2018</b> , 8, 2896	21
878	Interactions among decaying leaf litter, root litter and soil organic matter vary with mycorrhizal type. <b>2018</b> , 106, 502-513	34
877	From mycorrhizal fungal traits to ecosystem properties and back again. <b>2018</b> , 106, 463-467	9
876	A novel way of assessing C dynamics during urban organic waste composting and greenhouse gas emissions in tropical region. <b>2018</b> , 3, 35-42	12
875	DNA Facilitates the Sorption of Polycyclic Aromatic Hydrocarbons on Montmorillonites. <b>2018</b> , 52, 2694-2703	15

874	Ratiometric Gas Reporting: A Nondisruptive Approach To Monitor Gene Expression in Soils. <b>2018</b> , 7, 903-911	8
873	Grazing enhances belowground carbon allocation, microbial biomass, and soil carbon in a subtropical grassland. <b>2018</b> , 24, 2997-3009	75
872	Comparison between Soil- and Biochar-Derived Humic Acids: Composition, Conformation, and Phenanthrene Sorption. <b>2018</b> , 52, 1880-1888	55
871	Carbohydrates protect protein against abiotic fragmentation by soil minerals. <b>2018</b> , 8, 813	9
870	Digging deeper: A holistic perspective of factors affecting soil organic carbon sequestration in agroecosystems. <b>2018</b> , 24, 3285-3301	214
869	Diversity, Functions, and Stress Responses of Soil Microorganisms. <b>2018</b> , 1-19	3
868	HNO modified biochars for uranium (VI) removal from aqueous solution. <b>2018</b> , 256, 247-253	131
867	Incorporation of shoot versus root-derived <sup>13</sup> C and <sup>15</sup> N into mineral-associated organic matter fractions: results of a soil slurry incubation with dual-labelled plant material. <b>2018</b> , 137, 379-393	25
866	The responses of microbial temperature relationships to seasonal change and winter warming in a temperate grassland. <b>2018</b> , 24, 3357-3367	15
865	Cactus crop as an option to reduce soil CO <sub>2</sub> emissions in soils with declining fertility. <b>2018</b> , 38, 1	2
864	Soil carbon redistribution and organo-mineral associations after lateral soil movement and mixing in a first-order forest watershed. <b>2018</b> , 319, 142-155	4
863	Short and Long-Term Controls on Active Layer and Permafrost Carbon Turnover Across the Arctic. <b>2018</b> , 123, 372-390	14
862	The Millennial model: in search of measurable pools and transformations for modeling soil carbon in the new century. <b>2018</b> , 137, 51-71	85
861	Calcium-mediated stabilisation of soil organic carbon. <b>2018</b> , 137, 27-49	228
860	Role of Carbonates in the Physical Stabilization of Soil Organic Matter in Agricultural Mediterranean Soils. <b>2018</b> , 121-136	9
859	Residue analysis of smoking pipe fragments from the Feltus archaeological site, Southeastern North America. <b>2018</b> , 17, 640-649	4
858	Tracing of particulate organic C sources across the terrestrial-aquatic continuum, a case study at the catchment scale (Carminowe Creek, southwest England). <b>2018</b> , 616-617, 1077-1088	16
857	Exudation rates and <sup>13</sup> C signatures of tree root soluble organic carbon in a riparian forest. <b>2018</b> , 137, 235-252	6



856	The effects of heating, rhizosphere, and depth on root litter decomposition are mediated by soil moisture. <b>2018</b> , 137, 267-279	11
855	Disentangling the long-term effects of disturbance on soil biogeochemistry in a wet tropical forest ecosystem. <b>2018</b> , 24, 1673-1684	15
854	Stabilization of Soil Organic Carbon as Influenced by Clay Mineralogy. <b>2018</b> , 148, 33-84	73
853	Graphical statistical approach to soil organic matter resilience using analytical pyrolysis data. <b>2018</b> , 1533, 164-173	16
852	Linking soil organic matter thermal stability with contents of clay, bound water, organic carbon and nitrogen. <b>2018</b> , 316, 38-46	36
851	Organic matter identifies the nano-mechanical properties of native soil aggregates. <b>2018</b> , 10, 520-525	5
850	Large Differences in Global and Regional Total Soil Carbon Stock Estimates Based on SoilGrids, HWSD, and NCSCD: Intercomparison and Evaluation Based on Field Data From USA, England, Wales, and France. <b>2018</b> , 32, 42-56	69
849	Effects of temperature, soil substrate, and microbial community on carbon mineralization across three climatically contrasting forest sites. <b>2018</b> , 8, 879-891	21
848	Qualitative and quantitative soil organic matter estimation for sustainable soil management. <b>2018</b> , 18, 2801-2812	33
847	Effect of six years of nitrogen additions on soil chemistry in a subtropical <i>Pleioblastus amarus</i> forest, Southwest China. <b>2018</b> , 29, 1657-1664	3
846	Effective carbon sequestration in Italian agricultural soils by in situ polymerization of soil organic matter under biomimetic photocatalysis. <b>2018</b> , 29, 485-494	21
845	Riverine Export of Aged Carbon Driven by Flow Path Depth and Residence Time. <b>2018</b> , 52, 1028-1035	56
844	Soil phosphorus does not keep pace with soil carbon and nitrogen accumulation following woody encroachment. <b>2018</b> , 24, 1992-2007	19
843	Testing association between soil bacterial diversity and soil carbon storage on the Loess Plateau. <b>2018</b> , 626, 48-58	29
842	Large-Scale Distribution of Molecular Components in Chinese Grassland Soils: The Influence of Input and Decomposition Processes. <b>2018</b> , 123, 239-255	21
841	Decomposition characteristics of organic materials and their effects on labile and recalcitrant organic carbon fractions in a semi-arid soil under plastic mulch and drip irrigation. <b>2018</b> , 10, 115-128	14
840	Temperature response of plant residue and soil organic matter decomposition in soil from different depths. <b>2018</b> , 69, 325-335	7
839	Linking soil biology and chemistry in biological soil crust using isolate exometabolomics. <b>2018</b> , 9, 19	83

838	Mineralization of organic carbon and nitrogen in semi-arid soils under organic and inorganic fertilization. <b>2018</b> , 9, 243-253	23
837	Temperature sensitivity of soil organic carbon decomposition increased with mean carbon residence time: Field incubation and data assimilation. <b>2018</b> , 24, 810-822	27
836	Conversion of Tibetan grasslands to croplands decreases accumulation of microbially synthesized compounds in soil. <b>2018</b> , 123, 10-20	17
835	The synergistic effect of calcium on organic carbon sequestration to ferrihydrite. <b>2018</b> , 19, 4	41
834	Enhancing Soil Organic Matter as a Route to the Ecological Intensification of European Arable Systems. <b>2018</b> , 21, 1404-1415	30
833	Characterization of the heavy, hydrolysable and non-hydrolysable fractions of soil organic carbon in conventional and no-tillage soils. <b>2018</b> , 181, 144-151	12
832	Root Exudates and Microbial Communities Drive Mineral Dissolution and the Formation of Nano-size Minerals in Soils: Implications for Soil Carbon Storage. <b>2018</b> , 143-166	1
831	Beyond respiration: Controls on lateral carbon fluxes across the terrestrial-aquatic interface. <b>2018</b> , 3, 76-88	52
830	The Path From Litter to Soil: Insights Into Soil C Cycling From Long-Term Input Manipulation and High-Resolution Mass Spectrometry. <b>2018</b> , 123, 1486-1497	5
829	A net ecosystem carbon budget for snow dominated forested headwater catchments: linking water and carbon fluxes to critical zone carbon storage. <b>2018</b> , 138, 225-243	12
828	Wetland saturation with introduced Fe(III) reduces total carbon emissions and promotes the sequestration of DOC. <b>2018</b> , 325, 141-151	6
827	Adsorptive fractionation of corn, wheat, and soybean crop residue derived water-extractable organic matter on iron (oxy)hydroxide. <b>2018</b> , 326, 156-163	11
826	Post-caldera evolution of Deception Island (Bransfield Strait, Antarctica) over Holocene timescales. <b>2018</b> , 501, 58-69	2
825	Biochar reduces soil heterotrophic respiration in a subtropical plantation through increasing soil organic carbon recalcitrancy and decreasing carbon-degrading microbial activity. <b>2018</b> , 122, 173-185	89
824	Refractory organic matter in coastal salt marshes-effect on C sequestration calculations. <b>2018</b> , 633, 391-398	7
823	Differential capacity of kaolinite and birnessite to protect surface associated proteins against thermal degradation. <b>2018</b> , 119, 101-109	5
822	Humic-based bionanocomposites containing stable paramagnetic gold nanoparticles for prospective use in pharmaceuticals. <b>2018</b> , 51, 169-173	8
821	Soil carbon storage along a 46-year revegetation chronosequence in a desert area of northern China. <b>2018</b> , 325, 28-36	9

820	Transitional slopes act as hotspots of both soil CO <sub>2</sub> emission and CH <sub>4</sub> uptake in a temperate forest landscape. <b>2018</b> , 138, 121-135	6
819	Comment on "Climate legacies drive global soil carbon stocks in terrestrial ecosystems". <b>2018</b> , 4, e1701482	6
818	Priming effects induced by glucose and decaying plant residues on SOM decomposition: A three-source <sup>13</sup> C/ <sup>14</sup> C partitioning study. <b>2018</b> , 121, 138-146	36
817	Arbuscular mycorrhizal fungi influence decomposition and the associated soil microbial community under different soil phosphorus availability. <b>2018</b> , 120, 181-190	63
816	Carbon use efficiency of hayed alfalfa and grass pastures in a semiarid environment. <b>2018</b> , 9, e02147	10
815	Humic substances, their microbial interactions and effects on biological transformations of organic pollutants in water and soil: A review. <b>2018</b> , 202, 420-437	137
814	Soil carbon stock changes in tropical croplands are mainly driven by carbon inputs: A synthesis. <b>2018</b> , 259, 147-158	59
813	Environmental factors controlling soil organic carbon stability in French forest soils. <b>2018</b> , 426, 267-286	31
812	The root of the matter: Linking root traits and soil organic matter stabilization processes. <b>2018</b> , 120, 246-259	96
811	Molecular Insights into Arctic Soil Organic Matter Degradation under Warming. <b>2018</b> , 52, 4555-4564	44
810	Effects of environmental variation on stable isotope abundances during typical seasonal floodplain dry season litter decomposition. <b>2018</b> , 630, 1205-1215	8
809	Vegetation change alters soil profile δ <sup>15</sup> N values at the landscape scale. <b>2018</b> , 119, 110-120	7
808	Seeing the forest not for the carbon: why concentrating on land-use-induced carbon stock changes of soils in Brazil can be climate-unfriendly. <b>2018</b> , 18, 63-75	5
807	Enhanced roles of biochar and organic fertilizer in microalgae for soil carbon sink. <b>2018</b> , 29, 313-321	3
806	Carbon sequestration in wetlands, from science to practice: An overview of the biogeochemical process, measurement methods, and policy framework. <b>2018</b> , 114, 115-128	70
805	Invasion of <i>Praxelis clematidea</i> increases the chemically non-labile rather than labile soil organic carbon in a tropical savanna. <b>2018</b> , 64, 441-447	
804	Variable silicon accumulation in plants affects terrestrial carbon cycling by controlling lignin synthesis. <b>2018</b> , 24, e183-e189	51
803	A sequential selective dissolution method to quantify storage and stability of organic carbon associated with Al and Fe hydroxide phases. <b>2018</b> , 312, 24-35	44

802	Will CO <sub>2</sub> Emissions from Drained Tropical Peatlands Decline Over Time? Links Between Soil Organic Matter Quality, Nutrients, and C Mineralization Rates. <b>2018</b> , 21, 868-885	14
801	Humusica 1, article 2: Essential basesâfunctional considerations. <b>2018</b> , 122, 22-41	12
800	Food for microorganisms: Position-specific <sup>13</sup> C labeling and <sup>13</sup> C-PLFA analysis reveals preferences for sorbed or necromass C. <b>2018</b> , 312, 86-94	13
799	Synthesizing redox biogeochemistry at aquatic interfaces. <b>2018</b> , 68, 59-70	5
798	Nutritional functional trait diversity of crops in south-eastern Senegal. <b>2018</b> , 55, 81-91	13
797	Seasonal evolution of soil organic matter, glomalin and enzymes and potential for C storage after land abandonment and renaturalization processes in soils of NE Spain. <b>2018</b> , 162, 402-413	14
796	Lipoxygenase-induced autoxidative degradation of terrestrial particulate organic matter in estuaries: A widespread process enhanced at high and low latitude. <b>2018</b> , 115, 78-92	16
795	Synthetic iron (hydr)oxide-glucose associations in subsurface soil: Effects on decomposability of mineral associated carbon. <b>2018</b> , 613-614, 342-351	26
794	Future land use and land cover in Southern Amazonia and resulting greenhouse gas emissions from agricultural soils. <b>2018</b> , 18, 129-142	12
793	Response of mineral soil carbon storage to harvest residue retention depends on soil texture: A meta-analysis. <b>2018</b> , 408, 9-15	26
792	Effects of aging under field conditions on biochar structure and composition: Implications for biochar stability in soils. <b>2018</b> , 613-614, 969-976	103
791	Varying pyrolysis temperature impacts application effects of biochar on soil labile organic carbon and humic fractions. <b>2018</b> , 123, 484-493	24
790	Response and interaction of Bradyrhizobium japonicum and arbuscular mycorrhizal fungi in the soybean rhizosphere. <b>2018</b> , 84, 207-223	171
789	Centers of organic carbon burial and oxidation at the land-ocean interface. <b>2018</b> , 115, 138-155	103
788	Dynamics of soil biogeochemical gas emissions shaped by remolded aggregate sizes and carbon configurations under hydration cycles. <b>2018</b> , 24, e378-e392	22
787	Biophysical landscape interactions: Bridging disciplines and scale with connectivity. <b>2018</b> , 29, 1167-1175	13
786	Networking our science to characterize the state, vulnerabilities, and management opportunities of soil organic matter. <b>2018</b> , 24, e705-e718	61
785	Soil aggregate stability in Mediterranean and tropical agro-ecosystems: effect of plant roots and soil characteristics. <b>2018</b> , 424, 303-317	47

