Positive and negative carbon mineralization priming ef biochar-amended soils

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Citation Report

#	Article	IF	CITATIONS
1	Interactive Priming of Biochar and Labile Organic Matter Mineralization in a Smectite-Rich Soil. Environmental Science & Technology, 2011, 45, 9611-9618.	4.6	282
2	Contribution to characterisation of biochar to estimate the labile fraction of carbon. Organic Geochemistry, 2011, 42, 1331-1342.	0.9	231
3	Atividade microbiana e enzimática em solo após a aplicação de xisto retortado. Pesquisa Agropecuaria Brasileira, 2011, 46, 1538-1546.	0.9	10
4	Biochar effects on soil biota – A review. Soil Biology and Biochemistry, 2011, 43, 1812-1836.	4.2	3,514
5	The priming potential of biochar products in relation to labile carbon contents and soil organic matter status. Soil Biology and Biochemistry, 2011, 43, 2127-2134.	4.2	414
6	Short term soil priming effects and the mineralisation of biochar following its incorporation to soils of different pH. Soil Biology and Biochemistry, 2011, 43, 2304-2314.	4.2	510
7	Biochar and Manure Affect Calcareous Soil and Corn Silage Nutrient Concentrations and Uptake. Journal of Environmental Quality, 2012, 41, 1033-1043.	1.0	170
8	Surface albedo following biochar application in durum wheat. Environmental Research Letters, 2012, 7, 014025.	2.2	89
9	Biochar: A Synthesis of Its Agronomic Impact beyond Carbon Sequestration. Journal of Environmental Quality, 2012, 41, 973-989.	1.0	738
10	Biochar and Nitrogen Fertilizer Alters Soil Nitrogen Dynamics and Greenhouse Gas Fluxes from Two Temperate Soils. Journal of Environmental Quality, 2012, 41, 1361-1370.	1.0	111
11	Extent of Pyrolysis Impacts on Fast Pyrolysis Biochar Properties. Journal of Environmental Quality, 2012, 41, 1115-1122.	1.0	80
12	Synergisms between Compost and Biochar for Sustainable Soil Amelioration. , 0, , .		111
13	Kinetics of Carbon Mineralization of Biochars Compared with Wheat Straw in Three Soils. Journal of Environmental Quality, 2012, 41, 1210-1220.	1.0	81
14	Environmental Benefits of Biochar. Journal of Environmental Quality, 2012, 41, 967-972.	1.0	270
15	Effects of Biochar Addition on Greenhouse Gas Emissions and Microbial Responses in a Short-Term Laboratory Experiment. Journal of Environmental Quality, 2012, 41, 1193-1202.	1.0	109
16	Modelling the long-term response to positive and negative priming of soil organic carbon by black carbon. Biogeochemistry, 2012, 111, 83-95.	1.7	99
17	Effect of biochar amendment on sorption and leaching of nitrate, ammonium, and phosphate in a sandy soil. Chemosphere, 2012, 89, 1467-1471.	4.2	713
18	Rapid molecular screening of black carbon (biochar) thermosequences obtained from chestnut wood and rice straw: A pyrolysis-GC/MS study. Biomass and Bioenergy, 2012, 45, 115-129.	2.9	44

#	Article	IF	CITATIONS
19	An Index-Based Approach to Assessing Recalcitrance and Soil Carbon Sequestration Potential of Engineered Black Carbons (Biochars). Environmental Science & Technology, 2012, 46, 1415-1421.	4.6	292
20	Multiple Controls on the Chemical and Physical Structure of Biochars. Industrial & Engineering Chemistry Research, 2012, 51, 3587-3597.	1.8	145
21	Chemical and bioassay characterisation of nitrogen availability in biochar produced from dairy manure and biosolids. Organic Geochemistry, 2012, 51, 45-54.	0.9	112
22	Effects of polyacrylamide, biopolymer, and biochar on decomposition of soil organic matter and plant residues as determined by 14C and enzyme activities. European Journal of Soil Biology, 2012, 48, 1-10.	1.4	147
23	Chemical characterization of rice straw-derived biochar for soil amendment. Biomass and Bioenergy, 2012, 47, 268-276.	2.9	517
24	Shortâ€ŧerm effect of biochar and compost on soil fertility and water status of a Dystric Cambisol in NE Germany under field conditions. Journal of Plant Nutrition and Soil Science, 2012, 175, 698-707.	1.1	248
25	Effects of biochar amendment in two soils on greenhouse gas emissions and crop production. Plant and Soil, 2012, 360, 287-298.	1.8	251
26	Effects of biochar compared to organic and inorganic fertilizers on soil quality and plant growth in a greenhouse experiment. Journal of Plant Nutrition and Soil Science, 2012, 175, 410-422.	1.1	380
27	Predicting phosphorus bioavailability from high-ash biochars. Plant and Soil, 2012, 357, 173-187.	1.8	257
28	Nanoscale organo-mineral reactions of biochars in ferrosol: an investigation using microscopy. Plant and Soil, 2012, 357, 369-380.	1.8	209
29	Soil biochemical activities and the geometric mean of enzyme activities after application of sewage sludge biochar to soil. Biology and Fertility of Soils, 2012, 48, 511-517.	2.3	288
30	Soil organic matter turnover is governed by accessibility not recalcitrance. Global Change Biology, 2012, 18, 1781-1796.	4.2	1,176
31	Effects of biochar amendment on soil quality, crop yield and greenhouse gas emission in a Chinese rice paddy: A field study of 2 consecutive rice growing cycles. Field Crops Research, 2012, 127, 153-160.	2.3	494
32	Analytical pyrolysis of synthetic chars derived from biomass with potential agronomic application (biochar). Relationships with impacts on microbial carbon dioxide production. Journal of Analytical and Applied Pyrolysis, 2012, 93, 77-84.	2.6	79
33	Molecular characterization of Ulex europaeus biochar obtained from laboratory heat treatment experiments – A pyrolysis–GC/MS study. Journal of Analytical and Applied Pyrolysis, 2012, 95, 205-212.	2.6	54
34	â€~Bioenergy from cattle manure? <scp>I</scp> mplications of anaerobic digestion and subsequent pyrolysis for carbon and nitrogen dynamics in soil'. GCB Bioenergy, 2012, 4, 751-760.	2.5	51
35	The effect of biochar addition on N2O and CO2 emissions from a sandy loam soil – The role of soil aeration. Soil Biology and Biochemistry, 2012, 51, 125-134.	4.2	354
36	Biological degradation of pyrogenic organic matter in temperate forest soils. Soil Biology and Biochemistry, 2012, 51, 115-124.	4.2	154

IF

CITATIONS

37	Greenhouse gas emissions from a wastewater sludge-amended soil cultivated with wheat (Triticum) Tj ETQq0 0 90-95.	0 rgBT /Ov 4.2	verlock 10 Tf 5 63
38	Maize biochars accelerate short-term soil nitrogen dynamics in a loamy sand soil. Soil Biology and Biochemistry, 2012, 55, 20-27.	4.2	289
39	Adsorption of sulfamethoxazole on biochar and its impact on reclaimed water irrigation. Journal of Hazardous Materials, 2012, 209-210, 408-413.	6.5	229
40	Effect of biochar amendment on maize yield and greenhouse gas emissions from a soil organic carbon poor calcareous loamy soil from Central China Plain. Plant and Soil, 2012, 351, 263-275.	1.8	397
41	Degradation kinetics of biochar from pyrolysis and hydrothermal carbonization in temperate soils. Plant and Soil, 2013, 372, 375-387.	1.8	60
42	Impact of biochar application on nitrogen nutrition of rice, greenhouse-gas emissions and soil organic carbon dynamics in two paddy soils of China. Plant and Soil, 2013, 370, 527-540.	1.8	187
43	Impact of biochar field aging on laboratory greenhouse gas production potentials. GCB Bioenergy, 2013, 5, 165-176.	2.5	198
44	Interactions between biochar stability and soil organisms: review and research needs. European Journal of Soil Science, 2013, 64, 379-390.	1.8	388
45	An energyâ€biochar chain involving biomass gasification and rice cultivation in Northern Italy. GCB Bioenergy, 2013, 5, 192-201.	2.5	34
46	Microbial biomass growth, following incorporation of biochars produced at 350°C or 700°C, in a silty-clay loam soil of high and low pH. Soil Biology and Biochemistry, 2013, 57, 513-523.	4.2	241
47	Biochar-Mediated [¹⁴ C]Atrazine Mineralization in Atrazine-Adapted Soils from Belgium and Brazil. Journal of Agricultural and Food Chemistry, 2013, 61, 512-516.	2.4	38
48	Effects of biochar application on soil methane emission at different soil moisture levels. Biology and Fertility of Soils, 2013, 49, 119-128.	2.3	114
49	Short-term CO2 and N2O emissions and microbial properties of biochar amended sandy loam soils. Soil Biology and Biochemistry, 2013, 57, 401-410.	4.2	324
50	The effects of woodchip biochar application on crop yield, carbon sequestration and greenhouse gas emissions from soils planted with rice or leaf beet. Journal of the Taiwan Institute of Chemical Engineers, 2013, 44, 1039-1044.	2.7	66
51	Biochar and Microbial Signaling: Production Conditions Determine Effects on Microbial Communication. Environmental Science & Technology, 2013, 47, 11496-11503.	4.6	174
52	REVIEW: Charcoal function and management in boreal ecosystems. Journal of Applied Ecology, 2013, 50, 1197-1206.	1.9	35
53	Physicochemical and agronomic properties of biochar from sewage sludge pyrolysed at different temperatures. Journal of Analytical and Applied Pyrolysis, 2013, 102, 124-130.	2.6	167
54	Engineered Biochar Reclaiming Phosphate from Aqueous Solutions: Mechanisms and Potential Application as a Slow-Release Fertilizer. Environmental Science & Technology, 2013, 47, 8700-8708.	4.6	595

ARTICLE

#

#	Article	IF	CITATIONS
55	Biochar and its effects on plant productivity and nutrient cycling: a metaâ€analysis. GCB Bioenergy, 2013, 5, 202-214.	2.5	1,175
56	Coâ€generated fast pyrolysis biochar mitigates greenâ€house gas emissions and increases carbon sequestration in temperate soils. GCB Bioenergy, 2013, 5, 153-164.	2.5	169
57	Biodegradability of organic matter in fire-affected mineral soils of Southern Spain. Soil Biology and Biochemistry, 2013, 56, 31-39.	4.2	67
58	Microbial utilisation of biochar-derived carbon. Science of the Total Environment, 2013, 465, 288-297.	3.9	292
59	Change in net global warming potential of a rice–wheat cropping system with biochar soil amendment in a rice paddy from China. Agriculture, Ecosystems and Environment, 2013, 173, 37-45.	2.5	103
60	Carbon storage in a heavy clay soil landfill site after biosolid application. Science of the Total Environment, 2013, 465, 216-225.	3.9	50
61	Sorption of heavy metals on chitosan-modified biochars and its biological effects. Chemical Engineering Journal, 2013, 231, 512-518.	6.6	325
62	Production and characterization of slow pyrolysis biochar: influence of feedstock type and pyrolysis conditions. GCB Bioenergy, 2013, 5, 104-115.	2.5	629
63	Both priming and temperature sensitivity of soil organic matter decomposition depend on microbial biomass – An incubation study. Soil Biology and Biochemistry, 2013, 57, 739-748.	4.2	180
64	Predicting pyrogenic organic matter mineralization from its initial properties and implications for carbon management. Organic Geochemistry, 2013, 64, 76-83.	0.9	29
65	Physico-chemical and functional characteristics of soil charcoal produced at five different temperatures. Soil Biology and Biochemistry, 2013, 58, 140-146.	4.2	36
66	Potential applications of wastes from energy generation particularly biochar in Malaysia. Renewable and Sustainable Energy Reviews, 2013, 21, 694-702.	8.2	18
67	In situ application of activated carbon and biochar to PCB-contaminated soil and the effects of mixing regime. Environmental Pollution, 2013, 182, 201-208.	3.7	68
68	Difficulties in using soil-based methods to assess plant availability of potentially toxic elements in biochars and their feedstocks. Journal of Hazardous Materials, 2013, 250-251, 29-36.	6.5	50
69	Invasive plants as feedstock for biochar and bioenergy production. Bioresource Technology, 2013, 140, 439-442.	4.8	43
70	Influence of pyrolysis temperature on composted sewage sludge biochar priming effect in a loamy soil. Chemosphere, 2013, 93, 668-676.	4.2	87
71	Soil and tree responses to the application of wood ash containing charcoal in two soils with contrasting properties. Forest Ecology and Management, 2013, 295, 199-212.	1.4	40
72	Organic carbon and nutrient release from a range of laboratory-produced biochars and biochar–soil mixtures. Geoderma, 2013, 193-194, 122-130.	2.3	434

	CITATION	Report	
#	Article	IF	Citations
73	Chars produced by slow pyrolysis and hydrothermal carbonization vary in carbon sequestration potential and greenhouse gases emissions. Soil Biology and Biochemistry, 2013, 62, 137-146.	4.2	150
74	Effects of polyacrylamide, biopolymer and biochar on the decomposition of <scp> ¹⁴C</scp> â€labelled maize residues and on their stabilization in soil aggregates. European Journal of Soil Science, 2013, 64, 488-499.	1.8	114
75	Biochar addition indirectly affects N2O emissions via soil moisture and plant N uptake. Soil Biology and Biochemistry, 2013, 58, 99-106.	4.2	177
76	An estimation of annual nitrous oxide emissions and soil quality following the amendment of high temperature walnut shell biochar and compost to a small scale vegetable crop rotation. Science of the Total Environment, 2013, 465, 298-307.	3.9	98
77	The effects of walnut shell and wood feedstock biochar amendments on greenhouse gas emissions from a fertile soil. Geoderma, 2013, 200-201, 90-98.	2.3	64
78	Towards a carbon-negative sustainable bio-based economy. Frontiers in Plant Science, 2013, 4, 174.	1.7	114
79	Biochar Impacts on Soil Physical Properties and Greenhouse Gas Emissions. Agronomy, 2013, 3, 313-339.	1.3	363
80	A Review: Carbon Dioxide Capture: Biomass-Derived-Biochar and Its Applications. Journal of Dispersion Science and Technology, 2013, 34, 974-984.	1.3	32
81	Biocharâ€mediated reductive transformation of nitro herbicides and explosives. Environmental Toxicology and Chemistry, 2013, 32, 501-508.	2.2	120
82	Biochar Impact on Plant Resistance to Disease. , 2013, , 49-76.		9
83	Biochar-Fungi Interactions in Soils. , 2013, , 77-107.		24
84	The Stability of Biochar in the Environment. , 2013, , 9-48.		7
85	A Review of Biochar and Soil Nitrogen Dynamics. Agronomy, 2013, 3, 275-293.	1.3	663
86	Consumption of residual pyrogenic carbon by wildfire. International Journal of Wildland Fire, 2013, 22, 1072.	1.0	52
88	Characterization and Mineralization Rates of Low Temperature Peanut Hull and Pine Chip Biochars. Agronomy, 2013, 3, 294-312.	1.3	27
89	Blackcarbon in coastal and large river systems. , 2013, , 200-234.		9
90	Effects of biochar amendment on soil aggregates and hydraulic properties. Journal of Soil Science and Plant Nutrition, 2013, , 0-0.	1.7	62
91	Crop residue decomposition in Minnesota biochar-amended plots. Solid Earth, 2014, 5, 499-507.	1.2	21

#	Article	IF	CITATIONS
92	Effects of Detrital Inputs and Roots on Carbon Saturation Deficit of a Temperate Forest Soil. Soil Science Society of America Journal, 2014, 78, S76.	1.2	21
93	Effects of Biochar on Soil Microbial Biomass after Four Years of Consecutive Application in the North China Plain. PLoS ONE, 2014, 9, e102062.	1.1	79
94	Changes in fire-derived soil black carbon storage in a subhumid woodland. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 1807-1819.	1.3	7
95	Factors driving the carbon mineralization priming effect in a sandy loam soil amended with different types of biochar. Solid Earth, 2014, 5, 585-594.	1.2	82
96	Greenhouse Gas Production in Mixtures of Soil with Composted and Noncomposted Biochars Is Governed by Char-Associated Organic Compounds. Journal of Environmental Quality, 2014, 43, 971-979.	1.0	39
97	Characterization and Stabilisation of Biochars Obtained from Empty Fruit Bunch, Wood, and Rice Husk. BioResources, 2014, 9, .	0.5	36
98	Interactions of Soluble and Solid Organic Amendments with Priming Effects Induced by Glucose. Vadose Zone Journal, 2014, 13, 1-8.	1.3	6
99	Agriculture, Forestry and Other Land Use (AFOLU). , 2015, , 811-922.		66
100	Turnover of Soil Carbon following Addition of Switchgrass-Derived Biochar to Four Soils. Soil Science Society of America Journal, 2014, 78, 531-537.	1.2	27
101	Use of organic substrates for increasing soil organic matter quality and carbon sequestration of tropical degraded soil: a 3-year mesocosms experiment. Carbon Management, 2014, 5, 155-168.	1.2	21
102	Wheat straw and its biochar had contrasting effects on soil C and N cycling two growing seasons after addition to a Black Chernozemic soil planted to barley. Biology and Fertility of Soils, 2014, 50, 1291-1299.	2.3	48
103	Hydrochar amendment promotes microbial immobilization of mineral nitrogen. Journal of Plant Nutrition and Soil Science, 2014, 177, 59-67.	1.1	67
104	Biochar and Manure Effects on Net Nitrogen Mineralization and Greenhouse Gas Emissions from Calcareous Soil under Corn. Soil Science Society of America Journal, 2014, 78, 1641-1655.	1.2	82
105	Physicochemical changes in pyrogenic organic matter (biochar) after 15 months of field aging. Solid Earth, 2014, 5, 693-704.	1.2	156
106	Effects of amendment of different biochars on soil enzyme activities related to carbon mineralisation. Soil Research, 2014, 52, 706.	0.6	69
107	Biochars improve aggregate stability, water retention, and poreâ€space properties of clayey soil. Journal of Plant Nutrition and Soil Science, 2014, 177, 26-33.	1.1	278
108	Immobilization of Ni and Cd in Soil by Biochar Derived From Unfertilized Dates. Water, Air, and Soil Pollution, 2014, 225, 1.	1.1	42
109	Inactivation of <i>E. coli</i> O157:H7 in Cultivable Soil by Fast and Slow Pyrolysis-Generated Biochar. Foodborne Pathogens and Disease, 2014, 11, 215-223.	0.8	24

ARTICLE IF CITATIONS # Carbon Mineralizability Determines Interactive Effects on Mineralization of Pyrogenic Organic Matter 110 4.6 67 and Soil Organic Carbon. Environmental Science & amp; Technology, 2014, 48, 13727-13734. Coâ€benefits, tradeâ€offs, barriers and policies for greenhouse gas mitigation in the agriculture, forestry and other land use (<scp>AFOLU</scp>) sector. Global Change Biology, 2014, 20, 3270-3290. 4.2 Biochar addition rate influences soil microbial abundance and activity in temperate soils. European 112 272 1.8 Journal of Soil Science, 2014, 65, 28-39. Effects of biochar, earthworms, and litter addition on soil microbial activity and abundance in a temperate agricultural soil. Biology and Fertility of Soils, 2014, 50, 1189-1200. Effect of biochar addition on soil respiration partitioning and root dynamics in an apple orchard. 114 1.8 64 European Journal of Soil Science, 2014, 65, 186-195. Combined effects of nitrogen deposition and biochar application on emissions of N₂O, CO₂and NH₃from agricultural and forest soils. Soil Science and Plant 0.8 Nutrition, 2014, 60, 254-265. Effect of biogas digested slurry based-biochar and digested liquid on N2O, CO2 flux and crop yield for 116 three continuous cropping cycles of komatsuna (Brassica rapa var. perviridis). Biology and Fertility of 2.3 33 Soils, 2014, 50, 1201-1209. Consecutive Biochar Application Alters Soil Enzyme Activities in the Winter Wheat–Growing Season. Soil Science, 2014, 179, 75-83. Effects of Biochar Amendments on Soil Microbial Biomass and Activity. Journal of Environmental 118 1.0 35 Quality, 2014, 43, 2104-2114. Greenhouse gas emissions from sub-tropical agricultural soils after addition of organic by-products. 1.2 SpringerPlus, 2014, 3, 491. Biochar application to hardrock mine tailings: Soil quality, microbial activity, and toxic element 120 1.4 92 sorption. Applied Geochemistry, 2014, 43, 35-48. Effects of Rice Straw and Its Biochar Addition on Soil Labile Carbon and Soil Organic Carbon. Journal of Integrative Agriculture, 2014, 13, 491-498. Carbon dioxide emissions from biochar in soil: role of clay, microorganisms and carbonates. 122 1.8 100 European Journal of Soil Science, 2014, 65, 52-59. Impact of biochar on mineralisation of C and N from soil and willow litter and its relationship with 123 2.3 microbial community biomass and structure. Biology and Fertility of Soils, 2014, 50, 695-702. Carbon dioxide capture using biochar produced from sugarcane bagasse and hickory wood. Chemical 124 303 6.6 Engineering Journal, 2014, 249, 174-179. Biochar as a sorbent for contaminant management in soil and water: A review. Chemosphere, 2014, 99, 3,175 19-33. Medium-term effects of corn biochar addition on soil biota activities and functions in a temperate 126 4.2 141 soil cropped to corn. Soil Biology and Biochemistry, 2014, 72, 152-162. Biochar, hydrochar and uncarbonized feedstock application to permanent grasslandâ€"Effects on greenhouse gas emissions and plant growth. Agriculture, Ecosystems and Environment, 2014, 191, 39-52.

