

# Cornelia Rumpel

## List of Publications by Year in descending order

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225  
papers

17,784  
citations

17440

63  
h-index

15732

125  
g-index

234  
all docs

234  
docs citations

234  
times ranked

15184  
citing authors

#	ARTICLE	IF	CITATIONS
1	Stability of organic carbon in deep soil layers controlled by fresh carbon supply. <i>Nature</i> , 2007, 450, 277-280.	27.8	1,695
2	Is soil carbon mostly root carbon? Mechanisms for a specific stabilisation. <i>Plant and Soil</i> , 2005, 269, 341-356.	3.7	1,385
3	Deep soil organic matter "a key but poorly understood component of terrestrial C cycle. <i>Plant and Soil</i> , 2011, 338, 143-158.	3.7	1,239
4	Global change pressures on soils from land use and management. <i>Global Change Biology</i> , 2016, 22, 1008-1028.	9.5	605
5	Fate of lignins in soils: A review. <i>Soil Biology and Biochemistry</i> , 2010, 42, 1200-1211.	8.8	495
6	Comparison of quantification methods to measure fire-derived (black/elemental) carbon in soils and sediments using reference materials from soil, water, sediment and the atmosphere. <i>Global Biogeochemical Cycles</i> , 2007, 21, .	4.9	483
7	Stabilisation of soil organic matter by interactions with minerals as revealed by mineral dissolution and oxidative degradation. <i>Organic Geochemistry</i> , 2003, 34, 1591-1600.	1.8	362
8	Vertical distribution, age, and chemical composition of organic carbon in two forest soils of different pedogenesis. <i>Organic Geochemistry</i> , 2002, 33, 1131-1142.	1.8	316
9	Towards a global-scale soil climate mitigation strategy. <i>Nature Communications</i> , 2020, 11, 5427.	12.8	302
10	Impact of compost, vermicompost and biochar on soil fertility, maize yield and soil erosion in Northern Vietnam: A three year mesocosm experiment. <i>Science of the Total Environment</i> , 2015, 514, 147-154.	8.0	252
11	Biogeochemical cycles and biodiversity as key drivers of ecosystem services provided by soils. <i>Soil</i> , 2015, 1, 665-685.	4.9	249
12	Stabilization of organic matter by soil minerals " investigations of density and particle-size fractions from two acid forest soils. <i>Journal of Plant Nutrition and Soil Science</i> , 2002, 165, 451.	1.9	220
13	Stabilised carbon in subsoil horizons is located in spatially distinct parts of the soil profile. <i>Soil Biology and Biochemistry</i> , 2009, 41, 256-261.	8.8	215
14	Aligning agriculture and climate policy. <i>Nature Climate Change</i> , 2017, 7, 307-309.	18.8	213
15	The 4p1000 initiative: Opportunities, limitations and challenges for implementing soil organic carbon sequestration as a sustainable development strategy. <i>Ambio</i> , 2020, 49, 350-360.	5.5	208
16	Evaluation of an ultrasonic dispersion procedure to isolate primary organomineral complexes from soils. <i>European Journal of Soil Science</i> , 1999, 50, 87-94.	3.9	199
17	Chemical evaluation of chars produced by thermochemical conversion (gasification, pyrolysis and) <i>Tj ETQq1 1 0.784314 rgBT /Overlook Bioenergy</i> , 2013, 59, 264-278.	5.7	192
18	Carbon-13 natural abundance as a tool to study the dynamics of lignin monomers in soil: an appraisal at the Closeaux experimental field (France). <i>Geoderma</i> , 2005, 128, 3-17.	5.1	189

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19	Drought effects on microbial biomass and enzyme activities in the rhizosphere of grasses depend on plant community composition. <i>Applied Soil Ecology</i> , 2011, 48, 38-44.	4.3	186
20	Biochar modulates heavy metal toxicity and improves microbial carbon use efficiency in soil. <i>Science of the Total Environment</i> , 2018, 621, 148-159.	8.0	181
21	Location and chemical composition of stabilized organic carbon in topsoil and subsoil horizons of two acid forest soils. <i>Soil Biology and Biochemistry</i> , 2004, 36, 177-190.	8.8	171
22	Preferential erosion of black carbon on steep slopes with slash and burn agriculture. <i>Catena</i> , 2006, 65, 30-40.	5.0	170
23	Black carbon contribution to soil organic matter composition in tropical sloping land under slash and burn agriculture. <i>Geoderma</i> , 2006, 130, 35-46.	5.1	165
24	Stabilization of soil organic matter isolated via oxidative degradation. <i>Organic Geochemistry</i> , 2005, 36, 1567-1575.	1.8	162
25	Chemical modification of biomass residues during hydrothermal carbonization – What makes the difference, temperature or feedstock?. <i>Organic Geochemistry</i> , 2013, 54, 91-100.	1.8	160
26	Composting with additives to improve organic amendments. A review. <i>Agronomy for Sustainable Development</i> , 2018, 38, 1.	5.3	159
27	Smart Fertilizers as a Strategy for Sustainable Agriculture. <i>Advances in Agronomy</i> , 2018, 147, 119-157.	5.2	158
28	Alteration of soil organic matter following treatment with hydrofluoric acid (HF). <i>Organic Geochemistry</i> , 2006, 37, 1437-1451.	1.8	139
29	Lignin turnover kinetics in an agricultural soil is monomer specific. <i>Soil Biology and Biochemistry</i> , 2006, 38, 1977-1988.	8.8	136
30	Microbial functional diversity and carbon use feedback in soils as affected by heavy metals. <i>Environment International</i> , 2019, 125, 478-488.	10.0	135
31	How does drought stress influence the decomposition of plant litter with contrasting quality in a grassland ecosystem?. <i>Plant and Soil</i> , 2012, 352, 277-288.	3.7	134
32	Biochar alters the soil microbiome and soil function: results of next-generation amplicon sequencing across Europe. <i>GCB Bioenergy</i> , 2017, 9, 591-612.	5.6	126
33	Organo-mineral associations in sandy acid forest soils: importance of specific surface area, iron oxides and micropores. <i>European Journal of Soil Science</i> , 2005, 56, 050912034650049.	3.9	125
34	Soil carbon storage and stabilisation in andic soils: A review. <i>Catena</i> , 2014, 120, 102-110.	5.0	125
35	Put more carbon in soils to meet Paris climate pledges. <i>Nature</i> , 2018, 564, 32-34.	27.8	119
36	Carbon allocation in grassland communities under drought stress followed by <sup>14</sup> C pulse labeling. <i>Soil Biology and Biochemistry</i> , 2012, 55, 132-139.	8.8	116