784	Permafrost and land cover as controlling factors for light fraction organic matter on the southern Qinghai-Tibetan plateau. <b>2018</b> , 613-614, 1165-1174	10
783	Soil carbon cycling proxies: Understanding their critical role in predicting climate change feedbacks. <b>2018</b> , 24, 895-905	45
782	The Challenge of Improving Coastal Mudflat Soil: Formation and Stability of Organo-mineral Complexes. <b>2018</b> , 29, 1074-1080	10
781	Application of a simple headcut advance model for gullies. <b>2018</b> , 43, 202-217	21
780	Nutrient limitation of soil microbial processes in tropical forests. <b>2018</b> , 88, 4-21	151
779	Effects of soil macro- and mesofauna on litter decomposition and soil organic matter stabilization. <b>2018</b> , 332, 161-172	126
778	Soil organic matter in podzol horizons of the Amazon region: Humification, recalcitrance, and dating. <b>2018</b> , 613-614, 160-167	17
777	Radiocarbon measurements of ecosystem respiration and soil pore-space CO <sub>2</sub> in Utqiagvik (Barrow), Alaska. <b>2018</b> , 10, 1943-1957	8
776	Decomposability of soil organic matter over time: the Soil Incubation Database (SIDb, version 1.0) and guidance for incubation procedures. <b>2020</b> , 12, 1511-1524	5
775	An open-source database for the synthesis of soil radiocarbon data: International Soil Radiocarbon Database (ISRaD) version 1.0. <b>2020</b> , 12, 61-76	18
774	Stoichiometrically coupled carbon and nitrogen cycling in the Microbial-Mineral Carbon Stabilization model version 1.0 (MIMICS-CN v1.0). <b>2020</b> , 13, 4413-4434	14
773	Modeling radiocarbon dynamics in soils: SoilR version 1.1.	1
772	Comparing microbial and chemical approaches for modelling soil organic carbon decomposition using the DecoChem v1.0 and DecoBio v1.0 models.	3
771	Using reactive transport codes to provide mechanistic biogeochemistry representations in global land surface models: CLM-PFLOTRAN 1.0.	1
770	Spatial and temporal variability in microbial activities of coastal acid saline soils of Goa, India.	3
769	Soil indicators to assess the effectiveness of restoration strategies in dryland ecosystems.	2
768	Nitrate retention capacity of milldam-impacted legacy sediments and relict A horizon soils. <b>2017</b> , 3, 95-112	6
767	Permafrost soils and carbon cycling.	5

766	Organic nitrogen storage in mineral soil: implications for policy and management.	4
765	Soil properties and not inputs control carbon, nitrogen, phosphorus ratios in cropped soils in the long-term.	2
764	Plant diversity maintains multiple soil functions in future environments. <b>2018</b> , 7,	26
763	The distribution of organic carbon fractions in a typical loess-paleosol profile and its paleoenvironmental significance. <b>2018</b> , 6, e4611	1
762	Soil aggregates indirectly influence litter carbon storage and release through soil pH in the highly alkaline soils of north China. <b>2019</b> , 7, e7949	4
761	Inconsistent response of soil bacterial and fungal communities in aggregates to litter decomposition during short-term incubation. <b>2019</b> , 7, e8078	7
760	KEYLINK: towards a more integrative soil representation for inclusion in ecosystem scale models. I. review and model concept. <b>2020</b> , 8, e9750	8
759	Climate Warming Weakens the Negative Effect of Nitrogen Addition on the Microbial Contribution to Soil Carbon Pool in an Alpine Meadow.	
758	Warming effects on the flux of CH from peatland mesocosms are regulated by plant species composition: Richness and functional types. <b>2022</b> , 806, 150831	1
757	Priming effects in the rhizosphere and root detritosphere of two wet-grassland graminoids. 1	1
756	Theoretical insights from upscaling Michaelis-Menten microbial dynamics in biogeochemical models: a dimensionless approach. <b>2021</b> , 18, 5669-5679	1
755	Living, dead, and absent trees-How do moth outbreaks shape small-scale patterns of soil organic matter stocks and dynamics at the Subarctic mountain birch treeline?. <b>2021</b> ,	2
754	Variation of soil organic matter depends on light-fraction organic matter under long-term monocropping of different crops. <b>2021</b> , 67, 588-599	
753	Polysaccharide-Bacteria Interactions From the Lens of Evolutionary Ecology. <b>2021</b> , 12, 705082	0
752	Performance of field-scale lab vs in situ visible/near- and mid-infrared spectroscopy for estimation of soil properties.	3
751	The unravelling of radiocarbon composition of organic carbon in river sediments to document past anthropogenic impacts on river systems. <b>2022</b> , 806, 150890	0
750	Perennial grass bioenergy cropping systems: Impacts on soil fauna and implications for soil carbon accrual. <b>2022</b> , 14, 4	2
749	In-situ <sup>13</sup> CO <sub>2</sub> labeling to trace carbon fluxes in plant-soil-microorganism systems: Review and methodological guideline. <b>2021</b> , 20, 100441	2

748	Meta-analysis of the priming effect on native soil organic carbon in response to glucose amendment across soil depths. 1	0
747	Plants and Microbes Mediate the Shift in Ecosystem Multifunctionality From Low to High Patterns Across Alpine Grasslands on the Tibetan Plateau. <b>2021</b> , 12, 760599	2
746	A starting guide to root ecology: strengthening ecological concepts and standardising root classification, sampling, processing and trait measurements. <b>2021</b> , 232, 973-1122	31
745	Carbon stocks in Umbric Ferralsols driven by plant productivity and geomorphic processes, not by mineral protection.	0
744	Spatiotemporal dynamics of abiotic and biotic properties explain biodiversity-ecosystem-functioning relationships. e01490	1
743	Divergent contributions of living roots to turnover of different soil organic carbon pools and their links to plant traits.	0
742	Warming and elevated CO promote rapid incorporation and degradation of plant-derived organic matter in an ombrotrophic peatland. <b>2021</b> ,	0
741	Biogeochemistry of Wetland Carbon Preservation and Flux. <b>2021</b> , 33-71	3
740	On the Adsorption Mechanism of Humic Substances on Kaolinite and Their Microscopic Structure. <b>2021</b> , 11, 1138	2
739	Review: Performance of Biochar under Diminish Water Stress in Plants. 1-16	0
738	Potential role of organic matter in the transmission of antibiotic resistance genes in black soils. <b>2021</b> , 227, 112946	2
737	Microbial community structure in rhizosphere soil rather than that in bulk soil characterizes aggregate-associated organic carbon under long-term forest conversion in subtropical region. <b>2021</b> , 20, 100438	1
736	Eukaryotes in soil aggregates across conservation managements: Major roles of protists, fungi and taxa linkages in soil structuring and C stock. <b>2021</b> , 163, 108463	3
735	Structural Features of Humic Substances as Biogeochemical Proxies for Soil Carbon Stabilization and Ecosystem Functions. <b>2013</b> , 391-395	
734	Genomics and Spectroscopy Provide Novel Insights into the Mechanisms of Litter Decomposition and Nitrogen Assimilation by Ectomycorrhizal Fungi. <b>2013</b> , 191-211	
733	Climate Change and Soil Quality in the WANA Region. <b>2013</b> , 55-74	1
732	References. 305-342	
731	Examining soil carbon uncertainty in a global model: response of microbial decomposition to temperature, moisture and nutrient limitation.	

- 730 Interactive effects of belowground organic matter input, increased precipitation and clipping on soil carbon and nitrogen mineralization in a temperate steppe.
- 729 Bayesian calibration of a soil organic carbon model using  $\delta^{14}\text{C}$  measurements of soil organic carbon and heterotrophic respiration as joint constraints.
- 728 Perspectives of the microbial carbon pump with special references to microbial respiration and ecological efficiency. 1
- 727 Chapter 9. Development of a soil health index based on the ecological soil functions for organic carbon stabilization with application to alluvial soils of northeastern Italy. **2014**, 161-182
- 726 Soil organic matter dynamics under different land-use in grasslands in Inner Mongolia (northern China).
- 725 Net Ecosystem Production (NEP). **2014**, 358-363
- 724 Soil redistribution and weathering controlling the fate of geochemical and physical carbon stabilization mechanisms in soils of an eroding landscape.
- 723 Global Biogeochemical Restoration to Stabilize CO<sub>2</sub> at Safe Levels in Time to Avoid Severe Climate Change Impacts to Earth's Life Support Systems: Implications for the United Nations Framework Convention on Climate Change. **2014**, 5-58
- 722 Investigating microbial transformations of soil organic matter: synthesizing knowledge from disparate fields to guide new experimentation.
- 721 Interacting effects of climate and agriculture on fluvial DOM in temperate and subtropical catchments.
- 720 Feasibility of Analyzing Soil Organic Carbon Fractions using Mid-Infrared Spectroscopy. **2015**, 23, 85-92
- 719 Upscaling methane emission hotspots in boreal peatlands.
- 718 Towards a representation of priming on soil carbon decomposition in the global land biosphere model ORCHIDEE (version 1.9.5.2).
- 717 Study of Carbon Nanostructures for Soil Fertility Improvement. **2016**, 85-104
- 716 Projecting the release of carbon from permafrost soils using a perturbed physics ensemble.
- 715 Paleosols can promote root growth of the recent vegetation – a case study from the sandy soil-sediment sequence Rakt, the Netherlands.
- 714 Recovery of Ecosystem Processes: Carbon and Energy Flows in Restored Wetlands, Grasslands, and Forests. **2016**, 365-394
- 713 Mechanism of Eutrophication Affecting Salt Marsh Soil Organic Carbon Sequestration Potential. **2017**, 05, 53-60



- 712 Microbiological Carbon Sequestration. **2017**, 108-133
- 711 Biochar: Soil Carbon and Fertility. **2017**, 193-197
- 710 Organic Carbon: Subsoil Pools. **2017**, 1614-1617 1
- 709 Urban Lands: Management. **2017**, 2400-2406
- 708 Encyclopedia of Geochemistry. **2017**, 1-10
- 707 Farklı Bitki Yetimi Altındaki Toprakların Strüktürel Özelliklerindeki Değişimler. **2017**, 48, 9-9
- 706 Biochar and Nitrogen Fertilizers Effects on Growth and Flowering of Garland Chrysanthemum (Chrysanthemum Coronarium L.) Plant. **2017**, 2, 8-14 0
- 705 The Development of Theory on Humus and Soil Organic Matter: from Turin and Waksman to Present Days. **2017**, 3-38 4
- 704 Encyclopedia of Geochemistry. **2018**, 1-6
- 703 Encyclopedia of Geochemistry. **2018**, 561-571 2
- 702 Microbial abundance and activity in chernozem under different cropping systems. **2018**, 55, 6-11 1
- 701 Review of the Impacts on Soils of Land-Use Changes Induced by Non-food Biomass Production. **2018**, 79-125
- 700 Biogeochemical Fluxes in Terrestrial Ecosystems. **2019**, 529-577
- 699 In vitro community synergy between bacterial soil isolates can be facilitated by pH stabilisation of the environment.
- 698 Effects of zooplankton carcasses degradation on freshwater bacterial community composition and implications for carbon cycling.
- 697 Climate Change Induced Carbon Competition: Bioenergy Versus Soil Organic Matter Reproduction. **2019**, 257-262
- 696 Does Soil Testing for Fertiliser Recommendation Fall Short of a Soil Health Card?. **2018**, 1, 15-26 4
- 695 Fertilization and Irrigation Affect Soil Carbon under Eucalyptus Plantation in the Cerrado. **2019**, 26, 1

- 694 Experimental test of temperature and moisture controls on the rate of microbial decomposition of soil organic matter: preliminary results. **2019**, 5, 886-898
- 693 Carbon dioxide emission and nitrogen mineralizing component of chernozem leached in the forest-steppe of Priobie, Western Siberia. **2019**, 9, 240-262
- 692 Fertilizer Nitrogen as a Significant Driver of Rhizosphere Microbiome in Rice Paddies. **2019**, 359-377
- 691 Linking Microbial Genomics to Renewable Energy Production and Global Carbon Management. **2019**, 271-285
- 690 Resilience trinity: safeguarding ecosystem services across three different time horizons and decision contexts.
- 689 Developing Linkages for Carbon Sequestration, Livelihoods and Ecosystem Service Provision in Mountain Landscapes: Challenges and Opportunities in the Himalaya Hindu Kush (HKH) Region. **2020**, 299-313
- 688 Illuminating microbial species-specific effects on organic matter remineralization in marine sediments.
- 687  **2019**, 32-37
- 686 Biochar: A New Environmental Paradigm in Management of Agricultural Soils and Mitigation of GHG Emission. **2020**, 223-258 1
- 685 Soil respiration and microbial biomass peculiarities as influenced by different land use intensity. **2020**, 107, 3-10 1
- 684 Microbial community shifts reflect losses of native soil carbon with pyrogenic and fresh organic matter additions and are greatest in low-carbon soils.
- 683 Amino acids and amino sugars as molecular indicators of the origins and alterations of organic matter in buried tephra layers. **2020**, 373, 114449 1
- 682 The Role of Laccase from Zygomycetous Fungus *Mortierella elasson* in Humic Acids Degradation. **2021**, 11, 2169 0
- 681 Phenoloxidase activity and organic carbon dynamics in historic Anthrosols in Scotland, UK. **2021**, 16, e0259205 0
- 680 Integrating McGill Wetland Model (MWM) with peat cohort tracking and microbial controls. **2022**, 806, 151223 1
- 679 Rock weathering controls the potential for soil carbon storage at a continental scale. **2022**, 157, 1 3
- 678 Dispersible Colloid Facilitated Release of Organic Carbon From Two Contrasting Riparian Sediments. **2020**, 2, 0
- 677 Mechanisms for Retention of Low Molecular Weight Organic Carbon Varies with Soil Depth at a Coastal Prairie Ecosystem.