#	Article	IF	CITATIONS
128	Characterization and environmental applications of clay–biochar composites. Chemical Engineering Journal, 2014, 242, 136-143.	6.6	313
129	Short-term effects of biochar on soil properties and wheat yield formation with meat bone meal and inorganic fertiliser on a boreal loamy sand. Agriculture, Ecosystems and Environment, 2014, 191, 108-116.	2.5	122
130	Transformation and stabilization of pyrogenic organic matter in a temperate forest field experiment. Global Change Biology, 2014, 20, 1629-1642.	4.2	82
131	<scp>Effects</scp> of coâ€produced biochar on life cycle greenhouse gas emissions of pyrolysisâ€derived renewable fuels. Biofuels, Bioproducts and Biorefining, 2014, 8, 189-204.	1.9	31
132	Soil Chemical Insights Provided through Vibrational Spectroscopy. Advances in Agronomy, 2014, 126, 1-148.	2.4	168
133	Effects of biochar and other amendments on the physical properties and greenhouse gas emissions of an artificially degraded soil. Science of the Total Environment, 2014, 487, 26-36.	3.9	237
134	Producing energy while sequestering carbon? The relationship between biochar and agricultural productivity. Biomass and Bioenergy, 2014, 63, 167-176.	2.9	45
135	Fate of biochar in chemically- and physically-defined soil organic carbon pools. Organic Geochemistry, 2014, 73, 35-46.	0.9	25
136	Plant growth responses to biochar addition: an Australian soils perspective. Biology and Fertility of Soils, 2014, 50, 1035-1045.	2.3	102
137	Effects of wastewater sludge, urea and charcoal on greenhouse gas emissions in pots planted with wheat. Applied Soil Ecology, 2014, 73, 19-25.	2.1	17
138	Effect of biochar addition on soil microbial community in a wheat crop. European Journal of Soil Biology, 2014, 60, 9-15.	1.4	164
139	Biochar from Miscanthus: a potential silicon fertilizer. Plant and Soil, 2014, 374, 871-882.	1.8	86
140	Effects of feedstock type, production method, and pyrolysis temperature on biochar and hydrochar properties. Chemical Engineering Journal, 2014, 240, 574-578.	6.6	591
141	Influence of pyrolysis temperature and holding time on properties of biochar derived from medicinal herb (radix isatidis) residue and its effect on soil CO2 emission. Journal of Analytical and Applied Pyrolysis, 2014, 110, 277-284.	2.6	136
142	Effect of crop residue biochar on soil acidity amelioration in strongly acidic tea garden soils. Soil Use and Management, 2014, 30, 119-128.	2.6	87
143	Unintended effects of biochars on short-term plant growth in a calcareous soil. Plant and Soil, 2014, 385, 87-105.	1.8	68
144	C mineralization and microbial activity in four biochar field experiments several years after incorporation. Soil Biology and Biochemistry, 2014, 78, 195-203.	4.2	138
145	Biochar application to soil for climate change mitigation by soil organic carbon sequestration. Journal of Plant Nutrition and Soil Science, 2014, 177, 651-670.	1.1	169

#	Article	IF	CITATIONS
146	Environmental and Socioeconomic Impacts of Utilizing Waste for Biochar in Rural Areas in Indonesia–A Systems Perspective. Environmental Science & Technology, 2014, 48, 4664-4671.	4.6	46
147	Effects of biochar amendment on the net greenhouse gas emission and greenhouse gas intensity in a Chinese double rice cropping system. European Journal of Soil Biology, 2014, 65, 30-39.	1.4	88
148	Converting leguminous green manure into biochar: changes in chemical composition and C and N mineralization. Geoderma, 2014, 232-234, 581-588.	2.3	40
149	Priming of soil organic carbon by malic acid addition is differentially affected by nutrient availability. Soil Biology and Biochemistry, 2014, 77, 158-169.	4.2	72
150	Can biochar reduce soil greenhouse gas emissions from a <scp>M</scp> iscanthus bioenergy crop?. GCB Bioenergy, 2014, 6, 76-89.	2.5	132
151	Molecular characterization of biochars and their influence on microbiological properties of soil. Journal of Hazardous Materials, 2014, 279, 244-256.	6.5	137
152	An incubation study on the stability and biological effects of pyrogenic and hydrothermal biochar in two soils. European Journal of Soil Science, 2014, 65, 72-82.	1.8	90
153	Application of biochars to sandy and silty soil failed to increase maize yield under common agricultural practice. Soil and Tillage Research, 2014, 144, 184-194.	2.6	142
154	Contrasting effects of bamboo leaf and its biochar on soil CO2 efflux and labile organic carbon in an intensively managed Chinese chestnut plantation. Biology and Fertility of Soils, 2014, 50, 1109-1119.	2.3	66
155	Effect of biochar on soil respiration in the maize growing season after 5 years of consecutive application. Soil Research, 2014, 52, 505.	0.6	29
156	The biochar dilemma. Soil Research, 2014, 52, 217.	0.6	178
157	Effects of amendment of different biochars on soil carbon mineralisation and sequestration. Soil Research, 2014, 52, 46.	0.6	57
158	Short-Term Interactive Effects of Biochar, Green Manure, and Inorganic Fertilizer on Soil Properties and Agronomic Characteristics of Maize. Agricultural Research, 2014, 3, 128-136.	0.9	45
159	An evaluation of biochar pre-conditioned with urea ammonium nitrate on maize (<i>Zea mays</i> L.) production and soil biochemical characteristics. Canadian Journal of Soil Science, 2014, 94, 551-562.	0.5	21
160	Physical Disintegration of Biochar: An Overlooked Process. Environmental Science and Technology Letters, 2014, 1, 326-332.	3.9	245
161	Mechanisms of Water Interaction with Pore Systems of Hydrochar and Pyrochar from Poplar Forestry Waste. Journal of Agricultural and Food Chemistry, 2014, 62, 4917-4923.	2.4	44
162	Fate of Chinese-fir litter during decomposition as a result of inorganic N additions. Applied Soil Ecology, 2014, 74, 30-36.	2.1	5
163	Effect of biochar on aerobic processes, enzyme activity, and crop yields in two sandy loam soils. Biology and Fertility of Soils, 2014, 50, 1087-1097.	2.3	67

ARTICLE IF CITATIONS # Pyrogenic carbon additions to soil counteract positive priming of soil carbon mineralization by 4.2 88 164 plants. Soil Biology and Biochemistry, 2014, 73, 33-41. Biochar suppressed the decomposition of organic carbon in a cultivated sandy loam soil: A negative priming effect. Soil Biology and Biochemistry, 2014, 76, 12-21. 4.2 232 Ryegrass-derived pyrogenic organic matter changes organic carbon and nitrogen mineralization in a 166 4.2 100 temperate forest soil. Soil Biology and Biochemistry, 2014, 69, 291-301. Sustainable biochar effects for low carbon crop production: A 5-crop season field experiment on a low fertility soil from Central China. Agricultural Systems, 2014, 129, 22-29. Characterization of an enriched biochar. Journal of Analytical and Applied Pyrolysis, 2014, 108, 26-34. 168 2.6 74 Black carbon and soil properties at historical charcoal production sites in Germany. Geoderma, 2014, 169 2.3 232-234, 236-242. Impacts of Biochar and Other Amendments on Soil-Carbon and Nitrogen Stability: A Laboratory 170 1.2 29 Column Study. Soil Science Society of America Journal, 2014, 78, 1258-1266. Alteration of Biochar Carbon Chemistry during Soil Incubations: SRâ€FTIR and NEXAFS Investigation. Soil Science Society of America Journal, 2014, 78, 1632-1640. 171 1.2 29 Emission of <scp>CO</scp>₂ from biocharâ€amended soils and implications for soil organic 172 2.5 76 carbon. GCB Bioenergy, 2015, 7, 1294-1304. Effect of physical weathering on the carbon sequestration potential of biochars and hydrochars in 2.5 soil. GCB Bioenergy, 2015, 7, 488-496. A metaâ€analysis on pyrogenic organic matter induced priming effect. GCB Bioenergy, 2015, 7, 577-590. 174 190 2.5 Biochar mineralization and priming effect on <scp>SOM</scp> decomposition in two European short rotation coppices. GCB Bioenergy, 2015, 7, 1150-1160. Biochar – synergies and tradeâ€offs between soil enhancing properties and C sequestration potential. 176 2.5 75 GCB Bioenergy, 2015, 7, 1161-1175. Competing uses for China's straw: the economic and carbon abatement potential of biochar. GCB Bioenergy, 2015, 7, 1272-1282. 2.5 Use of biochar and oxidized lignite for reconstructing functioning agronomic topsoil: Effects on 178 0.5 17 soil properties in a greenhouse study. Canadian Journal of Soil Science, 2015, 95, 269-285. A dual-isotope approach to allow conclusive partitioning between three sources. Nature 179 5.8 30 Communications, 2015, 6, 8708. Lowering N2O emissions from soils using eucalypt biochar: the importance of redox reactions. 180 1.6 61 Scientific Reports, 2015, 5, 16773. Considerations in Biochar Characterization. SSSA Special Publication Series, 0, , 87-100.

		CITATION R	EPORT	
#	Article		IF	CITATIONS
182	The Effects of Biochar Amendment on Soil Fertility. SSSA Special Publication Series, 0,	, 123-144.	0.2	30
183	Application of Biochar for Soil Biological Improvement. SSSA Special Publication Series	, 0, , 145-173.	0.2	7
184	Impacts of Biochar Amendment on Greenhouse Gas Emissions from Agricultural Soils. Publication Series, 0, , 259-293.	SSSA Special	0.2	4
185	Regional Considerations for Targeted Use of Biochar in Agriculture and Remediation in SSSA Special Publication Series, 0, , 445-474.	Australia.	0.2	2
186	Agriculture: State-of-the-art soil. Nature, 2015, 517, 258-260.		13.7	88
187	Can Fire Residues (Ash and Char) Affect Microbial Decomposition in Wetland Soils?. W 1165-1173.	etlands, 2015, 35,	0.7	7
188	Biochar from Pyrolysis of Biosolids for Nutrient Adsorption and Turfgrass Cultivation. V Environment Research, 2015, 87, 2098-2106.	Vater	1.3	59
189	Effects of biochar amendment on greenhouse gas emissions, net ecosystem carbon bu properties of an acidic soil under intensive vegetable production. Soil Use and Manage 375-383.	dget and ment, 2015, 31,	2.6	40
190	Effects of biochar application on greenhouse gas emissions, carbon sequestration and in coastal saline soil. European Journal of Soil Science, 2015, 66, 329-338.	crop growth	1.8	101
191	Negative priming of native soil organic carbon mineralization by oilseed biochars of co quality. European Journal of Soil Science, 2015, 66, 714-721.	ntrasting	1.8	36
192	Optimal Thermolysis Conditions for Soil Carbon Storage on Plant Residue Burning: Mo Trade-Off between Thermal Decomposition and Subsequent Biodegradation. Journal of Quality, 2015, 44, 228-235.	deling the Environmental	1.0	10
193	Source Material and Concentration of Wildfire-Produced Pyrogenic Carbon Influence P Nutrient Dynamics. Forests, 2015, 6, 1325-1342.	ost-Fire Soil	0.9	22
194	Biochar for Soil Improvement: Evaluation of Biochar from Gasification and Slow Pyrolys Agriculture (Switzerland), 2015, 5, 1076-1115.	iis.	1.4	82
195	The Electrochemical Properties of Biochars and How They Affect Soil Redox Properties Agronomy, 2015, 5, 322-340.	and Processes.	1.3	122
196	Stabilization of Organic Matter by Biochar Application in Compost-amended Soils with Values and Textures. Sustainability, 2015, 7, 13317-13333.	Contrasting pH	1.6	46
197	Synergistic Effect of Rhizobia and Biochar on Growth and Physiology of Maize. Agrono 2015, 107, 2327-2334.	my Journal,	0.9	44
198	A Comparison of Corn (Zea mays L.) Residue and Its Biochar on Soil C and Plant Growt 2015, 10, e0121006.	h. PLoS ONE,	1.1	42
199	Effects of Biochar Addition on CO2 and N2O Emissions following Fertilizer Application Cultivated Grassland Soil. PLoS ONE, 2015, 10, e0126841.	to a	1.1	23

#	Article	IF	CITATIONS
200	BIOCHAR: PYROGENIC CARBON FOR AGRICULTURAL USE - A CRITICAL REVIEW. Revista Brasileira De Ciencia Do Solo, 2015, 39, 321-344.	0.5	141
201	Carbon mineralization and nutrient availability in calcareous sandy soils amended with woody waste biochar. Chemosphere, 2015, 138, 67-73.	4.2	113
202	Priming effect of bamboo (<i>Phyllostanchys edulis Carrière</i>) biochar application in a soil amended with legume. Soil Science and Plant Nutrition, 2015, 61, 934-939.	0.8	7
203	Influence of species identity and charring conditions on fire-derived charcoal traits. Canadian Journal of Forest Research, 2015, 45, 1669-1675.	0.8	7
204	Rapid decomposition of traditionally produced biochar in an Oxisol under savannah in Northeastern Brazil. Geoderma Regional, 2015, 6, 1-6.	0.9	12
205	Influence of Oil Palm Empty Fruit Bunch Biochar on Floodwater pH and Yield Components of Rice Cultivated on Acid Sulphate Soil under Rice Intensification Practices. Plant Production Science, 2015, 18, 491-500.	0.9	34
206	Increase in soil carbon sequestration using rice husk charcoal without stimulating CH ₄ and N ₂ O emissions in an Andosol paddy field in Japan. Soil Science and Plant Nutrition, 2015, 61, 873-884.	0.8	31
207	Ecotoxicological characterization of biochars: Role of feedstock and pyrolysis temperature. Science of the Total Environment, 2015, 512-513, 552-561.	3.9	82
208	Hydrochars derived from plant biomass under various conditions: Characterization and potential applications and impacts. Chemical Engineering Journal, 2015, 267, 253-259.	6.6	184
209	Multifaceted application of crop residue biochar as a tool for sustainable agriculture: An ecological perspective. Ecological Engineering, 2015, 77, 324-347.	1.6	117
210	Effects of temperature and processing conditions on biochar chemical properties and their influence on soil C and N transformations. Soil Biology and Biochemistry, 2015, 83, 19-28.	4.2	167
211	Short-term effects of rice straw biochar on sorption, emission, and transformation of soil NH4 +-N. Environmental Science and Pollution Research, 2015, 22, 9184-9192.	2.7	49
212	Effects of activated charcoal and tannin added to compost and to soil on carbon dioxide, nitrous oxide and ammonia volatilization. Journal of Plant Nutrition and Soil Science, 2015, 178, 218-228.	1.1	12
213	Biodegradation of a biochar-modified waterborne polyacrylate membrane coating for controlled-release fertilizer and its effects on soil bacterial community profiles. Environmental Science and Pollution Research, 2015, 22, 8672-8682.	2.7	45
214	Characterisation, stability, and microbial effects of four biochars produced from crop residues. Geoderma, 2015, 239-240, 293-303.	2.3	122
215	Effect of biochar addition on C mineralisation and soil organic matter priming in two subsoil horizons. Journal of Soils and Sediments, 2015, 15, 825-832.	1.5	35
216	Enhanced rice production but greatly reduced carbon emission following biochar amendment in a metal-polluted rice paddy. Environmental Science and Pollution Research, 2015, 22, 18977-18986.	2.7	41
217	Relationships between Chemical Characteristics and Phytotoxicity of Biochar from Poultry Litter Pyrolysis. Journal of Agricultural and Food Chemistry, 2015, 63, 6660-6667.	2.4	67

#	Article	IF	CITATIONS
218	Decomposition and Carbon Sequestration Potential of Different Rice-Residue-Derived By-products and Farmyard Manure in a Sandy Loam Soil. Communications in Soil Science and Plant Analysis, 2015, 46, 2201-2211.	0.6	7
219	Organic carbon dynamics in soils with pyrogenic organic matter that received plant residue additions over seven years. Soil Biology and Biochemistry, 2015, 88, 268-274.	4.2	25
220	Long-term influence of biochar on native organic carbon mineralisation in a low-carbon clayey soil. Scientific Reports, 2014, 4, 3687.	1.6	244
221	Biochar reduces the rhizosphere priming effect on soil organic carbon. Soil Biology and Biochemistry, 2015, 88, 372-379.	4.2	57
222	Biochar stimulates plant growth but not fruit yield of processing tomato in a fertile soil. Agriculture, Ecosystems and Environment, 2015, 207, 163-170.	2.5	156
223	GHG impacts of biochar: Predictability for the same biochar. Agriculture, Ecosystems and Environment, 2015, 207, 183-191.	2.5	48
224	Effect of dried olive pomace – derived biochar on the mobility of cadmium and nickel in soil. Journal of Environmental Chemical Engineering, 2015, 3, 1163-1176.	3.3	24
225	Biochar alters nitrogen transformations but has minimal effects on nitrous oxide emissions in an organically managed lettuce mesocosm. Biology and Fertility of Soils, 2015, 51, 573-582.	2.3	84
226	Effects of Biochar on Yield, Nutrient Recovery, and Soil Properties in a Canola (Brassica napus) Tj ETQq0 0 0 rgBT / Bioenergy Research, 2015, 8, 1183-1196.	Overlock	10 Tf 50 427 34
227	Soil chemical properties and organic matter composition of a subtropical Cambisol after charcoal	15	9
	The residues incorporation. Journal of Soils and Sediments, 2015, 15, 805-815.	1.0	
228	Switchgrass Biochar Effects on Plant Biomass and Microbial Dynamics in Two Soils from Different Regions. Pedosphere, 2015, 25, 329-342.	2.1	40
228 229	Soil microbial responses over 2 years following biochar addition to a north temperate forest. Biology and Fertility of Soils, 2015, 51, 649-659.	2.1 2.3	40 64
228 229 230	The residues incorporation. Journal of Soils and Sediments, 2015, 15, 805-815. Switchgrass Biochar Effects on Plant Biomass and Microbial Dynamics in Two Soils from Different Regions. Pedosphere, 2015, 25, 329-342. Soil microbial responses over 2 years following biochar addition to a north temperate forest. Biology and Fertility of Soils, 2015, 51, 649-659. The chemical composition of native organic matter influences the response of bacterial community to input of biochar and fresh plant material. Plant and Soil, 2015, 395, 87-104.	2.1 2.3 1.8	40 64 17
228 229 230 231	The residues incorporation. Journal of Solis and Sediments, 2015, 15, 805-815. Switchgrass Biochar Effects on Plant Biomass and Microbial Dynamics in Two Soils from Different Regions. Pedosphere, 2015, 25, 329-342. Soil microbial responses over 2 years following biochar addition to a north temperate forest. Biology and Fertility of Soils, 2015, 51, 649-659. The chemical composition of native organic matter influences the response of bacterial community to input of biochar and fresh plant material. Plant and Soil, 2015, 395, 87-104. Studying the impact of living roots on the decomposition of soil organic matter in two different forestry-drained peatlands. Plant and Soil, 2015, 396, 59-72.	2.1 2.3 1.8 1.8	40 64 17 17
228 229 230 231 232	Ime residues incorporation. Journal of Solis and Sediments, 2015, 15, 805-815. Switchgrass Biochar Effects on Plant Biomass and Microbial Dynamics in Two Soils from Different Regions. Pedosphere, 2015, 25, 329-342. Soil microbial responses over 2 years following biochar addition to a north temperate forest. Biology and Fertility of Soils, 2015, 51, 649-659. The chemical composition of native organic matter influences the response of bacterial community to input of biochar and fresh plant material. Plant and Soil, 2015, 395, 87-104. Studying the impact of living roots on the decomposition of soil organic matter in two different forestry-drained peatlands. Plant and Soil, 2015, 396, 59-72. KMnO4 determination of active carbon for laboratory routines: three long-term field experiments in Austria. Soil Research, 2015, 53, 190.	 2.1 2.3 1.8 1.8 0.6 	40 64 17 17 20
228 229 230 231 232 232	Switchgrass Biochar Effects on Plant Biomass and Microbial Dynamics in Two Soils from Different Regions. Pedosphere, 2015, 25, 329-342. Soil microbial responses over 2 years following biochar addition to a north temperate forest. Biology and Fertility of Soils, 2015, 51, 649-659. The chemical composition of native organic matter influences the response of bacterial community to input of biochar and fresh plant material. Plant and Soil, 2015, 395, 87-104. Studying the impact of living roots on the decomposition of soil organic matter in two different forestry-drained peatlands. Plant and Soil, 2015, 396, 59-72. KMnO4 determination of active carbon for laboratory routines: three long-term field experiments in Austria. Soil Research, 2015, 53, 190. Biochar for Sustainable Soil Health: A Review of Prospects and Concerns. Pedosphere, 2015, 25, 639-653.	 2.1 2.3 1.8 1.8 0.6 2.1 	 40 64 17 17 20 107
2228 2229 2330 2331 2332 2333	Switchgrass Biochar Effects on Plant Biomass and Microbial Dynamics in Two Soils from Different Regions. Pedosphere, 2015, 25, 329-342. Soil microbial responses over 2 years following biochar addition to a north temperate forest. Biology and Fertility of Soils, 2015, 51, 649-659. The chemical composition of native organic matter influences the response of bacterial community to input of biochar and fresh plant material. Plant and Soil, 2015, 395, 87-104. Studying the impact of living roots on the decomposition of soil organic matter in two different forestry-drained peatlands. Plant and Soil, 2015, 396, 59-72. KMnO4 determination of active carbon for laboratory routines: three long-term field experiments in Austria. Soil Research, 2015, 53, 190. Biochar for Sustainable Soil Health: A Review of Prospects and Concerns. Pedosphere, 2015, 25, 639-653. The stability of low- and high-ash biochars in acidic soils of contrasting mineralogy. Soil Biology and Biochemistry, 2015, 89, 217-225.	 2.1 2.3 1.8 1.8 0.6 2.1 4.2 	 40 64 17 17 20 107 23