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37	Wildfire effects on soil organic matter quantity and quality in two fire-prone Mediterranean pine forests. <i>Geoderma</i> , 2011, 167-168, 148-155.	5.1	115
38	Decomposition and stabilization of root litter in top- and subsoil horizons: what is the difference?. <i>Plant and Soil</i> , 2011, 338, 127-141.	3.7	114
39	Fire impact on C and N losses and charcoal production in a scrub oak ecosystem. <i>Biogeochemistry</i> , 2007, 82, 201-216.	3.5	112
40	Lignin turnover in an agricultural field: from plant residues to soil-protected fractions. <i>European Journal of Soil Science</i> , 2006, 57, 530-538.	3.9	108
41	Nature and reactivity of charcoal produced and added to soil during wildfire are particle-size dependent. <i>Organic Geochemistry</i> , 2010, 41, 682-689.	1.8	108
42	Effect of physical weathering on the carbon sequestration potential of biochars and hydrochars in soil. <i>GCB Bioenergy</i> , 2015, 7, 488-496.	5.6	107
43	Nanoclays from an Andisol: Extraction, properties and carbon stabilization. <i>Geoderma</i> , 2011, 161, 159-167.	5.1	105
44	Molecular dynamics of shoot vs. root biomarkers in an agricultural soil estimated by natural abundance <sup>13</sup> C labelling. <i>Soil Biology and Biochemistry</i> , 2010, 42, 169-177.	8.8	96
45	Types and chemical composition of organic matter in reforested lignite-rich mine soils. <i>Geoderma</i> , 1998, 86, 123-142.	5.1	95
46	Biological and chemical reactivity and phosphorus forms of buffalo manure compost, vermicompost and their mixture with biochar. <i>Bioresource Technology</i> , 2013, 148, 401-407.	9.6	93
47	Gas chromatographic analysis of monosaccharides in a forest soil profile: Analysis by gas chromatography after trifluoroacetic acid hydrolysis and reductionâ€“acetylation. <i>Soil Biology and Biochemistry</i> , 2006, 38, 1478-1481.	8.8	92
48	Lignin degradation during a laboratory incubation followed by <sup>13</sup> C isotope analysis. <i>Soil Biology and Biochemistry</i> , 2008, 40, 1916-1922.	8.8	91
49	Non-cellulosic neutral sugar contribution to mineral associated organic matter in top- and subsoil horizons of two acid forest soils. <i>Soil Biology and Biochemistry</i> , 2010, 42, 379-382.	8.8	89
50	Effect of in-situ aged and fresh biochar on soil hydraulic conditions and microbial C use under drought conditions. <i>Scientific Reports</i> , 2018, 8, 6852.	3.3	84
51	Microbial succession on decomposing root litter in a drought-prone Scots pine forest. <i>ISME Journal</i> , 2019, 13, 2346-2362.	9.8	84
52	Soil microbial diversity affects soil organic matter decomposition in a silty grassland soil. <i>Biogeochemistry</i> , 2013, 114, 201-212.	3.5	83
53	Water erosion impact on soil and carbon redistributions within uplands of Mekong River. <i>Global Biogeochemical Cycles</i> , 2005, 19, n/a-n/a.	4.9	81
54	Relative importance of sorption versus aggregation for organic matter storage in subsoil horizons of two contrasting soils. <i>European Journal of Soil Science</i> , 2010, 61, 958-969.	3.9	80

