

Effects of biochar and other amendments on the physical emissions of an artificially degraded soil

Science of the Total Environment

487, 26-36

DOI: [10.1016/j.scitotenv.2014.03.141](https://doi.org/10.1016/j.scitotenv.2014.03.141)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Impacts of Biochar on Physical Properties and Erosion Potential of a Mudstone Slope Land Soil. Scientific World Journal, The, 2014, 2014, 1-10.	0.8	71
2	Impacts of 1.5-Year Field Aging on Biochar, Humic Acid, and Water Treatment Residual Amended Soil. Soil Science, 2014, 179, 333-339.	0.9	33
3	Relating physical and chemical properties of four different biochars and their application rate to biomass production of Lolium perenne on a Calcic Cambisol during a pot experiment of 79 days. Science of the Total Environment, 2014, 499, 175-184.	3.9	123
4	Impacts of Biochar and Other Amendments on Soil-Carbon and Nitrogen Stability: A Laboratory Column Study. Soil Science Society of America Journal, 2014, 78, 1258-1266.	1.2	29
5	Emission of CO_2 from biochar-amended soils and implications for soil organic carbon. GCB Bioenergy, 2015, 7, 1294-1304.	2.5	76
6	Application of Biochar for Soil Physical Improvement. SSSA Special Publication Series, 0, , 101-122.	0.2	8
7	Application of Biochar for Soil Biological Improvement. SSSA Special Publication Series, 0, , 145-173.	0.2	7
8	Aqueous Contaminant Removal and Stormwater Treatment Using Biochar. SSSA Special Publication Series, 0, , 341-376.	0.2	8
9	The Origin and Reversible Nature of Poultry Litter Biochar Hydrophobicity. Journal of Environmental Quality, 2015, 44, 963-971.	1.0	31
10	Biochar for Soil Improvement: Evaluation of Biochar from Gasification and Slow Pyrolysis. Agriculture (Switzerland), 2015, 5, 1076-1115.	1.4	82
11	BIOCHAR: PYROGENIC CARBON FOR AGRICULTURAL USE - A CRITICAL REVIEW. Revista Brasileira De Ciencia Do Solo, 2015, 39, 321-344.	0.5	141
12	Effect of biochar and liming on soil nitrous oxide emissions from a temperate maize cropping system. Soil, 2015, 1, 707-717.	2.2	36
13	Peanut shell biochar improves soil properties and peanut kernel quality on a red Ferrisol. Journal of Soils and Sediments, 2015, 15, 2220-2231.	1.5	44
14	Production of bio-based phenolic resin and activated carbon from bio-oil and biochar derived from fast pyrolysis of palm kernel shells. Bioresource Technology, 2015, 178, 99-107.	4.8	153
15	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
16	A novel magnetic biochar from spent shiitake substrate: characterization and analysis of pyrolysis process. Biomass Conversion and Biorefinery, 2015, 5, 339-346.	2.9	9
17	Evaluation of slow pyrolyzed wood and rice husks biochar for adsorption of ammonium nitrogen from piggy manure anaerobic digester slurry. Science of the Total Environment, 2015, 505, 102-112.	3.9	412
18	Nitrogen availability, water-filled pore space, and N_2O -N fluxes after biochar application and nitrogen fertilization. Pesquisa Agropecuaria Brasileira, 2016, 51, 1203-1212.	0.9	4

#	ARTICLE	IF	CITATIONS
19	The importance of soybean production worldwide. , 2016, , 1-26.		61
20	Effects of Biochar and Marble mud on Mine Waste Properties to Reclaim Tailing Ponds. Land Degradation and Development, 2016, 27, 1227-1235.	1.8	14
21	Biochar Field Study: Greenhouse Gas Emissions, Productivity, and Nutrients in Two Soils. Agronomy Journal, 2016, 108, 1805-1815.	0.9	19
22	Spatial heterogeneity of soil biochar content affects soil quality and wheat growth and yield. Science of the Total Environment, 2016, 562, 690-700.	3.9	32
23	Effect of barley straw biochar application on greenhouse gas emissions from upland soil for Chinese cabbage cultivation in short-term laboratory experiments. Journal of Mountain Science, 2016, 13, 693-702.	0.8	15
24	Effect of Biochar Application on Rice Yield and Greenhouse Gas Emission under Different Nutrient Conditions from Paddy Soil. Journal of Environmental Engineering, ASCE, 2016, 142, .	0.7	18
25	Nutrient release and ammonium sorption by poultry litter and wood biochars in stormwater treatment. Science of the Total Environment, 2016, 553, 596-606.	3.9	97
26	Designing advanced biochar products for maximizing greenhouse gas mitigation potential. Critical Reviews in Environmental Science and Technology, 2016, 46, 1367-1401.	6.6	86
27	Reduced carbon sequestration potential of biochar in acidic soil. Science of the Total Environment, 2016, 572, 129-137.	3.9	92
28	Combination of biochar amendment and phytoremediation for hydrocarbon removal in petroleum-contaminated soil. Environmental Science and Pollution Research, 2016, 23, 21219-21228.	2.7	40
29	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
30	Effect of biochar amendment on morphology, productivity and water relations of sunflower plants under non-irrigation conditions. Catena, 2016, 147, 280-287.	2.2	117
31	Long-term effects of biochar on soil physical properties. Geoderma, 2016, 282, 96-102.	2.3	317
32	Biochar properties: Transport, fate, and impact. Critical Reviews in Environmental Science and Technology, 2016, 46, 1183-1296.	6.6	126
33	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
34	Effects of two different organic amendments addition to soil on sorption-desorption, leaching, bioavailability of penconazole and the growth of wheat (<i>Triticum aestivum</i> L.). Journal of Environmental Management, 2016, 167, 130-138.	3.8	26
35	Issues with the Amendment of Post-mined Reconstituted Soil with Organic Matter for Production of Sugarcane. Sugar Tech, 2016, 18, 505-514.	0.9	2
36	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

