

Ingrid Kärgel-Knabner

List of Publications by Year in descending order

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333
papers

37,040
citations

4136

87
h-index

3647

180
g-index

368
all docs

368
docs citations

368
times ranked

20412
citing authors

#	ARTICLE	IF	CITATIONS
1	Persistence of soil organic matter as an ecosystem property. <i>Nature</i> , 2011, 478, 49-56.	13.7	4,243
2	Stabilization of organic matter in temperate soils: mechanisms and their relevance under different soil conditions - a review. <i>European Journal of Soil Science</i> , 2006, 57, 426-445.	1.8	2,144
3	The macromolecular organic composition of plant and microbial residues as inputs to soil organic matter. <i>Soil Biology and Biochemistry</i> , 2002, 34, 139-162.	4.2	1,488
4	Deep soil organic matter—a key but poorly understood component of terrestrial C cycle. <i>Plant and Soil</i> , 2011, 338, 143-158.	1.8	1,239
5	SOM fractionation methods: Relevance to functional pools and to stabilization mechanisms. <i>Soil Biology and Biochemistry</i> , 2007, 39, 2183-2207.	4.2	1,130
6	Soil organic carbon storage as a key function of soils - A review of drivers and indicators at various scales. <i>Geoderma</i> , 2019, 333, 149-162.	2.3	944
7	Biogeochemistry of paddy soils. <i>Geoderma</i> , 2010, 157, 1-14.	2.3	912
8	Organo–mineral associations in temperate soils: Integrating biology, mineralogy, and organic matter chemistry. <i>Journal of Plant Nutrition and Soil Science</i> , 2008, 171, 61-82.	1.1	892
9	The molecularly-uncharacterized component of nonliving organic matter in natural environments. <i>Organic Geochemistry</i> , 2000, 31, 945-958.	0.9	618
10	Microaggregates in soils. <i>Journal of Plant Nutrition and Soil Science</i> , 2018, 181, 104-136.	1.1	567
11	The concept and future prospects of soil health. <i>Nature Reviews Earth & Environment</i> , 2020, 1, 544-553.	12.2	486
12	Temperature sensitivity of soil organic matter decomposition—what do we know?. <i>Biology and Fertility of Soils</i> , 2009, 46, 1-15.	2.3	404
13	¹³ C and ¹⁵ N NMR spectroscopy as a tool in soil organic matter studies. <i>Geoderma</i> , 1997, 80, 243-270.	2.3	403
14	Grazing effects on soil chemical and physical properties in a semiarid steppe of Inner Mongolia (P.R.)	2.3	372
15	Stabilization mechanisms of organic matter in four temperate soils: Development and application of a conceptual model. <i>Journal of Plant Nutrition and Soil Science</i> , 2008, 171, 111-124.	1.1	367
16	Persistence of soil organic carbon caused by functional complexity. <i>Nature Geoscience</i> , 2020, 13, 529-534.	5.4	363
17	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.	0.9	362
18	Analytical approaches for characterizing soil organic matter. <i>Organic Geochemistry</i> , 2000, 31, 609-625.	0.9	336