#	Article	IF	CITATIONS
236	Environmental concern on biochar: capture, then what?. Environmental Earth Sciences, 2015, 74, 7861-7863.	1.3	7
237	Response of biochar induced carbon mineralization priming effects to additional nitrogen in a sandy loam soil. Applied Soil Ecology, 2015, 96, 165-171.	2.1	19
238	Fate of Soil Organic Carbon and Polycyclic Aromatic Hydrocarbons in a Vineyard Soil Treated with Biochar. Environmental Science & Technology, 2015, 49, 11037-11044.	4.6	46
239	Removal of aqueous ammonium by biochars derived from agricultural residuals at different pyrolysis temperatures. Chemical Speciation and Bioavailability, 2015, 27, 92-97.	2.0	73
240	Experimental evidence for sequestering C with biochar by avoidance of <scp>CO</scp> ₂ emissions from original feedstock and protection of native soil organic matter. GCB Bioenergy, 2015, 7, 512-526.	2.5	71
241	The impact of biochars on sorption and biodegradation of polycyclic aromatic hydrocarbons in soils—a review. Environmental Science and Pollution Research, 2015, 22, 3314-3341.	2.7	102
242	Rhizosphere priming can promote mobilisation of N-rich compounds from soil organic matter. Soil Biology and Biochemistry, 2015, 81, 236-243.	4.2	125
243	Combined effects of nitrogen fertilization and biochar on the net global warming potential, greenhouse gas intensity and net ecosystem economic budget in intensive vegetable agriculture in southeastern China. Atmospheric Environment, 2015, 100, 10-19.	1.9	147
244	Biochar but not humic acid product amendment affected maize yields via improving plant-soil moisture relations. Plant and Soil, 2015, 395, 141-157.	1.8	136
245	Carbon mineralization following additions of fresh and aged biochar to an infertile soil. Catena, 2015, 125, 183-189.	2.2	46
246	Removal of arsenic by magnetic biochar prepared from pinewood and natural hematite. Bioresource Technology, 2015, 175, 391-395.	4.8	535
247	Effect of temperature on biochar priming effects and its stability in soils. Soil Biology and Biochemistry, 2015, 80, 136-145.	4.2	161
248	The way forward in biochar research: targeting tradeâ€offs between the potential wins. GCB Bioenergy, 2015, 7, 1-13.	2.5	228
249	Soil and greenhouse gas responses to biochar additions in a temperate hardwood forest. GCB Bioenergy, 2015, 7, 1062-1074.	2.5	73
250	Biochar amendment to soils with contrasting organic matter level: effects on N mineralization and biological soil properties. GCB Bioenergy, 2015, 7, 135-144.	2.5	156
251	Batch and column sorption of arsenic onto iron-impregnated biochar synthesized through hydrolysis. Water Research, 2015, 68, 206-216.	5.3	448
252	<i>Pleurotus</i> Spent Mushroom Compost as Green Supplementary Nutrient in Tissue Culture. MATEC Web of Conferences, 2016, 47, 05010.	0.1	1
253	Biochar amendment of grassland soil may promote woody encroachment by Eastern Red Cedar. Journal of Soil Science and Plant Nutrition, 2016, , 0-0.	1.7	0

#	Article	IF	Citations
254	The effects of worms, clay and biochar on CO ₂ emissions during production and soil application of co-composts. Soil, 2016, 2, 673-683.	2.2	20
256	Carbon Abatement and Emissions Associated with the Gasification of Walnut Shells for Bioenergy and Biochar Production. PLoS ONE, 2016, 11, e0150837.	1.1	18
257	Opportunities and Uses of Biochar on Forest Sites in North America. , 2016, , 315-335.		18
258	A model for mechanistic and system assessments of biochar effects on soils and crops and tradeâ€offs. GCB Bioenergy, 2016, 8, 1028-1045.	2.5	45
259	Crop yield and SOC responses to biochar application were dependent on soil texture and crop type in southern Quebec, Canada. Journal of Plant Nutrition and Soil Science, 2016, 179, 399-408.	1.1	35
260	Soil carbon sequestration and biochar as negative emission technologies. Global Change Biology, 2016, 22, 1315-1324.	4.2	577
261	Influence of pig manure and its biochar on soil CO2 emissions and soil enzymes. Ecological Engineering, 2016, 95, 19-24.	1.6	102
262	Biochar Reduced Nitrous Oxide and Carbon Dioxide Emissions from Soil with Different Water and Temperature Cycles. Agronomy Journal, 2016, 108, 2214-2221.	0.9	21
263	BIOCHARS IN SOILS: TOWARDS THE REQUIRED LEVEL OF SCIENTIFIC UNDERSTANDING. Journal of Environmental Engineering and Landscape Management, 2016, 25, 192-207.	0.4	48
264	Biochar Effects on Ecosystems. , 2016, , 55-77.		2
265	Examining Biochar Impacts on Soil Abiotic and Biotic Processes and Exploring the Potential for Pyrosequencing Analysis. , 2016, , 133-162.		4
266	Biochar in European Soils and Agriculture. , 0, , .		38
267	Biomass or biochar – which is better at improving soil hydraulic properties?. Acta Horticulturae, 2016, , 235-242.	0.1	5
268	Climate-smart soils. Nature, 2016, 532, 49-57.	13.7	1,320
269	Towards a global assessment of pyrogenic carbon from vegetation fires. Global Change Biology, 2016, 22, 76-91.	4.2	256
270	Longâ€ŧerm effect of biochar on the stabilization of recent carbon: soils with historical inputs of charcoal. GCB Bioenergy, 2016, 8, 371-381.	2.5	71
271	Biochar persistence, priming and microbial responses to pyrolysis temperature series. Biology and Fertility of Soils, 2016, 52, 749-761.	2.3	64
272	Application of woody biochar and woody mulch to mitigate nitrous oxide emissions from a poultry litter-amended soil in the subtropics. Agriculture, Ecosystems and Environment, 2016, 228, 1-8.	2.5	13

#	Article	IF	CITATIONS
273	Effects of biochar application on fluxes of three biogenic greenhouse gases: a metaâ€analysis. Ecosystem Health and Sustainability, 2016, 2, .	1.5	91
274	Microbial utilization of rice straw and its derived biochar in a paddy soil. Science of the Total Environment, 2016, 559, 15-23.	3.9	76
275	Can rice and wheat biochar amendment protect the carbon loss from tropical soils—An experimental study. Environmental Progress and Sustainable Energy, 2016, 35, 183-188.	1.3	6
276	Nutrient supplementation of pinewood biochar for use as a bacterial inoculum carrier. Biology and Fertility of Soils, 2016, 52, 515-522.	2.3	74
277	Microbial community mediated response of organic carbon mineralization to labile carbon and nitrogen addition in topsoil and subsoil. Biogeochemistry, 2016, 128, 125-139.	1.7	94
278	Biochar pricing hampers biochar farming. Clean Technologies and Environmental Policy, 2016, 18, 1225-1231.	2.1	74
279	Biochar as a novel niche for culturing microbial communities in composting. Waste Management, 2016, 54, 93-100.	3.7	117
280	Is current biochar research addressing global soil constraints for sustainable agriculture?. Agriculture, Ecosystems and Environment, 2016, 226, 25-32.	2.5	96
281	Response of different soil organic matter pools to biochar and organic fertilizers. Agriculture, Ecosystems and Environment, 2016, 225, 150-159.	2.5	93
282	Size distribution of carbon layer planes in biochar from different plant type of feedstock with different heating temperatures. Chemosphere, 2016, 163, 252-258.	4.2	4
283	Quantitative relationships between the adsorptivity of carbonaceous materials in soil for Pb(II) and soil organic matter content. Science of the Total Environment, 2016, 572, 369-378.	3.9	8
284	Phosphorus Removal from Aqueous Solution by Pre- or Post-Modified Biochars Derived from Agricultural Residues. Water, Air, and Soil Pollution, 2016, 227, 1.	1.1	30
285	Designing advanced biochar products for maximizing greenhouse gas mitigation potential. Critical Reviews in Environmental Science and Technology, 2016, 46, 1367-1401.	6.6	86
286	Novel molecular proxies for inferring pyrogenic black carbon oxidation state using thermally assisted hydrolysis and methylation (THM-GC–MS) with 13C-labeled tetramethylammonium hydroxide (TMAH). Journal of Analytical and Applied Pyrolysis, 2016, 121, 146-154.	2.6	9
287	Charcoal Disrupts Soil Microbial Communication through a Combination of Signal Sorption and Hydrolysis. ACS Omega, 2016, 1, 226-233.	1.6	54
288	Reduced carbon sequestration potential of biochar in acidic soil. Science of the Total Environment, 2016, 572, 129-137.	3.9	92
289	Carbon budget by priming in a biochar-amended soil. European Journal of Soil Biology, 2016, 76, 26-34.	1.4	10
290	Biochar and manure effluent effects on soil biochemical properties under corn production. Applied Soil Ecology, 2016, 107, 360-367.	2.1	65

#	ARTICLE	IF	CITATIONS
291	Long-term effect of biochar application on yield-scaled greenhouse gas emissions in a rice paddy cropping system: A four-year case study in south China. Science of the Total Environment, 2016, 569-570, 1390-1401.	3.9	127
292	Impacts of straw biochar additions on agricultural soil quality and greenhouse gas fluxes in karst area, Southwest China. Soil Science and Plant Nutrition, 2016, 62, 526-533.	0.8	24
293	Soil biochar amendment as a climate change mitigation tool: Key parameters and mechanisms involved. Journal of Environmental Management, 2016, 181, 484-497.	3.8	191
294	Biochemical cycling of nitrogen and phosphorus in biochar-amended soils. Soil Biology and Biochemistry, 2016, 103, 1-15.	4.2	362
295	Effects of biochar on carbon mineralization of coastal wetland soils in the Yellow River Delta, China. Ecological Engineering, 2016, 94, 329-336.	1.6	53
296	Volatile Gas Production by Methyl Halide Transferase: An In Situ Reporter Of Microbial Gene Expression In Soil. Environmental Science & Technology, 2016, 50, 8750-8759.	4.6	24
297	Alteration of extracellular enzyme activity and microbial abundance by biochar addition: Implication for carbon sequestration in subtropical mangrove sediment. Journal of Environmental Management, 2016, 182, 29-36.	3.8	53
298	Biochar properties: Transport, fate, and impact. Critical Reviews in Environmental Science and Technology, 2016, 46, 1183-1296.	6.6	126
299	Change in active microbial community structure, abundance and carbon cycling in an acid rice paddy soil with the addition of biochar. European Journal of Soil Science, 2016, 67, 857-867.	1.8	81
300	IsoCaRB: A novel bioreactor system to characterize the lability and natural carbon isotopic (¹⁴ C, ¹³ C) signatures of microbially respired organic matter. Limnology and Oceanography: Methods, 2016, 14, 668-681.	1.0	12
301	Shortâ€ŧerm releases of <scp>CO</scp> ₂ from newly mixed biochar and calcareous soil. Soil Use and Management, 2016, 32, 543-545.	2.6	3
302	Optimal bioenergy power generation for climate change mitigation with or without carbon sequestration. Nature Communications, 2016, 7, 13160.	5.8	99
303	Biochar amendment and phosphorus fertilization altered forest soil microbial community and native soil organic matter molecular composition. Biogeochemistry, 2016, 130, 227-245.	1.7	36
304	Biochar affects carbon composition and stability in soil: a combined spectroscopy-microscopy study. Scientific Reports, 2016, 6, 25127.	1.6	80
305	Quantifying Charcoal Degradation and Negative Priming of Soil Organic Matter with a ¹⁴ C-Dead Tracer. Radiocarbon, 2016, 58, 905-919.	0.8	9
306	Effects of compost, biochar and manure on carbon mineralization of biogas residues applied to soil. European Journal of Soil Science, 2016, 67, 217-225.	1.8	9
307	Historical soil amendment with charcoal increases sequestration of non harcoal carbon: a comparison among methods of black carbon quantification. European Journal of Soil Science, 2016, 67, 324-331.	1.8	32
308	Interactions between biochar and soil organic carbon decomposition: Effects of nitrogen and low molecular weight carbon compound addition. Soil Biology and Biochemistry, 2016, 100, 92-101.	4.2	38

#	Article	IF	CITATIONS
309	Temperature and moisture responses to carbon mineralization in the biochar-amended saline soil. Science of the Total Environment, 2016, 569-570, 390-394.	3.9	46
310	Carbon-Based Adsorbents for Postcombustion CO ₂ Capture: A Critical Review. Environmental Science & Technology, 2016, 50, 7276-7289.	4.6	430
311	Biochar to improve soil fertility. A review. Agronomy for Sustainable Development, 2016, 36, 1.	2.2	633
312	Properties of a clay soil from 1.5 to 3.5years after biochar application and the impact on rice yield. Geoderma, 2016, 276, 7-18.	2.3	43
313	Investigation of greenhouse gas emissions from the soil amended with rice straw biochar. KSCE Journal of Civil Engineering, 2016, 20, 2197-2207.	0.9	26
314	Microbial respiration of biochar- and digestate-based mixtures. Biology and Fertility of Soils, 2016, 52, 151-164.	2.3	39
315	Restoration of carbon and microbial activity in salt-induced soil by application of peanut shell biochar during short-term incubation study. Chemosphere, 2016, 148, 86-98.	4.2	129
316	Engineering the Rhizosphere. Trends in Plant Science, 2016, 21, 266-278.	4.3	203
317	Partitioning of carbon sources among functional pools to investigate short-term priming effects of biochar in soil: A 13C study. Science of the Total Environment, 2016, 547, 30-38.	3.9	28
318	Organic geochemical approaches to identifying formation processes for middens and charcoal-rich features. Organic Geochemistry, 2016, 94, 1-11.	0.9	4
319	Effects of selected process conditions on the stability of hydrochar in low-carbon sandy soil. Geoderma, 2016, 267, 137-145.	2.3	31
320	Effects of biochar and compost amendments on soil physico-chemical properties and the total community within a temperate agricultural soil. Applied Soil Ecology, 2016, 98, 243-253.	2.1	199
321	The impact of charcoal and soil mixtures on decomposition and soil microbial communities in boreal forest. Applied Soil Ecology, 2016, 99, 40-50.	2.1	22
322	Interactive effects of straw-derived biochar and N fertilization on soil C storage and rice productivity in rice paddies of Northeast China. Science of the Total Environment, 2016, 544, 203-210.	3.9	89
323	Spatiotemporal dynamics of phosphorus release, oxygen consumption and greenhouse gas emissions after localised soil amendment with organic fertilisers. Science of the Total Environment, 2016, 554-555, 119-129.	3.9	27
324	Soil N transformation and microbial community structure as affected by adding biochar to a paddy soil of subtropical China. Journal of Integrative Agriculture, 2016, 15, 209-219.	1.7	54
325	The priming potential of environmentally weathered pyrogenic carbon during landâ€use transition to biomass crop production. GCB Bioenergy, 2016, 8, 805-817.	2.5	4
326	Activated Carbon and Biochar Reduce Mercury Methylation Potentials in Aquatic Sediments. Bulletin of Environmental Contamination and Toxicology, 2016, 96, 536-539.	1.3	36

#	Article	IF	CITATIONS
327	Modification of chemical and hydrophysical properties of two texturally differentiated soils due to varying magnitudes of added biochar. Soil and Tillage Research, 2016, 164, 34-44.	2.6	96
328	Reclamation of intensively managed soils in temperate regions by addition of wood bottom ash containing charcoal: SOM composition and microbial functional diversity. Applied Soil Ecology, 2016, 100, 195-206.	2.1	19
329	Chemically and biologically-mediated fertilizing value of manure-derived biochar. Science of the Total Environment, 2016, 550, 924-933.	3.9	79
330	Soil properties, greenhouse gas emissions and crop yield under compost, biochar and co-composted biochar in two tropical agronomic systems. Science of the Total Environment, 2016, 550, 459-470.	3.9	146
331	Long-term effects of biochar amount on the content and composition of organic matter in soil aggregates under field conditions. Journal of Soils and Sediments, 2016, 16, 1481-1497.	1.5	99
332	Biochar has no effect on soil respiration across Chinese agricultural soils. Science of the Total Environment, 2016, 554-555, 259-265.	3.9	67
333	Long-Term Effects of Multiwalled Carbon Nanotubes and Graphene on Microbial Communities in Dry Soil. Environmental Science & Technology, 2016, 50, 3965-3974.	4.6	91
334	Weathering of pyrogenic organic matter induces fungal oxidative enzyme response in single culture inoculation experiments. Organic Geochemistry, 2016, 92, 32-41.	0.9	26
335	Effects of biochar on soil microbial community composition and activity in drip-irrigated desert soil. European Journal of Soil Biology, 2016, 72, 27-34.	1.4	89
336	Rice husk biochar and crop residue amendment in subtropical cropping soils: effect on biomass production, nitrogen use efficiency and greenhouse gas emissions. Biology and Fertility of Soils, 2016, 52, 261-270.	2.3	55
337	Effect of biochar on the soil nutrients about different grasslands in the Loess Plateau. Catena, 2016, 137, 554-562.	2.2	64
338	Feasibility of biochar application on a landfill final cover—a review on balancing ecology and shallow slope stability. Environmental Science and Pollution Research, 2016, 23, 7111-7125.	2.7	58
339	Greenhouse gas emissions and soil properties following amendment with manure-derived biochars: Influence of pyrolysis temperature and feedstock type. Journal of Environmental Management, 2016, 166, 73-83.	3.8	117
340	Effect of pyrolysis temperatures on stability and priming effects of C3 and C4 biochars applied to two different soils. Soil and Tillage Research, 2016, 155, 107-115.	2.6	56
341	Carbon dioxide capture using various metal oxyhydroxide–biochar composites. Chemical Engineering Journal, 2016, 283, 826-832.	6.6	105
342	Contrasting effects of aged and fresh biochars on glucose-induced priming and microbial activities in paddy soil. Journal of Soils and Sediments, 2016, 16, 191-203.	1.5	35
343	Ameliorating soil chemical properties of a hard setting subsoil layer in Coastal Plain USA with different designer biochars. Chemosphere, 2016, 142, 168-175.	4.2	20
344	Distribution and preservation of black carbon in the East China Sea sediments: Perspectives on carbon cycling at continental margins. Deep-Sea Research Part II: Topical Studies in Oceanography, 2016, 124, 43-52.	0.6	28

#	Article	IF	CITATIONS
345	Highly stable rice-straw-derived charcoal in 3700-year-old ancient paddy soil: evidence for an effective pathway toward carbon sequestration. Environmental Science and Pollution Research, 2016, 23, 1007-1014.	2.7	5
346	Response of soil carbon dioxide fluxes, soil organic carbon and microbial biomass carbon to biochar amendment: a metaâ€analysis. GCB Bioenergy, 2016, 8, 392-406.	2.5	292
347	Biochar stability in soil: metaâ€analysis of decomposition and priming effects. GCB Bioenergy, 2016, 8, 512-523.	2.5	731
348	Biochar for crop production: potential benefits and risks. Journal of Soils and Sediments, 2017, 17, 685-716.	1.5	331
349	Effects of biochar and polyacrylamide on decomposition of soil organic matter and 14C-labeled alfalfa residues. Journal of Soils and Sediments, 2017, 17, 611-620.	1.5	14
350	Taxon-specific responses of soil microbial communities to different soil priming effects induced by addition of plant residues and their biochars. Journal of Soils and Sediments, 2017, 17, 674-684.	1.5	52
351	Effect of organic fraction of municipal solid waste (OFMSW)-based biochar on organic carbon mineralization in a dry land soil. Journal of Material Cycles and Waste Management, 2017, 19, 473-482.	1.6	24
352	Sugarcane bagasse biochars impact respiration and greenhouse gas emissions from a latosol. Journal of Soils and Sediments, 2017, 17, 632-640.	1.5	45
353	Polycyclic aromatic hydrocarbons and volatile organic compounds in biochar and biocharâ€amended soil: a review. GCB Bioenergy, 2017, 9, 990-1004.	2.5	117
354	Effects of biochar application on soil greenhouse gas fluxes: a metaâ€analysis. GCB Bioenergy, 2017, 9, 743-755.	2.5	264
355	Biochar and manure alter few aspects of prairie development: A field test. Agriculture, Ecosystems and Environment, 2017, 236, 78-87.	2.5	33
356	Slow pyrolysis as a measure for rapidly treating cow manure and the biochar characteristics. Journal of Analytical and Applied Pyrolysis, 2017, 124, 355-361.	2.6	47
357	Root traits and nitrogen fertilizer recovery efficiency of corn grown in biochar-amended soil under greenhouse conditions. Plant and Soil, 2017, 415, 465-477.	1.8	66
358	Photooxidation of pyrogenic organic matter reduces its reactive, labile C pool and the apparent soil oxidative microbial enzyme response. Geoderma, 2017, 293, 10-18.	2.3	11
359	Facile hetero-assembly of superparamagnetic Fe3O4/BiVO4 stacked on biochar for solar photo-degradation of methyl paraben and pesticide removal from soil. Journal of Photochemistry and Photobiology A: Chemistry, 2017, 337, 118-131.	2.0	158
360	Initial biochar effects on plant productivity derive from N fertilization. Plant and Soil, 2017, 415, 435-448.	1.8	22
361	Impact of six lignocellulosic biochars on C and N dynamics of two contrasting soils. GCB Bioenergy, 2017, 9, 1279-1291.	2.5	28
362	Changes in microbial biomass and the metabolic quotient with biochar addition to agricultural soils: A Meta-analysis. Agriculture, Ecosystems and Environment, 2017, 239, 80-89.	2.5	143