#	ARTICLE	IF	CITATIONS
37	Interactive effects of straw-derived biochar and N fertilization on soil C storage and rice productivity in rice paddies of Northeast China. <i>Science of the Total Environment</i> , 2016, 544, 203-210.	3.9	89
38	Transport and retention of bacteria and viruses in biochar-amended sand. <i>Science of the Total Environment</i> , 2016, 548-549, 100-109.	3.9	72
39	Typical agricultural diffuse herbicide sorption with agricultural waste-derived biochars amended soil of high organic matter content. <i>Water Research</i> , 2016, 92, 156-163.	5.3	54
40	Impacts of biochar addition on rice yield and soil properties in a cold waterlogged paddy for two crop seasons. <i>Field Crops Research</i> , 2016, 191, 161-167.	2.3	153
41	Soil respiration characteristics in different land uses and response of soil organic carbon to biochar addition in high-latitude agricultural area. <i>Environmental Science and Pollution Research</i> , 2016, 23, 2279-2287.	2.7	9
42	Comparative Studies on the Use of Binary and Ternary Combinations of Various Acidifying Agents for the Reduction of Soil pH. <i>Communications in Soil Science and Plant Analysis</i> , 2016, 47, 11-18.	0.6	2
43	Predicting the impact of biochar additions on soil hydraulic properties. <i>Chemosphere</i> , 2016, 142, 136-144.	4.2	196
44	Effects of biochar application on soil greenhouse gas fluxes: a meta-analysis. <i>GCB Bioenergy</i> , 2017, 9, 743-755.	2.5	264
45	Efficiency of sewage sludge biochar in improving urban soil properties and promoting grass growth. <i>Chemosphere</i> , 2017, 173, 551-556.	4.2	145
46	Polycyclic Aromatic Hydrocarbons and Toxic Heavy Metals in Municipal Solid Waste and Corresponding Hydrochars. <i>Energy & Fuels</i> , 2017, 31, 1665-1671.	2.5	32
47	Effects of maize stover and its derived biochar on greenhouse gases emissions and C-budget of brown earth in Northeast China. <i>Environmental Science and Pollution Research</i> , 2017, 24, 8200-8209.	2.7	29
48	Mitigating cadmium accumulation in greenhouse lettuce production using biochar. <i>Environmental Science and Pollution Research</i> , 2017, 24, 6532-6542.	2.7	27
49	Biochar Application in Management of Paddy Crop Production and Methane Mitigation. , 2017, , 123-145.		18
50	Contrasting effects of straw and straw-derived biochar application on net global warming potential in the Loess Plateau of China. <i>Field Crops Research</i> , 2017, 205, 45-54.	2.3	100
51	Effects of biochar and wood pellets amendments added to landfill cover soil on microbial methane oxidation: A laboratory column study. <i>Journal of Environmental Management</i> , 2017, 193, 19-31.	3.8	44
52	Biochar: An Emerging Panacea for Contaminated and Degraded Soils. , 2017, , 455-476.		1
53	Biochar research activities and their relation to development and environmental quality. A meta-analysis. <i>Agronomy for Sustainable Development</i> , 2017, 37, 1.	2.2	17
54	Emissions intensity and carbon stocks of a tropical Ultisol after amendment with Tithonia green manure, urea and biochar. <i>Field Crops Research</i> , 2017, 209, 179-188.	2.3	24