676	Fifteen years of crop rotation combined with straw management alters the nitrogen supply capacity of upland-paddy soil. <b>2022</b> , 215, 105219	6
675	Soil and organic carbon redistribution in a recently burned Mediterranean hillslope affected by water erosion processes. <b>2022</b> , 406, 115539	0
674	Soil organic carbon saturation in cropland-grassland systems: Storage potential and soil quality. <b>2022</b> , 406, 115529	2
673	Soil organic carbon content and mineralization controlled by the composition, origin and molecular diversity of organic matter: A study in tropical alpine grasslands. <b>2022</b> , 215, 105203	0
672	Linking soil organic carbon stock to microbial stoichiometry, carbon sequestration and microenvironment under long-term forest conversion. <b>2022</b> , 301, 113940	1
671	Evolution of the transport properties of soil aggregates and their relationship with soil organic carbon following land use changes. <b>2022</b> , 215, 105226	2
670	Differential accumulation patterns of microbial necromass induced by maize root vs. shoot residue addition in agricultural Alfisols. <b>2022</b> , 164, 108474	1
669	Legacy of plaggen agriculture: High soil organic carbon stocks as result from high carbon input and volume increase. <b>2022</b> , 406, 115513	0
668	Impacts of reducing fallow periods on indicators of soil function in subtropical dryland farming systems. <b>2022</b> , 324, 107727	2
667	Differences in soil carbon and nitrogen pools between afforested pine forests and natural shrublands in a Mediterranean area. <b>2022</b> , 170, 104262	2
666	Regional mapping of soil organic matter content using multitemporal synthetic Landsat 8 images in Google Earth Engine. <b>2022</b> , 209, 105842	7
665	Stability of humic acid carbon under conservation agriculture practices. <b>2022</b> , 216, 105240	4
664	Towards a mechanistic understanding of microbial and nonmicrobial mediated topsoil organic carbon sequestration efficiency in a rice-wheat cropping system. <b>2022</b> , 170, 104259	0
663	Selection of Indicators to Discriminate Soil Tillage Systems and to Assess Soil Quality in a Red Latosol. <b>2020</b> , 63,	0
662	The Rhizosphere Microbiome: Microbial Communities and Plant Health. <b>2020</b> , 175-190	0
661	Litter Decomposition and Soil Carbon Stocks in Mixed Plantations of Eucalyptus spp. and Nitrogen-Fixing Trees. <b>2020</b> , 57-90	0
660	Soil Carbon Sequestration as an Elusive Climate Mitigation Tool. <b>2020</b> , 337-353	
659	Biogeochemical Cycling in Forest and Rangeland Soils of the United States. <b>2020</b> , 51-73	2

- 658 Soil Physico-chemical Properties and Microbial Activity in Ecological Restoration Red Soil Region of Subtropical Southern China. **2020**, 13, 72-80
- 657 Pre-informed Consumers on a Pre-adjusted Menu Had Smaller Nitrogen Footprints During the N2013 Conference, Kampala, Than Those on a Conventional Menu. **2020**, 561-582 1
- 656 Impact of hydrolysis lignin on phytosanitary condition of soils during potato cultivation. **2020**, 23, 03003
- 655 References. **2020**, 531-734
- 654 Lower Soil Carbon Loss Due to Persistent Microbial Adaptation to Climate Warming.
- 653 No solid evidence of soil carbon loss under warming in tropical forests along a 3000 m elevation gradient.
- 652 Dissecting Biological and Synthetic Soft-Hard Interfaces for Tissue-Like Systems. **2021**, 5
- 651 Carboxyl-richness controls organic carbon preservation during coprecipitation with iron (oxyhydr)oxides in the natural environment. **2021**, 2, 2
- 650 Depth-dependent drivers of soil microbial necromass carbon across Tibetan alpine grasslands. **2021**, 2
- 649 Mechanisms of soil organic carbon stability and its response to no-till: A global synthesis and perspective. **2021**, 5
- 648 Improving a Biogeochemical Model to Simulate Microbial-Mediated Carbon Dynamics in Agricultural Ecosystems. **2021**, 13, e2021MS002752
- 647 Key predictors of soil organic matter vulnerability to mineralization differ with depth at a continental scale. 1 0
- 646 Improved global-scale predictions of soil carbon stocks with Millennium Version 2. **2021**, 108466 2
- 645 Stoichiometry between Humate Unit Molecules and Metal Ions in Supramolecular Assembly Induced by Cu and Tb Measured by Gel Electrophoresis Techniques. **2021**, 55, 15172-15180 3
- 644 Effects of Microplastics and Drought on Ecosystem Functions and Multifunctionality. 2
- 643 Spatial variability of soil carbon and water storage across loess deposit catenas in China's Loess Plateau region. **2020**, 100, 263-277 0
- 642 How did Microorganisms Respond to the Addition of Indaziflam in a Vineyard Soil?.
- 641 Long-term cellulose enrichment selects for highly cellulolytic consortia and competition for public goods.

640	A unified theory for organic matter accumulation.	1
639	Earthworms accelerate rice straw decomposition and maintenance of soil organic carbon dynamics in rice agroecosystems. <b>2020</b> , 8, e9870	1
638	Impacts of Economic Growth, Transportation, and Tourism on the Contemporary Environment. <b>2021</b> , 563-662	1
637	Persistence of old soil carbon under changing climate: The role of mineral-organic matter interactions. <b>2022</b> , 587, 120629	2
636	Revisiting the quantitative contribution of microbial necromass to soil carbon pool: Stoichiometric control by microbes and soil. <b>2022</b> , 165, 108486	3
635	Effect of high soil C/N ratio and nitrogen limitation caused by the long-term combined organic-inorganic fertilization on the soil microbial community structure and its dominated SOC decomposition. <b>2021</b> , 303, 114155	4
634	Effect of the combined addition of mineral nitrogen and crop residue on soil respiration, organic carbon sequestration, and exogenous nitrogen in stable organic matter. <b>2022</b> , 171, 104324	0
633	Potential gross nitrogen mineralization and its linkage with microbial respiration along a forest transect in eastern China. <b>2022</b> , 171, 104347	0
632	Soil and land use factors control organic carbon status and accumulation in agricultural soils of Lower Austria. <b>2022</b> , 409, 115595	1
631	Deep in the Sierra Nevada critical zone: Saprock represents a large terrestrial organic carbon stock.	1
630	Linking litter decomposition to soil physicochemical properties, gas transport, and land use.	2
629	Climate Effects on Subsoil Carbon Loss Mediated by Soil Chemistry. <b>2021</b> , 55, 16224-16235	1
628	Reducing soil organic carbon mineralization under moderate thinning magnifies the soil carbon sink in a <i>Larix principis-rupprechtii</i> plantation. <b>2021</b> , 105858	0
627	Transformation of <i>n</i>-alkanes from plant to soil: a review. <b>2021</b> , 7, 785-809	5
626	Labile Soil Carbon as an Indicator of Soil Organic Matter Quality in the Province of Vojvodina, Serbia. <b>2022</b> , 667-686	0
625	Temperature effects on sorption of dissolved organic matter on ferrihydrite under dynamic flow and batch conditions.	1
624	Effect of vertebrate exclusion on leaf litter decomposition in the coastal Atlantic forest of southeast Brazil. 1	
623	Decreasing molecular diversity of soil dissolved organic matter related to microbial community along an alpine elevation gradient. <b>2021</b> , 151823	0

622 Stability of biochar in five soils: Effects from soil property. e13775

621 Warming has a minor effect on surface soil organic carbon in alpine meadow ecosystems on the Qinghai-Tibetan Plateau. **2021**, 2

620 Increased microbial expression of organic nitrogen cycling genes in long-term warmed grassland soils. **2021**, 1, 0

619 Temperature effects on carbon storage are controlled by soil stabilisation capacities. **2021**, 12, 6713 4

618 Is the climate change mitigation effect of enhanced silicate weathering governed by biological processes?. **2021**, 1

617 Co-application of biochar with non-pyrolyzed organic material accelerates carbon accrual and nutrient availability in soil. **2021**, 25, 102128 0

616 The Effect of Erosion Processes on the Content and Composition of Organic Matter in Macro-and Microaggregates of Haplic Chernozem. **2021**, 54, 1659-1667 1

615 Isotope analysis reveals differential impacts of artificial and natural afforestation on soil organic carbon dynamics in abandoned farmland. 1

614 Understanding and Monitoring Chemical and Biological Soil Degradation. **2022**, 75-124 0

613 Thresholds in aridity and soil carbon-to-nitrogen ratio govern the accumulation of soil microbial residues. **2021**, 2, 0

612 Grassland soil organic carbon and the effects of irrigated cropping in Alberta, Canada. 0

611 Stability of soil organic carbon under long-term fertilization: Results from C NMR analysis and laboratory incubation. **2021**, 205, 112476 5

610 The Accumulation of Microbial Necromass and Plant Lignin are Higher But Less Influenced by Fertilisation in Relatively Mature than Young Subtropical Forests.

609 Global Climate Change and Microbial Ecology: Current Scenario and Management. **2021**, 285-313

608 Forest harvest management systems and residual phytomass affecting physical properties of a sandy soil. **2021**, 45,

607 Insight into Interactions of Microplastics with Different Types and Compositions of Dissolved Organic Matter.

606 Land-Use Change Depletes Quantity and Quality of Soil Organic Matter Fractions in Ethiopian Highlands. **2022**, 13, 69 1

605 The fate of carbon in check dam sediments. **2022**, 224, 103889 1

604	A Microbial-Explicit Soil Organic Carbon Decomposition Model (MESDM): Development and Testing at a Semiarid Grassland Site. <b>2022</b> , 14, e2021MS002485	1
603	Pool complexity and molecular diversity shaped topsoil organic matter accumulation following decadal forest restoration in a karst terrain. <b>2022</b> , 166, 108553	0
602	Highly spatial variation of soil microbial respiration and temperature sensitivity in a subtropical forest. <b>2021</b> , 808, 152197	
601	Priming effect and its regulating factors for fast and slow soil organic carbon pools: A meta-analysis. <b>2022</b> , 32, 140-148	0
600	Nitrogen addition increases microbial necromass in croplands and bacterial necromass in forests: A global meta-analysis. <b>2022</b> , 165, 108500	2
599	Uranium partitioning from contaminated wetland soil to aqueous and suspended iron-floc phases: Implications of dynamic hydrologic conditions on contaminant release. <b>2022</b> , 318, 292-304	0
598	Recent weathering promotes C storage inside large phyllosilicate particles in forest soil. <b>2022</b> , 318, 328-351	0
597	Mathematical modelling of the interaction of winter wheat ( <i>Triticum aestivum</i> ) and <i>Fusarium</i> species ( <i>Fusarium</i> spp.). <b>2022</b> , 465, 109856	1
596	Soil organic matter characterisation using alkali and water extraction, and its relation to soil properties. <b>2022</b> , 28, e00469	0
595	Diverse regulations on the accumulation of fungal and bacterial necromass in cropland soils. <b>2022</b> , 410, 115675	0
594	The coupling interaction of soil organic carbon stock and water storage after vegetation restoration on the Loess Plateau, China.. <b>2022</b> , 306, 114481	1
593	Spectroscopic characteristics of humic acids extracted from soils under different integrated agricultural production systems in tropical regions. <b>2022</b> , 28, e00476	0
592	Soil microbial respiration in forest ecosystems along a north-south transect of eastern China: Evidence from laboratory experiments. <b>2022</b> , 211, 105980	0
591	Methanotrophy-driven accumulation of organic carbon in four paddy soils of Bangladesh. <b>2022</b> , 32, 348-358	0
590	Soil texture controls added organic matter mineralization by regulating soil moisture—evidence from a field experiment in a maritime climate. <b>2022</b> , 410, 115690	2
589	Young and century-old biochars strongly affect nutrient cycling in a temperate agroecosystem. <b>2022</b> , 328, 107847	0
588	Carbon Materials Advancing Microorganisms in Driving Soil Organic Carbon Regulation.. <b>2022</b> , 2022, 9857374	0
587	Production of hydrogen peroxide in an intra-meander hyporheic zone at East River, Colorado.. <b>2022</b> , 12, 712	0

586	Changes in plant inputs alter soil carbon and microbial communities in forest ecosystems.. <b>2022,</b>	2
585	Strategies to admittance soil quality using mid-infrared (mid-IR) spectroscopy an alternate tool for conventional lab analysis: A global perspective. <b>2022, 7, 100469</b>	3
584	Microbial impact on climate-smart agricultural practices. <b>2022, 203-236</b>	2
583	Drought impacts on microbial trait distribution and feedback to soil carbon cycling.	0
582	Accumulation of SOM fractions to croplands and plantations converted from cropland with black soil.	0
581	Hyphae move matter and microbes to mineral microsites: Integrating the hyphosphere into conceptual models of soil organic matter stabilization.. <b>2022,</b>	7
580	A new bioenergy model that simulates the impacts of plant-microbial interactions, soil carbon protection, and mechanistic tillage on soil carbon cycling. <b>2022, 14, 346-363</b>	0
579	Soil Moisture and Aromatic-Containing Compounds Control Soil Organic Carbon Associated with Iron Oxides in Permafrost Wetland Soils Along the Yarlung Tsangbo River, Tibet. 1	0
578	Evidences of soil warming from long-term trends (1951â2018) in North Rhine-Westphalia, Germany. <b>2022, 170, 1</b>	0
577	Tree identity and diversity directly affect soil moisture and temperature but not soil carbon ten years after planting.. <b>2022, 12, e8509</b>	0
576	Effects of long-term (70 years) nitrogen fertilization and liming on carbon storage in water-stable aggregates of a semi-arid grassland soil.. <b>2022, 8, e08690</b>	0
575	Soil organic matter qualification with FTIR spectroscopy under different soil types in Estonia. <b>2022, 28, e00483</b>	2
574	From energy to (soil organic) matter.. <b>2022,</b>	7
573	Effects of land use and climate on carbon and nitrogen pool partitioning in European mountain grasslands.. <b>2022, 822, 153380</b>	1
572	Sodium hypochlorite as an oxidizing agent for removal of soil organic matter before microplastics analyses.. <b>2021,</b>	0
571	Vertically Divergent Responses of SOC Decomposition to Soil Moisture in a Changing Climate. <b>2022 , 127,</b>	0
570	Coupled Sorption and Oxidation of Soil Dissolved Organic Matter on Manganese Oxides: Nano/Sub-nanoscale Distribution and Molecular Transformation.. <b>2022,</b>	2
569	Association of Organic Carbon With Reactive Iron Oxides Driven by Soil pH at the Global Scale. <b>2022 , 36,</b>	0



