Jufeng Zheng

List of Publications by Year
in descending order

65 papers	4,781 citations	117625 34 h-index	106344 65 g-index
65 all docs	65 docs citations	65 times ranked	4687 citing authors

#	ARTICLE	IF	CITATIONS
1	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.	5.1	494
2	Biochar soil amendment increased bacterial but decreased fungal gene abundance with shifts in community structure in a slightly acid rice paddy from Southwest China. Applied Soil Ecology, 2013, 71, 33-44.	4.3	324
3	Biochar decreased microbial metabolic quotient and shifted community composition four years after a single incorporation in a slightly acid rice paddy from southwest China. Science of the Total Environment, 2016, 571, 206-217.	8.0	236
4	Heavy metal pollution decreases microbial abundance, diversity and activity within particle-size fractions of a paddy soil. FEMS Microbiology Ecology, 2014, 87, 164-181.	2.7	225
5	Effects of amendment of biochar-manure compost in conjunction with pyroligneous solution on soil quality and wheat yield of a salt-stressed cropland from Central China Great Plain. Field Crops Research, 2013, 144, 113-118.	5.1	209
6	Biochar soil amendment as a solution to prevent Cd-tainted rice from China: Results from a cross-site field experiment. Ecological Engineering, 2013, 58, 378-383.	3.6	205
7	Biochar-manure compost in conjunction with pyroligneous solution alleviated salt stress and improved leaf bioactivity of maize in a saline soil from central China: a 2-year field experiment. Journal of the Science of Food and Agriculture, 2015, 95, 1321-1327.	3.5	177
8	Effects of biochar on availability and plant uptake of heavy metals â€“ A meta-analysis. Journal of Environmental Management, 2018, 222, 76-85.	7.8	172
9	Biochar helps enhance maize productivity and reduce greenhouse gas emissions under balanced fertilization in a rainfed low fertility inceptisol. Chemosphere, 2016, 142, 106-113.	8.2	149
10	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.	5.3	143
11	Consistent increase in abundance and diversity but variable change in community composition of bacteria in topsoil of rice paddy under short term biochar treatment across three sites from South China. Applied Soil Ecology, 2015, 91, 68-79.	4.3	133
12	Biochar compound fertilizer increases nitrogen productivity and economic benefits but decreases carbon emission of maize production. Agriculture, Ecosystems and Environment, 2017, 241, 70-78.	5.3	110
13	Effect of long-term fertilization on C mineralization and production of CH4 and CO2 under anaerobic incubation from bulk samples and particle size fractions of a typical paddy soil. Agriculture, Ecosystems and Environment, 2007, 120, 129-138.	5.3	107
14	Change in net global warming potential of a riceâ€“wheat cropping system with biochar soil amendment in a rice paddy from China. Agriculture, Ecosystems and Environment, 2013, 173, 37-45.	5.3	103
15	Changes in soil microbial community structure and enzyme activity with amendment of biochar-manure compost and pyroligneous solution in a saline soil from Central China. European Journal of Soil Biology, 2015, 70, 67-76.	3.2	102
16	Cd immobilization in a contaminated rice paddy by inorganic stabilizers of calcium hydroxide and silicon slag and by organic stabilizer of biochar. Environmental Science and Pollution Research, 2016, 23, 10028-10036.	5.3	99
17	Biochar compound fertilizer as an option to reach high productivity but low carbon intensity in rice agriculture of China. Carbon Management, 2014, 5, 145-154.	2.4	96
18	Is current biochar research addressing global soil constraints for sustainable agriculture?. Agriculture, Ecosystems and Environment, 2016, 226, 25-32.	5.3	96