#	ARTICLE	IF	CITATIONS
55	Green Technologies and Environmental Sustainability. , 2017, , .		24
56	A Dialogue on Perspectives of Biochar Applications and Its Environmental Risks. Water, Air, and Soil Pollution, 2017, 228, 1.	1.1	30
57	The influence of particle size and feedstock of biochar on the accumulation of Cd, Zn, Pb, and As by Brassica chinensis L.. Environmental Science and Pollution Research, 2017, 24, 22340-22352.	2.7	34
58	The role of biochar and biochar-compost in improving soil quality and crop performance: A review. Applied Soil Ecology, 2017, 119, 156-170.	2.1	487
59	Investigating the biochar effects on C&mineralization and sequestration of carbon in soil compared with conventional amendments using the stable isotope (^{13}C) approach. GCB Bioenergy, 2017, 9, 1085-1099.	2.5	80
60	Biochar applied with appropriate rates can reduce N leaching, keep N retention and not increase NH ₃ volatilization in a coastal saline soil. Science of the Total Environment, 2017, 575, 820-825.	3.9	214
61	Stoichiometric ratio of dissolved organic carbon to nitrate regulates nitrous oxide emission from the biochar-amended soils. Science of the Total Environment, 2017, 576, 559-571.	3.9	64
62	Biochar: The Black Diamond for Soil Sustainability, Contamination Control and Agricultural Production. , 0, , .		16
63	Crop response to soils amended with biochar: expected benefits and unintended risks. Italian Journal of Agronomy, 2017, 12, .	0.4	16
64	Characterization of halotolerant, pigmented, plant growth promoting bacteria of groundnut rhizosphere and its in-vitro evaluation of plant-microbe protocoooperation to withstand salinity and metal stress. Science of the Total Environment, 2018, 630, 231-242.	3.9	56
65	Biochar increases plant growth and alters microbial communities via regulating the moisture and temperature of green roof substrates. Science of the Total Environment, 2018, 635, 333-342.	3.9	92
66	Effect of biochar amendment on water infiltration in a coastal saline soil. Journal of Soils and Sediments, 2018, 18, 3271-3279.	1.5	45
67	Variation in Soil Methane Release or Uptake Responses to Biochar Amendment: A Separate Meta-analysis. Ecosystems, 2018, 21, 1692-1705.	1.6	39
68	Biochar application as a soil amendment for decreasing cadmium availability in soil and accumulation in Brassica chinensis. Journal of Soils and Sediments, 2018, 18, 2511-2519.	1.5	31
69	Biochar and Conservation Agriculture Nexus: Synergy and Research Gaps for Enhanced Sustainable Productivity in Degraded Soils"Review. Communications in Soil Science and Plant Analysis, 2018, 49, 389-403.	0.6	9
70	Impacts of simulated erosion and soil amendments on greenhouse gas fluxes and maize yield in Miamian soil of central Ohio. Scientific Reports, 2018, 8, 520.	1.6	12
71	Biochar amendment with fertilizers increases peanut N uptake, alleviates soil N ₂ O emissions without affecting NH ₃ volatilization in field experiments. Environmental Science and Pollution Research, 2018, 25, 8817-8826.	2.7	44
72	Leaching of ammonium and nitrate from Acrisol and Calcisol amended with holm oak biochar: A column study. Geoderma, 2018, 323, 136-145.	2.3	58