568	Addressing uncertainty and bias in land use, land use change, and forestry greenhouse gas inventories. <b>2022</b> , 170, 1	1
567	Land-Use Change on Soil C and N Stocks in the Humid Savannah Agro-Ecological Zone of Ghana. <b>2022</b> , 13, 32-68	
566	Grass-Legume Mixtures Show Potential to Increase Above- and Belowground Biomass Production for Andean Forage-Based Fallows. <b>2022</b> , 12, 142	1
565	In situ observations of the occlusion of a clay-sugar compound within calcite.	0
564	Soil organic matter in molecular simulations. <b>2022</b> ,	
563	A contribution of molecular modeling to supramolecular structures in soil organic matter #. <b>2022</b> , 185, 44-59	2
562	Tailor-made biochar systems: Interdisciplinary evaluations of ecosystem services and farmer livelihoods in tropical agro-ecosystems.. <b>2022</b> , 17, e0263302	0
561	Multiple soil map comparison highlights challenges for predicting topsoil organic carbon concentration at national scale.. <b>2022</b> , 12, 1379	0
560	Soil organic matter formation, persistence, and functioning: A synthesis of current understanding to inform its conservation and regeneration. <b>2022</b> , 1-66	5
559	The broad application and mechanism of humic acids for treating environmental pollutants: Insights from bibliometric analysis. <b>2022</b> , 337, 130510	4
558	Soil carbon stocks and dynamics of different land uses in Italy using the LUCAS soil database.. <b>2022</b> , 306, 114452	0
557	Global patterns in mycorrhizal mediation of soil carbon storage, stability, and nitrogen demand: A meta-analysis. <b>2022</b> , 166, 108578	2
556	Spatial prediction of soil organic matter content using multiyear synthetic images and partitioning algorithms. <b>2022</b> , 211, 106023	4
555	Soil carbon sequestration - An interplay between soil microbial community and soil organic matter dynamics.. <b>2022</b> , 815, 152928	6
554	Regional soil organic matter mapping models based on the optimal time window, feature selection algorithm and Google Earth Engine. <b>2022</b> , 219, 105325	4
553	Vertical variations of soil carbon under different land uses in a karst critical zone observatory (CZO), SW China. <b>2022</b> , 412, 115741	1
552	Changes in organic carbon and microbiology community structure due to long-term irrigated agriculture on Luvisols in the Brazilian semi-arid region. <b>2022</b> , 212, 106058	0
551	Priming effects of root exudates on the source-sink stability of benzo[a]pyrene in wetlands: A microcosm experiment.. <b>2022</b> , 429, 128364	1

550	Potential of soil amendment with organic matters in controlling phytonematodes. <b>2022</b> , 315-344	1
549	Bioenergy Underground: Challenges and opportunities for phenotyping roots and the microbiome for sustainable bioenergy crop production. <b>2022</b> , 5,	1
548	Microbial feedbacks on soil organic matter dynamics underlying the legacy effect of diversified cropping systems. <b>2022</b> , 108584	0
547	The hadal zone is an important and heterogeneous sink of black carbon in the ocean. <b>2022</b> , 3,	2
546	Invasive annual cheatgrass enhances the abundance of native microbial and microinvertebrate eukaryotes but reduces invasive earthworms. 1	0
545	Surface-soil carbon stocks greater under well-managed grazed pasture than row crops.	2
544	Microbial contribution to post-fire tundra ecosystem recovery over the 21st century. <b>2022</b> , 3,	0
543	Visualizing Mineral-Associated Organic Matters in Long-Term Fertilization Treated Soils by NanoSIMS and SR-FTIR. <b>2022</b> , 2,	
542	Pyrogenic carbon decomposition critical to resolving fire's role in the Earth system. <b>2022</b> , 15, 135-142	3
541	References. <b>2022</b> , 240-286	
540	The accumulation of microbial residues and plant lignin phenols are more influenced by fertilization in young than mature subtropical forests. <b>2022</b> , 509, 120074	0
539	Will fungi solve the carbon dilemma?. <b>2022</b> , 413, 115767	3
538	Intense wet-dry cycles weakened the carbon sequestration of soil aggregates in the riparian zone. <b>2022</b> , 212, 106117	1
537	Aridity influences root versus shoot contributions to steppe grassland soil carbon stock and its stability. <b>2022</b> , 413, 115744	0
536	Microbial Necromass in Soils—Linking Microbes to Soil Processes and Carbon Turnover. <b>2021</b> , 9,	2
535	Biochar, slag and ferrous manganese ore affect lead, cadmium and antioxidant enzymes in water spinach ( <i>Ipomoea aquatica</i> ) grown in multi-metal contaminated soil. <b>2022</b> ,	1
534	Long-term frequent fires do not decrease topsoil carbon and nitrogen in an Afromontane grassland. <b>2022</b> , 39, 44-55	2
533	Examining the Contributions of Maize Shoots, Roots, and Manure to Stable Soil Organic Carbon Pools in Tropical Smallholder Farming Soils.	

532	Permafrost Climate Feedbacks. <b>2022</b> , 189-209	0
531	Fungal Diversity in the Soil of the Root System on the Qinghai-Tibet Plateau.. <b>2022</b> , 13, 831783	
530	Humus horizon development during natural forest succession process in the Polish Carpathians. <b>2022</b> , 19, 647-661	1
529	Climate Sensitivities of Carbon Turnover Times in Soil and Vegetation: Understanding Their Effects on Forest Carbon Sequestration. <b>2022</b> , 127,	
528	Soil phosphorus forms show only minor changes across a 5000-year-old boreal wildfire chronosequence. 1	0
527	Functional Biochar Synergistic Solid/Liquid-Phase CO <sub>2</sub> Capture: A Review. <b>2022</b> , 36, 2945-2970	4
526	Inferring the Contribution of Microbial Taxa and Organic Matter Molecular Formulas to Ecological Assembly.. <b>2022</b> , 13, 803420	0
525	Effect of Clay Mineralogy and Soil Organic Carbon in Aggregates under Straw Incorporation. <b>2022</b> , 12, 534	10
524	Organic Matter in Riverbank Sediments and Fluvisols from the Flood Zones of Lower Vistula River. <b>2022</b> , 12, 536	1
523	Organic fertilization increased soil organic carbon stability and sequestration by improving aggregate stability and iron oxide transformation in saline-alkaline soil. 1	1
522	Low N apparent surplus with higher rice yield under long-term fertilizer postponing in the rice-wheat cropping system. <b>2022</b> ,	0
521	Characterization of the Colloidal Properties of Dissolved Organic Matter From Forest Soils. <b>2022</b> , 2,	0
520	The Biological Origins of Soil Organic Matter in Different Land-Uses in the Highlands of Ethiopia. <b>2022</b> , 13, 560	
519	Microbes contribute to setting the ocean carbon flux by altering the fate of sinking particulates.. <b>2022</b> , 13, 1657	0
518	BIOGEOCHEMISTRY IN DYNAMIC LANDSCAPES. <b>2022</b> , 323-332	
517	Calibrating the soil organic carbon model Yasso20 with multiple datasets. <b>2022</b> , 15, 1735-1752	0
516	Long-Term Cellulose Enrichment Selects for Highly Cellulolytic Consortia and Competition for Public Goods.. <b>2022</b> , e0151921	0
515	Decoupling of plant carbon and nitrogen under elevated CO <sub>2</sub> and nitrogen addition in a typical alpine ecosystem. 1	

514	SOIL CARBON DYNAMICS AND RESPONSES TO ENVIRONMENTAL CHANGES. <b>2022</b> , 207-231	
513	Utilization of Sewage Sludge-Derived Pyrogenic Material as a Promising Soil Amendment. <b>2022</b> , 12, 360	0
512	Soil geochemistry as a driver of soil organic matter composition: insights from a soil chronosequence. <b>2022</b> , 19, 1675-1689	0
511	Organic Carbon Storage and Dynamics as Affected by the Adoption of Irrigation in a Cultivated Calcareous Mediterranean Soil. <b>2022</b> , 2,	0
510	Contribution of Litter Layer to Greenhouse Gas Fluxes between Atmosphere and Soil Varies with Forest Succession. <b>2022</b> , 13, 544	0
509	Changes and Relationships between Components in the Plant-Soil System and the Dominant Plant Functional Groups in Alpine Kobresia Meadows Due to Overgrazing. <b>2022</b> , 14, 183	0
508	Depth profiles of soil organic carbon isotopes across a lithosequence: implications for drivers of soil C vertical changes.. <b>2022</b> , 1-21	
507	DEEP SOIL CARBON. <b>2022</b> , 193-206	0
506	Humic Substances as Indicator of Degradation Rate of Chernozems in South-Eastern Poland. <b>2022</b> , 12, 733	0
505	Vegetal UndercurrentsâObscured Riverine Dynamics of Plant Debris. <b>2022</b> , 127,	1
504	The Biogeochemical Legacy of Arctic Subglacial Sediments Exposed by Glacier Retreat. <b>2022</b> , 36,	0
503	PLANT-DERIVED MACROMOLECULES IN THE SOIL. <b>2022</b> , 79-115	1
502	NEXT-GENERATION SOIL BIOGEOCHEMISTRY MODEL REPRESENTATIONS. <b>2022</b> , 233-257	1
501	Carbon Sequestration Potential, Challenges, and Strategies towards Climate Action in Smallholder Agricultural Systems of South Asia. <b>2022</b> ,	2
500	Continental United States may lose 1.8 petagrams of soil organic carbon under climate change by 2100.	1
499	Soil health and crop response of biochar: an updated analysis. 1-26	2
498	Long-term impact of cover crop and reduced disturbance tillage on soil pore size distribution and soil water storage. <b>2022</b> , 8, 177-198	0
497	Pairing litter decomposition with microbial community structures using the Tea Bag Index (TBI). <b>2022</b> , 8, 163-176	1

496	Beyond habitat boundaries: Organic matter cycling requires a system-wide approach for accurate blue carbon accounting.	2
495	THE SCIENCE AND SEMANTICS OF "SOIL ORGANIC MATTER STABILIZATION" <b>2022</b> , 13-49	
494	THE CHANGING BIOGEOCHEMICAL CYCLES OF TUNDRA. <b>2022</b> , 157-181	0
493	INTERCONNECTING SOIL ORGANIC MATTER WITH NITROGEN AND PHOSPHORUS CYCLING. <b>2022</b> , 51-77	
492	Calling for comprehensive explorations between soil invertebrates and arbuscular mycorrhizas.. <b>2022</b> ,	0
491	Impact of biochar and manure application on in situ carbon dioxide flux, microbial activity, and carbon budget in degraded cropland soil of southern India.	0
490	Groundwater metabolome responds to recharge in fractured sedimentary strata.	
489	Estimating Mineral-Associated Organic Carbon Deficits in Soils of the Okanagan Valley: A Regional Study With Broader Implications. <b>2022</b> , 2,	0
488	Experimental Warming Has Not Affected the Changes in Soil Organic Carbon During the Growing Season in an Alpine Meadow Ecosystem on the Qinghai-Tibet Plateau.. <b>2022</b> , 13, 847680	0
487	Decadal Changes of Organic Carbon, Nitrogen, and Acidity of Austrian Forest Soils. <b>2022</b> , 6, 28	0
486	Distinct stabilization characteristics of organic carbon in coastal salt-affected soils with different salinity under straw returning.	1
485	From legacy contamination to watershed systems science: a review of scientific insights and technologies developed through DOE-supported research in water and energy security. <b>2022</b> , 17, 043004	1
484	Linking sedimentary and speleothem precipitation isotope proxy records to improve lacustrine and marine 14C chronologies. <b>2022</b> , 282, 107444	0
483	Soil organic matter storage in temperate lowland arable, grassland and woodland topsoil and subsoil.	1
482	Soil organic carbon and fine particle stocks along a volcanic chrono- and elevation-sequence on the Galápagos archipelago/Ecuador. <b>2022</b> , e00508	0
481	Using a tropical elevation gradient to evaluate the impact of land-use intensity and forest restoration on the microbial use of organic matter under climate change.	0
480	Improving soil carbon estimates by linking conceptual pools against measurable carbon fractions in the DAYCENT Model Version 4.5.	0
479	Deep-rooted perennial crops differ in capacity to stabilize C inputs in deep soil layers.. <b>2022</b> , 12, 5952	1

- 478 A Remotely Sensed Framework for Spatially-Detailed Dryland Soil Organic Matter Mapping: Coupled Cross-Wavelet Transform with Fractional Vegetation and Soil-Related Endmember Time Series. **2022**, 14, 1701 0
- 477 Land use impact on carbon mineralization in well aerated soils is mainly explained by variations of particulate organic matter rather than of soil structure. **2022**, 8, 253-267 0
- 476 Long-term regional evidence of the effects of livestock grazing on soil microbial community structure and functions in surface and deep soil layers. **2022**, 168, 108629 0
- 475 Effect of bacterial cell addition on Fe(III) reduction and soil organic matter transformation in a farmland soil. **2022**, 325, 25-38 0
- 474 Estimation of the stability of topsoil aggregates in areas affected by water erosion using selected soil and terrain properties. **2022**, 219, 105348 2
- 473 Shrubification decreases soil organic carbon mineralization and its temperature sensitivity in alpine meadow soils. **2022**, 168, 108651 0
- 472 Microbial formation and stabilisation of soil organic carbon is regulated by carbon substrate identity and mineral composition. **2022**, 414, 115762 0
- 471 Agronomy in the temperate zone and threats or mitigation from climate change: A review. **2022**, 212, 106089 0
- 470 Stable isotopes reveal that fungal residues contribute more to mineral-associated organic matter pools than plant residues. **2022**, 168, 108634 1
- 469 Soil organic matter pools response to perennial grain cropping and nitrogen fertilizer. **2022**, 220, 105376 0
- 468 Bryophyte diversity and soil organic carbon content in contrasting Northern Appalachian vernal pools. **2022**, 213, 106133 0
- 467 Insight into interactions of polystyrene microplastics with different types and compositions of dissolved organic matter.. **2022**, 153883 2
- 466 Interactive effects of sea-level rise and nitrogen enrichment on the decay of different plant residues in an oligohaline estuarine marsh. **2022**, 270, 107835 1
- 465 Evaluation of no-tillage impacts on soil respiration by C-isotopic signature in North China Plain.. **2022**, 824, 153852 1
- 464 Soil carbon sequestration, greenhouse gas emissions, and water pollution under different tillage practices.. **2022**, 154161 1
- 463 Insight into the effect of wastewater-derived dissolved organic matter composition on norgestrel degradation in activated sludge: Coupled bacterial community and molecular characteristics.. **2022**, 216, 118255 0
- 462 Response of microbial communities and their metabolic functions to calcareous succession process.. **2022**, 154020 0
- 461 Provenances, preponderances, and distribution of humic acids and organic pollutants in hydro-geosphere: The co-existence, interaction and isotopic biomarkers in the riverine ecosystem.. **2022**, 313, 114996 0