#	Article	IF	Citations
363	Contrasting effects of straw and straw–derived biochar application on net global warming potential in the Loess Plateau of China. Field Crops Research, 2017, 205, 45-54.	2.3	100
364	Degradation of Miscanthus × giganteus biochar, hydrochar and feedstock under the influence of disturbance events. Applied Soil Ecology, 2017, 113, 135-150.	2.1	8
365	Advances of Basic Science for Second Generation Bioethanol from Sugarcane. , 2017, , .		7
366	Aged biochar affects gross nitrogen mineralization and recovery: a ¹⁵ N study in two contrasting soils. GCB Bioenergy, 2017, 9, 1196-1206.	2.5	76
367	Biochar provides a safe and value-added solution for hyperaccumulating plant disposal: A case study of Phytolacca acinosa Roxb. (Phytolaccaceae). Chemosphere, 2017, 178, 59-64.	4.2	60
368	Soil priming effects following substrates addition to biochar-treated soils after 431Âdays of pre-incubation. Biology and Fertility of Soils, 2017, 53, 315-326.	2.3	36
369	Application of biochar and nitrogen influences fluxes of CO2, CH4 and N2O in a forest soil. Journal of Environmental Management, 2017, 192, 203-214.	3.8	66
370	Removal of nitrate from constructed wetland in winter in high-latitude areas with modified hydrophyte biochars. Korean Journal of Chemical Engineering, 2017, 34, 717-722.	1.2	8
371	Responses of microbial performance and community to corn biochar in calcareous sandy and clayey soils. Applied Soil Ecology, 2017, 114, 16-27.	2.1	72
372	Corncob-derived biochar decelerates mineralization of native and added organic matter (AOM) in organic matter depleted alkaline soil. Geoderma, 2017, 294, 19-28.	2.3	37
373	Tracing Aquatic Priming Effect During Microbial Decomposition of Terrestrial Dissolved Organic Carbon in Chemostat Experiments. Microbial Ecology, 2017, 74, 534-549.	1.4	18
374	Bacterial Community Composition Associated with Pyrogenic Organic Matter (Biochar) Varies with Pyrolysis Temperature and Colonization Environment. MSphere, 2017, 2, .	1.3	46
375	Impact of Biochar Organic and Inorganic Carbon on Soil CO 2 and N 2 O Emissions. Journal of Environmental Quality, 2017, 46, 505-513.	1.0	28
376	Seasonal dynamics of soil microbial activity after biochar addition in a dryland maize field in North-Western China. Ecological Engineering, 2017, 104, 141-149.	1.6	28
377	Effects and mechanisms of biochar-microbe interactions in soil improvement and pollution remediation: A review. Environmental Pollution, 2017, 227, 98-115.	3.7	634
378	Organic matter dynamics, soil aggregation and microbial biomass and activity in Technosols created with metalliferous mine residues, biochar and marble waste. Geoderma, 2017, 301, 19-29.	2.3	54
379	Influence of surface chemistry of carbon materials on their interactions with inorganic nitrogen contaminants in soil and water. Chemosphere, 2017, 184, 532-547.	4.2	42
380	Properties of a sandy clay loam Haplic Ferralsol and soybean grain yield in a five-year field trial as affected by biochar amendment. Geoderma, 2017, 305, 100-112.	2.3	43

#	Article	IF	Citations
381	Pyrogenic carbon and its role in contaminant immobilization in soils. Critical Reviews in Environmental Science and Technology, 2017, 47, 795-876.	6.6	72
382	Emissions intensity and carbon stocks of a tropical Ultisol after amendment with Tithonia green manure, urea and biochar. Field Crops Research, 2017, 209, 179-188.	2.3	24
383	Relevance of taking into account the fine scale soil variability to assess the effects of agricultural inputs on soil characteristics and soil microbial communities: A case study of biochar application in a rubber plantation in North East Thailand. Geoderma, 2017, 305, 21-29.	2.3	6
384	Critical comparison of the impact of biochar and wood ash on soil organic matter cycling and grassland productivity. Soil Biology and Biochemistry, 2017, 110, 134-142.	4.2	42
385	Fast growing research on negative emissions. Environmental Research Letters, 2017, 12, 035007.	2.2	114
386	Environmental-friendly montmorillonite-biochar composites: Facile production and tunable adsorption-release of ammonium and phosphate. Journal of Cleaner Production, 2017, 156, 648-659.	4.6	196
387	Predicting potential release of dissolved organic matter from biochars derived from agricultural residues using fluorescence and ultraviolet absorbance. Journal of Hazardous Materials, 2017, 334, 86-92.	6.5	117
388	Spatial variability of soil N ₂ O and CO ₂ fluxes in different topographic positions in a tropical montane forest in Kenya. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 514-527.	1.3	46
389	Biological response of a sandy soil treated with biochar derived from a halophyte (Salicornia) Tj ETQq0 0 0 rgBT /	Oyerlock	10 ₃
390	Environmental Sustainability Aspects of Second Generation Ethanol Production from Sugarcane. , 2017, , 177-195.		3
391	Multi-year and multi-location soil quality and crop biomass yield responses to hardwood fast pyrolysis biochar. Geoderma, 2017, 289, 46-53.	2.3	54
392	Contrasting effects of biochar on N2O emission and N uptake at different N fertilizer levels on a temperate sandy loam. Science of the Total Environment, 2017, 578, 557-565.	3.9	42
393	Biochar reduced nitrate leaching and improved soil moisture content without yield improvements in a four-year field study. Agriculture, Ecosystems and Environment, 2017, 237, 80-94.	2.5	231

394	Influence of pruning waste compost maturity and biochar on carbon dynamics in acid soil: Incubation study. European Journal of Soil Biology, 2017, 78, 66-74.	1.4	44
395	Priming effects in biochar enriched soils using a three-source-partitioning approach: 14C labelling and 13C natural abundance. Soil Biology and Biochemistry, 2017, 106, 28-35.	4.2	106
396	The roles of organic amendments and microbial community in the improvement of soil structure of a Vertisol. Applied Soil Ecology, 2017, 111, 84-93.	2.1	62
397	Impact of compost and manure on the ripening of dredged sediments. Journal of Soils and Sediments, 2017, 17, 567-577.	1.5	8
398	Biochar increased soil respiration in temperate forests but had no effects in subtropical forests. Forest Ecology and Management, 2017, 405, 339-349.	1.4	76

#	Article	IF	Citations
399	Increasing Rates of Biochar Application to Soil Induce Stronger Negative Priming Effect on Soil Organic Carbon Decomposition. Agricultural Research, 2017, 6, 389-398.	0.9	21
400	A RECONNAISSANCE-SCALE GIS-BASED MULTICRITERIA DECISION ANALYSIS TO SUPPORT SUSTAINABLE BIOCHAR USE: POLAND AS A CASE STUDY. Journal of Environmental Engineering and Landscape Management, 2017, 25, 208-222.	0.4	21
401	DNA extraction efficiency from soil as affected by pyrolysis temperature and extractable organic carbon of high-ash biochar. Soil Biology and Biochemistry, 2017, 115, 129-136.	4.2	24
402	Temperature sensitivity and priming of organic matter with different stabilities in a Vertisol with aged biochar. Soil Biology and Biochemistry, 2017, 115, 346-356.	4.2	44
403	Short-term effects of biochar and salinity on soil greenhouse gas emissions from a semi-arid Australian soil after re-wetting. Geoderma, 2017, 307, 267-276.	2.3	74
404	Enhancement of maize plant growth with inoculation of phosphate-solubilizing bacteria and biochar amendment in soil. Soil Science and Plant Nutrition, 2017, 63, 460-469.	0.8	65
405	Nitrogen nutrition in cotton and control strategies for greenhouse gas emissions: a review. Environmental Science and Pollution Research, 2017, 24, 23471-23487.	2.7	88
406	Biochar decreased the temperature sensitivity of soil carbon decomposition in a paddy field. Agriculture, Ecosystems and Environment, 2017, 249, 156-164.	2.5	54
407	A Dialogue on Perspectives of Biochar Applications and Its Environmental Risks. Water, Air, and Soil Pollution, 2017, 228, 1.	1.1	30
408	Potential of miscanthus biochar to improve sandy soil health, in situ nickel immobilization in soil and nutritional quality of spinach. Chemosphere, 2017, 185, 1144-1156.	4.2	55
409	Interactive effects of biochar addition and elevated carbon dioxide concentration on soil carbon and nitrogen pools in mine spoil. Journal of Soils and Sediments, 2017, 17, 2400-2409.	1.5	12
410	Effect of Biochar, Green Compost, and Vermicompost on the Quality of a Calcareous Soil. Soil Science, 2017, 182, 248-255.	0.9	11
411	Biochars mitigate greenhouse gas emissions and bioaccumulation of potentially toxic elements and arsenic speciation in Phaseolus vulgaris L. Environmental Science and Pollution Research, 2017, 24, 19524-19534.	2.7	21
412	Effects of apple branch biochar on soil C mineralization and nutrient cycling under two levels of N. Science of the Total Environment, 2017, 607-608, 109-119.	3.9	63
413	Profiles of Volatile Organic Compounds in Biochar: Insights into Process Conditions and Quality Assessment. ACS Sustainable Chemistry and Engineering, 2017, 5, 510-517.	3.2	57
414	A multicomponent approach to using waste-derived biochar in biofiltration: A case study based on dissimilar types of waste. International Biodeterioration and Biodegradation, 2017, 119, 565-576.	1.9	31
415	Effects of biochar on soil available inorganic nitrogen: A review and meta-analysis. Geoderma, 2017, 288, 79-96.	2.3	433
416	Interactive effects of biochar and polyacrylamide on decomposition of maize rhizodeposits: implications from 14C labeling and microbial metabolic quotient. Journal of Soils and Sediments, 2017, 17. 621-631.	1.5	4

#	Article	IF	CITATIONS
417	Effects of biochar and maize straw on the short-term carbon and nitrogen dynamics in a cultivated silty loam in China. Environmental Science and Pollution Research, 2017, 24, 1019-1029.	2.7	48
418	Lower residue decomposition in historically charcoal-enriched soils is related to increased adsorption of organic matter. Soil Biology and Biochemistry, 2017, 104, 1-7.	4.2	22
419	Interactions between biochar and litter priming: A three-source 14C and δ13C partitioning study. Soil Biology and Biochemistry, 2017, 104, 49-58.	4.2	38
420	Effects of manganese oxide-modified biochar composites on arsenic speciation and accumulation in an indica rice (Oryza sativa L.) cultivar. Chemosphere, 2017, 168, 341-349.	4.2	136
421	Investigating the biochar effects on Câ€mineralization and sequestration of carbon in soil compared with conventional amendments using the stable isotope (<i>δ</i> ¹³ C) approach. GCB Bioenergy, 2017, 9, 1085-1099.	2.5	80
422	Response of microbial community structure and function to short-term biochar amendment in an intensively managed bamboo (Phyllostachys praecox) plantation soil: Effect of particle size and addition rate. Science of the Total Environment, 2017, 574, 24-33.	3.9	146
423	Effect of organic, inorganic and slow-release urea fertilisers on CH4 and N2O emissions from rice paddy fields. Paddy and Water Environment, 2017, 15, 317-330.	1.0	29
424	Waste-art-paper biochar as an effective sorbent for recovery of aqueous Pb(II) into value-added PbO nanoparticles. Chemical Engineering Journal, 2017, 308, 863-871.	6.6	62
425	Forest burning affects quality and quantity of soil organic matter. Science of the Total Environment, 2017, 575, 41-49.	3.9	38
426	Commercial Microbial Products: Exploiting Beneficial Plant-Microbe Interaction. , 2017, , 607-626.		5
427	Effects of Biochar Application on CO2 Emissions from a Cultivated Soil under Semiarid Climate Conditions in Northwest China. Sustainability, 2017, 9, 1482.	1.6	46
428	Trial by Fire: On the Terminology and Methods Used in Pyrogenic Organic Carbon Research. Frontiers in Earth Science, 2017, 5, .	0.8	33
429	Function of Wildfire-Deposited Pyrogenic Carbon in Terrestrial Ecosystems. Frontiers in Environmental Science, 2017, 5, .	1.5	36
430	Biochars change the sorption and degradation of thiacloprid in soil: Insights into chemical and biological mechanisms. Environmental Pollution, 2018, 236, 158-167.	3.7	128
431	Variable effects of biochar application to soils on nitrification-mediated N2O emissions. Science of the Total Environment, 2018, 626, 603-611.	3.9	30
432	Competitive adsorption of Pb(II), Cu(II), and Zn(II) ions onto hydroxyapatite-biochar nanocomposite in aqueous solutions. Journal of Solid State Chemistry, 2018, 261, 53-61.	1.4	150
433	Tree taxa and pyrolysis temperature interact to control pyrogenic organic matter induced native soil organic carbon priming. Soil Biology and Biochemistry, 2018, 119, 174-183.	4.2	7
434	Abundance of microbial CO ₂ -fixing genes during the late rice season in a long-term management paddy field amended with straw and straw-derived biochar. Canadian Journal of Soil Science, 2018, 98, 306-316.	0.5	19

ARTICLE IF CITATIONS Persistent effects of biochar on soil organic carbon mineralization and resistant carbon pool in 435 1.3 20 upland red soil, China. Environmental Earth Sciences, 2018, 77, 1. Dynamics of soil organic carbon mineralization and C fractions in paddy soil on application of rice husk biochar. Biomass and Bioenergy, 2018, 115, 1-9. The effects of short term, long term and reapplication of biochar on soil bacteria. Science of the 437 3.9 105 Total Environment, 2018, 636, 142-151. Microbial Activity and Decomposition of Soil Organic Matter in Roadside Soils Contaminated With Petroleum Hydrocarbons. Clean - Soil, Air, Water, 2018, 46, 1800132. Application of hydrochar and pyrochar to manure is not effective for mitigation of ammonia 439 2.3 22 emissions from cattle slurry and poultry manure. Biology and Fertility of Soils, 2018, 54, 451-465. Insight into Multiple and Multilevel Structures of Biochars and Their Potential Environmental Applications: A Critical Review. Environmental Science & Samp; Technology, 2018, 52, 5027-5047. 4.6 Positive effects of apple branch biochar on wheat yield only appear at a low application rate, 441 1.5 21 regardless of nitrogen and water conditions. Journal of Soils and Sediments, 2018, 18, 3235-3243. Comparison of the ecotoxicological effects of biochar and activated carbon on a marine clam 4.6 (Meretrix meretrix). Journal of Čleaner Production, 2018, 180, 252-262. Bioconcentration factor-based management of soil pesticide residues: Endosulfan uptake by carrot 443 3.9 61 and potato plants. Science of the Total Environment, 2018, 627, 514-522. Impact of addition of different rates of rice-residue biochar on C and N dynamics in texturally diverse 444 1.3 soils. Archives of Agronomy and Soil Science, 2018, 64, 1419-1431. The Effects of Biochar Properties on Fomesafen Adsorption-Desorption Capacity of Biochar-Amended 445 17 1.1 Soil. Water, Air, and Soil Pollution, 2018, 229, 1. Carbon and nitrogen mineralization and enzyme activities in soil aggregate-size classes: Effects of 446 4.2 biochar, oyster shells, and polymers. Chemosphere, 2018, 198, 40-48. Pine sawdust biochar reduces GHG emission by decreasing microbial and enzyme activities in forest 447 3.9 61 and grassland soils in a laboratory experiment. Science of the Total Environment, 2018, 625, 1247-1256. Effects of biochar on carbon and nitrogen fluxes in boreal forest soil. Plant and Soil, 2018, 425, 71-85. 448 1.8 46 A meta-analysis and critical evaluation of influencing factors on soil carbon priming following 449 70 1.5 biochar amendment. Journal of Soils and Sediments, 2018, 18, 1507-1517. Pine sawdust biomass and biochars at different pyrolysis temperatures change soil redox processes. Science of the Total Environment, 2018, 625, 147-154. Biochar and biochar with N fertilizer as a potential tool for improving soil sorption of nutrients. 451 1.533 Journal of Soils and Sediments, 2018, 18, 1432-1440. Biochar alters microbial community and carbon sequestration potential across different soil pH. Science of the Total Environment, 2018, 622-623, 1391-1399.

#	Article	IF	CITATIONS
453	Effect of six engineered biochars on GHG emissions from two agricultural soils: A short-term incubation study. Geoderma, 2018, 327, 73-84.	2.3	46
454	Co-application of biochar and cattle manure counteract positive priming of carbon mineralization in a sandy soil. Environmental Systems Research, 2018, 7, .	1.5	28
455	Choice of pyrolysis parameters for urban wastes affects soil enzymes and plant germination in a Mediterranean soil. Science of the Total Environment, 2018, 634, 1308-1314.	3.9	46
456	Biochar reduces soil heterotrophic respiration in a subtropical plantation through increasing soil organic carbon recalcitrancy and decreasing carbon-degrading microbial activity. Soil Biology and Biochemistry, 2018, 122, 173-185.	4.2	149
457	Influence of pruning waste biochar and oyster shell on N2O and CO2 emissions from Japanese pear orchard soil. Heliyon, 2018, 4, e00568.	1.4	12
458	Problems associated to kinetic fitting of incubation data. Soil Biology and Biochemistry, 2018, 120, 260-271.	4.2	11
459	Effect of different biochars amendment on soil biological indicators in a calcareous soil. Environmental Science and Pollution Research, 2018, 25, 14752-14761.	2.7	23
460	Bamboo biochar does not affect paddy soil N ₂ O emissions or source following slurry or mineral fertilizer amendment—a ¹⁵ N tracer study. Journal of Plant Nutrition and Soil Science, 2018, 181, 90-98.	1.1	22
461	Enhanced roles of biochar and organic fertilizer in microalgae for soil carbon sink. Biodegradation, 2018, 29, 313-321.	1.5	7
462	Fire-derived charcoal might promote fine root decomposition in boreal forests. Soil Biology and Biochemistry, 2018, 116, 1-3.	4.2	15
463	Hydrochars derived from sewage sludge: effects of pre-treatment with water on char properties, phytotoxicity and chemical structure. Archives of Agronomy and Soil Science, 2018, 64, 860-872.	1.3	18
464	Influence of biochar produced from different pyrolysis temperature on nutrient retention and leaching. Archives of Agronomy and Soil Science, 2018, 64, 850-859.	1.3	54
465	The influence of lignocellulose and hemicellulose biochar on photosynthesis and water use efficiency in seedlings from a Northeastern U.S. pine-oak ecosystem. Journal of Sustainable Forestry, 2018, 37, 25-37.	0.6	14
466	Impact of biochar properties on soil conditions and agricultural sustainability: A review. Land Degradation and Development, 2018, 29, 2124-2161.	1.8	184
467	Varying pyrolysis temperature impacts application effects of biochar on soil labile organic carbon and humic fractions. Applied Soil Ecology, 2018, 123, 484-493.	2.1	42
468	Minireview of potential applications of hydrochar derived from hydrothermal carbonization of biomass. Journal of Industrial and Engineering Chemistry, 2018, 57, 15-21.	2.9	405
469	Short-term greenhouse emission lowering effect of biochars from solid organic municipal wastes. International Journal of Environmental Science and Technology, 2018, 15, 1093-1102.	1.8	7
470	Responses of soil nutrients and microbial activities to additions of maize straw biochar and chemical fertilization in a calcareous soil. European Journal of Soil Biology, 2018, 84, 1-10.	1.4	92

#	Article	IF	CITATIONS
471	Response of surface albedo and soil carbon dioxide fluxes to biochar amendment in farmland. Journal of Soils and Sediments, 2018, 18, 1590-1601.	1.5	10
472	Quantification and characterization of chemically-and thermally-labile and recalcitrant biochar fractions. Chemosphere, 2018, 194, 247-255.	4.2	19
473	Labile organic carbon fractions and carbon pool management index in a 3-year field study with biochar amendment. Journal of Soils and Sediments, 2018, 18, 1569-1578.	1.5	49
474	Physical feasibility of biochar production and utilization at a farm-scale: A case-study in non-irrigated seed production. Biomass and Bioenergy, 2018, 108, 244-251.	2.9	12
475	Biochar amendment changes temperature sensitivity of soil respiration and composition of microbial communities 3Âyears after incorporation in an organic carbon-poor dry cropland soil. Biology and Fertility of Soils, 2018, 54, 175-188.	2.3	79
476	Biochar application constrained native soil organic carbon accumulation from wheat residue inputs in a long-term wheat-maize cropping system. Agriculture, Ecosystems and Environment, 2018, 252, 200-207.	2.5	49
477	Mineral additive enhanced carbon retention and stabilization in sewage sludge-derived biochar. Chemical Engineering Research and Design, 2018, 115, 70-78.	2.7	57
478	Sewage sludge biochars management—Ecotoxicity, mobility of heavy metals, and soil microbial biomass. Environmental Toxicology and Chemistry, 2018, 37, 1197-1207.	2.2	53
479	Pyrolysis temperature during biochar production alters its subsequent utilization by microorganisms in an acid arable soil. Land Degradation and Development, 2018, 29, 2183-2188.	1.8	53
480	Carbon sequestration and turnover in soil under the energy crop <i>Miscanthus</i> : repeated ¹³ C natural abundance approach and literature synthesis. GCB Bioenergy, 2018, 10, 262-271.	2.5	44
481	Influence of Poultry Litter and Poultry Litter Biochar on Soil Microbial Respiration and Nitrifying Bacteria Activity. Waste and Biomass Valorization, 2018, 9, 379-389.	1.8	34
482	Effects of rice husk and rice husk biochar on root rot disease of ginseng (<i>Panax ginseng</i>) and on soil organisms. Biological Agriculture and Horticulture, 2018, 34, 27-39.	0.5	19
483	Biogeochemical potential of biomass pyrolysis systems for limiting global warming to 1.5 °C. Environmental Research Letters, 2018, 13, 044036.	2.2	48
484	Interacting Controls of Pyrolysis Temperature and Plant Taxa on the Degradability of PyOM in Fire-Prone Northern Temperate Forest Soil. Soil Systems, 2018, 2, 48.	1.0	9
485	Nitrogen Mineralization and Microbial Biomass Dynamics in Different Tropical Soils Amended with Contrasting Organic Resources. Soil Systems, 2018, 2, 63.	1.0	10
486	Effect of biochar and irrigation levels on faba bean productivity. Acta Horticulturae, 2018, , 157-162.	0.1	3
487	Effects of Biochar Amendment on CO2 Emissions from Paddy Fields under Water-Saving Irrigation. International Journal of Environmental Research and Public Health, 2018, 15, 2580.	1.2	22
488	Effects of biochar and slurry application as well as drying and rewetting on soil macroâ€aggregate formation in agricultural silty loam soils. Soil Use and Management, 2018, 34, 575-583.	2.6	7