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55	Variation in lipid relative abundance and composition among different particle size fractions of a forest soil. <i>Organic Geochemistry</i> , 2004, 35, 1355-1370.	1.8	78
56	Erosion budget and process selectivity of black carbon at meter scale. <i>Geoderma</i> , 2009, 154, 131-137.	5.1	77
57	Advances in Molecular Approaches for Understanding Soil Organic Matter Composition, Origin, and Turnover: A Historical Overview. <i>Advances in Agronomy</i> , 2018, , 1-48.	5.2	75
58	Nanoscale evidence of contrasted processes for root-derived organic matter stabilization by mineral interactions depending on soil depth. <i>Soil Biology and Biochemistry</i> , 2015, 85, 82-88.	8.8	73
59	Release of dissolved phosphorus from riparian wetlands: Evidence for complex interactions among hydroclimate variability, topography and soil properties. <i>Science of the Total Environment</i> , 2017, 598, 421-431.	8.0	73
60	Thermal alteration of organic matter during a shrubland fire: A field study. <i>Organic Geochemistry</i> , 2010, 41, 690-697.	1.8	69
61	Composition and reactivity of morphologically distinct charred materials left after slash-and-burn practices in agricultural tropical soils. <i>Organic Geochemistry</i> , 2007, 38, 911-920.	1.8	68
62	Composition and radiocarbon age of HF-resistant soil organic matter in a Podzol and a Cambisol. <i>Organic Geochemistry</i> , 2007, 38, 1356-1372.	1.8	68
63	Biochar mineralization and priming effect on SOM decomposition in two European short rotation coppices. <i>GCB Bioenergy</i> , 2015, 7, 1150-1160.	5.6	66
64	Interactions between compost, vermicompost and earthworms influence plant growth and yield: A one-year greenhouse experiment. <i>Scientia Horticulturae</i> , 2013, 160, 148-154.	3.6	65
65	Microplastics from lagooning sludge to composts as revealed by fluorescent staining- image analysis, Raman spectroscopy and pyrolysis-GC/MS. <i>Journal of Environmental Management</i> , 2020, 275, 111249.	7.8	65
66	Can pyrolysis-GC/MS be used to estimate the degree of thermal alteration of black carbon?. <i>Organic Geochemistry</i> , 2009, 40, 1179-1187.	1.8	62
67	Sorption of hydrophobic organic compounds to a diverse suite of carbonaceous materials with emphasis on biochar. <i>Chemosphere</i> , 2016, 144, 879-887.	8.2	62
68	Quantification of carbon derived from lignite in soils using mid-infrared spectroscopy and partial least squares. <i>Organic Geochemistry</i> , 2001, 32, 831-839.	1.8	59
69	Title is missing!. <i>Plant and Soil</i> , 1999, 213, 161-168.	3.7	58
70	Transformation of buffalo manure by composting or vermicomposting to rehabilitate degraded tropical soils. <i>Ecological Engineering</i> , 2011, 37, 269-276.	3.6	55
71	Carbon Sequestration and Fertility after Centennial Time Scale Incorporation of Charcoal into Soil. <i>PLoS ONE</i> , 2014, 9, e91114.	2.5	55
72	The rehabilitation of tropical soils using compost and vermicompost is affected by the presence of endogeic earthworms. <i>Applied Soil Ecology</i> , 2010, 46, 125-133.	4.3	54

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73	Araucaria forest expansion on grassland in the southern Brazilian highlands as revealed by $^{14}\text{C}$ and $^{13}\text{C}$ studies. <i>Geoderma</i> , 2008, 145, 143-157.	5.1	53
74	Current Wildland Fire Patterns and Challenges in Europe: A Synthesis of National Perspectives. <i>Air, Soil and Water Research</i> , 2021, 14, 117862212110281.	2.5	53
75	Relevance and limitations of biogenic and physocogenic classification: a comparison of approaches for differentiating the origin of soil aggregates. <i>European Journal of Soil Science</i> , 2009, 60, 1117-1125.	3.9	52
76	How does plant leaf senescence of grassland species influence decomposition kinetics and litter compounds dynamics?. <i>Nutrient Cycling in Agroecosystems</i> , 2010, 88, 159-171.	2.2	52
77	Do Compost and Vermicompost Improve Macronutrient Retention and Plant Growth in Degraded Tropical Soils?. <i>Compost Science and Utilization</i> , 2011, 19, 15-24.	1.2	52
78	Ensuring planetary survival: the centrality of organic carbon in balancing the multifunctional nature of soils. <i>Critical Reviews in Environmental Science and Technology</i> , 2022, 52, 4308-4324.	12.8	52
79	The effect of earthworms on carbon storage and soil organic matter composition in tropical soil amended with compost and vermicompost. <i>Soil Biology and Biochemistry</i> , 2012, 50, 214-220.	8.8	51
80	Fingerprinting sediment sources in the outlet reservoir of a hilly cultivated catchment in Tunisia. <i>Journal of Soils and Sediments</i> , 2013, 13, 801-815.	3.0	49
81	Quantification of lignite- and vegetation-derived soil carbon using $^{14}\text{C}$ activity measurements in a forested chronosequence. <i>Geoderma</i> , 2003, 112, 155-166.	5.1	48
82	Elemental and Molecular Evidence of Soot- and Char-Derived Black Carbon Inputs to New York City's Atmosphere during the 20th Century. <i>Environmental Science &amp; Technology</i> , 2007, 41, 82-87.	10.0	48
83	Contrasting composition of free and mineral-bound organic matter in top- and subsoil horizons of Andosols. <i>Biology and Fertility of Soils</i> , 2012, 48, 401-411.	4.3	48
84	Temperature sensitivity of decomposition decreases with increasing soil organic matter stability. <i>Science of the Total Environment</i> , 2020, 704, 135460.	8.0	47
85	Particle size fractionation of soil containing coal and combusted particles. <i>European Journal of Soil Science</i> , 1999, 50, 515-522.	3.9	43
86	Evolution of soil organic matter after prescribed fire: A 20-year chronosequence. <i>Geoderma</i> , 2012, 189-190, 98-107.	5.1	43
87	How do microbial communities in top- and subsoil respond to root litter addition under field conditions?. <i>Soil Biology and Biochemistry</i> , 2016, 103, 28-38.	8.8	43
88	â€4 per 1,000â€™ initiative will boost soil carbon for climate and food security. <i>Nature</i> , 2018, 553, 27-27.	27.8	43
89	Variation in lipid relative abundance and composition among different particle size fractions of a forest soil. <i>Organic Geochemistry</i> , 2004, 35, 1355-1370.	1.8	43
90	Effects of grasses and a legume grown in monoculture or mixture on soil organic matter and phosphorus forms. <i>Plant and Soil</i> , 2016, 402, 117-128.	3.7	42