#	ARTICLE	IF	CITATIONS
73	Woody biochar's greenhouse gas mitigation potential across fertilized and unfertilized agricultural soils and soil moisture regimes. <i>GCB Bioenergy</i> , 2018, 10, 108-122.	2.5	16
74	Impact of biochar properties on soil conditions and agricultural sustainability: A review. <i>Land Degradation and Development</i> , 2018, 29, 2124-2161.	1.8	184
75	Biochar application constrained native soil organic carbon accumulation from wheat residue inputs in a long-term wheat-maize cropping system. <i>Agriculture, Ecosystems and Environment</i> , 2018, 252, 200-207.	2.5	49
76	Performance and Emissions Control of Commercial-Scale Biochar Production Unit. <i>Applied Engineering in Agriculture</i> , 2018, 34, 73-84.	0.3	9
77	BIOCARVÃO: REALIDADE E POTENCIAL DE USO NO MEIO FLORESTAL. <i>Ciencia Florestal</i> , 2018, 28, 875-887.	0.1	15
78	Effects of biochar and bio-fertilizer on yield and qualitative properties of soybean and some chemical properties of soil. <i>Arabian Journal of Geosciences</i> , 2018, 11, 1.	0.6	18
79	Effects of Maize Residue Biochar Amendments on Soil Properties and Soil Loss on Acidic Hutton Soil. <i>Agronomy</i> , 2018, 8, 256.	1.3	39
80	Sorption of ammonium and nitrate to biochars is electrostatic and pH-dependent. <i>Scientific Reports</i> , 2018, 8, 17627.	1.6	140
81	A concise review of biochar application to agricultural soils to improve soil conditions and fight pollution. <i>Journal of Environmental Management</i> , 2018, 228, 429-440.	3.8	250
82	Organic Carbon and Ecosystem Services in Agricultural Soils of the Mediterranean Basin. <i>Sustainable Agriculture Reviews</i> , 2018, , 183-210.	0.6	10
83	Ameliorating some quality properties of an erosion-prone soil using biochar produced from dairy wastewater sludge. <i>Catena</i> , 2018, 171, 193-198.	2.2	13
84	Impact of soil properties on the soil methane flux response to biochar addition: a meta-analysis. <i>Environmental Sciences: Processes and Impacts</i> , 2018, 20, 1202-1209.	1.7	14
85	Sustainable Agriculture Reviews 28. <i>Sustainable Agriculture Reviews</i> , 2018, , .	0.6	1
86	Changes in root traits explain the variability of biochar effects on fruit production in eight agronomic species. <i>Organic Agriculture</i> , 2019, 9, 139-153.	1.2	7
87	Response of microbes to biochar strengthen nitrogen removal in subsurface flow constructed wetlands: Microbial community structure and metabolite characteristics. <i>Science of the Total Environment</i> , 2019, 694, 133687.	3.9	77
88	Effect of Pyrochar and Hydrochar on Water Evaporation in Clayey Soil under Greenhouse Cultivation. <i>International Journal of Environmental Research and Public Health</i> , 2019, 16, 2580.	1.2	9
89	A 2-year study on the effect of biochar on methane and nitrous oxide emissions in an intensive rice-wheat cropping system. <i>Biochar</i> , 2019, 1, 177-186.	6.2	22
90	Comparison of the methane-oxidizing capacity of landfill cover soil amended with biochar produced using different pyrolysis temperatures. <i>Science of the Total Environment</i> , 2019, 693, 133594.	3.9	26

#	ARTICLE	IF	CITATIONS
91	Effects of Biochar and Straw Application on the Physicochemical and Biological Properties of Paddy Soils in Northeast China. <i>Scientific Reports</i> , 2019, 9, 16531.	1.6	51
92	Biochar, Manure, and Sawdust Alter Long-Term Water Retention Dynamics in Degraded Soil. <i>Soil Science Society of America Journal</i> , 2019, 83, 1491-1501.	1.2	12
93	The impact of biochar on soil carbon sequestration: Meta-analytical approach to evaluating environmental and economic advantages. <i>Journal of Environmental Management</i> , 2019, 250, 109466.	3.8	86
94	Biochar for environmental management: Mitigating greenhouse gas emissions, contaminant treatment, and potential negative impacts. <i>Chemical Engineering Journal</i> , 2019, 373, 902-922.	6.6	256
95	Effects of biochar application on phreatic water evaporation and water-salt distribution in coastal saline soil. <i>Journal of Plant Nutrition</i> , 2019, 42, 1243-1253.	0.9	11
96	A review on biochar modulated soil condition improvements and nutrient dynamics concerning crop yields: Pathways to climate change mitigation and global food security. <i>Chemosphere</i> , 2019, 227, 345-365.	4.2	204
97	Assessing the terrestrial capacity for Negative Emission Technologies in Ireland. <i>Carbon Management</i> , 2019, 10, 1-10.	1.2	7
98	A Smart Automated Greenhouse: Soil Moisture, Temperature Monitoring and Automatic Water Supply System (Peaty, Loam and Silty). , 2019, , .		11
99	Priming of pyrogenic C (biochar) mineralization by dissolved organic matter and vice versa. <i>Soil Biology and Biochemistry</i> , 2019, 130, 105-112.	4.2	55
100	The potential of lignocellulosic biomass precursors for biochar production: Performance, mechanism and wastewater application—A review. <i>Industrial Crops and Products</i> , 2019, 128, 405-423.	2.5	204
101	Long-term effects of vehicular passages on soil carbon sequestration and carbon dioxide emission in a no-till corn-soybean rotation on a Crosby silt loam in Central Ohio, USA. <i>Journal of Plant Nutrition and Soil Science</i> , 2019, 182, 126-136.	1.1	10
102	Biochar amendment of chromium-polluted paddy soil suppresses greenhouse gas emissions and decreases chromium uptake by rice grain. <i>Journal of Soils and Sediments</i> , 2019, 19, 1756-1766.	1.5	18
103	Biochar increased field soil inorganic carbon content five years after application. <i>Soil and Tillage Research</i> , 2019, 186, 36-41.	2.6	51
104	Long-term charcoal-induced changes to soil properties in temperate regions of northern Iran. <i>Journal of Forestry Research</i> , 2019, 30, 1063-1071.	1.7	6
105	Leveraging existing household survey data to map livelihoods in Nigeria. <i>World Development</i> , 2020, 126, 104727.	2.6	2
106	Pyrolysis Improves the Effect of Straw Amendment on the Productivity of Perennial Ryegrass (<i>Lolium</i>) Tj ETQq1 1 0.784314 rgBT /Ove	1.3	4
107	Biochar characteristics, applications and importance in health risk reduction through metal immobilization. <i>Environmental Technology and Innovation</i> , 2020, 20, 101121.	3.0	20
108	Biochar: A Vital Source for Sustainable Agriculture. , 2020, , .		6