ARTICLE IF CITATIONS Effects of biochar on carbon pool, N mineralization, microbial biomass and microbial respiration 489 0.2 1 from mollisol. African Journal of Agricultural Research Vol Pp, 2018, 13, 2570-2578. Managing Beef Backgrounding Residual Soil Contaminants by Alum and Biochar Amendments. Journal 1.0 of Environmental Quality, 2018, 47, 1275-1283. Sorption to Biochar Impacts Î²-Glucosidase and Phosphatase Enzyme Activities. Agriculture 491 39 1.4 (Switzerland), 2018, 8, 158. Getting to the root of the matter: Water-soluble and volatile components in thermally-treated biosolids and biochar differentially regulate maize (Zea mays) seedling growth. PLoS ONE, 2018, 13, 1.1 e0206924. Negative priming effect of three kinds of biochar on the mineralization of native soil organic carbon. 493 1.8 29 Land Degradation and Development, 2018, 29, 3985-3994. An overview of the effect of pyrolysis process parameters on biochar stability. Bioresource Technology, 2018, 270, 627-642. 494 4.8 Tropical peatland carbon storage linked to global latitudinal trends in peat recalcitrance. Nature 495 5.8 135 Communications, 2018, 9, 3640. Impact of biochar on soil characteristics and temporal greenhouse gas emissions: A field study from 496 2.9 southern Canada. Biomass and Bioenergy, 2018, 118, 154-162. Evaluating fluorescent dissolved organic matter released from wetland-plant derived biochar: 497 4.2 52 Effects of extracting solutions. Chemosphere, 2018, 212, 638-644. Effect of biochar origin and soil pH on greenhouse gas emissions from sandy and clay soils. Applied 2.1 Soil Ecology, 2018, 129, 121-127. Application of holm oak biochar alters dynamics of enzymatic and microbial activity in two 499 1.4 28 contrasting Mediterranean soils. European Journal of Soil Biology, 2018, 88, 15-26. Dynamic changes of polychlorinated biphenyls (PCBs) degradation and adsorption to biochar as 4.2 affected by soil organic carbon content. Chémosphere, 2018, 211, 120-127. Pyrogenic Carbon Erosion: Implications for Stock and Persistence of Pyrogenic Carbon in Soil. 501 0.8 58 Frontiers in Earth Science, 2018, 6, . Determining the Stability of Sugarcane Filtercake Biochar in Soils with Contrasting Levels of Organic 1.4 Matter. Agriculture (Switzerland), 2018, 8, 71. Returning Tea Pruning Residue and Its Biochar Had a Contrasting Effect on Soil N2O and CO2 503 1.0 11 Emissions from Tea Plantation Soil. Atmosphere, 2018, 9, 109. Greenhouse gas emissions from soil amended with agricultural residue biochars: Effects of feedstock 504 44 type, production temperature and soil moisture. Biomass and Bioenergy, 2018, 117, 1-9. Dynamics of labile and stable carbon and priming effects during composting of sludge and lop 505 3.7 9 mixtures amended with low and high amounts of biochar. Waste Management, 2018, 78, 880-893. Priming mechanisms with additions of pyrogenic organic matter to soil. Geochimica Et Cosmochimica 1.6 Acta, 2018, 238, 329-342.

#	Article	IF	CITATIONS
507	Co-effects of salinity and moisture on CO2 and N2O emissions of laboratory-incubated salt-affected solls from different vegetation types. Geoderma, 2018, 332, 109-120.	2.3	39
508	Effects of biochar amendment on net greenhouse gas emissions and soil fertility in a double rice cropping system: A 4-year field experiment. Agriculture, Ecosystems and Environment, 2018, 262, 83-96.	2.5	108
509	Short-term biochar application induced variations in C and N mineralization in a compost-amended tropical soil. Environmental Science and Pollution Research, 2018, 25, 25715-25725.	2.7	20
510	Short-term effects on soil of biogas digestate, biochar and their combinations. Soil Research, 2018, 56, 623.	0.6	22
511	Research on biochar <i>via</i> a comprehensive scientometric approach. RSC Advances, 2018, 8, 28700-28709.	1.7	11
512	Effect of dolomite and biochar addition on N2O and CO2 emissions from acidic tea field soil. PLoS ONE, 2018, 13, e0192235.	1.1	46
513	Soil Nutrients and Soil Carbon Storage. , 2018, , 167-205.		8
514	Microbial Control of Soil Carbon Turnover. , 2018, , 165-194.		7
515	Biochar stability assessment methods: A review. Science of the Total Environment, 2019, 647, 210-222.	3.9	352
516	Effect of salinity on the decomposition of soil organic carbon in a tidal wetland. Journal of Soils and Sediments, 2019, 19, 609-617.	1.5	55
517	Effects of biochar and litter on carbon and nitrogen mineralization and soil microbial community structure in a China fir plantation. Journal of Forestry Research, 2019, 30, 1913-1923.	1.7	20
518	Straw biochar increases the abundance of inorganic phosphate solubilizing bacterial community for better rape (Brassica napus) growth and phosphate uptake. Science of the Total Environment, 2019, 647, 1113-1120.	3.9	76
520	Biochar application on paddy and purple soils in southern China: soil carbon and biotic activity. Royal Society Open Science, 2019, 6, 181499.	1.1	21
521	Biochar accelerates the removal of tetracyclines and their intermediates by altering soil properties. Journal of Hazardous Materials, 2019, 380, 120821.	6.5	69
522	Carbon mineralization in subtropical dryland soil amended with different biochar sources. Arabian Journal of Geosciences, 2019, 12, 1.	0.6	4
523	Charcoal Fine Residues Effects on Soil Organic Matter Humic Substances, Composition, and Biodegradability. Agronomy, 2019, 9, 384.	1.3	7
524	Effect of Woodchips Biochar on Sensitivity to Temperature of Soil Greenhouse Gases Emissions. Forests, 2019, 10, 594.	0.9	6
525	CO2 and N2O Emissions from Spring Maize Soil under Alternate Irrigation between Saline Water and Groundwater in Hetao Irrigation District of Inner Mongolia, China. International Journal of	1.2	4

#	Article	IF	CITATIONS
526	The Long-Term Effect of Biochar on Soil Microbial Abundance, Activity and Community Structure Is Overwritten by Land Management. Frontiers in Environmental Science, 2019, 7, .	1.5	80
527	Biochar Induces Changes to Basic Soil Properties and Bacterial Communities of Different Soils to Varying Degrees at 25 mm Rainfall: More Effective on Acidic Soils. Frontiers in Microbiology, 2019, 10, 1321.	1.5	68
528	Type and quantity of biochar influenced soil microbial activity and carbon priming effect. Semina:Ciencias Agrarias, 2019, 40, 1405.	0.1	3
529	Impact of biochar application dose on soil microbial communities associated with rubber trees in North East Thailand. Science of the Total Environment, 2019, 689, 970-979.	3.9	42
530	Sewage sludge derived biochars provoke negative effects on wheat growth related to the PTEs. Biochemical Engineering Journal, 2019, 152, 107386.	1.8	20
531	Aviation Risk Analysis: U-bowtie Model Based on Chance Theory. IEEE Access, 2019, 7, 86664-86677.	2.6	2
532	Driving forces linking microbial community structure and functions to enhanced carbon stability in biochar-amended soil. Environment International, 2019, 133, 105211.	4.8	49
533	Different nitrogen and biochar sources' application in an alkaline calcareous soil improved the maize yield and soil nitrogen retention. Arabian Journal of Geosciences, 2019, 12, 1.	0.6	10
534	Integrating metabolomics and physiological analysis to investigate the toxicological mechanisms of sewage sludge-derived biochars to wheat. Ecotoxicology and Environmental Safety, 2019, 185, 109664.	2.9	26
535	Priming effect of Miscanthus sinensis derived biochar on brown forest soil. Soil Science and Plant Nutrition, 2019, 65, 550-556.	0.8	3
536	The responses of soil organic carbon mineralization and microbial communities to fresh and aged biochar soil amendments. GCB Bioenergy, 2019, 11, 1408-1420.	2.5	67
537	The Investigation of Internal Turret Single Point Mooring Slip Ring Structure Design. IOP Conference Series: Earth and Environmental Science, 2019, 252, 022060.	0.2	0
538	Biochar addition can reduce NOx gas emissions from a calcareous soil. Environmental Pollutants and Bioavailability, 2019, 31, 38-48.	1.3	21
539	The impact of biochar on soil carbon sequestration: Meta-analytical approach to evaluating environmental and economic advantages. Journal of Environmental Management, 2019, 250, 109466.	3.8	86
540	Effect of pruning material compost on the nitrogen dynamic, soil microbial biomass, and plant biomass in different soil types. Landscape and Ecological Engineering, 2019, 15, 413-419.	0.7	3
541	Straw and biochar strongly affect functional diversity of microbial metabolism in paddy soils. Journal of Integrative Agriculture, 2019, 18, 1474-1485.	1.7	35
542	Constructed wetland modified by biochar/zeolite addition for enhanced wastewater treatment. Environmental Technology and Innovation, 2019, 16, 100472.	3.0	55
543	Kinetics of Carbon Mineralization and Sequestration of Sole and/or Co-amended Biochar and Cattle Manure in a Sandy Soil. Communications in Soil Science and Plant Analysis, 2019, 50, 2593-2609.	0.6	10

#	Article	IF	CITATIONS
544	Strain-Specific Effects of Biochar and Its Water-Soluble Compounds on Bacterial Growth. Applied Sciences (Switzerland), 2019, 9, 3209.	1.3	9
545	Physicochemical property and colloidal stability of micron- and nano-particle biochar derived from a variety of feedstock sources. Science of the Total Environment, 2019, 661, 685-695.	3.9	126
546	Mixed heavy metal removal from wastewater by using discarded mushroom-stick biochar: adsorption properties and mechanisms. Environmental Sciences: Processes and Impacts, 2019, 21, 584-592.	1.7	38
547	Effects of Biochar on Fluxes and Turnover of Carbon in Boreal Forest Soils. Soil Science Society of America Journal, 2019, 83, 126-136.	1.2	13
548	Biochar for environmental management: Mitigating greenhouse gas emissions, contaminant treatment, and potential negative impacts. Chemical Engineering Journal, 2019, 373, 902-922.	6.6	256
549	Biochar-induced soil stability influences phosphorus retention in a temperate agricultural soil. Geoderma, 2019, 351, 71-75.	2.3	28
550	Effects of single and successive applications of rice husk charcoal on paddy soil carbon content and rice productivity during two cropping seasons. Soil Science and Plant Nutrition, 2019, 65, 196-202.	0.8	6
551	The Impact of Woody Biochar on Microbial Processes in Conventionally and Organically Managed Arable soils. Communications in Soil Science and Plant Analysis, 2019, 50, 1387-1402.	0.6	7
552	Soil properties and combustion temperature: Controls on the decomposition rate of pyrogenic organic matter. Catena, 2019, 182, 104127.	2.2	16
553	Biochar application and summer temperatures reduce N2O and enhance CH4 emissions in a Mediterranean agroecosystem: Role of biologically-induced anoxic microsites. Science of the Total Environment, 2019, 685, 1075-1086.	3.9	39
554	In situ biochar capping is feasible to control ammonia nitrogen release from sediments evaluated by DGT. Chemical Engineering Journal, 2019, 374, 811-821.	6.6	33
555	Biochar Application to Soil for Increased Resilience of Agroecosystems to Climate Change in Eastern and Southern Africa. Climate Change Management, 2019, , 129-144.	0.6	3
556	Amino acids promote black carbon aggregation and microbial colonization in coastal waters off Vietnam. Science of the Total Environment, 2019, 685, 527-532.	3.9	2
557	Biochar amendment effects on the activities of soil carbon, nitrogen, and phosphorus hydrolytic enzymes: a meta-analysis. Environmental Science and Pollution Research, 2019, 26, 22990-23001.	2.7	61
558	Effects of rice husk biochar and soil moisture on the accumulation of organic and inorganic nitrogen and nitrous oxide emissions during the decomposition of hairy vetch (Vicia villosa) mulch. Soil Science and Plant Nutrition, 2019, 65, 409-418.	0.8	20
559	Substitution of mineral fertilizers with biogas digestate plus biochar increases physically stabilized soil carbon but not crop biomass in a field trial. Science of the Total Environment, 2019, 680, 181-189.	3.9	46
560	Removal and Oxidation of Arsenic from Aqueous Solution by Biochar Impregnated with Fe-Mn Oxides. Water, Air, and Soil Pollution, 2019, 230, 1.	1.1	27
561	Biochar addition increases subsurface soil microbial biomass but has limited effects on soil CO2 emissions in subtropical moso bamboo plantations. Applied Soil Ecology, 2019, 142, 155-165.	2.1	51

#	Article	IF	CITATIONS
562	Competitive interaction with keystone taxa induced negative priming under biochar amendments. Microbiome, 2019, 7, 77.	4.9	148
563	Carbon sequestration in soil amended with anaerobic digested matter. Soil and Tillage Research, 2019, 192, 87-94.	2.6	28
564	Preparation, modification and environmental application of biochar: A review. Journal of Cleaner Production, 2019, 227, 1002-1022.	4.6	1,216
565	Earthworms regulate ability of biochar to mitigate CO2 and N2O emissions from a tropical soil. Applied Soil Ecology, 2019, 140, 57-67.	2.1	14
566	Effects of biochar and NPK on soil microbial biomass and enzyme activity during 2 years of application in the arid region. Arabian Journal of Geosciences, 2019, 12, 1.	0.6	24
567	Nitrogen mineralization and microbial biomass carbon and nitrogen in response to co-application of biochar and paper mill biosolids. Applied Soil Ecology, 2019, 142, 90-98.	2.1	41
568	Pyrolysis biochar has negligible effects on soil greenhouse gas production, microbial communities, plant germination, and initial seedling growth. Chemosphere, 2019, 228, 565-576.	4.2	30
569	Biochar composition-dependent impacts on soil nutrient release, carbon mineralization, and potential environmental risk: A review. Journal of Environmental Management, 2019, 241, 458-467.	3.8	249
570	Effects of Land Use and Restoration on Soil Microbial Communities. Advances in Environmental Microbiology, 2019, , 173-242.	0.1	4
571	Biochar-supported nZVI (nZVI/BC) for contaminant removal from soil and water: A critical review. Journal of Hazardous Materials, 2019, 373, 820-834.	6.5	307
572	Three‥ear Field Observation of Biocharâ€Mediated Changes in Soil Organic Carbon and Microbial Activity. Journal of Environmental Quality, 2019, 48, 717-726.	1.0	10
574	Role of biochar and plant growth promoting rhizobacteria to enhance soil carbon sequestration—a review. Environmental Monitoring and Assessment, 2019, 191, 251.	1.3	68
575	A scientometric review of biochar research in the past 20Âyears (1998–2018). Biochar, 2019, 1, 23-43.	6.2	160
576	Tillage and Biochar Effects on Wheat Productivity under Arid Conditions. Crop Science, 2019, 59, 1191-1199.	0.8	11
577	Biochars Induced Changes in the Physicochemical Characteristics of Technosols: Effects of Feedstock and Pyrolysis Temperature. Advances in Science, Technology and Innovation, 2019, , 109-111.	0.2	0
578	Past, present, and future of biochar. Biochar, 2019, 1, 75-87.	6.2	278
579	Soil organic matter alteration under biochar amendment: study in the incubation experiment on the Podzol soils of the Leningrad region (Russia). Journal of Soils and Sediments, 2019, 19, 2708-2716.	1.5	18
580	Effects of nitrogen and phosphorus on the production of carbon dioxide and nitrous oxide in salt-affected soils under different vegetation communities. Atmospheric Environment, 2019, 204, 78-88.	1.9	22

#	Article	IF	Citations
581	Positive Effects of Biochar and Biochar-Compost on Maize Growth and Nutrient Availability in Two Agricultural Soils. Communications in Soil Science and Plant Analysis, 2019, 50, 512-526.	0.6	45
582	Effect of Biochar on Soil Greenhouse Gas Emissions at the Laboratory and Field Scales. Soil Systems, 2019, 3, 8.	1.0	80
583	Impact of biochar-supported zerovalent iron nanocomposite on the anaerobic digestion of sewage sludge. Environmental Science and Pollution Research, 2019, 26, 10292-10305.	2.7	55
584	Biochar stability assessment by incubation and modelling: Methods, drawbacks and recommendations. Science of the Total Environment, 2019, 664, 11-23.	3.9	69
585	Combining the microbial calcite precipitation process with biochar in order to improve nickel remediation. Applied Geochemistry, 2019, 103, 68-71.	1.4	31
586	Food waste to biochars through pyrolysis: A review. Resources, Conservation and Recycling, 2019, 144, 310-320.	5.3	239
587	Temporal Changes in the Efficiency of Biochar- and Compost-Based Amendments on Copper Immobilization in Vineyard Soils. Soil Systems, 2019, 3, 78.	1.0	1
588	Long-Term Effects of Biochar-Based Organic Amendments on Soil Microbial Parameters. Agronomy, 2019, 9, 747.	1.3	50
589	Effectiveness of ameliorant and fertilizer on improving soil fertility, growth and yields of red chili in degraded peatland. IOP Conference Series: Earth and Environmental Science, 2019, 393, 012011.	0.2	2
590	Significance of biochar application to the environment and economy. Annals of Agricultural Sciences, 2019, 64, 222-236.	1.1	192
591	Effect of biochar addition on leaf-litter decomposition at soil surface during three years in a warm-temperate secondary deciduous forest, Japan. Scientific Reports, 2019, 9, 16961.	1.6	18
592	Biochar implications for sustainable agriculture and environment: A review. South African Journal of Botany, 2019, 127, 333-347.	1.2	110
593	Evaluation of the Influence of Individual Clay Minerals on Biochar Carbon Mineralization in Soils. Soil Systems, 2019, 3, 79.	1.0	4
594	Labile and stable pools of organic matter in soil amended with sewage sludge biochar. Archives of Agronomy and Soil Science, 2019, 65, 770-781.	1.3	14
595	Effects of composting and carbon based materials on carbon and nitrogen loss in the arable land utilization of cow manure and corn stalks. Journal of Environmental Management, 2019, 233, 283-290.	3.8	31
596	Priming of pyrogenic C (biochar) mineralization by dissolved organic matter and vice versa. Soil Biology and Biochemistry, 2019, 130, 105-112.	4.2	55
597	Effects of Biochar and Phosphorus Fertilizers on Phosphorus Fractions, Wheat Yield and Microbial Biomass Carbon in <i>Vertic Torrifluvents</i> . Communications in Soil Science and Plant Analysis, 2019, 50, 362-372.	0.6	18
598	Soil greenhouse gas, carbon content, and tree growth response to biochar amendment in western United States forests. GCB Bioenergy, 2019, 11, 660-671.	2.5	39

#	Article	IF	CITATIONS
599	Biochar mineralization and priming effect in a poplar short rotation coppice from a 3-year field experiment. Biology and Fertility of Soils, 2019, 55, 67-78.	2.3	47
600	Influence of select bioenergy by-products on soil carbon and microbial activity: A laboratory study. Science of the Total Environment, 2019, 653, 1354-1363.	3.9	19
601	Physical Characteristics of Biochars and Their Effects on Soil Physical Properties. , 2019, , 21-35.		10
602	On the Carbon Abatement Potential and Economic Viability of Biochar Production Systems. , 2019, , 385-408.		3
603	Contrasting effects of banana peels waste and its biochar on greenhouse gas emissions and soil biochemical properties. Chemical Engineering Research and Design, 2019, 122, 366-377.	2.7	82
604	Interactive priming of soil N transformations from combining biochar and urea inputs: A 15N isotope tracer study. Soil Biology and Biochemistry, 2019, 131, 166-175.	4.2	60
605	Investigating responses of soil bacterial community composition to hardwood biochar amendment using high-throughput PCR sequencing. Applied Soil Ecology, 2019, 136, 80-85.	2.1	33
606	Manure pellet, woodchip and their biochars differently affect wheat yield and carbon dioxide emission from bulk and rhizosphere soils. Science of the Total Environment, 2019, 659, 463-472.	3.9	28
607	Synthesis and adsorption of Fe Mn La-impregnated biochar composite as an adsorbent for As(III) removal from aqueous solutions. Environmental Pollution, 2019, 247, 128-135.	3.7	42
608	Biochar improves soil quality and N2-fixation and reduces net ecosystem CO2 exchange in a dryland legume-cereal cropping system. Soil and Tillage Research, 2019, 186, 172-182.	2.6	85
609	Biochar, soil and land-use interactions that reduce nitrate leaching and N2O emissions: A meta-analysis. Science of the Total Environment, 2019, 651, 2354-2364.	3.9	339
610	Daptomycin adsorption on magnetic ultra-fine wood-based biochars from water: Kinetics, isotherms, and mechanism studies. Bioresource Technology, 2019, 273, 8-15.	4.8	68
611	Lower mineralizability of soil carbon with higher legacy soil moisture. Soil Biology and Biochemistry, 2019, 130, 94-104.	4.2	36
612	High temperature-produced biochar can be efficient in nitrate loss prevention and carbon sequestration. Geoderma, 2019, 338, 48-55.	2.3	43
613	A pilot study on using biochars as sustainable amendments to inhibit rice uptake of Hg from a historically polluted soil in a Karst region of China. Ecotoxicology and Environmental Safety, 2019, 170, 18-24.	2.9	55
614	Biochar application to low fertility soils: A review of current status, and future prospects. Geoderma, 2019, 337, 536-554.	2.3	571
615	Date palm waste-derived biochar composites with silica and zeolite: synthesis, characterization and implication for carbon stability and recalcitrant potential. Environmental Geochemistry and Health, 2019, 41, 1687-1704.	1.8	73
616	Exploring how fire spread mode shapes the composition of pyrogenic carbon from burning forest litter fuels in a combustion wind tunnel. Science of the Total Environment, 2020, 698, 134306.	3.9	5