460	Millennium timescale carbon stability in an Andisol: How persistent are organo-metal complexes?. <b>2022</b> , 417, 115820	1
459	Extraction methods for untargeted metabolomics influence enzymatic activity in diverse soils.. <b>2022</b> , 154433	0
458	Equivalent-mass versus fixed-depth as criteria for quantifying soil carbon sequestration: How relevant is the difference?. <b>2022</b> , 214, 106283	0
457	Land use-land cover gradient demonstrates the importance of perennial grasslands with intact soils for building soil carbon in the fertile Mollisols of the North Central US. <b>2022</b> , 418, 115854	1
456	Improvements in soil health and soil carbon sequestration by an agroforestry for food production system. <b>2022</b> , 333, 107945	2
455	Comparison of soil carbon and nitrogen pools among poplar and eucalyptus based agroforestry systems in Punjab, India. <b>2021</b> , 12, 693-708	1
454	Patterns and drivers of the degradability of dissolved organic matter in dryland soils on the Tibetan Plateau. <b>2022</b> , 59, 884-894	1
453	The cost-effectiveness of reflectance spectroscopy for estimating soil organic carbon. <b>2022</b> , 73,	1
452	Effects of Elevation and Distance from Highway on the Abundance and Community Structure of Bacteria in Soil along Qinghai-Tibet Highway.. <b>2021</b> , 18,	0
451	Humic Substances: Hypotheses and Reality (a Review). <b>2021</b> , 54, 1826-1854	4
450	Past climate conditions predict the influence of nitrogen enrichment on the temperature sensitivity of soil respiration. <b>2021</b> , 2,	0
449	Soil Organic Carbon Dynamics in Two Rice Cultivation Systems Compared to an Agroforestry Cultivation System. <b>2022</b> , 12, 17	1
448	Soil Organic Carbon Sequestration after Biochar Application: A Global Meta-Analysis. <b>2021</b> , 11, 2474	9
447	Humus formation in soils of the Lena River Delta. <b>2021</b> , 4,	
446	Overestimate of C 4 Plant Abundance Caused by Soil Degradation-Induced Carbon Isotope Fractionation. <b>2021</b> , 48,	0
445	High stability and metabolic capacity of bacterial community promote the rapid reduction of easily decomposing carbon in soil. <b>2021</b> , 4, 1376	1
444	Identifying Data Needed to Reduce Parameter Uncertainty in a Coupled Microbial Soil C and N Decomposition Model. <b>2021</b> , 126,	
443	The contribution of deadwood to soil carbon dynamics in contrasting temperate forest ecosystems. <b>2022</b> , 141, 241-252	1

442	Fire effects on the persistence of soil organic matter and long-term carbon storage. <b>2022</b> , 15, 5-13	7
441	Factors constraining the adoption of soil organic carbon enhancing technologies among small-scale farmers in Ethiopia.. <b>2021</b> , 7, e08497	3
440	Mineral and Climatic Controls Over Soil Organic Matter Stability Across the Tibetan Alpine Permafrost Region. <b>2021</b> , 35,	1
439	Seasonal Changes of Organic Carbon Mixing, Degradation and Deposition in Yangtze River Dominated Margin Related to Intrinsic Molecular and External Environmental Factors. <b>2021</b> , 126,	0
438	Community RNA-Seq: multi-kingdom responses to living versus decaying roots in soil. <b>2021</b> , 1,	1
437	Decomposition of vascular plants and carbon mineralization in coastal wetlands. <b>2022</b> , 25-54	
436	Effect of Soil Samples Preparation on Their Thermal Hydrophysical Properties and Allelotoxicity. <b>2022</b> , 55, 330-338	0
435	Soil fungal and bacterial communities are altered by incorporation of leaf litter containing a fungal endophyte.	
434	Molecular behavior and interactions with microbes during anaerobic degradation of bio-derived DOM in waste leachate. <b>2022</b> ,	0
433	How climate and soil properties affect the abundances of nitrogen-cycling genes in nitrogen-treated ecosystems: a meta-analysis. 1	2
432	Vegetation Regulates Element Composition of Soils by Enhancing Organic Matter Accumulation in the Salt Marshes of Liao River Delta, China. <b>2022</b> , 9,	0
431	Distribution Characteristics and Controlling Factors of Soil Total Nitrogen: Phosphorus Ratio Across the Northeast Tibetan Plateau Shrublands.. <b>2022</b> , 13, 825817	0
430	Spectroscopic-chemometric modeling of 80 humic acids confirms the structural pattern identity of humified organic matter despite different formation environments.. <b>2022</b> , 155133	0
429	Macroaggregates Serve as Micro-Hotspots Enriched With Functional and Networked Microbial Communities and Enhanced Under Organic/Inorganic Fertilization in a Paddy Topsoil From Southeastern China.. <b>2022</b> , 13, 831746	0
428	Microscale carbon distribution around pores and particulate organic matter varies with soil moisture regime.. <b>2022</b> , 13, 2098	3
427	Evaluating Land Sustainability Indicators Through Structural Stability Changes In Deforested Land. <b>2022</b> , 995, 012007	
426	Optimizing Carbon Sequestration Through Cover Cropping in Mediterranean Agroecosystems: Synthesis of Mechanisms and Implications for Management. <b>2022</b> , 4,	0
425	Stability of soil organic carbon pools affected by land use and land cover changes in forests of eastern Himalayan region, India. <b>2022</b> , 215, 106308	0



- 424 Latitudinal patterns of light and heavy organic matter fractions in arid and semi-arid soils. **2022**, 215, 106293 1
- 423 Ecosystem organic carbon storage and their drivers across the drylands of China. **2022**, 214, 106280 1
- 422 Data\_Sheet\_1.xlsx. **2018**,
- 421 Data\_Sheet\_2.xlsx. **2018**,
- 420 Data\_Sheet\_3.xlsx. **2018**,
- 419 Data\_Sheet\_4.xlsx. **2018**,
- 418 Data\_Sheet\_5.docx. **2018**,
- 417 Data\_Sheet\_6.pdf. **2018**,
- 416 Table\_1.docx. **2018**,
- 415 Table\_2.XLSX. **2018**,
- 414 Data\_Sheet\_1.PDF. **2019**,
- 413 Data\_Sheet\_2.PDF. **2019**,
- 412 Data\_Sheet\_3.PDF. **2019**,
- 411 Data\_Sheet\_4.PDF. **2019**,
- 410 Image\_1.TIFF. **2019**,
- 409 Image\_2.TIFF. **2019**,
- 408 Data\_Sheet\_1.CSV. **2020**,
- 407 Table\_1.DOCX. **2020**,

406 Data\_Sheet\_1.PDF. 2019,

405 Data\_Sheet\_1.docx. 2020,

404 Data\_Sheet\_2.docx. 2020,

403 Data\_Sheet\_3.docx. 2020,

402 Data\_Sheet\_4.docx. 2020,

401 Data\_Sheet\_5.docx. 2020,

400 Data\_Sheet\_6.docx. 2020,

399 Image\_1.PDF. 2018,

398 Image1.PDF. 2018,

397 Image2.PDF. 2018,

396 Image3.PDF. 2018,

395 Image\_1.tiff. 2018,

394 Table\_1.DOCX. 2018,

393 Data\_Sheet\_1.XLSX. 2020,

392 Data\_Sheet\_2.DOCX. 2020,

391 Data\_Sheet\_1.PDF. 2019,

390 Image\_1.JPEG. 2018,

389 Data\_Sheet\_1.docx. 2019,

388 Data\_Sheet\_1.PDF. **2020**,

387 Presentation\_1.pdf. **2018**,

386 Table\_1.DOCX. **2018**,

385 Table\_2.XLSX. **2018**,

384 Image1.PDF. **2017**,

383 Table1.XLSX. **2017**,

382 Table2.XLSX. **2017**,

381 Table3.XLSX. **2017**,

380 Image\_1.PDF. **2020**,

379 Table\_1.docx. **2020**,

378 Data\_Sheet\_1.docx. **2020**,

377 Data\_Sheet\_1.docx. **2018**,

376 Table\_1.xlsx. **2020**,

375 Data\_Sheet\_1.pdf. **2020**,

374 Data\_Sheet\_1.docx. **2019**,

373 Data\_Sheet\_1.pdf. **2020**,

372 Emerging Microbe-Mediated Advanced Technology to Mitigate Climatic Stresses in Plants and Soil Health: Current Perspectives and Future Challenges. **2022**, 341-366

371 How the Nitrogen Economy of a Perennial Cereal-Legume Intercrop Affects Productivity: Can Synchrony Be Achieved?. **2022**, 6,

- 370 Molecular-level characteristics of soil organic carbon in rhizosheaths from a semiarid grassland of North China. **2022**, 108682 ○
- 369 Prescribed defoliation strategies influence soil carbon and nitrous oxide potential in pastures. ○
- 368 Metagenomic analysis reveals the different characteristics of microbial communities inside and outside the karst tiankeng.. **2022**, 22, 115 ○
- 367 Physical Protection in Aggregates and Organo-Mineral Associations Contribute to Carbon Stabilization at the Transition Zone of Seasonally Saturated Wetlands. **2022**, 42, 1 1
- 366 Decomposition of Apple (*Malus domestica*) Plant Residue and Uptake of Residue-Derived N. 1 ○
- 365 Earthworms as catalysts in the formation and stabilization of soil microbial necromass.. **2022**, ○
- 364 Sources and composition of natural and anthropogenic hydrocarbons in sediments from an impacted estuary.. **2022**, 155779 ○
- 363 Copiotrophic Bacterial Traits Increase With Burn Severity One Year After a Wildfire. **2022**, 5, ○
- 362 Clay fraction properties and grassland management imprint on soil organic matter composition and stability at molecular level. ○
- 361 Twenty years of litter manipulation reveals that above-ground litter quantity and quality controls soil organic matter molecular composition. 1 ○
- 360 Enhancing Calcareous and Saline-Sodic Soils Fertility by Increasing Organic Matter Decomposition and Enzyme Activities: An Incubation Study. 1-13 ○
- 359 The Grain-for-Green project offsets warming-induced soil organic carbon loss and increases soil carbon stock in Chinese Loess Plateau.. **2022**, 155469 1
- 358 Crop diversification reinforces soil microbiome functions and soil health. 1
- 357 Effects of Biodegradable Liquid Film on the Soil and Fruit Quality of *Vitis Franco-american* L. Hutai-8 Berries. **2022**, 8, 418 ○
- 356 Susceptibility of new soil organic carbon to mineralization during dry-wet cycling in soils from contrasting ends of a precipitation gradient. **2022**, 169, 108681 1
- 355 Contributions of partition and adsorption to polycyclic aromatic hydrocarbons sorption by fractionated soil at different particle sizes.. **2022**, 301, 134715 1
- 354 Size fractions of organic matter pools influence their stability: Application of the Rock-Eval<sup>®</sup> analysis to beech forest soils. **2022**, 32, 565-575 ○
- 353 Mineral element recycling in topsoil following permafrost degradation and a vegetation shift in sub-Arctic tundra. **2022**, 421, 115915 ○

- 352 Humus: Dark side of life or intractable â€œetherâ€ **2022**, 32, 660-664 0
- 351 Organo-mineral complexes alter bacterial composition and induce carbon and nitrogen cycling in the rhizosphere.. **2022**, 155671
- 350 Adsorption of soil organic matter by gel-like ferrihydrite and dense ferrihydrite.. **2022**, 155507 0
- 349 Hot Spots and Hot Moments in the Critical Zone: Identification of and Incorporation into Reactive Transport Models. **2022**, 9-47 1
- 348 Deep-C storage: Biological, chemical and physical strategies to enhance carbon stocks in agricultural subsoils. **2022**, 108697 1
- 347 Ammoniated straw incorporation increases wheat yield, yield stability, soil organic carbon and soil total nitrogen content. **2022**, 284, 108558 0
- 346 Biochar for carbon sequestration and environmental remediation in soil. **2022**, 35-49
- 345 Unified understanding of intrinsic and extrinsic controls of dissolved organic carbon reactivity in aquatic ecosystems. 0
- 344 Faeces traits as unifying predictors of detritivore effects on organic matter turnover. **2022**, 422, 115940 0
- 343 Soil Organic Carbon Stabilization is Dominated by Non-Sorptive Process Among the Soils from Different Parent Material.
- 342 Research Progress on the Effects of Nitrogen Addition on Soil and Rhizosphere Microbial Community Structure. **2022**, 11, 180-193
- 341 Integrated Application of Inorganic and Organic Fertilizer Enhances Soil Organo-Mineral Associations and Nutrients in Tea Garden Soil. **2022**, 12, 1330 2
- 340 Soil carbon sequestration by root exudates. **2022**, 2
- 339 Plant N economics and the extended phenotype: Integrating the functional traits of plants and associated soil biota into plant-plant interactions. 0
- 338 Afforestation on cropland promotes pedogenic inorganic carbon accumulation in deep soil layers on the Chinese loess plateau.
- 337 Global soil organic carbonâ€”climate interactions: Why scales matter. 0
- 336 Climate-induced shifts in composition and protection regulate temperature sensitivity of carbon decomposition through soil profile. **2022**, 108743 0
- 335 Observation-based global soil heterotrophic respiration indicates underestimated turnover and sequestration of soil carbon by terrestrial ecosystem models. 0