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91	The role of lignite in the carbon cycle of lignite-containing mine soils: evidence from carbon mineralisation and humic acid extractions. <i>Organic Geochemistry</i> , 2002, 33, 393-399.	1.8	41
92	Depletion of soil organic carbon and nitrogen under <i>Pinus taeda</i> plantations in Southern Brazilian grasslands ( <i>Campos</i> ). <i>European Journal of Soil Science</i> , 2009, 60, 347-359.	3.9	41
93	Carbon Storage and Sequestration in Subsoil Horizons: Knowledge, Gaps and Potentials. , 2012, , 445-464.		41
94	Abundance and composition of free and aggregate-occluded carbohydrates and lignin in two forest soils as affected by wildfires of different severity. <i>Geoderma</i> , 2015, 245-246, 40-51.	5.1	41
95	Impact of landuse change on the molecular composition of soil organic matter. <i>Journal of Analytical and Applied Pyrolysis</i> , 2009, 85, 431-434.	5.5	40
96	Can cutin and suberin biomarkers be used to trace shoot and root-derived organic matter? A molecular and isotopic approach. <i>Biogeochemistry</i> , 2011, 106, 23-38.	3.5	40
97	Does grassland introduction into cropping cycles affect carbon dynamics through changes of allocation of soil organic matter within aggregate fractions?. <i>Science of the Total Environment</i> , 2017, 576, 251-263.	8.0	40
98	Management of grasslands by mowing versus grazing – impacts on soil organic matter quality and microbial functioning. <i>Applied Soil Ecology</i> , 2020, 156, 103701.	4.3	40
99	Chemical nature of residual phosphorus in Andisols. <i>Geoderma</i> , 2016, 271, 27-31.	5.1	39
100	Rainfall simulation to identify the storm-scale mechanisms of gully bank retreat. <i>Agricultural Water Management</i> , 2011, 98, 1704-1710.	5.6	38
101	How do earthworms influence organic matter quantity and quality in tropical soils?. <i>Soil Biology and Biochemistry</i> , 2011, 43, 223-230.	8.8	38
102	Spectroscopic and pyrolytic features and abundance of the macromolecular refractory fraction in a sandy acid forest soil (Landes de Gascogne, France). <i>Organic Geochemistry</i> , 2005, 36, 349-362.	1.8	37
103	Stabilisation of HF soluble and HCl resistant organic matter in sloping tropical soils under slash and burn agriculture. <i>Geoderma</i> , 2008, 145, 347-354.	5.1	37
104	Effects of drought and elevated temperature on biochemical composition of forage plants and their impact on carbon storage in grassland soil. <i>Plant and Soil</i> , 2014, 374, 767-778.	3.7	37
105	Charcoal mineralisation potential of microbial inocula from burned and unburned forest soil with and without substrate addition. <i>Soil Biology and Biochemistry</i> , 2010, 42, 1472-1478.	8.8	36
106	Can biochar and hydrochar stability be assessed with chemical methods?. <i>Organic Geochemistry</i> , 2013, 60, 40-44.	1.8	36
107	Microbial use of lignite compared to recent plant litter as substrates in reclaimed coal mine soils. <i>Soil Biology and Biochemistry</i> , 2004, 36, 67-75.	8.8	35
108	Adsorption and desorption behavior of selected pesticides as influenced by decomposition of maize mulch. <i>Chemosphere</i> , 2013, 91, 1447-1455.	8.2	35