#	Article	IF	CITATIONS
617	Interactions between biochar and nitrogen impact soil carbon mineralization and the microbial community. Soil and Tillage Research, 2020, 196, 104437.	2.6	73
618	Characterising the biophysical, economic and social impacts of soil carbon sequestration as a greenhouse gas removal technology. Global Change Biology, 2020, 26, 1085-1108.	4.2	65
619	Fire affects the taxonomic and functional composition of soil microbial communities, with cascading effects on grassland ecosystem functioning. Global Change Biology, 2020, 26, 431-442.	4.2	45
620	Chemical and biological immobilization mechanisms of potentially toxic elements in biochar-amended soils. Critical Reviews in Environmental Science and Technology, 2020, 50, 903-978.	6.6	157
621	Biochar for Water and Soil Remediation: Production, Characterization, and Application. , 2020, , 153-196.		13
622	The role of biochars in sustainable crop production and soil resiliency. Journal of Experimental Botany, 2020, 71, 520-542.	2.4	53
623	Biochar increases 15N fertilizer retention and indigenous soil N uptake in a cotton-barley rotation system. Geoderma, 2020, 357, 113944.	2.3	40
624	Biochar changes thermal activation of greenhouse gas emissions in a rice–lettuce rotation microcosm experiment. Journal of Cleaner Production, 2020, 247, 119148.	4.6	8
625	Effects of spent mushroom substrate-derived biochar on soil CO2 and N2O emissions depend on pyrolysis temperature. Chemosphere, 2020, 246, 125608.	4.2	37
626	Combining the phosphate solubilizing microorganisms with biochar types in order to improve safflower yield and soil enzyme activity. Soil Science and Plant Nutrition, 2020, 66, 255-267.	0.8	12
627	Mechanistic evaluation of biochar potential for plant growth promotion and alleviation of chromium-induced phytotoxicity in Ficus elastica. Chemosphere, 2020, 243, 125332.	4.2	27
628	Biochar altered native soil organic carbon by changing soil aggregate size distribution and native SOC in aggregates based on an 8-year field experiment. Science of the Total Environment, 2020, 708, 134829.	3.9	49
629	Surface and colloid properties of biochar and implications for transport in porous media. Critical Reviews in Environmental Science and Technology, 2020, 50, 2484-2522.	6.6	56
630	Biochar reduced Chinese chive (Allium tuberosum) uptake and dissipation of thiamethoxam in an agricultural soil. Journal of Hazardous Materials, 2020, 390, 121749.	6.5	41
631	Effects of different corn straw amendments on humus composition and structural characteristics of humic acid in black soil. Communications in Soil Science and Plant Analysis, 2020, 51, 107-117.	0.6	35
632	Sorption of volatile organic compounds on non-activated biochar. Bioresource Technology, 2020, 297, 122469.	4.8	74
633	Agronomic potential of biochar prepared from brewery byproducts. Journal of Environmental Management, 2020, 255, 109856.	3.8	22
634	Restoring Abandoned Farmland to Mitigate Climate Change on a Full Earth. One Earth, 2020, 3, 176-186.	3.6	60

#	Article	IF	CITATIONS
635	Greater microbial carbon use efficiency and carbon sequestration in soils: Amendment of biochar versus crop straws. GCB Bioenergy, 2020, 12, 1092-1103.	2.5	35
636	The Trends in Research on the Effects of Biochar on Soil. Sustainability, 2020, 12, 7810.	1.6	13
637	Sulfide-induced reduction of nitrobenzene mediated by different size fractions of rice straw-derived black carbon: A key role played by reactive polysulfide species. Science of the Total Environment, 2020, 748, 141365.	3.9	11
638	Biochar characteristics, applications and importance in health risk reduction through metal immobilization. Environmental Technology and Innovation, 2020, 20, 101121.	3.0	20
639	Photochemistry after fire: Structural transformations of pyrogenic dissolved organic matter elucidated by advanced analytical techniques. Geochimica Et Cosmochimica Acta, 2020, 290, 271-292.	1.6	25
640	Biochar: A Vital Source for Sustainable Agriculture. , 2020, , .		6
641	Ameliorative effect of <i>Lantana camara</i> biochar on coal mine spoil and growth of maize (<i>Zea) Tj ETQqO</i>	0 0 rgBT /(2.6	Overlock 10 T
642	Biochar—A Panacea for Agriculture or Just Carbon?. Horticulturae, 2020, 6, 37.	1.2	17

643	Co-application of poultry-litter biochar with Azolla has synergistic effects on CH4 and N2O emissions from rice paddy soils. Heliyon, 2020, 6, e05042.	1.4	19
644	Humic Acid Mitigates the Negative Effects of High Rates of Biochar Application on Microbial Activity. Sustainability, 2020, 12, 9524.	1.6	17
645	Kinetics of C Mineralization of Biochars in Three Excessive Compost-Fertilized Soils: Effects of Feedstocks and Soil Properties. Agronomy, 2020, 10, 1749.	1.3	8
646	Increased phosphorus availability to corn resulting from the simultaneous applications of phosphate rock, calcareous rock, and biochar to an acid sandy soil. Pedosphere, 2020, 30, 719-733.	2.1	20
647	Effects of aging and weathering on immobilization of trace metals/metalloids in soils amended with biochar. Environmental Sciences: Processes and Impacts, 2020, 22, 1790-1808.	1.7	29
648	Evaluating Biochar-Microbe Synergies for Improved Growth, Yield of Maize, and Post-Harvest Soil Characteristics in a Semi-Arid Climate. Agronomy, 2020, 10, 1055.	1.3	25
649	Four-year continuous residual effects of biochar application to a sandy loam soil on crop yield and N2O and NO emissions under maize-wheat rotation. Agriculture, Ecosystems and Environment, 2020, 302, 107109.	2.5	46
650	Systematic relationship between soil properties and organic carbon mineralization based on structural equation modeling analysis. Journal of Cleaner Production, 2020, 277, 123338.	4.6	12
652	How to trace back an unknown production temperature of biochar from chemical characterization methods in a feedstock independent way. Journal of Analytical and Applied Pyrolysis, 2020, 151, 104926.	2.6	8
653	Effect of Maize Straw–Derived Biochar on Calcareous Arable Soil Organic Carbon Mineralization Under the Condition of with or Without Nitrogen-Fertilizer Addition. Journal of Soil Science and Plant Nutrition, 2020, 20, 2606-2616	1.7	3

#	Article	IF	CITATIONS
654	Impact of agricultural management practices on soil carbon sequestration and its monitoring through simulation models and remote sensing techniques: A review. Critical Reviews in Environmental Science and Technology, 2022, 52, 1-49.	6.6	46
655	Biochar Application for Improved Resource Use and Environmental Quality. , 2020, , .		2
656	Corn stover harvest reduces soil CO ₂ fluxes but increases overall C losses. GCB Bioenergy, 2020, 12, 894-909.	2.5	3
657	The effect of particle size of bamboo biochar on the phytoremediation of Salix psammophila C. to multi-metal polluted soil. International Journal of Phytoremediation, 2020, 23, 1-11.	1.7	4
658	Effects of Two Types of Straw Biochar on the Mineralization of Soil Organic Carbon in Farmland. Sustainability, 2020, 12, 10586.	1.6	15
659	An investigation of the effect of biochar application rates on CO2 emissions in soils under upland rice production in southern Guinea Savannah of Nigeria. Heliyon, 2020, 6, e05578.	1.4	4
660	The addition of organic carbon and nitrogen accelerates the restoration of soil system of degraded alpine grassland in Qinghai-Tibet Plateau. Ecological Engineering, 2020, 158, 106084.	1.6	20
661	Fertility Impact of Separate and Combined Treatments with Biochar, Sewage Sludge Compost and Bacterial Inocula on Acidic Sandy Soil. Agronomy, 2020, 10, 1612.	1.3	9
662	A critical literature review on biosolids to biochar: an alternative biosolids management option. Reviews in Environmental Science and Biotechnology, 2020, 19, 807-841.	3.9	49
663	Biochar induced negative priming effect on soil organic carbon mineralisation by changing the microbial community structure across plant growth stages. Journal of Soils and Sediments, 2020, 20, 3340-3350.	1.5	12
664	Colloidal interactions of micro-sized biochar and a kaolinitic soil clay. Science of the Total Environment, 2020, 738, 139844.	3.9	23
665	Temperature and moisture driven changes in soil carbon sequestration and mineralization under biochar addition. Journal of Cleaner Production, 2020, 265, 121921.	4.6	29
666	Biochar prepared from maize straw and molasses fermentation wastewater: application for soil improvement. RSC Advances, 2020, 10, 14510-14519.	1.7	6
667	Combined biochar and nitrogen application stimulates enzyme activity and root plasticity. Science of the Total Environment, 2020, 735, 139393.	3.9	70
668	Pyrolysis of tomato harvest waste as a function of temperature and duration: Characteristics, production energy, and carbon dioxide emission in field conditions. Soil and Tillage Research, 2020, 202, 104652.	2.6	3
669	Soil microbial community dynamics mediate the priming effects caused by in situ decomposition of fresh plant residues. Science of the Total Environment, 2020, 737, 139708.	3.9	22
670	Combined application of biochar and N increased temperature sensitivity of soil respiration but still decreased the soil CO2 emissions in moso bamboo plantations. Science of the Total Environment, 2020, 730, 139003.	3.9	29
671	Urease activity and nitrogen dynamics in highly weathered soils with designer biochars under corn cultivation. Biochar, 2020, 2, 343-356.	6.2	5

#	Article	IF	Citations
672	Biochar stimulates NH4+ turnover while decreasing NO3â^' production and N2O emissions in soils under long-term vegetable cultivation. Science of the Total Environment, 2020, 737, 140266.	3.9	38
673	Balancing Waste and Nutrient Flows Between Urban Agglomerations and Rural Ecosystems: Biochar for Improving Crop Growth and Urban Air Quality in The Mediterranean Region. Atmosphere, 2020, 11, 539.	1.0	9
674	Effects of Biochar to Excessive Compost-Fertilized Soils on the Nutrient Status. Agronomy, 2020, 10, 683.	1.3	5
675	Effect of Biochar on Soil Respiration from a Semi-evergreen, Moist Deciduous Forest Soil. International Journal of Geosynthetics and Ground Engineering, 2020, 6, 1.	0.9	2
676	Response of Soil Respiration and Microbial Biomass to Soil Salinity under Different Water Content in the Coastal Areas of Eastern China. Eurasian Soil Science, 2020, 53, 82-89.	0.5	4
677	Biochar increases soil microbial biomass with changes in extra- and intracellular enzyme activities: a global meta-analysis. Biochar, 2020, 2, 65-79.	6.2	146
678	Biochar production and applications in agro and forestry systems: A review. Science of the Total Environment, 2020, 723, 137775.	3.9	140
679	Biochar type and pyrolysis temperature effects on soil quality indicators and structural stability. Journal of Environmental Management, 2020, 261, 110190.	3.8	37
680	Impact of Biomass Sources on Acoustic-Based Chemical Functionalization of Biochars for Improved CO ₂ Adsorption. Energy & Fuels, 2020, 34, 8608-8627.	2.5	7
681	Steel slag and biochar amendments decreased CO2 emissions by altering soil chemical properties and bacterial community structure over two-year in a subtropical paddy field. Science of the Total Environment, 2020, 740, 140403.	3.9	30
682	Short-term effects of biochar on soil CO2 efflux in boreal Scots pine forests. Annals of Forest Science, 2020, 77, 1.	0.8	8
683	Effect of conservation farming and biochar addition on soil organic carbonÂquality, nitrogenÂmineralization, and crop productivity in a light textured Acrisol in the sub-humid tropics. PLoS ONE, 2020, 15, e0228717.	1.1	32
684	Role of biochars in soil fertility management of fruit crops. , 2020, , 431-444.		1
685	Effects of biochar application on crop water use efficiency depend on experimental conditions: A meta-analysis. Field Crops Research, 2020, 249, 107763.	2.3	34
686	Accelerated carbonation of biochar reinforced cement-fly ash composites: Enhancing and sequestering CO2 in building materials. Construction and Building Materials, 2020, 244, 118363.	3.2	78
687	Effects of biochar on soil microbial community and functional genes of a landfill cover three years after ecological restoration. Science of the Total Environment, 2020, 717, 137133.	3.9	42
688	Biochar Integration with Legume Crops in Summer Gape Synergizes Nitrogen Use Efficiency and Enhance Maize Yield. Agronomy, 2020, 10, 58.	1.3	14
689	Application of biochar with functional microorganisms for enhanced atrazine removal and phosphorus utilization. Journal of Cleaner Production, 2020, 257, 120535.	4.6	39

#	Article	IF	CITATIONS
690	Application of mixed straw and biochar meets plant demand of carbon dioxide and increases soil carbon storage in sunken solar greenhouse vegetable production. Soil Use and Management, 2020, 36, 439-448.	2.6	23
691	Biochar from biomass waste as a renewable carbon material for climate change mitigation in reducing greenhouse gas emissions—a review. Biomass Conversion and Biorefinery, 2021, 11, 2247-2267.	2.9	83
692	Biochar's stability and effect on the content, composition and turnover of soil organic carbon. Geoderma, 2020, 364, 114184.	2.3	154
693	Effects of Biochar Application on Soil Organic Carbon Composition and Enzyme Activity in Paddy Soil under Water-Saving Irrigation. International Journal of Environmental Research and Public Health, 2020, 17, 333.	1.2	45
694	Carbon Mineralization under Different Saline—Alkali Stress Conditions in Paddy Fields of Northeast China. Sustainability, 2020, 12, 2921.	1.6	13
695	Quantifying the Effects of Biochar Application on Greenhouse Gas Emissions from Agricultural Soils: A Global Meta-Analysis. Sustainability, 2020, 12, 3436.	1.6	63
696	Biochar Applications in Agriculture and Environment Management. , 2020, , .		9
697	Biochar increases nitrogen use efficiency of maize by relieving aluminum toxicity and improving soil quality in acidic soil. Ecotoxicology and Environmental Safety, 2020, 196, 110531.	2.9	73
698	Effect of biochar on soil properties on the Loess Plateau: Results from field experiments. Geoderma, 2020, 369, 114323.	2.3	44
699	Carbon sequestration, kinetics of ammonia volatilization and nutrient availability in alkaline sandy soil as a function on applying calotropis biochar produced at different pyrolysis temperatures. Science of the Total Environment, 2020, 726, 138489.	3.9	33
700	Priming of soil organic carbon induced by sugarcane residues and its biochar control the source of nitrogen for plant uptake: A dual 13C and 15N isotope three-source-partitioning study. Soil Biology and Biochemistry, 2020, 146, 107792.	4.2	31
701	Soil microbiome-induced changes in the priming effects of 13C-labelled substrates from rice residues. Science of the Total Environment, 2020, 726, 138562.	3.9	17
702	Precision biochar and inoculum applications shift bacterial community structure and increase specific nutrient availability and maize yield. Applied Soil Ecology, 2020, 151, 103541.	2.1	4
703	Legacy effects override soil properties for CO ₂ and N ₂ O but not CH ₄ emissions following digestate application to soil. GCB Bioenergy, 2020, 12, 445-457.	2.5	10
704	Biochar acting as an electron acceptor reduces nitrate removal in woodchip denitrifying bioreactors. Ecological Engineering, 2020, 149, 105724.	1.6	11
705	Progress and future prospects in biochar composites: Application and reflection in the soil environment. Critical Reviews in Environmental Science and Technology, 2021, 51, 219-271.	6.6	93
706	Effects of biochar application with fertilizer on soil microbial biomass and greenhouse gas emissions in a peanut cropping system. Environmental Technology (United Kingdom), 2021, 42, 9-19.	1.2	16
707	Investigating the migration of pyrethroid residues between mung bean sprouts and growth media. Food Chemistry, 2021, 343, 128480.	4.2	10

#	Article	IF	Citations
708	Pioneer and fibrous root seasonal dynamics of Vitis vinifera L. are affected by biochar application to a low fertility soil: A rhizobox approach. Science of the Total Environment, 2021, 751, 141455.	3.9	30
709	Application of biochar in estrogen hormone-contaminated and manure-affected soils: Impact on soil respiration, microbial community and enzyme activity. Chemosphere, 2021, 270, 128625.	4.2	24
710	Effects of Different Feedstock Type and Carbonization Temperature of Biochar on Oat Growth and Nitrogen Uptake in Coapplication with Compost. Journal of Soil Science and Plant Nutrition, 2021, 21, 276-285.	1.7	10
711	Divergent consequences of different biochar amendments on carbon dioxide (CO2) and nitrous oxide (N2O) emissions from the red soil. Science of the Total Environment, 2021, 754, 141935.	3.9	23
712	Soil organic and inorganic carbon sequestration by consecutive biochar application: Results from a decade field experiment. Soil Use and Management, 2021, 37, 95-103.	2.6	28
713	Agro-residue biochar and N fertilizer addition mitigates CO2-C emission and stabilized soil organic carbon pools in a rain-fed agricultural cropland. International Soil and Water Conservation Research, 2021, 9, 76-86.	3.0	28
714	Positive and negative priming effects in an Ultisol in relation to aggregate size class and biochar level. Soil and Tillage Research, 2021, 208, 104874.	2.6	10
715	Organo-mineral associations largely contribute to the stabilization of century-old pyrogenic organic matter in cropland soils. Geoderma, 2021, 388, 114841.	2.3	24
716	Temperature and soil management effects on carbon fluxes and priming effect intensity. Soil Biology and Biochemistry, 2021, 153, 108103.	4.2	33
717	Carbon footprints and social carbon cost assessments in a perennial energy crop system: A comparison of fertilizer management practices in a Mediterranean area. Agricultural Systems, 2021, 186, 102989.	3.2	23
718	Role of cultural and nutrient management practices in carbon sequestration in agricultural soil. Advances in Agronomy, 2021, 166, 131-196.	2.4	32
719	Impact of biochar water extract addition on soil organic carbon mineralization and C fractions in different tillage systems. Environmental Technology and Innovation, 2021, 21, 101193.	3.0	10
720	Use of Piptatherum miliaceum to enable the establishment success of Salvia rosmarinus in Technosols developed from pyritic tailings. Chemosphere, 2021, 267, 129281.	4.2	2
721	Biochar and effective microorganisms promote Sesbania cannabina growth and soil quality in the coastal saline-alkali soil of the Yellow River Delta, China. Science of the Total Environment, 2021, 756, 143801.	3.9	119
722	Response of soil organic C fractions and enzyme activity to integrating N fertilisation with cotton stalk or its biochar in a drip-irrigated cotton field. Acta Agriculturae Scandinavica - Section B Soil and Plant Science, 2021, 71, 98-111.	0.3	2
723	The potential for biochar application in rubber plantations in Xishuangbanna, Southwest China: a pot trial. Biochar, 2021, 3, 65-76.	6.2	4
724	Application of biochars in the remediation of chromium contamination: Fabrication, mechanisms, and interfering species. Journal of Hazardous Materials, 2021, 407, 124376.	6.5	93
725	Functional response of the soil microbial community to biochar applications. GCB Bioenergy, 2021, 13, 269-281.	2.5	56

#	Article	IF	CITATIONS
726	Effects of biochar amendment on greenhouse gas emission in two paddy soils with different textures. Paddy and Water Environment, 2021, 19, 87-98.	1.0	12
727	Biochar decreases methanogenic archaea abundance and methane emissions in a flooded paddy soil. Science of the Total Environment, 2021, 752, 141958.	3.9	35
728	Can N ₂ O emissions offset the benefits from soil organic carbon storage?. Global Change Biology, 2021, 27, 237-256.	4.2	174
729	Higher biochar rate strongly reduced decomposition of soil organic matter to enhance C and N sequestration in nutrient-poor alkaline calcareous soil. Journal of Soils and Sediments, 2021, 21, 148-162.	1.5	35
730	Pineapple Residue Ash Reduces Carbon Dioxide and Nitrous Oxide Emissions in Pineapple Cultivation on Tropical Peat Soils at Saratok, Malaysia. Sustainability, 2021, 13, 1014.	1.6	2
731	Soil nutrient and nematode community changes in response to hardwood charcoal application. Communications in Soil Science and Plant Analysis, 2021, 52, 917-925.	0.6	5
732	Effect of different biochar application rates on soil organic carbon in the semi-arid Loess Plateau, China. Communications in Soil Science and Plant Analysis, 2021, 52, 423-431.	0.6	2
733	Effects of Biochar Application on Soil Properties, Plant Biomass Production, and Soil Greenhouse Gas Emissions: A Mini-Review. Agricultural Sciences, 2021, 12, 213-236.	0.2	8
734	Biochar Role in Mitigation of Greenhouse Gas Emissions from Agricultural Soils. , 2021, , 261-278.		1
735	Effect of Biochar on CO2 Sequestration and Productivity of Pearl Millet Plants Grown in Saline Sodic Soils. Journal of Soil Science and Plant Nutrition, 2021, 21, 897-907.	1.7	22
736	Efficacy of Characterized Prosopis Wood Biochar Amendments in Improving Growth, Nitrogen Use Efficiency, Nitrate Accumulation, and Mineral Content in Cabbage Genotypes. Journal of Soil Science and Plant Nutrition, 2021, 21, 690-708.	1.7	11
737	Biochar Role in Soil Carbon Stabilization and Crop Productivity. , 2021, , 1-46.		1
738	Soil Organic Matter and Its Impact on Soil Properties and Nutrient Status. , 2021, , 129-159.		6
739	Biochar for the Improvement of Peatland and Suboptimal Land. , 2021, , 337-361.		1
740	Experimental Investigation of briquettes formed from various sources of biochar mixed with cow dung as alternate source of energy – A West Bengal study. Materials Today: Proceedings, 2021, 46, 7996-8001.	0.9	1
742	Greenhouse Gas Emissions from Forest Soils Reduced by Straw Biochar and Nitrapyrin Applications. Land, 2021, 10, 189.	1.2	7
743	Dynamics of soil organic carbon mineralization and enzyme activities after twoÂmonths and sixÂyears of biochar addition. Biomass Conversion and Biorefinery, 2023, 13, 1153-1162.	2.9	4
744	The potency of biochar to improve water quality in tidal swampland. IOP Conference Series: Earth and Environmental Science, 2021, 648, 012184.	0.2	0