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19	Digital mapping of soil organic matter stocks using Random Forest modeling in a semi-arid steppe ecosystem. <i>Plant and Soil</i> , 2011, 340, 7-24.	1.8	335
20	Improvement of ¹³ C and ¹⁵ N CPMAS NMR spectra of bulk soils, particle size fractions and organic material by treatment with 10% hydrofluoric acid. <i>European Journal of Soil Science</i> , 1997, 48, 319-328.	1.8	333
21	Contribution of lignin and polysaccharides to the refractory carbon pool in C-depleted arable soils. <i>Soil Biology and Biochemistry</i> , 2003, 35, 101-118.	4.2	327
22	Vertical distribution, age, and chemical composition of organic carbon in two forest soils of different pedogenesis. <i>Organic Geochemistry</i> , 2002, 33, 1131-1142.	0.9	316
23	Soil organic matter fractions as early indicators for carbon stock changes under different land-use?. <i>Geoderma</i> , 2005, 124, 143-155.	2.3	304
24	Charred organic carbon in German chernozemic soils. <i>European Journal of Soil Science</i> , 1999, 50, 351-365.	1.8	293
25	Submicron structures provide preferential spots for carbon and nitrogen sequestration in soils. <i>Nature Communications</i> , 2014, 5, 2947.	5.8	288
26	Characterization of Ferrihydrite-Soil Organic Matter Coprecipitates by X-ray Diffraction and Mössbauer Spectroscopy. <i>Environmental Science & Technology</i> , 2008, 42, 7891-7897.	4.6	268
27	Storage and stability of organic carbon in soils as related to depth, occlusion within aggregates, and attachment to minerals. <i>Biogeosciences</i> , 2013, 10, 1675-1691.	1.3	252
28	Soil organic carbon stocks in southeast Germany (Bavaria) as affected by land use, soil type and sampling depth. <i>Global Change Biology</i> , 2012, 18, 2233-2245.	4.2	242
29	Estimation and decomposition pattern of the lignin component in forest humus layers. <i>Soil Biology and Biochemistry</i> , 1986, 18, 589-594.	4.2	234
30	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.	1.1	220
31	Fractionation of Organic Matter Due to Reaction with Ferrihydrite: Coprecipitation versus Adsorption. <i>Environmental Science & Technology</i> , 2011, 45, 527-533.	4.6	217
32	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.	4.2	215
33	Soil C and N stocks as affected by cropping systems and nitrogen fertilisation in a southern Brazil Acrisol managed under no-tillage for 17 years. <i>Soil and Tillage Research</i> , 2005, 81, 87-95.	2.6	214
34	Soil organic carbon stocks in topsoil and subsoil controlled by parent material, carbon input in the rhizosphere, and microbial-derived compounds. <i>Soil Biology and Biochemistry</i> , 2018, 122, 19-30.	4.2	202
35	Evaluation of an ultrasonic dispersion procedure to isolate primary organomineral complexes from soils. <i>European Journal of Soil Science</i> , 1999, 50, 87-94.	1.8	199
36	The role of microorganisms at different stages of ecosystem development for soil formation. <i>Biogeosciences</i> , 2013, 10, 3983-3996.	1.3	189