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109	Effect of biochar addition on C mineralisation and soil organic matter priming in two subsoil horizons. <i>Journal of Soils and Sediments</i> , 2015, 15, 825-832.	3.0	35
110	Organic matter composition and the protist and nematode communities around anecic earthworm burrows. <i>Biology and Fertility of Soils</i> , 2016, 52, 91-100.	4.3	35
111	Techniques for the differentiation of carbon types present in lignite-rich mine soils. <i>Organic Geochemistry</i> , 2000, 31, 543-551.	1.8	34
112	Adding worms during composting of organic waste with red mud and fly ash reduces CO <sub>2</sub> emissions and increases plant available nutrient contents. <i>Journal of Environmental Management</i> , 2018, 222, 207-215.	7.8	34
113	Application of thermal and spectroscopic techniques to assess fire-induced changes to soil organic matter in a Mediterranean forest. <i>Journal of Geochemical Exploration</i> , 2014, 143, 174-182.	3.2	33
114	Urban waste composts enhance OC and N stocks after long-term amendment but do not alter organic matter composition. <i>Agriculture, Ecosystems and Environment</i> , 2016, 223, 211-222.	5.3	33
115	Organic matter dynamics in agroecosystems – the knowledge gaps. <i>European Journal of Soil Science</i> , 2009, 60, 153-157.	3.9	31
116	The impact of grassland management on biogeochemical cycles involving carbon, nitrogen and phosphorus. <i>Journal of Soil Science and Plant Nutrition</i> , 2015, , 0-0.	3.4	31
117	How do earthworms affect organic matter decomposition in the presence of clay-sized minerals?. <i>Soil Biology and Biochemistry</i> , 2020, 143, 107730.	8.8	31
118	Improving bioavailability of phosphorous from cattle dung by using phosphatase immobilized on natural clay and nanoclay. <i>Chemosphere</i> , 2012, 89, 648-655.	8.2	30
119	Ley grassland under temperate climate had a legacy effect on soil organic matter quantity, biogeochemical signature and microbial activities. <i>Soil Biology and Biochemistry</i> , 2018, 122, 203-210.	8.8	30
120	A multi-technique approach to assess the fate of biochar in soil and to quantify its effect on soil organic matter composition. <i>Organic Geochemistry</i> , 2017, 112, 177-186.	1.8	29
121	Title is missing!. <i>Water, Air, and Soil Pollution</i> , 1998, 105, 481-492.	2.4	28
122	Spatial dependance of organic carbon–metal relationships. <i>Geoderma</i> , 2010, 158, 120-127.	5.1	28
123	Fertilizer P Uptake Determined by Soil P Fractionation and Phosphatase Activity. <i>Journal of Soil Science and Plant Nutrition</i> , 2019, 19, 166-174.	3.4	28
124	Cutin and suberin biomarkers as tracers for the turnover of shoot and root derived organic matter along a chronosequence of Ecuadorian pasture soils. <i>European Journal of Soil Science</i> , 2012, 63, 808-819.	3.9	27
125	Decomposition of plant tissue submerged in an extremely acidic mining lake sediment: phenolic CuO-oxidation products and solid-state <sup>13</sup> C NMR spectroscopy. <i>Soil Biology and Biochemistry</i> , 2004, 36, 1161-1169.	8.8	26
126	The role of lignin for the <sup>13</sup> C signature in C <sub>4</sub> grassland and C <sub>3</sub> forest soils. <i>Soil Biology and Biochemistry</i> , 2013, 57, 1-13.	8.8	26



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127	Lignin decomposition along an Alpine elevation gradient in relation to physicochemical and soil microbial parameters. <i>Global Change Biology</i> , 2014, 20, 2272-2285.	9.5	26
128	Retention Mechanisms of Citric Acid in Ternary Kaolinite-Fe(III)-Citrate Acid Systems Using Fe K-edge EXAFS and L3,2-edge XANES Spectroscopy. <i>Scientific Reports</i> , 2016, 6, 26127.	3.3	26
129	Optimization of wheat straw co-composting for carrier material development. <i>Waste Management</i> , 2019, 98, 37-49.	7.4	26
130	The role of organic carbon excretion by bulbous rush roots and its turnover and utilization by bacteria under iron plaques in extremely acid sediments. <i>Environmental and Experimental Botany</i> , 2001, 46, 237-245.	4.2	25
131	Alkyl C and hydrophobicity in B and C horizons of an acid forest soil. <i>Journal of Plant Nutrition and Soil Science</i> , 2004, 167, 685-692.	1.9	25
132	Relative distributions of phenol dimers and hydroxy acids in a cultivated soil and above ground maize tissue. <i>Organic Geochemistry</i> , 2006, 37, 1634-1638.	1.8	25
133	Changes in soil organic matter composition are associated with forest encroachment into grassland with long-term fire history. <i>European Journal of Soil Science</i> , 2009, 60, 578-589.	3.9	24
134	Sodium silicate and calcium silicate differentially affect silicon and aluminium uptake, antioxidant performance and phenolics metabolism of ryegrass in an acid Andisol. <i>Crop and Pasture Science</i> , 2018, 69, 205.	1.5	24
135	Black carbon yields and types in forest and cultivated sandy soils (Landes de Gascogne, France) as determined with different methods: Influence of change in land use. <i>Organic Geochemistry</i> , 2006, 37, 1185-1189.	1.8	23
136	Composition and distribution of organic matter in physical fractions of a rehabilitated mine soil rich in lignite-derived carbon. <i>Geoderma</i> , 2000, 98, 177-192.	5.1	22
137	Altered soil carbon dynamics under different land-use regimes in subtropical seasonally-dry forests of central Argentina. <i>Plant and Soil</i> , 2016, 403, 375-387.	3.7	22
138	Spatial heterogeneity of soil quality within a Mediterranean alley cropping agroforestry system: Comparison with a monocropping system. <i>European Journal of Soil Biology</i> , 2021, 105, 103330.	3.2	22
139	Effect of base hydrolysis on the chemical composition of organic matter of an acid forest soil. <i>Organic Geochemistry</i> , 2005, 36, 239-249.	1.8	21
140	Contribution of maize root derived C to soil organic carbon throughout an agricultural soil profile assessed by compound specific <sup>13</sup> C analysis. <i>Organic Geochemistry</i> , 2012, 42, 1502-1511.	1.8	21
141	Use of organic substrates for increasing soil organic matter quality and carbon sequestration of tropical degraded soil: a 3-year mesocosms experiment. <i>Carbon Management</i> , 2014, 5, 155-168.	2.4	21
142	Co-composting solid biowastes with alkaline materials to enhance carbon stabilization and revegetation potential. <i>Environmental Science and Pollution Research</i> , 2016, 23, 7099-7110.	5.3	21
143	Silicon Modulates the Production and Composition of Phenols in Barley under Aluminum Stress. <i>Agronomy</i> , 2020, 10, 1138.	3.0	21
144	Persistence in soil of Miscanthus biochar in laboratory and field conditions. <i>PLoS ONE</i> , 2017, 12, e0184383.	2.5	21