#	Article	IF	CITATIONS
745	One-time application of biochar influenced crop yield across three cropping cycles on tropical sandy loam soil in Ghana. Heliyon, 2021, 7, e06267.	1.4	19
747	Biochar-Compost Interactions as Affected by Weathering: Effects on Biological Stability and Plant Growth. Agronomy, 2021, 11, 336.	1.3	11
748	Maize straw and its biochar affect phosphorus distribution in soil aggregates and are beneficial for improving phosphorus availability along the soil profile. European Journal of Soil Science, 2021, 72, 2165-2179.	1.8	13
749	Impact of biochar and ligniteâ€based amendments on microbial communities and greenhouse gas emissions from agricultural soil. Vadose Zone Journal, 2021, 20, e20105.	1.3	13
750	Greater, but not necessarily better: The influence of biochar on soil hydraulic properties. European Journal of Soil Science, 2021, 72, 2033-2048.	1.8	11
751	Bibliometric Analysis of Soil Nutrient Research between 1992 and 2020. Agriculture (Switzerland), 2021, 11, 223.	1.4	24
752	Combination of biochar and immobilized bacteria accelerates polyacrylamide biodegradation in soil by both bio-augmentation and bio-stimulation strategies. Journal of Hazardous Materials, 2021, 405, 124086.	6.5	51
753	Microbial Community Shifts Reflect Losses of Native Soil Carbon with Pyrogenic and Fresh Organic Matter Additions and Are Greatest in Low-Carbon Soils. Applied and Environmental Microbiology, 2021, 87, .	1.4	9
754	Changes in Acidic Soil Chemical Properties and Carbon Dioxide Emission Due to Biochar and Lime Treatments. Agriculture (Switzerland), 2021, 11, 219.	1.4	20
755	Effects of Biochar on the Soil Carbon Cycle in Agroecosystems: An Promising Way to Increase the Carbon Pool in Dryland. IOP Conference Series: Earth and Environmental Science, 2021, 693, 012082.	0.2	6
756	Effects of biochar amendment on soil carbon dioxide emission and carbon budget in the karst region of southwest China. Geoderma, 2021, 385, 114895.	2.3	14
757	Effect of different temperatures on the properties of pyrolysis products of Parthenium hysterophorus. Journal of Saudi Chemical Society, 2021, 25, 101197.	2.4	16
758	Holistic Assessment of Biochar and Brown Coal Waste as Organic Amendments in Sustainable Environmental and Agricultural Applications. Water, Air, and Soil Pollution, 2021, 232, 1.	1.1	12
759	Manure-based biochar decreases heterotrophic respiration and increases gross nitrification rates in rhizosphere soil. Soil Biology and Biochemistry, 2021, 154, 108147.	4.2	18
760	Experimental and Numerical Study of Biochar Fixed Bed Column for the Adsorption of Arsenic from Aqueous Solutions. Water (Switzerland), 2021, 13, 915.	1.2	20
761	Pyrolysis temperature and soil depth interactions determine PyC turnover and induced soil organic carbon priming. Biogeochemistry, 2021, 153, 47-65.	1.7	5
762	Evaluating the Effects of Biochar with Farmyard Manure under Optimal Mineral Fertilizing on Tomato Growth, Soil Organic C and Biochemical Quality in a Low Fertility Soil. Sustainability, 2021, 13, 2652.	1.6	13
763	Priming, stabilization and temperature sensitivity of native SOC is controlled by microbial responses and physicochemical properties of biochar. Soil Biology and Biochemistry, 2021, 154, 108139.	4.2	48

#	Article	IF	CITATIONS
764	Biochar with Alternate Wetting and Drying Irrigation: A Potential Technique for Paddy Soil Management. Agriculture (Switzerland), 2021, 11, 367.	1.4	19
765	Comparing Biochar-Swine Manure Mixture to Conventional Manure Impact on Soil Nutrient Availability and Plant Uptake—A Greenhouse Study. Land, 2021, 10, 372.	1.2	13
766	Nutrient cycling and greenhouse gas emissions from soil amended with biochar-manure mixtures. Pedosphere, 2021, 31, 289-302.	2.1	27
767	Changes in the Soil–Plant–Water System Due to Biochar Amendment. Water (Switzerland), 2021, 13, 1216.	1.2	5
768	Biomass for a sustainable bioeconomy: An overview of world biomass production and utilization. Renewable and Sustainable Energy Reviews, 2021, 139, 110691.	8.2	319
769	Alterations of soil labile organic carbon fractions and biological properties under different residue-management methods with equivalent carbon input. Applied Soil Ecology, 2021, 161, 103821.	2.1	16
770	Biolability of Fresh and Photodegraded Pyrogenic Dissolved Organic Matter From Laboratoryâ€Prepared Chars. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2020JG005981.	1.3	29
771	Silicic acid increases dispersibility of micro-sized biochars. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 617, 126381.	2.3	6
772	Importance of sources of variability, scales and experimental design: A case study about the effects of biochar and slurry application on soil properties in agricultural silty loam soils. European Journal of Soil Science, 2021, 72, 1954-1968.	1.8	0
773	Influence of Acidified Biochar on CO2–C Efflux and Micronutrient Availability in an Alkaline Sandy Soil. Sustainability, 2021, 13, 5196.	1.6	6
774	The Role of Biochar in Regulating the Carbon, Phosphorus, and Nitrogen Cycles Exemplified by Soil Systems. Sustainability, 2021, 13, 5612.	1.6	39
775	Biochar Mitigates N ₂ O Emission of Microbial Denitrification through Modulating Carbon Metabolism and Allocation of Reducing Power. Environmental Science & Technology, 2021, 55, 8068-8078.	4.6	58
776	Biochar and urea co-application regulates nitrogen availability in soil. Environmental Monitoring and Assessment, 2021, 193, 326.	1.3	13
777	Stabilization of dissolvable biochar by soil minerals: Release reduction and organo-mineral complexes formation. Journal of Hazardous Materials, 2021, 412, 125213.	6.5	41
778	A comprehensive review of biochar-derived dissolved matters in biochar application: Production, characteristics, and potential environmental effects and mechanisms. Journal of Environmental Chemical Engineering, 2021, 9, 105258.	3.3	20
779	Slow pyrolysis pine wood-derived biochar reduces nitrous oxide production from surface but not subsurface soil. Canadian Journal of Soil Science, 2022, 102, 147-154.	0.5	1
780	Decomposition of substrates with recalcitrance gradient, primed CO2, and its relations with soil microbial diversity in post-fire forest soils. Journal of Soils and Sediments, 2021, 21, 3007-3017.	1.5	0
781	Effect of field-aged biochar on fertilizer N retention and N2O emissions: A field microplot experiment with 15N-labeled urea. Science of the Total Environment, 2021, 773, 145645.	3.9	16

#	Article	IF	CITATIONS
782	Improving soil organic carbon and microbial functionality through different rice straw management approaches in rice–wheat cropping sequence. Biomass Conversion and Biorefinery, 2023, 13, 15659-15669.	2.9	3
783	Pyrogenic conversion of rice straw and wood to biochar increases aromaticity and carbon accumulation in soil. Carbon Management, 2021, 12, 385-397.	1.2	8
784	An overview on the preparation of rice husk biochar, factors affecting its properties, and its agriculture application. Journal of the Saudi Society of Agricultural Sciences, 2022, 21, 149-159.	1.0	29
785	Biochar porosity: a nature-based dependent parameter to deliver microorganisms to soils for land restoration. Environmental Science and Pollution Research, 2021, 28, 46894-46909.	2.7	15
786	Cattle manure biochar and earthworm interactively affected CO2 and N2O emissions in agricultural and forest soils: Observation of a distinct difference. Frontiers of Environmental Science and Engineering, 2022, 16, 1.	3.3	7
787	Effects of Biochar Feedstock and Pyrolysis Temperature on Soil Organic Matter Mineralization and Microbial Community Structures of Forest Soils. Frontiers in Environmental Science, 2021, 9, .	1.5	5
788	Pollutant-removal and DOM characteristics in an urban stormwater wetland. Environmental Technology (United Kingdom), 2021, , 1-12.	1.2	0
789	Biocharâ€assisted ecoâ€restoration of coal mine degraded land to meet United Nation Sustainable Development Goals. Land Degradation and Development, 2021, 32, 4494-4508.	1.8	24
790	Nitrous oxide, methane emissions and grain yield in rainfed wheat grown under nitrogen enriched biochar and straw in a semiarid environment. PeerJ, 2021, 9, e11937.	0.9	4
791	Review of Large-Scale Biochar Field-Trials for Soil Amendment and the Observed Influences on Crop Yield Variations. Frontiers in Energy Research, 2021, 9, .	1.2	43
792	Combined Application of Rice Husk Biochar and Lime Increases Phosphorus Availability and Maize Yield in an Acidic Soil. Agriculture (Switzerland), 2021, 11, 793.	1.4	7
793	Quantitative assessment of the effects of biochar amendment on photosynthetic carbon assimilation and dynamics in a rice–soil system. New Phytologist, 2021, 232, 1250-1258.	3.5	10
794	Geochemical characteristics control potential microbial activity in exposed Late Quaternary alluvial deposits. Pedobiologia, 2021, 87-88, 150747.	0.5	1
795	Effect of Biochar and Inorganic Fertilizer on the Soil Properties and Growth and Yield of Onion (Allium cepa) in Tropical Ethiopia. Scientific World Journal, The, 2021, 2021, 1-9.	0.8	6
796	Effects of biochar aging in the soil on its mechanical property and performance for soil CO2 and N2O emissions. Science of the Total Environment, 2021, 782, 146824.	3.9	69
797	Organic carbon mineralization of the biochar and organic compost of poultry litter in an Argisol. Semina:Ciencias Agrarias, 2021, 42, 3167-3184.	0.1	1
798	Lindane degradation in wet-dry cycling soil as affected by aging and microbial toxicity of biochar. Ecotoxicology and Environmental Safety, 2021, 219, 112374.	2.9	8
799	Responses of greenhouse gas emissions to different straw management methods with the same amount of carbon input in cotton field. Soil and Tillage Research, 2021, 213, 105126.	2.6	9

#	ARTICLE	IF	CITATIONS
800	Pore characteristics of hydrochars and their role as a vector for soil bacteria: A critical review of engineering options. Critical Reviews in Environmental Science and Technology, 2022, 52, 4147-4171.	6.6	12
801	Biochar Stability in a Highly Weathered Sandy Soil under Four Years of Continuous Corn Production. Energies, 2021, 14, 6157.	1.6	1
802	Agricultural Waste-Based Biochar for Agronomic Applications. Applied Sciences (Switzerland), 2021, 11, 8914.	1.3	28
803	Chemical, biochemical, and microbiological properties of Technosols produced from urban inorganic and organic wastes. Journal of Soils and Sediments, 2022, 22, 146-161.	1.5	3
804	Assessment of optimal conditions for the performance of greenhouse gas removal methods. Journal of Environmental Management, 2021, 294, 113039.	3.8	12
805	Compensation of high nitrogen toxicity and nitrogen deficiency with biochar amendment through enhancement of soil fertility and nitrogen use efficiency promoted rice growth and yield. GCB Bioenergy, 2021, 13, 1765-1784.	2.5	26
806	Biochar modulates mineral nitrogen dynamics in soil and terrestrial ecosystems: A critical review. Chemosphere, 2021, 278, 130378.	4.2	42
807	Effects of Biochar Application on Soil Organic Carbon in Degraded Saline-sodic Wetlands of Songnen Plain, Northeast China. Chinese Geographical Science, 2021, 31, 877-887.	1.2	4
808	Soil amendments from recycled waste differently affect COâ,, soil emissions in restored mining soils under semiarid conditions. Journal of Environmental Management, 2021, 294, 112894.	3.8	13
809	Changes in soil microbial communities and priming effects induced by rice straw pyrogenic organic matter produced at two temperatures. Geoderma, 2021, 400, 115217.	2.3	14
810	The spectral characteristics of biochar-derived dissolved organic matter at different pyrolysis temperatures. Journal of Environmental Chemical Engineering, 2021, 9, 106075.	3.3	32
811	Influences of soil and biochar properties and amount of biochar and fertilizer on the performance of biochar in improving plant photosynthetic rate: A meta-analysis. European Journal of Agronomy, 2021, 130, 126345.	1.9	32
812	Potential hazards of biochar: The negative environmental impacts of biochar applications. Journal of Hazardous Materials, 2021, 420, 126611.	6.5	118
813	Biochar amendment improves soil physico-chemical properties and alters root biomass and the soil food web in grazed pastures. Agriculture, Ecosystems and Environment, 2021, 319, 107517.	2.5	20
814	A critical review of the possible adverse effects of biochar in the soil environment. Science of the Total Environment, 2021, 796, 148756.	3.9	113
815	Does biochar accelerate the mitigation of greenhouse gaseous emissions from agricultural soil? - A global meta-analysis. Environmental Research, 2021, 202, 111789.	3.7	66
816	Opening the black box: Soil microcosm experiments reveal soot black carbon short-term oxidation and influence on soil organic carbon mineralisation. Science of the Total Environment, 2021, 801, 149659.	3.9	0
817	The role of biochar particle size and application rate in promoting the hydraulic and physical properties of sandy desert soil. Catena, 2021, 207, 105607.	2.2	29

#	ARTICLE	IF	CITATIONS
818	Biochar-induced priming effects in soil via modifying the status of soil organic matter and microflora: A review. Science of the Total Environment, 2022, 805, 150304.	3.9	42
819	Interaction of pyrolysed and un-pyrolysed organic materials enhances carbon accumulation in soil irrigated with water of variable electrical conductivity. Soil and Tillage Research, 2022, 215, 105193.	2.6	5
820	Transformation of biochar into extracted humic substances under short-term laboratory incubation conditions: Evidence from stable carbon isotopes. Soil and Tillage Research, 2022, 215, 105189.	2.6	12
821	Coffee waste as an eco-friendly and low-cost alternative for biochar production impacts on sandy soil chemical attributes and microbial gene abundance. Bragantia, 0, 80, .	1.3	6
822	Improvement of Soil Quality by Solid Waste Recycling: A Global Perspective. , 2021, , 637-667.		0
823	Short-Term Effect of Biochar on Microbial Biomass, Respiration and Enzymatic Activities in Wastewater Irrigated Soils in Urban Agroecosystems of the West African Savannah. Agronomy, 2021, 11, 271.	1.3	14
824	Role of Biochar on Greenhouse Gas Emissions and Carbon Sequestration in Soil: Opportunities for Mitigating Climate Change. , 2021, , 237-260.		1
825	Use of Biochar in Sustainable Agriculture. , 2019, , 501-528.		4
826	Prospects of Biochar in Alkaline Soils to Mitigate Climate Change. , 2020, , 133-149.		9
827	Response of soil microbial biomass and enzymatic activity to biochar amendment in the organic carbon deficient arid soil: a 2-year field study. Arabian Journal of Geosciences, 2019, 12, 1.	0.6	49
828	Short-Term Interactive Effects of Biochar, Green Manure, and Inorganic Fertilizer on Soil Properties and Agronomic Characteristics of Maize. , 2014, 3, 128.		1
829	Conceptual vision of bioenergy sector development in Mediterranean regions based on decentralized thermochemical systems. Sustainable Energy Technologies and Assessments, 2017, 23, 33-47.	1.7	21
830	Temperature sensitivity of soil organic matter decomposition varies with biochar application and soil type. Pedosphere, 2020, 30, 336-342.	2.1	15
831	Edaphic and environmental controls of soil respiration and related soil processes under two contrasting manuka and kanuka shrubland stands in North Island, New Zealand. Soil Research, 2013, 51, 390.	0.6	6
832	Biochar: an improver of nutrient and soil water availability - what is the evidence?. CAB Reviews: Perspectives in Agriculture, Veterinary Science, Nutrition and Natural Resources, 0, , 1-19.	0.6	32
833	Risk Evaluation of Pyrolyzed Biochar from Multiple Wastes. Journal of Chemistry, 2019, 2019, 1-28.	0.9	36
834	The Stability of Biochar in the Environment. , 2013, , 1-40.		23
835	The Potential of Biochar Amendments to Remediate Contaminated Soils. , 2013, , 108-141.		5

#	Article	IF	CITATIONS
836	KINETIC MODELLING AND HALF LIFE STUDY OF ADSORPTIVE BIOREMEDIATION OF SOIL ARTIFICIALLY CONTAMINATED WITH BONNY LIGHT CRUDE OIL. Journal of Ecological Engineering, 2015, 16, 1-13.	0.5	16
837	A Systematic Review of Biochar Research, with a Focus on Its Stability in situ and Its Promise as a Climate Mitigation Strategy. PLoS ONE, 2013, 8, e75932.	1.1	157
838	Biochar from Sugarcane Filtercake Reduces Soil CO2 Emissions Relative to Raw Residue and Improves Water Retention and Nutrient Availability in a Highly-Weathered Tropical Soil. PLoS ONE, 2014, 9, e98523.	1.1	29
839	Short-Term Responses of Soil Respiration and C-Cycle Enzyme Activities to Additions of Biochar and Urea in a Calcareous Soil. PLoS ONE, 2016, 11, e0161694.	1.1	16
840	Bioszén hatása a talaj-növény-mikróba rendszerre: előnyök és aggályok — Szemle. Agrokemia Es T 2015, 64, 257-272.	alajtan, 9.1	3
841	Role of Biochar in Mitigation of Climate Change through Carbon Sequestration. International Journal of Current Microbiology and Applied Sciences, 2017, 6, 859-866.	0.0	13
842	Conservation Tillage Impact on Topsoil and Deep Soil Aggregation and Aggregate Associated Carbon Fractions and Microbial Community Composition in Subtropical India: A Review. International Journal of Current Microbiology and Applied Sciences, 2019, 8, 283-302.	0.0	3
844	Effect of Rice Straw Biochar on Soil Quality and the Early Growth and Biomass Yield of Two Rice Varieties. Agricultural Sciences, 2015, 06, 798-806.	0.2	26
845	Effects of Biochar on the Emissions of Greenhouse Gases from Sugarcane Residues Applied to Soils. Agricultural Sciences, 2017, 08, 869-886.	0.2	7
850	Biochar for soil carbon sequestration. Clean Technology, 2013, 19, 201-211.	0.1	22
851	Ecological Intensification for Soil Management: Biochar – A Natural Solution for Soil from Agricultural Residues. , 2021, , 403-455.		1
852	Biochar dose determines methane uptake and methanotroph abundance in Haplic Luvisol. Science of the Total Environment, 2022, 806, 151259.	3.9	16
853	Greenhouse Gas Inventory Model for Biochar Additions to Soil. Environmental Science & Technology, 2021, 55, 14795-14805.	4.6	68
854	Stability of Woodchips Biochar and Impact on Soil Carbon Stocks: Results from a Two-Year Field Experiment. Forests, 2021, 12, 1350.	0.9	3
856	Biochar: A Potential Alternative for Sustainable Agriculture. International Journal of Current Microbiology and Applied Sciences, 2018, 7, 410-425.	0.0	0
857	Carbon Sequestration in Alkaline Soils. Sustainable Agriculture Reviews, 2019, , 149-167.	0.6	1
858	Rhizosphere Management: A Novel Approach for Improving the Crop Productivity. International Journal of Current Microbiology and Applied Sciences, 2019, 8, 2143-2155.	0.0	1
859	Biochar: A New Environmental Paradigm in Management of Agricultural Soils and Mitigation of GHG Emission. , 2020, , 223-258.		1