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37	The effect of 10% HF treatment on the resolution of CPMAS ¹³ C NMR spectra and on the quality of organic matter in Ferralsols. <i>Geoderma</i> , 2003, 116, 373-392.	2.3	177
38	The macromolecular organic composition of plant and microbial residues as inputs to soil organic matter: Fourteen years on. <i>Soil Biology and Biochemistry</i> , 2017, 105, A3-A8.	4.2	175
39	Carbon and nitrogen stocks in physical fractions of a subtropical Acrisol as influenced by long-term no-till cropping systems and N fertilisation. <i>Plant and Soil</i> , 2005, 268, 319-328.	1.8	172
40	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.	4.2	171
41	Content and composition of free and occluded particulate organic matter in a differently textured arable Cambisol as revealed by solid-state ¹³ C NMR spectroscopy. <i>Journal of Plant Nutrition and Soil Science</i> , 2004, 167, 45-53.	1.1	170
42	Carbon sequestration potential of soils in southeast Germany derived from stable soil organic carbon saturation. <i>Global Change Biology</i> , 2014, 20, 653-665.	4.2	170
43	Tree girdling provides insight on the role of labile carbon in nitrogen partitioning between soil microorganisms and adult European beech. <i>Soil Biology and Biochemistry</i> , 2009, 41, 1622-1631.	4.2	167
44	Stabilization of soil organic matter isolated via oxidative degradation. <i>Organic Geochemistry</i> , 2005, 36, 1567-1575.	0.9	162
45	Chemical composition of the organic matter in forest soils: The humus layer. <i>Zeitschrift Fur Pflanzenernahrung Und Bodenkunde = Journal of Plant Nutrition and Plant Science</i> , 1988, 151, 331-340.	0.4	148
46	Soil organic matter stabilization in acidic forest soils is preferential and soil type-specific. <i>European Journal of Soil Science</i> , 2008, 59, 674-692.	1.8	145
47	Biogeochemical interfaces in soil: The interdisciplinary challenge for soil science. <i>Journal of Plant Nutrition and Soil Science</i> , 2010, 173, 88-99.	1.1	143
48	Amount, distribution and driving factors of soil organic carbon and nitrogen in cropland and grassland soils of southeast Germany (Bavaria). <i>Agriculture, Ecosystems and Environment</i> , 2013, 176, 39-52.	2.5	143
49	Alteration of soil organic matter following treatment with hydrofluoric acid (HF). <i>Organic Geochemistry</i> , 2006, 37, 1437-1451.	0.9	139
50	Characterization of lignin in forest humus layers by high-performance liquid chromatography of cupric oxide oxidation products. <i>Soil Biology and Biochemistry</i> , 1985, 17, 637-640.	4.2	138
51	An integrative approach of organic matter stabilization in temperate soils: Linking chemistry, physics, and biology. <i>Journal of Plant Nutrition and Soil Science</i> , 2008, 171, 5-13.	1.1	129
52	Aggregation controls the stability of lignin and lipids in clay-sized particulate and mineral associated organic matter. <i>Biogeochemistry</i> , 2017, 132, 307-324.	1.7	129
53	Root Exudates Induce Soil Macroaggregation Facilitated by Fungi in Subsoil. <i>Frontiers in Environmental Science</i> , 2018, 6, .	1.5	128
54	Girdling Affects Ectomycorrhizal Fungal (EMF) Diversity and Reveals Functional Differences in EMF Community Composition in a Beech Forest. <i>Applied and Environmental Microbiology</i> , 2010, 76, 1831-1841.	1.4	126

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55	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.	1.8	125
56	Aliphatic components of forest soil organic matter as determined by solid-state ¹³ C NMR and analytical pyrolysis. <i>Science of the Total Environment</i> , 1992, 113, 89-106.	3.9	124
57	Occurrence, distribution and fate of the lipid plant biopolymers cutin and suberin in temperate forest soils. <i>Organic Geochemistry</i> , 1993, 20, 1063-1076.	0.9	120
58	Ancient paddy soils from the Neolithic age in China's Yangtze River Delta. <i>Die Naturwissenschaften</i> , 2006, 93, 232-236.	0.6	120
59	Chemical Structural Studies of Forest Soil Humic Acids: Aromatic Carbon Fraction. <i>Soil Science Society of America Journal</i> , 1991, 55, 241-247.	1.2	118
60	Refractory organic carbon in particle-size fractions of arable soils II: organic carbon in relation to mineral surface area and iron oxides in fractions <math>< 6 \mu\text{m}</math>. <i>Organic Geochemistry</i> , 2002, 33, 1699-1713.	0.9	116
61	Nature and distribution of alkyl carbon in forest soil profiles: implications for the origin and humification of aliphatic biomacromolecules. <i>Science of the Total Environment</i> , 1992, 117-118, 175-185.	3.9	114
62	A systemic approach for modeling soil functions. <i>Soil</i> , 2018, 4, 83-92.	2.2	113
63	Dissolved Organic Matter-Enhanced Retention of Polycyclic Aromatic Hydrocarbons in Soil Miscible Displacement Experiments. <i>Journal of Environmental Quality</i> , 1997, 26, 1090-1100.	1.0	112
64	Anthropogenic N deposition increases soil organic matter accumulation without altering its biochemical composition. <i>Global Change Biology</i> , 2017, 23, 933-944.	4.2	111
65	Small scale spatial variability of organic carbon stocks in litter and solum of a forested Luvisol. <i>Geoderma</i> , 2006, 136, 631-642.	2.3	110
66	How are soil use and management reflected by soil organic matter characteristics: a spectroscopic approach. <i>European Journal of Soil Science</i> , 2006, 57, 485-494.	1.8	108
67	Aggregate stability and physical protection of soil organic carbon in semi-arid steppe soils. <i>European Journal of Soil Science</i> , 2012, 63, 22-31.	1.8	107
68	Storage and drivers of organic carbon in forest soils of southeast Germany (Bavaria) – Implications for carbon sequestration. <i>Forest Ecology and Management</i> , 2013, 295, 162-172.	1.4	107
69	Projected loss of soil organic carbon in temperate agricultural soils in the 21st century: effects of climate change and carbon input trends. <i>Scientific Reports</i> , 2016, 6, 32525.	1.6	107
70	Partitioning of polycyclic aromatic hydrocarbons (PAH) to water-soluble soil organic matter. <i>European Journal of Soil Science</i> , 1995, 46, 193-204.	1.8	106
71	MALDI-TOF mass spectrometry and PSD fragmentation as means for the analysis of condensed tannins in plant leaves and needles. <i>Phytochemistry</i> , 2003, 62, 1159-1170.	1.4	106
72	Sorption of polycyclic aromatic hydrocarbons to mineral surfaces. <i>European Journal of Soil Science</i> , 2007, 58, 918-931.	1.8	106