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19	Changes in microbial community structure and function within particle size fractions of a paddy soil under different long-term fertilization treatments from the Tai Lake region, China. Colloids and Surfaces B: Biointerfaces, 2007, 58, 264-270.	5.0	79
20	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.	4.3	79
21	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.	6.1	77
22	Utilization of biochar produced from invasive plant species to efficiently adsorb Cd (II) and Pb (II). Bioresource Technology, 2020, 317, 124011.	9.6	76
23	Effect of biochar amendment on soilâ€silicon availability and rice uptake. Journal of Plant Nutrition and Soil Science, 2014, 177, 91-96.	1.9	75
24	Soil carbon, multiple benefits. Environmental Development, 2015, 13, 33-38.	4.1	75
25	Biochar has no effect on soil respiration across Chinese agricultural soils. Science of the Total Environment, 2016, 554-555, 259-265.	8.0	67
26	The responses of soil organic carbon mineralization and microbial communities to fresh and aged biochar soil amendments. GCB Bioenergy, 2019, 11, 1408-1420.	5.6	67
27	A long-term hybrid poplar plantation on cropland reduces soil organic carbon mineralization and shifts microbial community abundance and composition. Applied Soil Ecology, 2017, 111, 94-104.	4.3	62
28	Short-term responses of microbial community and functioning to experimental CO2 enrichment and warming in a Chinese paddy field. Soil Biology and Biochemistry, 2014, 77, 58-68.	8.8	59
29	Farmersâ€™ Perceptions of Climate Variability and Factors Influencing Adaptation: Evidence from Anhui and Jiangsu, China. Environmental Management, 2016, 57, 976-986.	2.7	57
30	Biochar provided limited benefits for rice yield and greenhouse gas mitigation six years following an amendment in a fertile rice paddy. Catena, 2019, 179, 20-28.	5.0	52
31	Short-term response of nitrifier communities and potential nitrification activity to elevated CO2 and temperature interaction in a Chinese paddy field. Applied Soil Ecology, 2015, 96, 88-98.	4.3	49
32	Legacy of soil health improvement with carbon increase following one time amendment of biochar in a paddy soil â€“ A rice farm trial. Geoderma, 2020, 376, 114567.	5.1	40
33	Long-term rice cultivation stabilizes soil organic carbon and promotes soil microbial activity in a salt marsh derived soil chronosequence. Scientific Reports, 2015, 5, 15704.	3.3	36
34	Pyrolysis of contaminated wheat straw to stabilize toxic metals in biochar but recycle the extract for agricultural use. Biomass and Bioenergy, 2018, 118, 32-39.	5.7	35
35	Greater microbial carbon use efficiency and carbon sequestration in soils: Amendment of biochar versus crop straws. GCB Bioenergy, 2020, 12, 1092-1103.	5.6	35
36	Variation of organic carbon and nitrogen in aggregate size fractions of a paddy soil under fertilisation practices from Tai Lake Region, China. Journal of the Science of Food and Agriculture, 2007, 87, 1052-1058.	3.5	34