- 334 Improving the remote estimation of soil organic carbon in complex ecosystems with Sentinel-2 and GIS using Gaussian processes regression. 0
- 333 Hydrothermal Carbonisation of Biomass Wastes as a Tool for Carbon Capture. **2022**, 26, 415-427
- 332 Direct observation of humic acid-promoted hydrolysis of phytate through stabilizing a conserved catalytic domain in phytase.
- 331 Soil Organic Matter Quality, Rather than Quantity, Drives Spatial Variation of Soil Microbial Basal Respiration in Boreal Forests.
- 330 Effects of global change and human disturbance on soil carbon cycling in boreal forest: A review. **2022**, 0
- 329 Deciphering dissolved organic matter by Fourier transform ion cyclotron resonance mass spectrometry (FT-ICR MS): from bulk to fractions and individuals. **2022**, 1, 5
- 328 Organic Carbon Speciation in Urban Anthrosols: The Legacy of Historical Waste Management. **2022**, 6, 53
- 327 Farklı Organik Gübre Uygulamalarının Heritage Ahududu (*Rubus idaeus* L.) Üzerinde Bazı Meyve Zelliklerine Etkisi Üzerine Bir Çalışma. 50-61
- 326 Biotic Interactions as Mediators of Context-Dependent Biodiversity-Ecosystem Functioning Relationships. 8, 0
- 325 Prospecting microbial biofilms as climate smart strategies for improving plant and soil health: A review. **2022**,
- 324 Alpine Litter Humification and Its Response to Reduced Snow Cover: Can More Carbon Be Sequestered in Soils?. **2022**, 13, 897 0
- 323 Divergent Trajectory of Soil Autotrophic and Heterotrophic Respiration upon Permafrost Thaw. 0
- 322 Diffuse reflectance spectroscopy characterises the functional chemistry of soil organic carbon in agricultural soils. 0
- 321 Selective Interactions of Soil Organic Matter Compounds with Calcite and the Role of Aqueous Ca. 0
- 320 Impacts of the components of conservation agriculture on soil organic carbon and total nitrogen storage: A global meta-analysis. **2022**, 156822 2
- 319 Long-term fertilization affects chemical composition of dissolved organic carbon by changing soil properties.
- 318 A Model of the Spatiotemporal Dynamics of Soil Carbon Following Coastal Wetland Loss Applied to a Louisiana Salt Marsh in the Mississippi River Deltaic Plain. **2022**, 127, 0
- 317 Geotechnology Applied to Analysis of Vegetation Dynamics and Occurrence of Forest Fires on Indigenous Lands in Cerrado-Amazonia Ecotone. **2022**, 14, 6919 0

- 316 Sedge replacement by grasses accelerates litter decomposition and decreases organic matter formation in alpine meadow soils. 0
- 315 Depth-dependent responses of soil organic carbon stock under annual and perennial cropping systems. **2022**, 119, 0
- 314 Effect of Shrub Encroachment on Alpine Grass Soil Microbial Community Assembly. 2,
- 313 Microbial and Environmental Processes Shape the Link between Organic Matter Functional Traits and Composition. 0
- 312 High stability of autochthonous dissolved organic matter in karst aquatic ecosystems: Evidence from fluorescence. **2022**, 220, 118723 1
- 311 Degradation of microplastics by hydroxyl radicals generated during microbially driven humus redox transformation. **2022**, 221, 118731 0
- 310 Mowing and phosphorus affect plant diversity and soil carbon and nitrogen storage under nitrogen enrichment in the semi-arid alpine steppe. **2022**, 217, 106458 0
- 309 Organic Matter Accumulates and Stabilizes Under Norway Spruce Following Experimental Drought.
- 308 Aggregate-Associated Carbon Contributes to Soil Organic Carbon Accumulation Along the Elevation Gradient of Helan Mountains.
- 307 A chromosome-level genome assembly and intestinal transcriptome of *Trypoxylus dichotomus* (Coleoptera: Scarabaeidae) to understand its lignocellulose digestion ability. **2022**, 11, 0
- 306 Regulation of soil organic carbon stock with physical properties in alluvial soils of Bihar. **2022**, 23, 309-314 0
- 305 Storage, patterns and influencing factors for soil organic carbon in coastal wetlands of China. 2
- 304 Effects of environmental factors and tree species mixtures on the functional groups of soil organic carbon across subtropical plantations in southern China.
- 303 Deep ocean microbial communities produce more stable dissolved organic matter through the succession of rare prokaryotes. **2022**, 8, 0
- 302 Base cation evidence for enhanced water infiltration in Ancestral Pueblo gravel mulch fields, Northern New Mexico, USA.
- 301 Understory plant removal counteracts tree thinning effect on soil respiration in a temperate forest. 0
- 300 The role and fate of organic carbon during aging of ferrihydrite. **2022**, 2
- 299 Response of Seasonally Frozen Ground to Climate Changes in the Northeastern Qinghai-Tibet Plateau. 10,

- 298 Dynamics of soil aggregate-associated carbon as influenced by simulated tillage and runoff. 0
- 297 A critical review of mineral-microbe interaction and coevolution: mechanisms and applications. 1
- 296 Long-term cultivation of Miscanthus and switchgrass accelerates soil organic carbon accumulation by decreasing carbon mineralization in infertile red soil. 0
- 295 The black carbon cycle and its role in the Earth system. 4
- 294 Detection of organic carbon in Mars-analog paleosols with thermal and evolved gas analysis.
- 293 The role of machine learning on Arabica coffee crop yield based on remote sensing and mineral nutrition monitoring. **2022**, 221, 81-104 1
- 292 Climate warming weakens the negative effect of nitrogen addition on the microbial contribution to soil carbon pool in an alpine meadow. **2022**, 217, 106513 0
- 291 Factors controlling soil organic carbon with depth at the basin scale. **2022**, 217, 106478 1
- 290 Severe drought rather than cropping system determines litter decomposition in arable systems. **2022**, 338, 108078
- 289 Conservation tillage facilitated soil carbon sequestration through diversified carbon conversions. **2022**, 337, 108080 0
- 288 Conservation with elephants and agricultural intensification: effects on lignin and n-alkanes in soils of sub-Saharan Africa. **2022**, 425, 116009
- 287 Examining the contributions of maize shoots, roots, and manure to stable soil organic carbon pools in tropical smallholder farming soils. **2022**, 425, 116049 0
- 286 Thermokarst processes increase the supply of stabilizing surfaces and elements (Fe, Mn, Al, and Ca) for mineral-organic carbon interactions. 0
- 285 Distribution of Molecular Weight of Humic Substances Isolated from Soils of Tallgrass Temperate Rainforests (Chernevaya Taiga). **2022**, 12, 1760 0
- 284 Capturing the short-term variability of carbon dioxide emissions from sedimentary rock weathering in a remote mountainous catchment, New Zealand. **2022**, 121024 0
- 283 Differential responses of fungal and bacterial necromass accumulation in soil to nitrogen deposition in relation to deposition rate. **2022**, 157645
- 282 Retention of soil organic matter by occlusion within soil minerals. **2022**, 21, 727-746 1
- 281 Vertical SOC distribution and aromatic carbon in centuries old charcoal-rich Technosols. **2022**, 73,



- 280 Soil microbial carbon and activity along with land use and geographic gradients.
- 279 Effects of transforming multiple ecosystem types to plantations on soil carbon, nitrogen, and phosphorus concentrations at the global scale. 0
- 278 Stabilisation of soil organic matter: interactions between clay and microbes. 1
- 277 Responses of soil fauna communities to the individual and combined effects of multiple global change factors. 1
- 276 Small-Scale Variability of Soil Quality in Permafrost Peatland of the Great Hingâän Mountains, Northeast China. **2022**, 14, 2597 0
- 275 Characterization of Sequentially Extracted Soil Organic Matter by Electrospray Ionization and Atmospheric Pressure Photoionization Fourier Transform Ion Cyclotron Resonance Mass Spectrometry. 0
- 274 Coupled of carbon and nitrogen mineralization in rhizosphere soils along a temperate forest altitudinal gradient. 0
- 273 Soil microbiomes and one health. 2
- 272 Recarbonizing Global Soils for Sustainable Development.
- 271 Organic carbon compounds associated with deep soil carbon stores.
- 270 Combined application of chemical fertilizer with green manure increased the stabilization of organic carbon in the organo-mineral complexes of paddy soil. 0
- 269 Litter removal increases the plant carbon input to soil in a *Pinus massoniana* plantation. 0
- 268 Bridging Ecology and Agronomy to Foster Diverse Pastures and Healthy Soils. **2022**, 12, 1893 1
- 267 Interactions between polypropylene microplastics (PP-MPs) and humic acid influenced by aging of MPs. **2022**, 222, 118921 0
- 266 From plant to soil: Quantitative changes in pine and juniper extractive compounds at different transformation stages. 0
- 265 Carbon fluxes within tree-crop-grass agroforestry system: <sup>13</sup>C field labeling and tracing. 0
- 264 Impact of deforestation and temporal land-use change on soil organic carbon storage, quality, and lability. **2022**, 17, e0263205 0
- 263 Diversified crop rotation improves continuous monocropping eggplant production by altering the soil microbial community and biochemical properties. 0

- 262 Fungivorous nematodes drive microbial diversity and carbon cycling in soil.
- 261 Comparison of Sample Preparation Techniques for the (â)ESI-FT-ICR-MS Analysis of Humic and Fulvic Acids. 0
- 260 Groundwater metabolome responds to recharge in fractured sedimentary strata. **2022**, 223, 118998 0
- 259 Nitrogen availability and mineral particles contributed fungal necromass to the newly formed stable carbon pool in the alpine areas of Southwest China. **2022**, 173, 108788 0
- 258 Particulate and mineral-associated organic carbon turnover revealed by modelling their long-term dynamics. **2022**, 173, 108780
- 257 Archaeal lipids in soils and sediments: Water impact and consequences for microbial carbon sequestration. **2022**, 173, 108801
- 256 Microbial utilization of simple and complex carbon compounds in a temperate forest soil. **2022**, 173, 108786 0
- 255 Microbe-iron interactions control lignin decomposition in soil. **2022**, 173, 108803
- 254 Vertical distribution and influencing factors of deep soil organic carbon in a typical subtropical agricultural watershed. **2022**, 339, 108141 0
- 253 Fertilizer quality and labile soil organic matter fractions are vital for organic carbon sequestration in temperate arable soils within a long-term trial in Switzerland. **2022**, 426, 116080 1
- 252 Links between chemical composition of soil organic matter and soil enzyme activity in alpine grassland ecosystems of the Tibetan Plateau. **2022**, 218, 106565 0
- 251 Plant endophytes and arbuscular mycorrhizal fungi alter the decomposition of *Achnatherum sibiricum* litter. **2022**, 180, 104616 1
- 250 Bringing soil chemistry to environmental health science to tackle soil contaminants. 10, 0
- 249 Recent developments in modification of biochar and its application in soil pollution control and ecoregulation. **2022**, 313, 120184 0
- 248 Sedimentary organic carbon and nitrogen stocks of intertidal seagrass meadows in a dynamic and impacted wetland: Effects of coastal infrastructure constructions and meadow establishment time. **2022**, 322, 115841 1
- 247 Long-term manure applications to increase carbon sequestration and macroaggregate-stabilized carbon. **2022**, 174, 108827 2
- 246 Effects of decadal nitrogen addition on carbon and nitrogen stocks in different organic matter fractions of typical steppe soils. **2022**, 144, 109471 0
- 245 Those who can don't want to, and those who want to can't: An eco-evolutionary mechanism of soil carbon persistence. **2022**, 174, 108813 0

- 244 Direct and indirect greenhouse gas emissions under conventional, organic, and conservation agriculture. **2022**, 340, 108148 ○
- 243 Potential utilization of vitamin C industrial effluents in agriculture: Soil fertility and bacterial community composition. **2022**, 851, 158253 ○
- 242 Elevational pattern of soil organic carbon release in a Tibetan alpine grassland: Consequence of quality but not quantity of initial soil organic carbon. **2022**, 428, 116148 1
- 241 Long-term alfalfa (*Medicago sativa* L.) establishment could alleviate phosphorus limitation induced by nitrogen deposition in the carbonate soil. **2022**, 324, 116346 ○
- 240 Self-template mechanism of "selective silicon dissolution" for the construction of functional rice husk biochar. **2022**, 238, 107511 ○
- 239 Interactions between organic matter and Fe oxides at soil micro-interfaces: Quantification, associations, and influencing factors. **2023**, 855, 158710 1
- 238 Effect of biochar application rate on changes in soil labile organic carbon fractions and the association between bacterial community assembly and carbon metabolism with time. **2023**, 855, 158876 ○
- 237 Contributions of Climate and Soil Properties to Geographic Variations of Soil Organic Matter Across the East Asian Monsoon Region. ○
- 236 Genome-Resolved Metagenomics Informs the Functional Ecology of Uncultured Acidobacteria in Redox Oscillated Sphagnum Peat. ○
- 235 Effects of litter input on the balance of new and old soil organic carbon under natural forests along a climatic gradient in China. **2022**, 160, 409-421 ○
- 234 Temperature Sensitivity of Soil Respiration in Two Temperate Forest Ecosystems: The Synthesis of a 24-Year Continuous Observation. **2022**, 13, 1374 ○
- 233 Assessing the carbonisation temperatures recorded by ancient charcoals for  $\delta^{13}\text{C}$ -based palaeoclimate reconstruction. **2022**, 12, ○
- 232 Advances in Molecular and Microscale Characterization of Soil Organic Matter: Current Limitations and Future Prospects. **2022**, 56, 12793-12810 1
- 231 Microbiome structure and interconnection in soil aggregates across conservation and conventional agricultural practices allow to identify main prokaryotic and fungal taxa related to soil functioning. **2022**, 108833 1
- 230 Advancing the science and practice of ecological nutrient management for smallholder farmers. 6, 1
- 229 Gypsum, crop rotation, and cover crop impacts on soil organic carbon and biological dynamics in rainfed transitional no-till corn-soybean systems. **2022**, 17, e0275198 ○
- 228 Soil organic carbon stock responded more sensitively to degradation in alpine meadows than in alpine steppes on the Qinghai-Tibetan Plateau. ○
- 227 Vertical pattern of organic matter decomposability in cryoturbated permafrost-affected soils. **2022**, 17, 104023 ○