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73	N balance and cycling of Inner Mongolia typical steppe: a comprehensive case study of grazing effects. <i>Ecological Monographs</i> , 2013, 83, 195-219.	2.4	105
74	Chemical heterogeneity of humic substances: characterization of size fractions obtained by hollow-fibre ultrafiltration. <i>European Journal of Soil Science</i> , 2000, 51, 617-625.	1.8	104
75	Partitioning of polycyclic aromatic hydrocarbons to dissolved organic matter from different soils. <i>Chemosphere</i> , 1998, 36, 79-97.	4.2	102
76	Chemical composition of young and old carbon pools throughout Cambisol and Luvisol profiles under forests. <i>Soil Biology and Biochemistry</i> , 2006, 38, 2411-2424.	4.2	102
77	Concurrent evolution of organic and mineral components during initial soil development after retreat of the Damma glacier, Switzerland. <i>Geoderma</i> , 2011, 163, 83-94.	2.3	102
78	Humic substances distribution and transformation in forest soils. <i>Science of the Total Environment</i> , 1992, 117-118, 155-174.	3.9	99
79	Soil Type-Dependent Responses to Phenanthrene as Revealed by Determining the Diversity and Abundance of Polycyclic Aromatic Hydrocarbon Ring-Hydroxylating Dioxygenase Genes by Using a Novel PCR Detection System. <i>Applied and Environmental Microbiology</i> , 2010, 76, 4765-4771.	1.4	98
80	Indications for soil organic matter quality in soils under different management. <i>Geoderma</i> , 2002, 105, 243-258.	2.3	97
81	Types and chemical composition of organic matter in reforested lignite-rich mine soils. <i>Geoderma</i> , 1998, 86, 123-142.	2.3	95
82	STXM and NanoSIMS Investigations on EPS Fractions before and after Adsorption to Goethite. <i>Environmental Science & Technology</i> , 2013, 47, 3158-3166.	4.6	95
83	Carbon storage capacity of semi-arid grassland soils and sequestration potentials in northern China. <i>Global Change Biology</i> , 2015, 21, 3836-3845.	4.2	95
84	Alteration of soil organic matter pools and aggregation in semi-arid steppe topsoils as driven by organic matter input. <i>European Journal of Soil Science</i> , 2009, 60, 198-212.	1.8	93
85	Submicron scale imaging of soil organic matter dynamics using NanoSIMS – From single particles to intact aggregates. <i>Organic Geochemistry</i> , 2012, 42, 1476-1488.	0.9	93
86	Development of biogeochemical interfaces in an artificial soil incubation experiment; aggregation and formation of organo-mineral associations. <i>Geoderma</i> , 2012, 189-190, 585-594.	2.3	92
87	Speciation of sulphur in soils and soil particles by X-ray spectromicroscopy. <i>European Journal of Soil Science</i> , 2003, 54, 423-433.	1.8	91
88	Organic carbon accumulation in a 2000-year chronosequence of paddy soil evolution. <i>Catena</i> , 2011, 87, 376-385.	2.2	91
89	Decoupled carbon and nitrogen mineralization in soil particle size fractions of a forest topsoil. <i>Soil Biology and Biochemistry</i> , 2014, 78, 263-273.	4.2	91
90	Refractory organic carbon in C-depleted arable soils, as studied by ¹³ C NMR spectroscopy and carbohydrate analysis. <i>Organic Geochemistry</i> , 2000, 31, 655-668.	0.9	89