#	ARTICLE	IF	CITATIONS
109	Co-application of poultry-litter biochar with Azolla has synergistic effects on CH ₄ and N ₂ O emissions from rice paddy soils. <i>Heliyon</i> , 2020, 6, e05042.	1.4	19
110	Computational intelligence applied to soil quality index using GIS and geostatistical approaches in semiarid ecosystem. <i>Arabian Journal of Geosciences</i> , 2020, 13, 1.	0.6	26
111	Humic Acid Mitigates the Negative Effects of High Rates of Biochar Application on Microbial Activity. <i>Sustainability</i> , 2020, 12, 9524.	1.6	17
112	Effect of Water Quality and Date Palm Biochar on Evaporation and Specific Hydrological Characteristics of Sandy Soil. <i>Agriculture (Switzerland)</i> , 2020, 10, 300.	1.4	2
113	Biochar amendment boosts photosynthesis and biomass in C ₃ but not C ₄ plants: A global synthesis. <i>GCB Bioenergy</i> , 2020, 12, 605-617.	2.5	46
114	The long-term impact of vehicular traffic on winter and spring methane flux under no-till farming in Central Ohio. <i>Atmospheric Pollution Research</i> , 2020, 11, 2030-2035.	1.8	4
115	Carbon Dioxide Fluxes and Carbon Stocks under Conservation Agricultural Practices in South Africa. <i>Agriculture (Switzerland)</i> , 2020, 10, 374.	1.4	15
116	Effects of solid oxygen fertilizers and biochars on nitrous oxide production from agricultural soils in Florida. <i>Scientific Reports</i> , 2020, 10, 21754.	1.6	8
117	Co-Composting of Khat-Derived Biochar with Municipal Solid Waste: A Sustainable Practice of Waste Management. <i>Sustainability</i> , 2020, 12, 10668.	1.6	8
118	Investigating the Influence of Biochar Amendment on the Physicochemical Properties of Podzolic Soil. <i>Agriculture (Switzerland)</i> , 2020, 10, 471.	1.4	12
119	Application of stabilized sludge to extensive green roofs in Shanghai: Feasibility and nitrogen leaching control. <i>Science of the Total Environment</i> , 2020, 732, 138898.	3.9	15
120	Combined effects of biochar properties and soil conditions on plant growth: A meta-analysis. <i>Science of the Total Environment</i> , 2020, 713, 136635.	3.9	156
121	Biochar from biomass waste as a renewable carbon material for climate change mitigation in reducing greenhouse gas emissions—a review. <i>Biomass Conversion and Biorefinery</i> , 2021, 11, 2247-2267.	2.9	83
122	Removal of <i>Escherichia coli</i> from lake water in a biochar-amended biosand filtering system. <i>Ecological Engineering</i> , 2020, 150, 105819.	1.6	15
123	Biochar Applications in Agriculture and Environment Management. , 2020, , .		9
124	Progress and future prospects in biochar composites: Application and reflection in the soil environment. <i>Critical Reviews in Environmental Science and Technology</i> , 2021, 51, 219-271.	6.6	93
125	Dynamics of soil N ₂ O emissions and functional gene abundance in response to biochar application in the presence of earthworms. <i>Environmental Pollution</i> , 2021, 268, 115670.	3.7	13
126	Influence of Organic Amendments on Soil Properties, Microflora and Plant Growth. <i>Sustainable Agriculture Reviews</i> , 2021, , 147-191.	0.6	6