- 226 Microbial necromass response to soil warming: A meta-analysis. 2, 0
- 225 Fe-Bound Organic Carbon and Sorption of Aromatic Dissolved Organic Carbon in Surface Soil: Comparing a Forest, a Cropland, and a Pasture Soil in the Central Appalachian Region, West Virginia, U.S.A. **2022**, 9, 113 0
- 224 Clarifying the evidence for microbial- and plant-derived soil organic matter, and the path toward a more quantitative understanding. 2
- 223 5300-year-old soil carbon is less primed than young soil organic matter. 0
- 222 Polypropylene microplastics affect the distribution and bioavailability of cadmium by changing soil components during soil aging. **2022**, 130079 0
- 221 Modelling long-term yield and soil organic matter dynamics in a maize cropping system. 1
- 220 Bamboo-based agroforestry changes phytoremediation efficiency by affecting soil properties in rhizosphere and non-rhizosphere in heavy metal-polluted soil (Cd/Zn/Cu). 0
- 219 A continental scale analysis reveals widespread root bimodality. 0
- 218 Microspectroscopic visualization of how biochar lifts the soil organic carbon ceiling. **2022**, 13, 0
- 217 The pyrolytical fingerprint of nitrogen compounds reflects the content and quality of soil organic carbon. **2022**, 116187 0
- 216 Soil mineral fraction influences the bacterial abundance: evidence from a mineral and plant materials incubation study. 0
- 215 Plant litter chemistry controls coarse-textured soil carbon dynamics. 0
- 214 Soil organic carbon sequestration following a secondary succession of agricultural abandonment in the karst region of southwest China. **2022**, 81, 0
- 213 A Novel 4-Set Venn Diagram Model Based on High-Resolution Mass Spectrometry To Monitor Wastewater Treatment. 0
- 212 Grasslands enhance ecosystem service multifunctionality above and below ground in agricultural landscapes. 1
- 211 Seasonal behaviour of carbon mineralisation kinetics, microbial biomass carbon and enzyme activities in three natural ecosystems of Kaziranga National Park, Assam, North East India. 0
- 210 Instance-based transfer learning for soil organic carbon estimation. 10, 0
- 209 Fluvisols Contribution to Water Retention Hydrological Ecosystem Services in Different Floodplain Ecosystems. **2022**, 11, 1510 0

208	Continuous and Nested Time in Historical Ecology: Application to Soil Studies. <b>2022</b> , 99-109	0
207	Precipitation-derived effects on the characteristics of proteinaceous soil organic matter across the continental United States. 2,	0
206	Root exudates contribute to belowground ecosystem hotspots: A review. 13,	1
205	The climate benefit of sequestration in soils for warming mitigation.	0
204	Ecosystem productivity has a stronger influence than soil age on surface soil carbon storage across global biomes. <b>2022</b> , 3,	0
203	Large macroaggregate disintegration contributes to cPOM transfer and carbon loss in forest soil under rainfall simulation.	0
202	Long-term fertilizer postponing promotes soil organic carbon sequestration in paddy soils by accelerating lignin degradation and increasing microbial necromass. <b>2022</b> , 108839	0
201	The crucial interactions between climate and soil. <b>2022</b> , 159169	0
200	Forest gaps accelerate the degradation of cellulose and lignin in decaying logs in a subalpine forest.	0
199	Biodegradation of dissolved organic matter and sedimentary organic matter in high arsenic groundwater system: Evidence from lipid biomarkers and compound-specific carbon isotopes. <b>2022</b> , 612, 121140	0
198	NTPF and Homegarden vis-à-vis Land Degradation Neutrality: Sustainable Livelihood and Development. <b>2022</b> , 419-436	0
197	Carbon Sequestration Acts as a Moderator for Soil Restoration of Degraded Coal Mined Lands: An Overview. <b>2022</b> , 315-332	0
196	Lipid Biomarkers as a Tool for the Identification of Herder Activities in El Mirador Cave. <b>2022</b> , 251-270	0
195	Climate change challenges, plant science solutions.	0
194	The grassland carbon cycle: mechanisms, responses to global changes, and potential contribution to carbon neutrality. <b>2022</b> ,	0
193	Iron-bound organic carbon dynamics in peatland profiles: the preservation equivalence of deep and surface soil. <b>2022</b> ,	0
192	Long-term manure application enhances organic carbon and nitrogen stocks in Mollisol subsoil.	1
191	Improving pedotransfer functions for predicting soil mineral associated organic carbon by ensemble machine learning. <b>2022</b> , 116208	1

- 190 Modeling nitrous oxide emissions from agricultural soil incubation experiments using CoupModel. **2022**, 19, 4811-4832 ○
- 189 Faster accumulation and greater contribution of glomalin to the soil organic carbon pool than amino sugars do under tropical coastal forest restoration. 1
- 188 Comprehensive Assessment of Seasonally Frozen Ground Changes in the Northern Hemisphere Based on Observations. **2022**, 127, ○
- 187 Soil carbon storage is related to tree functional composition in naturally regenerating tropical forests. ○
- 186 Italian Ryegrass, Perennial Ryegrass, and Meadow Fescue as Undersown Cover Crops in Spring Wheat and Barley: Results from a Mixed Methods Study in Norway. **2022**, 14, 13055 ○
- 185 A field incubation approach to evaluate the depth dependence of soil biogeochemical responses to climate change. ○
- 184 A Comparative Study of the Humic Substances and Organic Matter in Physical Fractions of Haplic Chernozem under Contrasting Land Uses. **2022**, 55, 1371-1383 ○
- 183 Divergent effects of moderate grazing duration on carbon sequestration between temperate and alpine grasslands in China. **2022**, 159621 ○
- 182 Depolymerization of lignin by extracellular activity of *Pycnoporus cinnabarinus*, to obtain cellulose. **2022**, ○
- 181 Microbial autotrophy explains large-scale soil CO<sub>2</sub> fixation. ○
- 180 Exploring the Impacts of Data Source, Model Types and Spatial Scales on the Soil Organic Carbon Prediction: A Case Study in the Red Soil Hilly Region of Southern China. **2022**, 14, 5151 ○
- 179 Effects of application of horticultural soil amendments on decomposition, quantity, stabilisation and quality of soil carbon. **2022**, 12, ○
- 178 Short-term but not long-term perennial mugwort cropping increases soil organic carbon in Northern China Plain. 13, ○
- 177 Plant types shape soil microbial composition, diversity, function, and co-occurrence patterns in the cultivated land of a karst area. ○
- 176 Contrasting Export of Particulate Organic Carbon From Greenlandic Glacial and Nonglacial Streams. **2022**, 49, ○
- 175 Minerals: A missing role for enhanced biochar carbon sequestration from the thermal conversion of biomass to the application in soil. **2022**, 234, 104215 ○
- 174 Fractions, stability, and influencing factors of soil organic carbon under different land-use in sodic soils. **2022**, 31, e00590 ○
- 173 Mesofauna community influences litter chemical trajectories during early-stage litter decay. **2022**, 95, 150844 ○

172	Nano and sub-nano scale distribution of organic carbon species on soil particles revealed by Cs-STEM EELS. <b>2022</b> , 613, 121168	0
171	Phosphorus species in sequentially extracted soil organic matter fractions. <b>2023</b> , 429, 116227	0
170	Humic acid and phosphorus fractions transformation regulated by carbon-based materials in composting steered its potential for phosphorus mobilization in soil. <b>2023</b> , 325, 116553	1
169	Soil microbial communities vary in composition and functional strategy across soil aggregate size class regardless of tillage. <b>2022</b> , 10,	0
168	Sensing technologies for characterizing and monitoring soil functions: A review. <b>2022</b> ,	1
167	Import and release of nutrients during the first five years of plant litter decomposition. <b>2023</b> , 176, 108878	2
166	Native soil labile organic matter influences soil priming effects. <b>2023</b> , 182, 104732	0
165	Effect of grazing exclusion on emission of greenhouse gases and soil organic carbon turnover in alpine shrub meadow. <b>2023</b> , 858, 159758	0
164	Straw return alleviates the negative effects of saline sodic stress on rice by improving soil chemistry and reducing the accumulation of sodium ions in rice leaves. <b>2023</b> , 342, 108253	0
163	Fungal necromass increases soil aggregation and organic matter chemical stability under improved cropland management and natural restoration. <b>2023</b> , 858, 159953	0
162	How Much Organic Carbon Could Be Stored in Rainfed Olive Grove Soil? A Case Study in Mediterranean Areas. <b>2022</b> , 14, 14609	0
161	Holes in the tundra: Invasive earthworms alter soil structure and moisture in tundra soils. <b>2022</b> , 160125	0
160	Progress on the Effect of Nitrogen on Transformation of Soil Organic Carbon. <b>2022</b> , 10, 2425	0
159	Molecular Signature of Soil Organic Matter under Different Land Uses in the Lake Chaohu Basin. <b>2022</b> ,	1
158	Dry-wet seasonal variations of microbially-mediated carbon metabolism in soils of a floodplain lake.	0
157	Simulating long-term responses of soil organic matter turnover to substrate stoichiometry by abstracting fast and small-scale microbial processes: the Soil Enzyme Steady Allocation Model (SESAM; v3.0). <b>2022</b> , 15, 8377-8393	0
156	Spatio-Temporal Variation and Its Driving Forces of Soil Organic Carbon along an UrbanâRural Gradient: A Case Study of Beijing. <b>2022</b> , 19, 15201	1
155	Species shifts induce soil organic matter priming and changes in microbial communities. <b>2023</b> , 859, 159956	1

- 154 The involvement of organic acids in soil fertility, plant health and environment sustainability. **2022**, 204, 0
- 153 Wildfire impacts on surface water quality parameters: Cause of data variability and reporting needs. **2023**, 317, 120713 1
- 152 Long-term warming reduces surface soil organic carbon by reducing mineral-associated carbon rather than "free" particulate carbon. **2023**, 177, 108905 0
- 151 Variations in soil aggregate stability and organic carbon stability of alpine meadow and shrubland under long-term warming. **2023**, 222, 106848 0
- 150 Amorphous iron oxides protect aggregate-associated organic carbon from microbial utilization and decomposition evidenced from the natural abundance of  $^{13}\text{C}$ . **2023**, 227, 105623 0
- 149 Cropland carbon stocks driven by soil characteristics, rainfall and elevation. **2023**, 862, 160602 0
- 148 Natural marsh-pasture/sugarcane field transitions greatly reduced lignin-derived pyrolysis products of soil organic matter. **2023**, 329, 117019 0
- 147 Crop rotational diversity alters the composition of stabilized soil organic matter compounds in soil physical fractions. 0
- 146 Native multispecies and fast-growing forest root biomass increase C and N stocks in a reclaimed bauxite mining area. **2023**, 195, 0
- 145 Linking soil aggregation to organic matter chemistry in a Calcic Cambisol: evidence from a 33-year field experiment. 0
- 144 Energy cover crops for biogas production increase soil organic carbon stocks: A modeling approach. 0
- 143 Interactions between soil organic matter chemical structure and microbial communities determine the spatial variation of soil basal respiration in boreal forests. **2022**, 104743 1
- 142 Grazing and ecosystem service delivery in global drylands. **2022**, 378, 915-920 5
- 141 Degradation properties of fulvic acid and its microbially driven mechanism from a partial nitrification bioreactor through multi-spectral and bioinformatic analysis. **2022**, 0
- 140 Universal microbial reworking of dissolved organic matter along environmental gradients. 0
- 139 The carbon-quality temperature hypothesis: Fact or artefact?. 0
- 138 Differences in soil organic matter between EcM - and AM -dominated forests depend on tree and fungal identity. 0
- 137 The effect of mineral composition on soil organic matter turnover in temperate forest soils. 0



136	Rice Rhizosphere Metagenome in Association with Application of Biochar under Continuous Exposure to Elevated Carbon Dioxide.	0
135	Microbial Community Investigation of Wild Brambles with Root Nodulation from a Calcareous Nitrogen-Deficient Soil. <b>2022</b> , 6, 96	0
134	Long-Term Effects of Organic Amendments on Carbon Stability in ClayâOrganic Complex and Its Role in Soil Aggregation. <b>2023</b> , 13, 39	1
133	Aggregate-associated carbon contributes to soil organic carbon accumulation along the elevation gradient of Helan Mountains. <b>2022</b> , 108926	0
132	Integration of root architecture, root nitrogen metabolism, and photosynthesis of âHanfuâapple trees under the cross-talk between glucose and IAA. <b>2022</b> ,	0
131	Greenhouse gas fluxes in mangrove forest soil in an Amazon estuary. <b>2022</b> , 19, 5483-5497	0
130	Empirically-based production environment soil health goals.	0
129	Regularities in the Development of Soil Biological Activity and Winter Wheat Productivity under Ecologised Fertiliser Systems. <b>2022</b> , 25,	0
128	Assessing the impact of grazing management on wind erosion risk in grasslands: A case study on how grazing affects aboveground biomass and soil particle composition in Inner Mongolia. <b>2022</b> , 40, e02344	0
127	Global perspectives for biochar application in the remediation of heavy metal-contaminated soil: a bibliometric analysis over the past three decades. 1-15	0
126	Edaphic controls of soil organic carbon in tropical agricultural landscapes. <b>2022</b> , 12,	0
125	Effects of Arbuscular Mycorrhizal Fungi and Biochar on Growth, Nutrient Absorption, and Physiological Properties of Maize ( <i>Zea mays</i> L.). <b>2022</b> , 8, 1275	5
124	Bioenergetic control of soil carbon dynamics across depth. <b>2022</b> , 13,	1
123	Linking plant lignin components or microbial necromass to soil organic carbon accumulation across different forest types.	0
122	Effect and mechanism of the improvement of coastal silt soil by application of organic fertilizer and gravel combined with <i>Sesbania cannabina</i> cultivation. 13,	0
121	Influence of Clay Mineralogy on Soil Organic Carbon Stabilization under Tropical Climate, India.	0
120	Redox oscillations destabilize and mobilize colloidal soil organic carbon. <b>2022</b> , 161153	0
119	Spatial Differentiation of the Coupling Characteristics of Soil Carbon and Nitrogen on Mulberry Plantations in China. <b>2022</b> , 14,	0