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91	Characteristics of soil organic matter of different Brazilian Ferralsols under native vegetation as a function of soil depth. <i>Geoderma</i> , 2005, 124, 319-333.	2.3	89
92	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.	4.2	89
93	Soil organic matter in major pedogenic soil groups. <i>Geoderma</i> , 2021, 384, 114785.	2.3	89
94	Soil organic carbon stocks, distribution, and composition affected by historic land use changes on adjacent sites. <i>Biology and Fertility of Soils</i> , 2009, 45, 347-359.	2.3	86
95	Soil microaggregate size composition and organic matter distribution as affected by clay content. <i>Geoderma</i> , 2019, 355, 113901.	2.3	86
96	Accumulation of nitrogen and microbial residues during 2000 years of rice paddy and non-paddy soil development in the Yangtze River Delta, China. <i>Global Change Biology</i> , 2011, 17, 3405-3417.	4.2	85
97	The carbon count of 2000 years of rice cultivation. <i>Global Change Biology</i> , 2013, 19, 1107-1113.	4.2	85
98	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.	1.6	84
99	Large soil organic carbon increase due to improved agronomic management in the North China Plain from 1980s to 2010s. <i>Global Change Biology</i> , 2018, 24, 987-1000.	4.2	84
100	Clay mineral composition modifies decomposition and sequestration of organic carbon and nitrogen in fine soil fractions. <i>Biology and Fertility of Soils</i> , 2015, 51, 427-442.	2.3	82
101	Carbon and nitrogen mineralization in hierarchically structured aggregates of different size. <i>Soil and Tillage Research</i> , 2016, 160, 23-33.	2.6	80
102	Organic carbon and nitrogen in fine soil fractions after treatment with hydrogen peroxide. <i>Soil Biology and Biochemistry</i> , 2001, 33, 2155-2158.	4.2	79
103	Land use effects on organic carbon storage in soils of Bavaria: The importance of soil types. <i>Soil and Tillage Research</i> , 2015, 146, 296-302.	2.6	79
104	Spatial distribution and chemical composition of soil organic matter fractions in rhizosphere and non-rhizosphere soil under European beech (<i>Fagus sylvatica</i> L.). <i>Geoderma</i> , 2016, 264, 179-187.	2.3	79
105	Degradation and small-scale spatial homogenization of topsoils in intensively-grazed steppes of Northern China. <i>Soil and Tillage Research</i> , 2009, 104, 299-310.	2.6	78
106	Changes in the chemical composition of soil organic matter after application of compost. <i>European Journal of Soil Science</i> , 2002, 53, 299-309.	1.8	77
107	Management-induced organic carbon accumulation in paddy soils: The role of organo-mineral associations. <i>Soil and Tillage Research</i> , 2013, 126, 60-71.	2.6	77
108	Mineral composition and charcoal determine the bacterial community structure in artificial soils. <i>FEMS Microbiology Ecology</i> , 2013, 86, 15-25.	1.3	76