#	ARTICLE	IF	CITATIONS
127	Biochar Role in Mitigation of Greenhouse Gas Emissions from Agricultural Soils. , 2021, , 261-278.		1
128	Impact of biochar on nutrient supply, crop yield and microbial respiration on sandy soils of northern Germany. <i>European Journal of Soil Science</i> , 2021, 72, 1885-1901.	1.8	19
129	Preparation and characterization of manganese-containing biochars and their lead ion adsorption mechanism. <i>Canadian Journal of Chemical Engineering</i> , 2021, 99, S18.	0.9	1
130	Reduced inorganic fertiliser in combination with an alkaline humic acid fertiliser amendment on acid growth media properties and cherry tomato growth. <i>New Zealand Journal of Crop and Horticultural Science</i> , 2021, 49, 225-242.	0.7	4
131	Effects of biochar amendment on soil carbon dioxide emission and carbon budget in the karst region of southwest China. <i>Geoderma</i> , 2021, 385, 114895.	2.3	14
132	Long-term effects of biochar application on greenhouse gas production and microbial community in temperate forest soils under increasing temperature. <i>Science of the Total Environment</i> , 2021, 767, 145021.	3.9	27
133	Exploring long-term effects of biochar on mitigating methane emissions from paddy soil: a review. <i>Biochar</i> , 2021, 3, 125-134.	6.2	58
134	Does biochar application improve soil aggregation? A meta-analysis. <i>Soil and Tillage Research</i> , 2021, 209, 104926.	2.6	70
135	Assessing the Impacts of Land Spreading Water-treatment Residuals on the Anecic Earthworm <i>Lumbricus terrestris</i> , Soil Microbial Activity, and Porewater Chemistry. <i>Environmental Toxicology and Chemistry</i> , 2021, 40, 1962-1970.	2.2	0
136	Biochar: A Sustainable Approach for Improving Soil Health and Environment. , 0, , .		9
137	Biochar and urea co-application regulates nitrogen availability in soil. <i>Environmental Monitoring and Assessment</i> , 2021, 193, 326.	1.3	13
138	Effects of Biochar on Infiltration and Evaporation of Soil Water with Sand Mulching. <i>Journal of Biobased Materials and Bioenergy</i> , 2021, 15, 369-373.	0.1	3
139	Biochar application to rice with 15N-labelled fertilizers, enhanced leaf nitrogen concentration and assimilation by improving morpho-physiological traits and soil quality. <i>Saudi Journal of Biological Sciences</i> , 2021, 28, 3399-3413.	1.8	34
140	Integrated transcriptome and metabolome analyses of biochar-induced pathways in response to <i>Fusarium</i> wilt infestation in pepper. <i>Genomics</i> , 2021, 113, 2085-2095.	1.3	12
141	Contradictory Results of Soil Greenhouse Gas Emissions as Affected by Biochar Application: Special Focus on Alkaline Soils. <i>International Journal of Environmental Research</i> , 2021, 15, 903-920.	1.1	7
142	Antagonistic interaction between biochar and nitrogen addition on soil greenhouse gas fluxes: A global synthesis. <i>GCB Bioenergy</i> , 2021, 13, 1636-1648.	2.5	13
143	Impacts of continuous biochar application on major carbon fractions in soil profile of North China Plain's cropland: In comparison with straw incorporation. <i>Agriculture, Ecosystems and Environment</i> , 2021, 315, 107445.	2.5	18
144	Integrated nutrient management to improve some soil characteristics and biomass production of saffron. <i>Industrial Crops and Products</i> , 2021, 166, 113447.	2.5	7

#	ARTICLE	IF	CITATIONS
145	Effect of Biochar on Soil CO ₂ Fluxes from Agricultural Field Experiments in Russian Far East. <i>Agronomy</i> , 2021, 11, 1559.	1.3	6
146	Agricultural Waste-Based Biochar for Agronomic Applications. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 8914.	1.3	28
147	Soil greenhouse gas emissions, organic carbon and crop yield following pinewood biochar and biochar-manure applications at eroded and depositional landscape positions: A field trial in South Dakota, USA. <i>Soil Use and Management</i> , 2022, 38, 487-502.	2.6	22
148	Effects of biochar on N ₂ O emission in denitrification pathway from paddy soil: A drying incubation study. <i>Science of the Total Environment</i> , 2021, 787, 147591.	3.9	26
149	Effects of nitrogen-enriched biochar on rice growth and yield, iron dynamics, and soil carbon storage and emissions: A tool to improve sustainable rice cultivation. <i>Environmental Pollution</i> , 2021, 287, 117565.	3.7	36
150	Engineering conversion of Asteraceae plants into biochars for exploring potential applications: A review. <i>Science of the Total Environment</i> , 2021, 797, 149195.	3.9	33
151	Responses of soil organic carbon to conservation practices including climate-smart agriculture in tropical and subtropical regions: A meta-analysis. <i>Science of the Total Environment</i> , 2022, 805, 150428.	3.9	26
152	Advances in Pyrolytic Technologies with Improved Carbon Capture and Storage to Combat Climate Change. , 2020, , 535-575.		4
153	Short-Term Responses of Soil Respiration and C-Cycle Enzyme Activities to Additions of Biochar and Urea in a Calcareous Soil. <i>PLoS ONE</i> , 2016, 11, e0161694.	1.1	16
154	Biochar: An Ingredient to Redress Stubble Burning and Boost Crop Production. <i>International Journal of Current Microbiology and Applied Sciences</i> , 2019, 8, 20-27.	0.0	4
155	Effect of Pyrolysis Temperature and Feedstock Type on Agricultural Properties and Stability of Biochars. <i>Agricultural Sciences</i> , 2017, 08, 914-933.	0.2	14
157	Impact of Biochar Particle Shape and Size on Saturated Hydraulic Properties of Soil. <i>Korean Journal of Environmental Agriculture</i> , 2018, 37, 1-8.	0.0	10
158	Ecological Intensification for Soil Management: Biochar – A Natural Solution for Soil from Agricultural Residues. , 2021, , 403-455.		1
159	Biochar dose determines methane uptake and methanotroph abundance in Haplic Luvisol. <i>Science of the Total Environment</i> , 2022, 806, 151259.	3.9	16
160	Effect of Sesame Straw Biochar Application on Soil Physics and Nitrous Oxide Emission in Upland Soil. <i>Han'guk T'oyang Piryu Hakhoe Chi Han'guk T'oyang Piryu Hakhoe</i> , 2016, 49, 259-264.	0.1	4
161	Biochar and Soil Characteristics. , 2017, , 184-188.		0
162	Automatic Estimation of Soil Biochar Quantity via Hyperspectral Imaging. , 2019, , 1608-1635.		0
163	Biochar Application for Greenhouse Gases Mitigation. <i>Green Energy and Technology</i> , 2020, , 39-68.	0.4	2