- 118 Degradation pathways for organic matter of terrestrial origin are widespread and expressed in Arctic Ocean microbiomes. **2022**, 10, ○
- 117 One thousand soils for molecular understanding of belowground carbon cycling. ○
- 116 Nanoscale Interactions of Humic Acid and Minerals Reveal Mechanisms of Carbon Protection in Soil. ○
- 115 Large-diameter trees and deadwood correspond with belowground ectomycorrhizal fungal richness. **2023**, 12, ○
- 114 Measurement and modelling of organic matter's altering effect on dielectric behavior of soil in the region of 200 MHz to 14 GHz. 1-25 ○
- 113 Soil Microbial Biochemical Activity and Influence of Climate Change. **2023**, 137-155 ○
- 112 Oxygen priming induced by elevated CO<sub>2</sub> reduces carbon accumulation and methane emissions in coastal wetlands. **2023**, 16, 63-68 1
- 111 Soil carbon prediction under different land uses by integration of remote sensing and machine learning algorithms in a semi-arid watershed, Iran. **2023**, 16, ○
- 110 The direct and legacy effects of drying-rewetting cycles on active and relatively resistant soil carbon decomposition. ○
- 109 Role of biochar toward carbon neutrality. **2023**, 2, ○
- 108 Biochemical composition of soil organic matter physical fractions under 32-year fertilization in Ferralic Cambisol. **2023**, 2, ○
- 107 Characteristic of Molecular Weight-Fractions of Soil Organic Matter from Calcareous Soil and Yellow Soil. **2023**, 15, 1537 ○
- 106 Using the end-member mixing model to evaluate biogeochemical reactivities of dissolved organic matter (DOM): autochthonous versus allochthonous origins. **2023**, 119644 ○
- 105 Topographically Distinguished Microbiome Taxonomy and Stress-Response Genes of Royal Belum Rainforest and Raja Muda Musa Peat Swamp Revealed through Metagenomic Inquisition. **2023**, 24, 872 ○
- 104 An integrated solar-induced chlorophyll fluorescence model for more accurate soil organic carbon content estimation in an Alpine agricultural area. ○
- 103 Soil depth as a driver of microbial and carbon dynamics in a planted forest (*Pinus radiata*) pumice soil. **2023**, 9, 55-70 ○
- 102 Elevation Gradient Drives Distribution of Soil Carbon in a Semiarid Grassland of British Columbia. ○
- 101 Loss of soil organic matter in the mining landscape and its implication to climate change. **2023**, 16, ○

- 100 Interactions and Regulatory Functions of Phenolics in Soil-Plant-Climate Nexus. **2023**, 13, 280 1
- 99 Soil N:P Ratio and Its Regulation Factors in Alpine Wetlands Across the Three Rivers Source Region. 0
- 98 Quantifying mineral-associated organic matter in wetlands as an indicator of the degree of soil carbon protection. **2023**, 430, 116327 0
- 97 Priming effect on soil carbon decomposition by root exudate surrogates: A meta-analysis. **2023**, 178, 108955 0
- 96 Environmental and pedological factors influencing organic carbon storage in Italian forest soils. **2023**, 32, e00605 0
- 95 Modeling ecosystem-scale carbon dynamics in soil: The microbial dimension. **2023**, 178, 108948 0
- 94 Depth-dependent response of particulate and mineral-associated organic carbon to long-term throughfall reduction in a subtropical natural forest. **2023**, 223, 106904 0
- 93 The inverted forest: Aboveground and notably large belowground carbon stocks and their drivers in Brazilian savannas. **2023**, 867, 161320 0
- 92 Abiotic and biotic drivers of tree trait effects on soil microbial biomass and soil carbon concentration. 0
- 91 The Soil Environment of Abandoned Charcoal Kiln Platforms in a Low-Altitude Central European Forest. **2023**, 14, 29 0
- 90 Bibliometric Analysis of the Permafrost Research: Developments, Impacts, and Trends. **2023**, 15, 234 0
- 89 Topsoil Carbon Stocks in Urban Greenspaces of The Hague, the Netherlands. 0
- 88 Effects of organic amendments and cover crops on soil characteristics and potato yields. **2023**, 73, 13-26 0
- 87 Organic Matter Continuum in a Compost System: Life and Death in a Compost Microbiome Decide Whether Compost Is Essential. **2023**, 71, 1769-1770 0
- 86 Using Landfill Leachate to Indicate the Chemical and Biochemical Activities in Elevated Temperature Landfills. 0
- 85 Composted biosolids amendments for enhanced soil organic carbon and water storage in perennial pastures in Colorado. **2023**, 347, 108401 0
- 84 Dynamics of SOC density and driving factors during the restoration of artificial grassland and abandoned farmland in Mu Us Desert, China. **2023**, 224, 106991 0
- 83 Organic carbon in soilsâ€”fine fraction: thresholds in saturation capacity and its relationship with carbon stabilization. 0

- 82 Rhizosphere Mycobiome: Roles, Diversity, and Dynamics. **2023**, 47-61
- 81 Humic Substances: From Supramolecular Aggregation to Fractal Conformation—Is There Time for a New Paradigm?. **2023**, 13, 2236
- 80 Use of untargeted metabolomics to analyse changes in extractable soil organic matter in response to long-term fertilisation. **2023**, 59, 301-316
- 79 Rapid loss of complex polymers and pyrogenic carbon in subsoils under whole-soil warming. **2023**, 16, 344-348
- 78 Remote sensing of soil degradation: Progress and perspective. **2023**,
- 77 Functionalized cross-linking mechanism of biochar—adsorption-reaction microunit—in the promotion of new ammonia-based CO<sub>2</sub> capture. **2023**, 123865
- 76 One thousand soils for molecular understanding of belowground carbon cycling. 3,
- 75 A simple but effective evaluation criterion for parameters optimization of EPO and its application to moisture insensitive prediction of soil organic matter. **2023**, 236, 104794
- 74 Effect of pre-treatment processes of organic residues on soil aggregates. **2023**, 30, 103104
- 73 Molecular diversity and the fate of biochemical fractions of eucalypt tissues in soil. **2023**, 432, 116404
- 72 Greater regulation of permafrost organic matter composition by enzymes and redox than temperature. **2023**, 180, 108991
- 71 Revealing the potential of organo-mineral complexes in agricultural application using bibliometrics. **2023**, 401, 136728
- 70 Increasing tree productivity does not translate into greater soil organic carbon storage. **2023**, 535, 120884
- 69 Earthworms and long-term straw management practices interactively affect soil carbon and nitrogen forms across soil depths. **2023**, 116, 103478
- 68 Residence time of carbon in paddy soils. **2023**, 400, 136707
- 67 Shrub encroachment increases soil carbon and nitrogen stocks in alpine grassland ecosystems of the central Tibetan Plateau. **2023**, 433, 116468
- 66 Post-farming land restoration schemes exhibit higher soil aggregate stability and organic carbon: Evidence in the Three Gorges Reservoir Area, China. **2023**, 227, 107099
- 65 Nitrogen deposition induces a greater soil C sequestration in the rhizosphere than bulk soil in an alpine forest. **2023**, 875, 162701

- 64 Stable oxic-anoxic transitional interface is beneficial to retard soil carbon loss in drained peatland. **2023**, 181, 109024 ○
- 63 Soil organic carbon pool distribution and stability with grazing and topography in a Mongolian grassland. **2023**, 348, 108431 ○
- 62 Countrywide mapping and assessment of organic carbon saturation in the topsoil using machine learning-based pedotransfer function with uncertainty propagation. **2023**, 227, 107086 ○
- 61 High intensity fire accelerates accumulation of a stable carbon pool in permafrost peatlands under climate warming. **2023**, 227, 107108 ○
- 60 Depth-dependent effects of tree species identity on soil microbial community characteristics and multifunctionality. **2023**, 878, 162972 ○
- 59 Necromass-derived soil organic carbon and its drivers at the global scale. **2023**, 181, 109025 ○
- 58 Structure turnover times of grassland soils under different moisture regimes. **2023**, 433, 116464 ○
- 57 Differences in available phosphorus in temperate and subtropical forest soils. **2023**, 187, 104849 ○
- 56 Soil microbial necromass: The state-of-the-art, knowledge gaps, and future perspectives. **2023**, 115, 103472 ○
- 55 Species of fast bulk-soil nutrient cycling have lower rhizosphere effects: A nutrient spectrum of rhizosphere effects. **2023**, 104, ○
- 54 Potential disintegration and transport of biochar in the soil-water environment: A case study towards purple soil. **2023**, 222, 115383 ○
- 53 Groundwater Plays an Important Role in Controlling Riverine Dissolved Organic Matter in a Cold Alpine Catchment, the Qinghai-Tibet Plateau. **2023**, 59, ○
- 52 Experimental drought increased the belowground sink strength towards higher topsoil organic carbon stocks in a temperate mature forest. **2023**, 431, 116356 ○
- 51 Patterns and determinants of plant-derived lignin phenols in coastal wetlands: Implications for organic C accumulation. **2023**, 37, 1067-1081 ○
- 50 Current controversies on mechanisms controlling soil carbon storage: implications for interactions with practitioners and policy-makers. A review. **2023**, 43, ○
- 49 Microbial necromass in cropland soils: A global meta-analysis of management effects. **2023**, 29, 1998-2014 ○
- 48 Extracted samples and in situ soil investigations to assess the effects of different land use and tillage management practices on soil organic matter composition. ○
- 47 Understanding the impact of main cell wall polysaccharides on the decomposition of ectomycorrhizal fungal necromass. **2023**, 74, ○

- 46 The lower labile carbon of surface soils in Chinese semiarid areas. **2023**, 73, 34-41 ○
- 45 Predicting Fine Root Decomposition from Functional Traits in 10 Temperate Tree Species. **2023**, 14, 372 ○
- 44 Growing soil organic carbon in dryland agricultural systems. **2023**, 44, 18-21 ○
- 43 Potential ecological impacts of physical control on *Spartina alterniflora* in coastal wetland: Migration and transformation of nutrients and the response of bacterial community structure. **2023**, 398, 136556 ○
- 42 Recently fixed carbon fuels microbial activity several meters below the soil surface. **2023**, 20, 827-838 ○
- 41 Changes of Soil Dissolved Organic Matter and Its Relationship with Microbial Community along the Hailuoguo Glacier Forefield Chronosequence. **2023**, 57, 4027-4038 ○
- 40 Effects of soil and rock microhabitats on soil organic carbon stability in a karst peak-cluster depression region of Southwestern China. **2023**, 32, e00623 ○
- 39 Chronic Warming and Nitrogen-Addition Alter Soil Organic Matter Molecular Composition Distinctly in Tandem Compared to Individual Stressors. **2023**, 7, 609-622 ○
- 38 Consistent physiological, ecological and evolutionary effects of fire regime on conservative leaf economics strategies in plant communities. **2023**, 26, 597-608 ○
- 37 Evenness of soil organic carbon chemical components changes with tree species richness, composition and functional diversity across forests in China. **2023**, 29, 2852-2864 ○
- 36 Microbial keystone taxa drive succession of plant residue chemistry. **2023**, 17, 748-757 ○
- 35 Total organic carbon, aluminium and iron in bulk samples and aggregate size fractions of a sandy clay loam humic soil under sugarcane relative to native forest in northern KwaZulu-Natal, South Africa. **2023**, 9, e14000 ○
- 34 Amendments of waste ochre from former coal mines can potentially be used to increase soil carbon persistence. **2023**, 151, 105618 ○
- 33 Effects of returning corn straw incorporated with fungi, and fermented corn straw on soil humic acid structural characteristics. **2023**, 23, 2048-2064 ○
- 32 Spatial heterogeneity and compositional profiles of dissolved organic matter in farmland soils across mainland China. **2024**, 137, 593-603 ○
- 31 Interpreting ramped combustion thermograms using <sup>13</sup>C NMR spectroscopy to characterize soil organic matter composition. **2023**, 432, 116415 ○
- 30 The influence of inherent soil factors and agricultural management on soil organic matter. **2023**, 14, 1 ○
- 29 Trade-offs in carbon-degrading enzyme activities limit long-term soil carbon sequestration with biochar addition. ○

- 28 Root functional traits determine the magnitude of the rhizosphere priming effect among eight tree species. ○
- 27 Molecular <sup>14</sup>C evidence for contrasting turnover and temperature sensitivity of soil organic matter components. **2023**, 26, 778-788 ○
- 26 Masked diversity and contrasting soil processes in tropical seagrass meadows: the control of environmental settings. **2023**, 9, 189-208 ○
- 25 Habitat complexity affects microbial growth in fractal maze. **2023**, ○
- 24 Integrating terrestrial and aquatic ecosystems to constrain estimates of land-atmosphere carbon exchange. **2023**, 14, ○
- 23 Comparison of Soil Carbon and Nitrogen Stocks in Gareh-Bygone Plain of Fasa in Fields with and without Flood Spreading. **2021**, 12, 170-181 ○
- 22 Heavy Metal Pollution of Soil in Vienna, Austria. **2023**, 234, ○
- 21 Modeling organic carbon bound in clay and silt particles in highly weathered lateritic soils of the Central Highlands of Vietnam. ○
- 20 Restricted power: Can microorganisms maintain soil organic matter stability under warming exceeding 2 degrees?. ○
- 19 Applying the core-satellite species concept: Characteristics of rare and common riverine dissolved organic matter. 5, ○
- 18 Spatial variation and relationship between soil dissolved organic matter and bacterial community in urban greenspaces. **2023**, 2, ○
- 17 Subsoil carbon loss. **2023**, 16, 284-285 ○
- 16 Formulae Differences Commence a Database for Interlaboratory Studies of Natural Organic Matter. **2023**, 57, 6238-6247 ○
- 15 An Introduction to Environmental Soil Chemistry. **2024**, 1-38 ○
- 14 Perspectives of the Fritz-Scheffer Awardee 2021: Profile- to ecosystem-scale perspectives on soil organic matter formation as demonstrated by woody debris in forest dynamics. ○
- 13 Different contributing processes in bacterial vs. fungal necromass affect soil carbon fractions during the plant residues transformation. ○
- 12 The Structural Quality of Soil Organic Matter under Selected Soil Fertility Management Practices in the Central Highlands of Kenya. **2023**, 15, 6500 ○
- 11 Stabilization of mineral-associated organic carbon in Pleistocene permafrost. **2023**, 14, ○

- 10 Diversified crop rotations and organic amendments as strategies for increasing soil carbon storage and stabilisation in UK arable systems. 11,
- 9 Mineral-microbial interactions in nine-year organic fertilization field experiment: a mechanism for carbon storage in saline-alkaline paddy soil.
- 8 Carbon farming in paddy soil to increase soil C and soil health as an implementation of soil carbon 4 per mille. **2023**, 1165, 012023
- 7 Soil organic carbon sequestration in agricultural long-term field experiments as derived from particulate and mineral-associated organic matter. **2023**, 434, 116472
- 6 Mapping soil organic carbon fractions for Australia, their stocks, and uncertainty. **2023**, 20, 1559-1586
- 5 Dramatic Carbon Loss in a Permafrost Thaw Slump in the Tibetan Plateau is Dominated by the Loss of Microbial Necromass Carbon.
- 4 Carbon management and sequestration for sustainable agriculture and environment. **2023**, 145-159
- 3 Toward the tree-based ecosystems for carbon sequestration. **2023**, 129-162
- 2 Changes in soil microbial biomass and organic C pools improve the sustainability of perennial grass and legume system under organic nutrient management. 14,
- 1 Associations of soil Fe oxides and organic carbon vary in different aggregate fractions under warming.