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109	Artificial soil studies reveal domain-specific preferences of microorganisms for the colonisation of different soil minerals and particle size fractions. <i>FEMS Microbiology Ecology</i> , 2014, 90, 770-782.	1.3	76
110	Accelerated soil formation due to paddy management on marshlands (Zhejiang Province, China). <i>Geoderma</i> , 2014, 228-229, 67-89.	2.3	76
111	Organic matter input determines structure development and aggregate formation in artificial soils. <i>Geoderma</i> , 2019, 354, 113881.	2.3	76
112	Advances in Molecular Approaches for Understanding Soil Organic Matter Composition, Origin, and Turnover: A Historical Overview. <i>Advances in Agronomy</i> , 2018, , 1-48.	2.4	75
113	Clay fractions from a soil chronosequence after glacier retreat reveal the initial evolution of organo-mineral associations. <i>Geochimica Et Cosmochimica Acta</i> , 2012, 85, 1-18.	1.6	74
114	Comparison of humus horizons from two ecosystem phases on northern Vancouver Island using ¹³ C CPMAS NMR spectroscopy and CuO oxidation. <i>Canadian Journal of Soil Science</i> , 1993, 73, 9-25.	0.5	73
115	Intimate association between O/N-alkyl carbon and iron oxides in clay fractions of forest soils. <i>Organic Geochemistry</i> , 2005, 36, 1378-1390.	0.9	73
116	Impact of brown coal dust on the organic matter in particle-size fractions of a Mollisol. <i>Organic Geochemistry</i> , 1996, 25, 29-39.	0.9	72
117	Tracing the sources and spatial distribution of organic carbon in subsoils using a multi-biomarker approach. <i>Scientific Reports</i> , 2016, 6, 29478.	1.6	72
118	Iron Oxides as Major Available Interface Component in Loamy Arable Topsoils. <i>Soil Science Society of America Journal</i> , 2011, 75, 2158-2168.	1.2	71
119	Organic matter from biological soil crusts induces the initial formation of sandy temperate soils. <i>Catena</i> , 2014, 122, 196-208.	2.2	71
120	Changes in the structure and protein binding ability of condensed tannins during decomposition of fresh needles and leaves. <i>Soil Biology and Biochemistry</i> , 2003, 35, 577-589.	4.2	68
121	Composition and radiocarbon age of HF-resistant soil organic matter in a Podzol and a Cambisol. <i>Organic Geochemistry</i> , 2007, 38, 1356-1372.	0.9	68
122	Alteration of gymnosperm and angiosperm lignin during decomposition in forest humus layers. <i>Zeitschrift Fur Pflanzenernahrung Und Bodenkunde = Journal of Plant Nutrition and Plant Science</i> , 1986, 149, 323-331.	0.4	67
123	Estimation of total organic carbon storage and its driving factors in soils of Bavaria (southeast) Tj ETQq1 1 0.784314,rgBT /Overlock 10	0.9	67
124	The role of allophane nano-structure and Fe oxide speciation for hosting soil organic matter in an allophanic Andosol. <i>Geochimica Et Cosmochimica Acta</i> , 2016, 180, 284-302.	1.6	67
125	Interaction of minerals, organic matter, and microorganisms during biogeochemical interface formation as shown by a series of artificial soil experiments. <i>Biology and Fertility of Soils</i> , 2017, 53, 9-22.	2.3	67
126	Organic matter accumulating in Aeh and Bh horizons of a Podzol " chemical characterization in primary organo-mineral associations. <i>Organic Geochemistry</i> , 2000, 31, 727-734.	0.9	66