#	ARTICLE	IF	CITATIONS
164	Biochar: A New Environmental Paradigm in Management of Agricultural Soils and Mitigation of GHG Emission. , 2020, , 223-258.		1
165	The combined application of organic fertilizers improves the physical properties of soil associated to quinoa (<i>Chenopodium quinoa</i> Willd.) cultivation. <i>Scientia Agropecuaria</i> , 2020, 11, 401-408.	0.5	1
166	Co-pyrolysis of sludge and kaolin/zeolite in a rotary kiln: Analysis of stabilizing heavy metals. <i>Frontiers of Environmental Science and Engineering</i> , 2022, 16, 1.	3.3	12
167	Does long-term application of mineral fertilizers improve physical properties and nutrient regime of sandy soils?. <i>Soil and Tillage Research</i> , 2022, 215, 105224.	2.6	3
168	Water treatment residuals for ameliorating sandy soils: Implications in environmental, soil and plant growth parameters. <i>Geoderma</i> , 2022, 407, 115537.	2.3	1
169	Biochars and Its Implications on Soil Health and Crop Productivity in Semi-Arid Environment. , 2020, , 99-122.		0
170	Automatic Estimation of Soil Biochar Quantity via Hyperspectral Imaging. <i>Advances in Environmental Engineering and Green Technologies Book Series</i> , 0, , 220-247.	0.3	0
172	Biochar Mitigated Paddy CH ₄ Emission Stably Over Seven Years with NO ₃ -N Elevation the Decisive Factor the Last Year. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
173	Reviewing role of biochar in controlling soil erosion and considering future aspect of production using microwave pyrolysis process for the same. <i>Biomass Conversion and Biorefinery</i> , 2023, 13, 11543-11569.	2.9	11
175	Elevation of NO ₃ ⁻ -N from biochar amendment facilitates mitigating paddy CH ₄ emission stably over seven years. <i>Environmental Pollution</i> , 2022, 295, 118707.	3.7	18
176	Effects of straw and biochar amendment on hydrological fluxes of dissolved organic carbon in a subtropical montane agricultural landscape. <i>Environmental Pollution</i> , 2022, 296, 118751.	3.7	3
177	The influence of the biochar application on the CO ₂ emission from Luvic Anthrosols in the south of Primorsky region (Russian Far East). <i>IOP Conference Series: Earth and Environmental Science</i> , 2021, 862, 012091.	0.2	2
178	Liming and co-application of water treatment residuals with biosolids for conditioning sandy soils.. <i>Land Degradation and Development</i> , 0, , .	1.8	0
179	Effects of Biochar Application on Vegetation Growth, Cover, and Erosion Potential in Sloped Cultivated Soil Derived from Mudstone. <i>Processes</i> , 2022, 10, 306.	1.3	3
180	Biochar, slag and ferrous manganese ore affect lead, cadmium and antioxidant enzymes in water		