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145	Origin of Nitrogen in Reforested Lignite-Rich Mine Soils Revealed by Stable Isotope Analysis. <i>Environmental Science &amp; Technology</i> , 2008, 42, 2787-2792.	10.0	20
146	Quantitative and qualitative analysis of cutin in maize and a maize-cropped soil: Comparison of CuO oxidation, transmethylation and saponification methods. <i>Organic Geochemistry</i> , 2010, 41, 187-191.	1.8	20
147	Changes in litter chemistry and soil lignin signature during decomposition and stabilisation of <sup>13</sup> C labelled wheat roots in three subsoil horizons. <i>Soil Biology and Biochemistry</i> , 2013, 67, 55-61.	8.8	20
148	The effects of worms, clay and biochar on CO <sub>2</sub> emissions during production and soil application of co-composts. <i>Soil</i> , 2016, 2, 673-683.	4.9	20
149	Management effects on composition and dynamics of cutin and suberin in topsoil under agricultural use. <i>European Journal of Soil Science</i> , 2016, 67, 360-373.	3.9	20
150	Size fractionation as a tool for separating charcoal of different fuel source and recalcitrance in the wildfire ash layer. <i>Science of the Total Environment</i> , 2017, 595, 461-471.	8.0	20
151	Lignite degradation and mineralization in lignite-containing mine sediment as revealed by <sup>14</sup> C activity measurements and molecular analysis. <i>Organic Geochemistry</i> , 2006, 37, 957-976.	1.8	19
152	Stable carbon isotope signature and chemical composition of organic matter in lignite-containing mine soils and sediments are closely linked. <i>Organic Geochemistry</i> , 2007, 38, 835-844.	1.8	19
153	Evolution of organic matter in lignite-containing sediments revealed by analytical pyrolysis (Py-GC-MS). <i>Organic Geochemistry</i> , 2012, 53, 119-130.	1.8	19
154	Grassland Management Influences the Response of Soil Respiration to Drought. <i>Agronomy</i> , 2019, 9, 124.	3.0	19
155	Influence of change in land use on the refractory organic macromolecular fraction of a sandy spodosol (Landes de Gascogne, France). <i>Geoderma</i> , 2006, 136, 136-151.	5.1	18
156	Nature and decomposition degree of cover crops influence pesticide sorption: Quantification and modelling. <i>Chemosphere</i> , 2015, 119, 1007-1014.	8.2	18
157	Methods for Studying Soil Organic Matter. , 2015, , 383-419.		18
158	Mixing of biochar with organic amendments reduces carbon removal after field exposure under tropical conditions. <i>Ecological Engineering</i> , 2016, 91, 378-380.	3.6	18
159	Carbon mineralization and lignin content of eroded sediments from a grazed watershed of South-Africa. <i>Geoderma</i> , 2011, 167-168, 247-253.	5.1	17
160	Molecular-level understanding of malic acid retention mechanisms in ternary kaolinite-Fe(III)-malic acid systems: The importance of Fe speciation. <i>Chemical Geology</i> , 2017, 464, 69-75.	3.3	17
161	Age matters: Fate of soil organic matter during ageing of earthworm casts produced by the anecic earthworm <i>Amyntas khami</i> . <i>Soil Biology and Biochemistry</i> , 2020, 148, 107906.	8.8	17
162	Isolation of soil lignins by combination of ball-milling and cellulolysis: Evaluation of purity and isolation efficiency with pyrolysis/GC/MS. <i>Journal of Analytical and Applied Pyrolysis</i> , 2009, 85, 426-430.	5.5	16