#	Article	IF	CITATIONS
860	Impact of dry sludges and sludge biochar on height and dry matter of Solanum lycopersicum L Agronomia Colombiana, 2020, 38, 242-252.	0.1	0
862	Characteristics of greenhouse gas emissions from farmland soils based on a structural equation model: Regulation mechanism of biochar. Environmental Research, 2022, 206, 112303.	3.7	31
863	Biochar-Induced Priming Effects in Young and Old Poplar Plantation Soils. Phyton, 2020, 89, 13-26.	0.4	4
865	Integrated Instillation Technology for the Synthesis of a pH-Responsive Sodium Alginate/Biomass Charcoal Soil Conditioner for Controlled Release of Humic Acid and Soil Remediation. Journal of Agricultural and Food Chemistry, 2021, 69, 13386-13397.	2.4	14
866	Effect of Levels of Coconut Shell Biochar and Farm Yard Manure on Soil Properties under Upland Rice Cultivation. International Research Journal of Pure and Applied Chemistry, 0, , 18-35.	0.2	0
869	Nitrogen-doped biochar as peroxymonosulfate activator to degrade 2,4-dichlorophenol: Preparation, properties and structure–activity relationship. Journal of Hazardous Materials, 2022, 424, 127743.	6.5	16
870	Impact of Corn Cob-Derived Biochar in Altering Soil Quality, Biochemical Status and Improving Maize Growth under Drought Stress. Agronomy, 2021, 11, 2300.	1.3	18
871	Stability of biochar in five soils: Effects from soil property. Environmental Progress and Sustainable Energy, 0, , e13775.	1.3	1
872	Use of biochar for alleviating negative impact of salinity stress in corn grown in arid soil. Canadian Journal of Soil Science, 2022, 102, 187-196.	0.5	7
873	Co-application of biochar with non-pyrolyzed organic material accelerates carbon accrual and nutrient availability in soil. Environmental Technology and Innovation, 2022, 25, 102128.	3.0	13
874	Efficiency of Rice Husk Biochar with Poultry Litter Co-Composts in Oxisols for Improving Soil Physico-Chemical Properties and Enhancing Maize Performance. Agronomy, 2021, 11, 2409.	1.3	2
875	Anaerobic primed CO2 and CH4 in paddy soil are driven by Fe reduction and stimulated by biochar. Science of the Total Environment, 2022, 808, 151911.	3.9	15
876	HCH Removal in a Biochar-Amended Biofilter. Water (Switzerland), 2021, 13, 3396.	1.2	6
877	A relationship paradigm between biochar amendment and greenhouse gas emissions. Advances in Chemical Pollution, Environmental Management and Protection, 2021, 7, 203-220.	0.3	0
879	Biochar for sustainable agriculture: Prospects and implications. Advances in Chemical Pollution, Environmental Management and Protection, 2021, 7, 221-262.	0.3	1
880	An overview on biochar production, its implications, and mechanisms of biochar-induced amelioration of soil and plant characteristics. Pedosphere, 2022, 32, 107-130.	2.1	67
881	Three source-partitioning of CO2 fluxes based on a dual-isotope approach to investigate interactions between soil organic carbon, glucose and straw. Science of the Total Environment, 2022, 811, 152163.	3.9	7
882	Short-term biochar effect on soil physicochemical and microbiological properties of a degraded alpine grassland. Pedosphere, 2022, 32, 426-437.	2.1	11

#	Article	IF	CITATIONS
883	Carbon mineralization in subtropical alluvial arable soils amended with sugarcane bagasse and rice husk biochars. Pedosphere, 2022, 32, 475-486.	2.1	6
884	Soil Clay Content, Biochar Production Temperature and Aging Affected Biochar Stability and its Priming Effect on Soil Organic Carbon Mineralization. SSRN Electronic Journal, 0, , .	0.4	0
885	Effects of Applying Recycled Urban Green Waste Compost Made from Pruning Materials to Soil on the Growth of Plants. Journal of Soil Science and Plant Nutrition, 2022, 22, 1088-1097.	1.7	2
886	Nitrogen recovery in reclaimed mine soil under different amendment practices in tandem with legume and nonâ€legume revegetation: A review. Soil Use and Management, 2022, 38, 1113-1145.	2.6	11
887	Carbon dioxide emission, nitrogen mineralisation and spinach dry matter yield in a loamy humic soil amended with lime and poultry manure. Environmental Monitoring and Assessment, 2022, 194, 110.	1.3	0
888	Evaluating coal char as an alternative to biochar for mitigating nutrient and carbon loss from manureâ€amended soils: Insights from a greenhouse experiment. Journal of Environmental Quality, 2022, 51, 272-287.	1.0	3
889	Short-term effects of repeated application of solid digestate on soil C and N dynamics and CO2 emission in a clay soil olive (Olea europaea L.) orchard. , 2022, 1, 100004.		4
890	Wood Ash Based Treatment of Anaerobic Digestate: State-of-the-Art and Possibilities. Processes, 2022, 10, 147.	1.3	7
891	Increased soil-derived N2O production following a simulated fall-freeze–thaw cycle: effects of fall urea addition, soil moisture, and history of manure applications. Biogeochemistry, 2022, 157, 379-398.	1.7	6
892	Using Biochar and Vermiwash to Improve Biological Activities of Soil. Agriculture (Switzerland), 2022, 12, 178.	1.4	7
893	13C Labelling of Litter Added to Tea (Camellia sinensis L.) Plantation Soil Reveals a Significant Positive Priming Effect That Leads to Less Soil Organic Carbon Accumulation. Agronomy, 2022, 12, 293.	1.3	4
894	Soil properties modulate the effect of different carbon amendments on growth and phosphorus uptake by cucumber plant. Spanish Journal of Agricultural Research, 2022, 20, e1101-e1101.	0.3	1
895	Biochar and compost amendments to a coarse-textured temperate agricultural soil lead to nutrient leaching. Applied Soil Ecology, 2022, 173, 104393.	2.1	9
896	Circular bioeconomy perspective of agro-waste-based biochar. , 2022, , 223-243.		1
897	Effects of Pyrogenic Carbon Addition after Wildfire on Soil Carbon Mineralization in Peatland. SSRN Electronic Journal, 0, , .	0.4	0
898	Difference of Soil Aggregates Composition, Stability, and Organic Carbon Content between Eroded and Depositional Areas after Adding Exogenous Organic Materials. Sustainability, 2022, 14, 2143.	1.6	4
899	Mitigation of Greenhouse Gas Emissions with Biochar Application in Compacted and Uncompacted Soil. Agronomy, 2022, 12, 546.	1.3	2
900	Investigation of the adsorption performance of cationic and anionic dyes using hydrochared waste human hair. Biomass Conversion and Biorefinery, 2024, 14, 3715-3728.	2.9	28

#	ARTICLE	IF	CITATIONS
901	Inclusion of biochar in a C dynamics model based on observations from an 8-year field experiment. Soil, 2022, 8, 199-211.	2.2	13
902	Nutrient Management Drives the Direction and Magnitude of Nitrous Oxide Flux in Crop Residue-Returned Soil Under Different Soil Moisture. Frontiers in Environmental Science, 2022, 10, .	1.5	5
903	Increases in temperature response to CO2 emissions in biochar-amended vegetable field soil. Environmental Science and Pollution Research, 2022, 29, 50895-50905.	2.7	2
904	Plant-soil nitrogen, carbon and phosphorus content after the addition of biochar, bacterial inoculums and nitrogen fertilizer. Journal of Plant Nutrition, 2023, 46, 541-555.	0.9	5
906	Impact of biochar and manure application on in situ carbon dioxide flux, microbial activity, and carbon budget in degraded cropland soil of southern India. Land Degradation and Development, 0, , .	1.8	4
907	Biochar-Based Compost Affects Bacterial Community Structure and Induces a Priming Effect on Soil Organic Carbon Mineralization. Processes, 2022, 10, 682.	1.3	1
908	Closing the circle for urban food waste anaerobic digestion: The use of digestate and biochar on plant growth in potting soil. Journal of Cleaner Production, 2022, 347, 131071.	4.6	31
909	The effect of biochars produced from barberry and jujube on erosion, nutrient, and properties of soil in laboratory conditions. Soil and Tillage Research, 2022, 219, 105345.	2.6	11
910	Use of biomass-derived biochar in wastewater treatment and power production: A promising solution for a sustainable environment. Science of the Total Environment, 2022, 825, 153892.	3.9	62
911	Biochar stability and impact on soil organic carbon mineralization depend on biochar processing, aging and soil clay content. Soil Biology and Biochemistry, 2022, 169, 108657.	4.2	60
912	Biochar produced from the straw of common crops simultaneously stabilizes soil organic matter and heavy metals. Science of the Total Environment, 2022, 828, 154494.	3.9	22
913	Rice-husk biochar effects on organic carbon, aggregate stability and nitrogen-fertility of coarse-textured Ultisols evaluated using Celosia argentea growth. Sains Tanah, 2021, 18, 177.	0.2	3
915	Effects of the Rapid Construction of a High-Quality Plough Layer Based on Woody Peat in a Newly Reclaimed Cultivated Land Area. Agriculture (Switzerland), 2022, 12, 31.	1.4	5
916	A data synthesis on the biochar properties and implications for air, soil, and water quality in Brazil. Environmental Quality Management, 2023, 32, 27-41.	1.0	3
925	<scp>¹³C</scp> methodologies for quantifying biochar stability in soil: A critique. European Journal of Soil Science, 2022, 73, .	1.8	2
926	Circular economy-based environmental management using biochar: Driving towards sustainability. Chemical Engineering Research and Design, 2022, 163, 585-600.	2.7	33
927	Influence of addition of two typical activated carbons on fertility properties and mechanical strength of vegetation concrete under freeze-thaw conditions. Science of the Total Environment, 2022, 838, 156446.	3.9	6
928	Distribution of terrestrial organic material in intertidal and nearshore marine sediment due to debris flow response efforts. Science of the Total Environment, 2022, , 156886.	3.9	0

#	Article	IF	CITATIONS
929	Alternative strategies to synthetic chemical fertilizers: revitalization of soil quality for sustainable agriculture using organic-based approaches. , 2022, , 1-30.		4
930	Effects of Slow Pyrolysis Biochar on CO2 Emissions from Two Soils under Anaerobic Conditions. Agriculture (Switzerland), 2022, 12, 1028.	1.4	1
931	Biochar induces mineralization of soil recalcitrant components by activation of biochar responsive bacteria groups. Soil Biology and Biochemistry, 2022, 172, 108778.	4.2	34
932	Impact of Plant-Based Amendments on Water-Soluble Nitrogen Release Dynamics in Cultivated Peatlands. Nitrogen, 2022, 3, 426-443.	0.6	4
933	Vertical <scp>SOC</scp> distribution and aromatic carbon in centuries old charcoalâ€rich Technosols. European Journal of Soil Science, 2022, 73, .	1.8	4
934	Physico-chemical properties of waste derived biochar from community scale faecal sludge treatment plants. Gates Open Research, 0, 6, 96.	2.0	8
935	Biogas residue biochar still had ecological risks to the ultisol: evidence from soil bacterial communities, organic carbon structures, and mineralization. Journal of Soils and Sediments, 0, , .	1.5	1
936	Land-use-driven change in soil labile carbon affects microbial community composition and function. Geoderma, 2022, 426, 116056.	2.3	11
937	Mixed application of biochar, maize straw, and nitrogen can improve organic carbon fractions and available nutrients of a sandy soil. Arid Land Research and Management, 2023, 37, 115-133.	0.6	0
938	Unravelling how biochar and dung amendments determine the functional structure and community assembly related to methane metabolisms in grassland soils. Biochar, 2022, 4, .	6.2	10
939	Compost amendment maintains soil structure and carbon storage by increasing available carbon and microbial biomass in agricultural soil – A six-year field study. Geoderma, 2022, 427, 116117.	2.3	22
940	Impacts of deficit irrigation and organic amendments on soil microbial populations and yield of processing tomatoes. Applied Soil Ecology, 2022, 180, 104625.	2.1	5
941	A review of biochar potential in Cote d'lvoire in light of the challenges facing Sub-Saharan Africa. Biomass and Bioenergy, 2022, 165, 106581.	2.9	8
942	Field-aged biochar enhances soil organic carbon by increasing recalcitrant organic carbon fractions and making microbial communities more conducive to carbon sequestration. Agriculture, Ecosystems and Environment, 2022, 340, 108177.	2.5	17
943	Sewage Sludge Biochar. , 2022, , 183-199.		0
944	Embedding of biochar in soil mineral fractions: Evidence from benzene polycarboxylic acids molecular biomarkers. Science of the Total Environment, 2023, 856, 159025.	3.9	2
945	Arsenic removal from water and soils using pristine and modified biochars. Biochar, 2022, 4, .	6.2	30
946	Spatial spillover of global value chain in eco-efficiency. Frontiers in Environmental Science, 0, 10, .	1.5	0

#	Article	IF	CITATIONS
947	Effects of biochar and ligneous soil amendments on greenhouse gas exchange during extremely dry growing season in a Finnish cropland. Frontiers in Sustainable Food Systems, 0, 6, .	1.8	0
948	Combined effects of biochar addition with varied particle size and temperature on the decomposition of soil organic carbon in a temperate forest, China. Soil Science and Plant Nutrition, 2023, 69, 45-53.	0.8	2
949	A synthesis of soil organic carbon mineralization in response to biochar amendment. Soil Biology and Biochemistry, 2022, 175, 108851.	4.2	7
950	The Effect of Dosage and Biochar Types On the Availability Of Phosphorus Nutrients In Acid Soil In Sebatik, Indonesia. IOP Conference Series: Earth and Environmental Science, 2022, 1083, 012002.	0.2	0
951	Net Carbon Balance between Priming and Replenishment of Soil Organic Carbon with Biochar Addition Regulated by N Addition Differing in Contrasting Forest Ecosystems. Forests, 2022, 13, 1710.	0.9	1
952	Comparison of the Responses of Soil Enzymes, Microbial Respiration and Plant Growth Characteristics under the Application of Agricultural and Food Waste-Derived Biochars. Agronomy, 2022, 12, 2428.	1.3	4
953	Biochar and organic fertilizer amendments stimulate the dynamics of ammonia oxidizers community in a slightly alkaline soil. Arabian Journal of Geosciences, 2022, 15, .	0.6	0
954	Oak Biomass in the Form of Wood, Bark, Brushwood, Leaves and Acorns in the Production Process of Multifunctional Biochar. Molecules, 2022, 27, 7191.	1.7	1
955	Long-term continuous farmyard manure application increases soil carbon when combined with mineral fertilizers due to lower priming effects. Geoderma, 2022, 428, 116216.	2.3	17
956	Improving nitrogen retention of cattle slurry with oxidized biochar: An incubation study with three different soils. Journal of Environmental Quality, 2023, 52, 1-12.	1.0	1
957	Exploring invasive weed biochar as soil amendment: A study on fodder oats productivity and soil biological properties. Environmental Research, 2023, 216, 114527.	3.7	4
958	Water-stable aggregates and aggregate-associated organic carbon after two years of biochar application. Archives of Agronomy and Soil Science, 2023, 69, 2218-2232.	1.3	1
959	Successive addition of rice straw biochar enhances carbon accumulation in soil irrigated with saline or non-saline water. Environmental Research, 2023, 217, 114733.	3.7	4
960	Surface functional groups and degree of carbonization of selected chars from different processes and feedstock. PLoS ONE, 2022, 17, e0277365.	1.1	7
961	A global synthesis of biochar's sustainability in climate-smart agriculture - Evidence from field and laboratory experiments. Renewable and Sustainable Energy Reviews, 2023, 172, 113042.	8.2	20
962	CO2 emissions and their changes with H2O emissions, soil moisture, and temperature during the wetting–drying process of the soil mixed with different biochar materials. Journal of Water and Climate Change, 2022, 13, 4273-4282.	1.2	4
963	Biochar-Compost Additions Have Strong Short-Term Effects on Carbon and Nitrogen Emissions from an Agricultural Soil. Agronomy, 2022, 12, 2959.	1.3	0
965	Physico-chemical properties of waste derived biochar from community scale faecal sludge treatment plants. Gates Open Research, 0, 6, 96.	2.0	0

#	Article	IF	CITATIONS
966	Potential implications of biochar and compost on the stoichiometry-based assessments of soil enzyme activity in heavy metal-polluted soils. , 2022, 1, .		17
967	Effect of biochar and DMPP application alone or in combination on nitrous oxide emissions differed by soil types. Biology and Fertility of Soils, 2023, 59, 123-138.	2.3	5
968	Role of biochar toward carbon neutrality. , 2023, 2, .		37
969	Biochar as a Soil Amendment for Restraining Greenhouse Gases Emission and Improving Soil Carbon Sink: Current Situation and Ways Forward. Sustainability, 2023, 15, 1206.	1.6	12
970	The Impact of Biochar and Animal Manure on Soil Properties, Yield, and Quality of Crops. , 2023, , 183-196.		0
971	Machine learning in the evaluation and prediction models of biochar application: A review. Science Progress, 2023, 106, 003685042211488.	1.0	7
972	Effects of pyrogenic carbon addition after fire on soil carbon mineralization in the Great Khingan Mountains peatlands (Northeast China). Science of the Total Environment, 2023, 864, 161102.	3.9	1
973	Recycled biochar adsorption combined with CaCl2 washing to increase rice yields and decrease Cd levels in grains and paddy soils: A field study. Science of the Total Environment, 2023, 865, 161265.	3.9	0
974	Biochar Acts as an Emerging Soil Amendment and Its Potential Ecological Risks: A Review. Energies, 2023, 16, 410.	1.6	10
975	Transmissible Effects of a Biochar Amendment to an Upper Soil Zone Upon an Associated Lower Zone, Including Attenuation of Soybean Cyst Nematode (Heterodera glycines). Agronomy, 2023, 13, 53.	1.3	1
976	Priming effect depending on land use and soil types in a typical semi-arid landscape in Kenya. Biogeochemistry, 0, , .	1.7	0
977	Short-term responses of soil carbon and nitrogen pools as well as their isotopic compositions to biochar applications in a suburban forest in subtropical Australia subjected to prescribed burning. Journal of Soils and Sediments, 2023, 23, 1473-1484.	1.5	2
978	Is soil an organic carbon sink or source upon erosion, transport and deposition?. European Journal of Soil Science, 2023, 74, .	1.8	4
979	Microbe-mediated abiotic stress management for sustainable agriculture. , 2023, , 245-262.		0
980	Invasive Wetland Weeds Derived Biochar Properties Affecting Soil Carbon Dynamics of South Indian Tropical Ultisol. Environmental Management, 2023, 72, 343-362.	1.2	1
981	Biochar as a negative emission technology: A synthesis of field research on greenhouse gas emissions. Journal of Environmental Quality, 2023, 52, 769-798.	1.0	2
982	Biochar soil amendment as carbon farming practice in a Mediterranean environment. Geoderma Regional, 2023, 33, e00634.	0.9	1
983	Effect of biochar addition and reduced irrigation regimes on growth, physiology and water use efficiency of cotton plants under salt stress. Industrial Crops and Products, 2023, 198, 116702.	2.5	7

#	Article	IF	CITATIONS
984	Biochar-immobilized Bacillus spp. for heavy metals bioremediation: A review on immobilization techniques, bioremediation mechanisms and effects on soil. Science of the Total Environment, 2023, 881, 163385.	3.9	12
985	Nanoâ€biochar: Properties and prospects for sustainable agriculture. Land Degradation and Development, 2023, 34, 2445-2463.	1.8	10
986	Responses of Soil Humus Composition and Humic Acid Structural Characteristics to the Addition of Different Types of Biochar in Phaeozems. Journal of Soil Science and Plant Nutrition, 2023, 23, 1611-1618.	1.7	1
987	Pine Chip and Poultry Litter Derived Biochars Affect C and N Dynamics in Two Georgia, USA, Ultisols. Agronomy, 2023, 13, 531.	1.3	2
988	EFFECT OF BIOCHAR APPLICATION ON CO2 EMISSION IN RELATIONSHIP WITH SOIL PHYSICAL PROPERTIES. , 2022, , .		0
989	Advances and prospects of biochar in improving soil fertility, biochemical quality, and environmental applications. Frontiers in Environmental Science, 0, 11, .	1.5	17
990	Unravelling the Recent Developments in the Production Technology and Efficient Applications of Biochar for Agro-Ecosystems. Agriculture (Switzerland), 2023, 13, 512.	1.4	7
991	Pyrolysis temperature has greater effects on carbon and nitrogen biogeochemistry than biochar feedstock when applied to a sandy forest soil. Forest Ecology and Management, 2023, 534, 120881.	1.4	2
992	Effect of Carbon Content in Wheat Straw Biochar on N2O and CO2 Emissions and Pakchoi Productivity Under Different Soil Moisture Conditions. Sustainability, 2023, 15, 5100.	1.6	4
993	Potential of Biochar to Sequester Carbon and Mitigate Greenhouse Gas Emissions. Current Journal of Applied Science and Technology, 2023, 42, 24-31.	0.3	0
994	Moderation of nitrogen availability through the application of pyrolyzed and unpyrolyzed organic materials in saline water irrigated soil. Environmental Monitoring and Assessment, 2023, 195, .	1.3	1
996	Multifaceted applications of biochar in environmental management: a bibliometric profile. Biochar, 2023, 5, .	6.2	26
997	Spatial variation and relationship between soil dissolved organic matter and bacterial community in urban greenspaces. , 2023, 2, .		4
998	Filter Cake Biochar as a Soil Conditioner Cultivated with Native Cerrado Species: Effect on Soil Chemical and Microbiological Properties. Floresta E Ambiente, 2023, 30, .	0.1	0
999	Biochar for Crop Protection from Soil Borne Diseases. Sustainable Agriculture Reviews, 2023, , 231-246.	0.6	2
1035	Biochar aged or combined with humic substances: fabrication and implications for sustainable agriculture and environment-a review. Journal of Soils and Sediments, 2024, 24, 139-162.	1.5	1
1039	Biochar for Sustainable Crop Production. Clean Energy Production Technologies, 2023, , 227-256.	0.3	0
1040	Effect of biomass-based materials on enzyme activities in heavy metal-contaminated environment. , 2023, , 241-386.		0

#	Article	IF	CITATIONS
1041	Engineered biochar improves nitrogen use efficiency via stabilizing soil water-stable macroaggregates and enhancing nitrogen transformation. Biochar, 2023, 5, .	6.2	6
1054	Biochar: A Tool for Combatting Both Invasive Species and Climate Change. , 2023, , 367-393.		Ο
1056	Faecal sludge pyrolysis as a circular economic approach to waste management and nutrient recovery. Environment, Development and Sustainability, 0, , .	2.7	0
1058	Crop Production and Soil Management Interventions for Increased Organic Carbon Sequestration in Soils. , 2023, , 615-645.		1
1073	Biochar's effect on soil properties. , 2024, , 45-80.		0
1079	Perspective Chapter: The Role of Biochar in Soil Amelioration. , 0, , .		0
1089	Effects of Date Palm Residues Derived Biochar on CHG Emissions and NO3-N Leaching in Urea-Fertilized Desert Soil. Advances in Science, Technology and Innovation, 2024, , 129-132.	0.2	0