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127	Quantification of functional soil organic carbon pools for major soil units and land uses in southeast Germany (Bavaria). <i>Agriculture, Ecosystems and Environment</i> , 2014, 185, 208-220.	2.5	65
128	Establishment of macro-aggregates and organic matter turnover by microbial communities in long-term incubated artificial soils. <i>Soil Biology and Biochemistry</i> , 2014, 79, 57-67.	4.2	65
129	Changes in the lignin fraction of spruce and pine needle litter during decomposition as studied by some chemical methods. <i>Soil Biology and Biochemistry</i> , 1986, 18, 611-619.	4.2	63
130	Biological activity and organic matter mineralization of soils amended with biowaste composts. <i>Journal of Plant Nutrition and Soil Science</i> , 2002, 165, 151.	1.1	63
131	Soil organic matter composition and soil lightness. <i>Journal of Plant Nutrition and Soil Science</i> , 2004, 167, 545-555.	1.1	63
132	The modeling of reactive solute transport with sorption to mobile and immobile sorbents: 1. Experimental evidence and model development. <i>Water Resources Research</i> , 1996, 32, 1611-1622.	1.7	61
133	Patterns and processes of initial terrestrial ecosystem development. <i>Journal of Plant Nutrition and Soil Science</i> , 2011, 174, 229-239.	1.1	61
134	Organic carbon accumulation on soil mineral surfaces in paddy soils derived from tidal wetlands. <i>Geoderma</i> , 2014, 228-229, 90-103.	2.3	60
135	Nature of organic nitrogen in fine particle size separates of sandy soils of highly industrialized areas as revealed by NMR spectroscopy. <i>Soil Biology and Biochemistry</i> , 2000, 32, 241-252.	4.2	59
136	Quantification of carbon derived from lignite in soils using mid-infrared spectroscopy and partial least squares. <i>Organic Geochemistry</i> , 2001, 32, 831-839.	0.9	59
137	O/N-alkyl and alkyl C are stabilised in fine particle size fractions of forest soils. <i>Biogeochemistry</i> , 2005, 73, 475-497.	1.7	59
138	Title is missing!. <i>Plant and Soil</i> , 1999, 213, 161-168.	1.8	58
139	Changes of lignin phenols and neutral sugars in different soil types of a high-elevation forest ecosystem 25 years after forest dieback. <i>Soil Biology and Biochemistry</i> , 2007, 39, 655-668.	4.2	58
140	Is turnover and development of organic matter controlled by mineral composition?. <i>Soil Biology and Biochemistry</i> , 2013, 67, 235-244.	4.2	58
141	The fate of cutin and suberin of decaying leaves, needles and roots – Inferences from the initial decomposition of bound fatty acids. <i>Organic Geochemistry</i> , 2016, 95, 81-92.	0.9	58
142	Identification of Distinct Functional Microstructural Domains Controlling C Storage in Soil. <i>Environmental Science & Technology</i> , 2017, 51, 12182-12189.	4.6	58
143	Distribution of soil organic matter between fractions and aggregate size classes in grazed semiarid steppe soil profiles. <i>Plant and Soil</i> , 2011, 338, 63-81.	1.8	57
144	Grazing changes topography-controlled topsoil properties and their interaction on different spatial scales in a semi-arid grassland of Inner Mongolia, P.R. China. <i>Plant and Soil</i> , 2011, 340, 35-58.	1.8	55

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145	Distribution of cutin and suberin biomarkers under forest trees with different root systems. <i>Plant and Soil</i> , 2014, 381, 95-110.	1.8	55
146	Distribution and decomposition pattern of cutin and suberin in forest soils. <i>Zeitschrift Fur Pflanzenernahrung Und Bodenkunde = Journal of Plant Nutrition and Plant Science</i> , 1989, 152, 409-413.	0.4	54
147	Refractory organic carbon in particle-size fractions of arable soils I: distribution of refractory carbon between the size fractions. <i>Organic Geochemistry</i> , 2002, 33, 1683-1697.	0.9	54
148	Rhizosphere Spatiotemporal Organization – A Key to Rhizosphere Functions. <i>Frontiers in Agronomy</i> , 2020, 2, .	1.5	54
149	Influence of origin and properties of dissolved organic matter on the partition of polycyclic aromatic hydrocarbons (PAHs). <i>European Journal of Soil Science</i> , 1997, 48, 443-455.	1.8	54
150	Araucaria forest expansion on grassland in the southern Brazilian highlands as revealed by ¹⁴ C and ¹³ C studies. <i>Geoderma</i> , 2008, 145, 143-157.	2.3	53
151	NanoSIMS as a tool for characterizing soil model compounds and organomineral associations in artificial soils. <i>Journal of Soils and Sediments</i> , 2012, 12, 35-47.	1.5	53
152	Stagnating crop yields: An overlooked risk for the carbon balance of agricultural soils?. <i>Science of the Total Environment</i> , 2015, 536, 1045-1051.	3.9	53
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