#	ARTICLE	IF	CITATIONS
163	Black carbon contribution in volcanic soils affected by wildfire or stubble burning. <i>Organic Geochemistry</i> , 2012, 47, 41-50.	1.8	16
164	Soils linked to climate change. <i>Nature</i> , 2019, 572, 442-443.	27.8	16
165	Synergistic and Antagonistic Effects of Poultry Manure and Phosphate Rock on Soil P Availability, Ryegrass Production, and P Uptake. <i>Agronomy</i> , 2019, 9, 191.	3.0	16
166	Dynamics of <sup>13</sup> C-labeled mustard litter ( <i>Sinapis alba</i> ) in particle-size and aggregate fractions in an agricultural cropland with high- and low-yield areas. <i>Journal of Plant Nutrition and Soil Science</i> , 2007, 170, 123-133.	1.9	15
167	Organic matter stabilization in two Andisols of contrasting age under temperate rain forest. <i>Biology and Fertility of Soils</i> , 2013, 49, 681-689.	4.3	15
168	Soil available P, soil organic carbon and aggregation as affected by long-term poultry manure application to Andisols under pastures in Southern Chile. <i>Geoderma Regional</i> , 2020, 21, e00271.	2.1	15
169	Isotopic tracers for the analysis of vegetation-derived organic matter in lignite-containing soils and sediments along a transect ranging from a forest soil to submerged lake sediment. <i>Organic Geochemistry</i> , 2006, 37, 740-753.	1.8	14
170	Carbon distribution in top- and subsoil horizons of two contrasting Andisols under pasture or forest. <i>European Journal of Soil Science</i> , 2012, 63, 616-624.	3.9	14
171	Opportunities and threats of deep soil organic matter storage. <i>Carbon Management</i> , 2014, 5, 115-117.	2.4	14
172	Characterisation of the microbial biomass in lignite-containing mine soils by radiocarbon measurements. <i>Soil Biology and Biochemistry</i> , 2001, 33, 2019-2021.	8.8	13
173	Biogeochemical nature of grassland soil organic matter under plant communities with two nitrogen sources. <i>Plant and Soil</i> , 2017, 415, 189-201.	3.7	13
174	Promoting plant growth and carbon transfer to soil with organic amendments produced with mineral additives. <i>Geoderma</i> , 2020, 374, 114454.	5.1	13
175	Anecic earthworms generate more topsoil than they contribute to erosion – Evidence at catchment scale in northern Vietnam. <i>Catena</i> , 2021, 201, 105186.	5.0	13
176	A call for international soil experiment networks for studying, predicting, and managing global change impacts. <i>Soil</i> , 2015, 1, 575-582.	4.9	12
177	Managing Soil Organic Carbon for Mitigating Climate Change and Increasing Food Security. <i>Agronomy</i> , 2021, 11, 1553.	3.0	12
178	Characterisation of Organic Matter and Carbon Cycling in Rehabilitated Lignite-rich Mine Soils. <i>Water, Air and Soil Pollution</i> , 2003, 3, 153-166.	0.8	11
179	Stable carbon isotopic composition of dissolved inorganic carbon (DIC) as a driving factor of aquatic plants organic matter build-up related to salinity. <i>Ecological Indicators</i> , 2019, 99, 230-239.	6.3	11
180	Inferring the impact of earthworms on the stability of organo-mineral associations, by Rock-Eval thermal analysis and <sup>13</sup> C NMR spectroscopy. <i>Organic Geochemistry</i> , 2020, 144, 104016.	1.8	11

#	ARTICLE	IF	CITATIONS
181	Biochar-Compost Interactions as Affected by Weathering: Effects on Biological Stability and Plant Growth. <i>Agronomy</i> , 2021, 11, 336.	3.0	11
182	Monitoring Grassland Management Effects on Soil Organic Carbon—A Matter of Scale. <i>Agronomy</i> , 2020, 10, 2016.	3.0	11
183	Response of bulk chemical composition, lignin and carbohydrate signature to grassland conversion in a ley-arable cropping system. <i>Nutrient Cycling in Agroecosystems</i> , 2010, 88, 173-182.	2.2	10
184	Organic matter stabilization and ecosystem functions: proceedings of the fourth conference on the mechanisms of organic matter stabilization and destabilization (SOM-2010, Presqu'île de Giens, France). <i>Soil Biology and Biochemistry</i> , 2011, 43, 1015-1020.	2.5	10
185	Anthropogenic charcoal-rich soils of the XIX century reveal that biochar leads to enhanced fertility and fodder quality of alpine grasslands. <i>Plant and Soil</i> , 2017, 411, 499-516.	3.7	10
186	Effect of decomposition products produced in the presence or absence of epigeic earthworms and minerals on soil carbon stabilization. <i>Soil Biology and Biochemistry</i> , 2021, 160, 108308.	8.8	10
187	Lignin signature as a function of land abandonment and erosion in dry luvisols of SE Spain. <i>Catena</i> , 2012, 93, 78-86.	5.0	9
188	Ligno-aliphatic complexes in soils revealed by an isolation procedure: implication for lignin fate. <i>Biology and Fertility of Soils</i> , 2013, 49, 517-526.	4.3	9
189	Pyrolysis-GCMS as a Tool for Maturity Evaluation of Compost from Sewage Sludge and Green Waste. <i>Waste and Biomass Valorization</i> , 2021, 12, 2639-2652.	3.4	9
190	Site-Specific Effects of Organic Amendments on Parameters of Tropical Agricultural Soil and Yield: A Field Experiment in Three Countries in Southeast Asia. <i>Agronomy</i> , 2021, 11, 348.	3.0	9
191	Faeces traits as unifying predictors of detritivore effects on organic matter turnover. <i>Geoderma</i> , 2022, 422, 115940.	5.1	9
192	Fertilizer effects on phosphorus fractions and organic matter in Andisols. <i>Journal of Soil Science and Plant Nutrition</i> , 2016, , 0-0.	3.4	8
193	Microbial Control of Soil Carbon Turnover. , 2018, , 165-194.		7
194	Plant–Soil Interactions Control C:N:P Coupling and Decoupling Processes in Agroecosystems With Perennial Vegetation. , 2019, , 3-13.		7
195	Paris Climate Agreement: Promoting Interdisciplinary Science and Stakeholders' Approaches for Multi-Scale Implementation of Continental Carbon Sequestration. <i>Sustainability</i> , 2020, 12, 6715.	3.2	7
196	Phosphorus fertiliser source determines the allocation of root-derived organic carbon to soil organic matter fractions. <i>Soil Biology and Biochemistry</i> , 2022, 167, 108614.	8.8	7
197	Chemical parameters of decomposing dung in tropical forest as indicators of feeding behaviour of large herbivores: A step beyond classical stoichiometry. <i>Ecological Indicators</i> , 2020, 115, 106407.	6.3	6
198	Characterization of Biogeochemical Processes at the Microscale. , 2017, , 193-212.		6