#	ARTICLE	IF	CITATIONS
185	Reusing Fe water treatment residual as a soil amendment to improve physical function and flood resilience. <i>Soil</i> , 2022, 8, 283-295.	2.2	4
186	The effect of biochars produced from barberry and jujube on erosion, nutrient, and properties of soil in laboratory conditions. <i>Soil and Tillage Research</i> , 2022, 219, 105345.	2.6	11
187	Biochar from fruit crops waste and its potential impact on fruit crops. <i>Scientia Horticulturae</i> , 2022, 299, 111052.	1.7	10
188	Effects of biochar and barley straw application on the rice productivity and greenhouse gas emissions of paddy field. <i>Applied Biological Chemistry</i> , 2021, 64, .	0.7	6
189	Biochar and Other Organic Amendments Improve the Physicochemical Properties of Soil in Highly Degraded Habitat. <i>European Journal of Education and Pedagogy</i> , 2020, 5, 331-338.	0.2	0
190	Long-Term Effects of Biochar on Soil Physical and Hydrological Properties in Crosby Silt Loam in Central Ohio, USA. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
191	Relationships between growth indices, dry matter production, and nutrient use efficiency in saffron: Integrative effect of mycorrhizal inoculation and nutrient resources. <i>Journal of Plant Nutrition</i> , 2022, 45, 2077-2095.	0.9	3
192	Implications of crop residue removal on soil physical properties: A review. <i>Soil Science Society of America Journal</i> , 2022, 86, 979-1001.	1.2	7
193	Effects of mixed-based biochar on water infiltration and evaporation in aeolian sand soil. <i>Journal of Arid Land</i> , 2022, 14, 374-389.	0.9	9
194	Effect of sewage sludge-derived amendments on the nutrient uptake by Chinese cabbage from Mediterranean soils. <i>Journal of Plant Nutrition</i> , 2023, 46, 1421-1445.	0.9	5
195	Biochar production with amelioration of microwave-assisted pyrolysis: Current scenario, drawbacks and perspectives. <i>Bioresource Technology</i> , 2022, 355, 127303.	4.8	50
196	Plastic film mulch combined with adding biochar improved soil carbon budget, carbon footprint, and maize yield in a rainfed region. <i>Field Crops Research</i> , 2022, 284, 108574.	2.3	20
197	Effects of biochar on soil chemical properties: A global meta-analysis of agricultural soil. <i>Plant, Soil and Environment</i> , 2022, 68, 272-289.	1.0	18
198	Peanut shell biochar in acidic soil increases nitrogen absorption and photosynthesis characteristics of maize under different nitrogen levels. <i>Environment, Development and Sustainability</i> , 0, , .	2.7	0
199	Growth and Photosynthetic Characteristics of Sesame Seedlings with Gibberellin-Producing <i>Rhodobacter sphaeroides</i> SIR03 and Biochar. <i>International Journal of Plant Biology</i> , 2022, 13, 257-269.	1.1	2
200	Biochar application for greenhouse gas mitigation, contaminants immobilization and soil fertility enhancement: A state-of-the-art review. <i>Science of the Total Environment</i> , 2022, 853, 158562.	3.9	76
201	Pyrolyzed or Composted Sewage Sludge Application Induces Short-Term Changes in the Terra Rossa Soil Bacterial and Fungal Communities. <i>Sustainability</i> , 2022, 14, 11382.	1.6	1
202	Coconut shell and husk biochar: A review of production and activation technology, economic, financial aspect and application. <i>Waste Management and Research</i> , 2023, 41, 37-51.	2.2	16

#	ARTICLE	IF	CITATIONS
203	Coconut shell-derived biochar and oyster shell powder alter rhizosphere soil biochemical properties and Cd uptake of rice (<i>Oryza sativa</i> L.). <i>International Journal of Environmental Science and Technology</i> , 0, , .	1.8	1
204	High-Throughput Absolute Quantification Sequencing Reveals that a Combination of Leguminous Shrubs Is Effective in Driving Soil Bacterial Diversity During the Process of Desertification Reversal. <i>Microbial Ecology</i> , 2023, 86, 1145-1163.	1.4	3
206	Influence of Biochar Particle Size and Shape on Soil Hydraulic Properties. <i>Journal of Environmental Science and Engineering Technology</i> , 2017, 5, 8-15.	0.1	4
207	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. <i>Journal of Soils and Sediments</i> , 2023, 23, 1473-1484.	1.5	2
208	Synthesis and characterization of biochar from dehradun rice straw and its application for adsorption of methylene blue dye. <i>AIP Conference Proceedings</i> , 2023, , .	0.3	0
209	Can surface-applied biochar improve soil health and plant performance in a perennial cool-season grass forage system?. <i>Soil Science Society of America Journal</i> , 2023, 87, 656-668.	1.2	0
210	Biochar-compost as a new option for soil improvement: Application in various problem soils. <i>Science of the Total Environment</i> , 2023, 870, 162024.	3.9	42
211	Effects of Graphene on Soil Water-Retention Curve, van Genuchten Parameters, and Soil Pore Size Distribution—A Comparison with Traditional Soil Conditioners. <i>Water (Switzerland)</i> , 2023, 15, 1297.	1.2	2
212	Biochar Production and Its Impact on Sustainable Agriculture. <i>Environmental Contamination Remediation and Management</i> , 2023, , 445-474.	0.5	1
214	Use of Biochar for Biological Carbon Sequestration. , 2023, , 393-411.		0
225	Sustainability in residue management: a review with special reference to Indian agriculture. <i>Paddy and Water Environment</i> , 0, , .	1.0	0