Zhangcai Qin

List of Publications by Year
in descending order

40 papers	2,264 citations	331259 21 h-index	253896 43 g-index
48 all docs	48 docs citations	48 times ranked	3210 citing authors

#	Article	IF	Citations
1	Increased atmospheric vapor pressure deficit reduces global vegetation growth. Science Advances, 2019, 5, eaax1396.	4.7	755
2	Soil carbon sequestration and land use change associated with biofuel production: empirical evidence. GCB Bioenergy, 2016, 8, 66-80.	2.5	150
3	Changes in soil organic carbon under perennial crops. Global Change Biology, 2020, 26, 4158-4168.	4.2	132
4	Biomass and biofuels in China: Toward bioenergy resource potentials and their impacts on the environment. Renewable and Sustainable Energy Reviews, 2018, 82, 2387-2400.	8.2	120
5	Robust paths to net greenhouse gas mitigation and negative emissions via advanced biofuels. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 21968-21977.	3.3	110
6	Life cycle energy and greenhouse gas emission effects of biodiesel in the United States with induced land use change impacts. Bioresource Technology, 2018, 251, 249-258.	4.8	106
7	Soil organic carbon sequestration potential of cropland in China. Global Biogeochemical Cycles, 2013, 27, 711-722.	1.9	83
8	Biofuel, land and water: maize, switchgrass or<i>Miscanthus</i>?. Environmental Research Letters, 2013, 8, 015020.	2.2	76
9	Impacts of land use change due to biofuel crops on carbon balance, bioenergy production, and agricultural yield, in the conterminous <scp>U</scp>nited <scp>S</scp>tates. GCB Bioenergy, 2012, 4, 277-288.	2.5	61
10	Carbon Consequences and Agricultural Implications of Growing Biofuel Crops on Marginal Agricultural Lands in China. Environmental Science & Technology, 2011, 45, 10765-10772.	4.6	60
11	Influence of spatially dependent, modeled soil carbon emission factors on lifeâ€cycle greenhouse gas emissions of corn and cellulosic ethanol. GCB Bioenergy, 2016, 8, 1136-1149.	2.5	47
12	A global metaâ€analysis of soil organic carbon response to corn stover removal. GCB Bioenergy, 2019, 11, 1215-1233.	2.5	47
13	Natural Climate Solutions for China: The Last Mile to Carbon Neutrality. Advances in Atmospheric Sciences, 2021, 38, 889-895.	1.9	43
14	Evaluating the Potential of Marginal Land for Cellulosic Feedstock Production and Carbon Sequestration in the United States. Environmental Science & Technology, 2017, 51, 733-741.	4.6	41
15	Quantification of soil organic carbon sequestration potential in cropland: A model approach. Science China Life Sciences, 2010, 53, 868-884.	2.3	38
16	Land management change greatly impacts biofuelsâ€™ greenhouse gas emissions. GCB Bioenergy, 2018, 10, 370-381.	2.5	38
17	Bioenergy crop productivity and potential climate change mitigation from marginal lands in the United States: An ecosystem modeling perspective. GCB Bioenergy, 2015, 7, 1211-1221.	2.5	37
18	Estimating wetland methane emissions from the northern high latitudes from 1990 to 2009 using artificial neural networks. Global Biogeochemical Cycles, 2013, 27, 592-604.	1.9	31

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19	Large influence of atmospheric vapor pressure deficit on ecosystem production efficiency. Nature Communications, 2022, 13, 1653.	5.8	31
20	The role of China's terrestrial carbon sequestration 2010â€“2060 in offsetting energy-related CO2 emissions. National Science Review, 2022, 9, .	4.6	28
21	Consideration of land use change-induced surface albedo effects in life-cycle analysis of biofuels. Energy and Environmental Science, 2016, 9, 2855-2867.	15.6	25
22	Carbon and nitrogen dynamics in bioenergy ecosystems: 2. Potential greenhouse gas emissions and global warming intensity in the conterminous <scp>U</scp>nited <scp>S</scp>tates. GCB Bioenergy, 2015, 7, 25-39.	2.5	22
23	Delayed impact of natural climate solutions. Global Change Biology, 2021, 27, 215-217.	4.2	20
24	Intercomparison of global terrestrial carbon fluxes estimated by MODIS and Earth system models. Science of the Total Environment, 2022, 810, 152231.	3.9	17
25	A global, empirical, harmonised dataset of soil organic carbon changes under perennial crops. Scientific Data, 2019, 6, 57.	2.4	13
26	Droughtâ€Induced Salinity Enhancement Weakens Mangrove Greenhouse Gas Cycling. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2021JG006416.	1.3	13
27	Soil indigenous nutrients increase the resilience of maize yield to climatic warming in China. Environmental Research Letters, 2020, 15, 094047.	2.2	13
28	How Landâ€Sea Interaction of Tidal and Sea Breeze Activity Affect Mangrove Net Ecosystem Exchange?. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034047.	1.2	12
29	Degradation of wetlands on the Qinghai-Tibetan Plateau causing a loss in soil organic carbon in 1966â€“2016. Plant and Soil, 2021, 467, 253-265.	1.8	11
30	Assessing albedo dynamics and its environmental controls of grasslands over the Tibetan Plateau. Agricultural and Forest Meteorology, 2021, 307, 108479.	1.9	11
31	Carbon and nitrogen dynamics in bioenergy ecosystems: 1. Model development, validation and sensitivity analysis. GCB Bioenergy, 2014, 6, 740-755.	2.5	9
32	Evaluation of CH4MOD_{wetland} and Terrestrial Ecosystem Model (TEM) used to estimate global CH₄ emissions from natural wetlands. Geoscientific Model Development, 2020, 13, 3769-3788.	1.3	9
33	Carbon sequestration in soil and biomass under native and non-native mangrove ecosystems. Plant and Soil, 2022, 479, 61-76.	1.8	9
34	Carbon dioxide uptake overrides methane emission at the air-water interface of algae-shellfish mariculture ponds: Evidence from eddy covariance observations. Science of the Total Environment, 2022, 815, 152867.	3.9	8
35	Calibration and validation of phenological models for Biome-BGCMuSo in the grasslands of Tibetan Plateau using remote sensing data. Agricultural and Forest Meteorology, 2022, 322, 109001.	1.9	6
36	Animal waste use and implications to agricultural greenhouse gas emissions in the United States. Environmental Research Letters, 2021, 16, 064079.	2.2	5

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37	Net CO2 and CH4 emissions from restored mangrove wetland: New insights based on a case study in estuary of the Pearl River, China. Science of the Total Environment, 2022, 811, 151619.	3.9	5
38	Decarbonizing through nature. One Earth, 2022, 5, 449-451.	3.6	4
39	Lifeâ€cycle greenhouse gas emissions of corn kernel fiber ethanol. Biofuels, Bioproducts and Biorefining, 2018, 12, 1013-1022.	1.9	2
40	Differed Adaptive Strategies to Nutrient Status between Native and Exotic Mangrove Species. Forests, 2022, 13, 804.	0.9	1