#	ARTICLE	IF	CITATIONS
199	Does the Introduction of N <sub>2</sub> -Fixing Trees in Forest Plantations on Tropical Soils Ameliorate Low Fertility and Enhance Carbon Sequestration via Interactions Between Biota and Nutrient Availability? Case Studies From Central Africa and South America. <i>Frontiers in Soil Science</i> , 2021, 1, .	2.2	6
200	The role of soil carbon sequestration in enhancing human resilience in tackling global crises including pandemics. <i>Soil Security</i> , 2022, 8, 100069.	2.3	6
201	Chemical Composition of Organic Matter in Extremely Acid, Lignite-Containing Lake Sediments Impacted by Fly Ash Contamination. <i>Journal of Environmental Quality</i> , 2004, 33, 628-636.	2.0	5
202	Carbon storage and organic matter dynamics in grassland soils.. , 2011, , 65-72.		5
203	Land-use perturbations in ley grassland decouple the degradation of ancient soil organic matter from the storage of newly derived carbon inputs. <i>Soil</i> , 2020, 6, 435-451.	4.9	5
204	Bestimmung und Charakterisierung der organischen Substanz in braunkohlehaltigen aschemelierten Kippenböden unter Wald. , 2000, , 261-284.		5
205	Mechanisms and kinetics of (de-)protection of soil organic carbon in earthworm casts in a tropical environment. <i>Soil Biology and Biochemistry</i> , 2022, 170, 108686.	8.8	5
206	Mid-infrared spectroscopy to trace biogeochemical changes of earthworm casts during ageing under field conditions. <i>Geoderma</i> , 2021, 383, 114811.	5.1	4
207	Chemical Composition of Organic Matter in Extremely Acid, Lignite-Containing Lake Sediments Impacted by Fly Ash Contamination. <i>Journal of Environmental Quality</i> , 2004, 33, 628.	2.0	4
208	Do grassland management practices affect soil lignin chemistry by changing the composition of plant-derived organic matter input?. <i>Plant and Soil</i> , 2021, 469, 443-455.	3.7	4
209	Composition changes of eroded carbon at different spatial scales in a tropical watershed suggest enrichment of degraded material during transport. <i>Biogeosciences</i> , 2014, 11, 3299-3305.	3.3	3
210	Role of Nanoclays in Carbon stabilization in Andisols and Cambisols. <i>Journal of Soil Science and Plant Nutrition</i> , 2015, , 0-0.	3.4	3
211	Closing Biogeochemical Cycles and Meeting Plant Requirements by Smart Fertilizers and Innovative Organic Amendments. <i>Agronomy</i> , 2021, 11, 1158.	3.0	3
212	DOES BURNING OF HARVESTING RESIDUES INCREASE SOIL CARBON STORAGE?. <i>Revista De La Ciencia Del Suelo Y Nutricion Vegetal</i> , 2008, 8, .	0.4	3
213	Editorial: Carbon Storage in Agricultural and Forest Soils. <i>Frontiers in Environmental Science</i> , 2022, 10, .	3.3	3
214	Effect of <sup>13</sup> C enrichment and sugar type on analysis of sugars by gas chromatography/combustion/isotope ratio mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2012, 26, 1934-1940.	1.5	2
215	Enhancing carbon sequestration for mitigation and co-benefits in agriculture: actions and novel practices. <i>Carbon Management</i> , 2014, 5, 127-129.	2.4	2
216	Response to "The 4p1000 initiative: A new name should be adopted" by Baveye and White (2019). <i>Ambio</i> , 2020, 49, 363-364.	5.5	2

#	ARTICLE	IF	CITATIONS
217	Preface to the Special Issue on "Challenges and limits of stable isotopes in environmental research". Organic Geochemistry, 2012, 42, 1437-1439.	1.8	1
218	Research for development in the 21st century. Geoderma, 2020, 378, 114558.	5.1	1
219	Carbon Mineralization Controls in Top- and Subsoil Horizons of Two Andisols Under Temperate Old-Growth Rain Forest. Journal of Soil Science and Plant Nutrition, 2021, 21, 780-790.	3.4	1
220	Mid-infrared spectroscopy of earthworm bodies to investigate their species belonging and their relationship with the soil they inhabit. Applied Soil Ecology, 2021, 162, 103894.	4.3	1
221	Effects of soil mineral matrix on the analysis of plant- and soil-derived polysaccharides after acid hydrolysis. Rapid Communications in Mass Spectrometry, 2014, 28, 2337-2340.	1.5	0
222	Mikrobielle Abbaubarkeit von geogenem Kohlenstoff in braunkohlehaltigen Kippbännen (Teilprojekt 2.2). , 2000, , 19-37.		0
223	Characterization of Biogeochemical Processes at the Microscale. , 2017, , 193-212.		0
224	Soil Organic Matter Stocks and Content – Critical Policy Issues?. , 2021, , 191-203.		0
225	Interactions between soils and climate change. , 2022, , .		0