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37	Decline in Topsoil Microbial Quotient, Fungal Abundance and C Utilization Efficiency of Rice Paddies under Heavy Metal Pollution across South China. PLoS ONE, 2012, 7, e38858.	2.5	34
38	Functional and structural responses of bacterial and fungal communities from paddy fields following long-term rice cultivation. Journal of Soils and Sediments, 2016, 16, 1460-1471.	3.0	33
39	Could biochar amendment be a tool to improve soil availability and plant uptake of phosphorus? A meta-analysis of published experiments. Environmental Science and Pollution Research, 2021, 28, 34108-34120.	5.3	31
40	Perspectives on studies on soil carbon stocks and the carbon sequestration potential of China. Science Bulletin, 2011, 56, 3748-3758.	1.7	29
41	Responses of Methanogenic and Methanotrophic Communities to Elevated Atmospheric CO2 and Temperature in a Paddy Field. Frontiers in Microbiology, 2016, 7, 1895.	3.5	29
42	Abundance, composition and activity of denitrifier communities in metal polluted paddy soils. Scientific Reports, 2016, 6, 19086.	3.3	28
43	Short-term biochar manipulation of microbial nitrogen transformation in wheat rhizosphere of a metal contaminated Inceptisol from North China plain. Science of the Total Environment, 2018, 640-641, 1287-1296.	8.0	26
44	Sequestration of maize crop straw C in different soils: Role of oxyhydrates in chemical binding and stabilization as recalcitrance. Chemosphere, 2012, 87, 649-654.	8.2	25
45	Abundance, Composition and Activity of Ammonia Oxidizer and Denitrifier Communities in Metal Polluted Rice Paddies from South China. PLoS ONE, 2014, 9, e102000.	2.5	24
46	Microbial activity promoted with organic carbon accumulation in macroaggregates of paddy soils under long-term rice cultivation. Biogeosciences, 2016, 13, 6565-6586.	3.3	23
47	Biochar increases maize yield by promoting root growth in the rainfed region. Archives of Agronomy and Soil Science, 2021, 67, 1411-1424.	2.6	23
48	Changes in greenhouse gas evolution in heavy metal polluted paddy soils with rice straw return: A laboratory incubation study. European Journal of Soil Biology, 2014, 63, 1-6.	3.2	22
49	Assessment of climate change awareness and agronomic practices in an agricultural region of Henan Province, China. Environment, Development and Sustainability, 2015, 17, 379-391.	5.0	22
50	Pyrolyzed municipal sewage sludge ensured safe grain production while reduced C emissions in a paddy soil under rice and wheat rotation. Environmental Science and Pollution Research, 2019, 26, 9244-9256.	5.3	22
51	Changes in micronutrient availability and plant uptake under simulated climate change in winter wheat field. Journal of Soils and Sediments, 2016, 16, 2666-2675.	3.0	20
52	Long-term elevated CO2 and warming enhance microbial necromass carbon accumulation in a paddy soil. Biology and Fertility of Soils, 2021, 57, 673-684.	4.3	20
53	Influence of pyrolysis temperature on the cadmium and lead removal behavior of biochar derived from oyster shell waste. Bioresource Technology Reports, 2021, 15, 100709.	2.7	19
54	Does metal pollution matter with C retention by rice soil?. Scientific Reports, 2015, 5, 13233.	3.3	17

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55	Improved ginseng production under continuous cropping through soil health reinforcement and rhizosphere microbial manipulation with biochar: a field study of <i>Panax ginseng</i> from Northeast China. Horticulture Research, 2022, 9, .	6.3	15
56	Macroaggregates as biochemically functional hotspots in soil matrix: Evidence from a rice paddy under long-term fertilization treatments in the Taihu Lake Plain, eastern China. Applied Soil Ecology, 2019, 138, 262-273.	4.3	12
57	Amendment of straw biochar increased molecular diversity and enhanced preservation of plant derived organic matter in extracted fractions of a rice paddy. Journal of Environmental Management, 2021, 285, 112104.	7.8	11
58	The role of soils in regulation of freshwater and coastal water quality. Philosophical Transactions of the Royal Society B: Biological Sciences, 2021, 376, 20200176.	4.0	11
59	Assessing the impacts of biocharâ€blended urea on nitrogen use efficiency and soil retention in wheat production. GCB Bioenergy, 2022, 14, 65-83.	5.6	11
60	Quantitative assessment of the effects of biochar amendment on photosynthetic carbon assimilation and dynamics in a riceâ€“soil system. New Phytologist, 2021, 232, 1250-1258.	7.3	10
61	Pool complexity and molecular diversity shaped topsoil organic matter accumulation following decadal forest restoration in a karst terrain. Soil Biology and Biochemistry, 2022, 166, 108553.	8.8	10
62	Copyrolysis of food waste and rice husk to biochar to create a sustainable resource for soil amendment: A pilot-scale case study in Jinhua, China. Journal of Cleaner Production, 2022, 347, 131269.	9.3	8
63	Amendment of crop residue in different forms shifted micro-pore system structure and potential functionality of macroaggregates while changed their mass proportion and carbon storage of paddy topsoil. Geoderma, 2022, 409, 115643.	5.1	6
64	Macroaggregates Serve as Micro-Hotspots Enriched With Functional and Networked Microbial Communities and Enhanced Under Organic/Inorganic Fertilization in a Paddy Topsoil From Southeastern China. Frontiers in Microbiology, 2022, 13, 831746.	3.5	4
65	Molecular changes of ferric oxide bound soil humus during the decomposition of maize straw. Chemical and Biological Technologies in Agriculture, 2016, 3, .	4.6	2