

# Christopher nzediegwu

## List of Publications by Year in descending order

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24  
papers

837  
citations

758635

12  
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642321

23  
g-index

24  
all docs

24  
docs citations

24  
times ranked

843  
citing authors

#	ARTICLE	IF	CITATIONS
1	Improper solid waste management increases potential for COVID-19 spread in developing countries. Resources, Conservation and Recycling, 2020, 161, 104947.	5.3	234
2	Fuel, thermal and surface properties of microwave-pyrolyzed biochars depend on feedstock type and pyrolysis temperature. Bioresource Technology, 2021, 320, 124282.	4.8	83
3	Biochar heavy metal removal in aqueous solution depends on feedstock type and pyrolysis purging gas. Environmental Pollution, 2021, 281, 117094.	3.7	76
4	Carboxyl and hydroxyl groups enhance ammonium adsorption capacity of iron (III) chloride and hydrochloric acid modified biochars. Bioresource Technology, 2020, 309, 123390.	4.8	64
5	Effect of biochar on heavy metal accumulation in potatoes from wastewater irrigation. Journal of Environmental Management, 2019, 232, 153-164.	3.8	63
6	Lead(II) adsorption on microwave-pyrolyzed biochars and hydrochars depends on feedstock type and production temperature. Journal of Hazardous Materials, 2021, 412, 125255.	6.5	58
7	Carbonization temperature and feedstock type interactively affect chemical, fuel, and surface properties of hydrochars. Bioresource Technology, 2021, 330, 124976.	4.8	52
8	Pristine and engineered biochar for the removal of contaminants co-existing in several types of industrial wastewaters: A critical review. Science of the Total Environment, 2022, 809, 151120.	3.9	44
9	Effect of hydrogel based soil amendments on heavy metal uptake by spinach grown with wastewater irrigation. Journal of Cleaner Production, 2021, 311, 127644.	4.6	20
10	Heavy metal uptake by wastewater irrigated potato plants grown on contaminated soil treated with hydrogel based amendments. Environmental Technology and Innovation, 2020, 19, 100952.	3.0	17
11	Feedstock type drives surface property, demineralization and element leaching of nitric acid-activated biochars more than pyrolysis temperature. Bioresource Technology, 2022, 344, 126316.	4.8	17
12	Use of Polyacrylamide Superabsorbent Polymers and Plantain Peel Biochar to Reduce Heavy Metal Mobility and Uptake by Wastewater-Irrigated Potato Plants. Transactions of the ASABE, 2020, 63, 11-28.	1.1	14
13	Effect of Biochar on the Yield of Potatoes Cultivated Under Wastewater Irrigation for Two Seasons. Journal of Soil Science and Plant Nutrition, 2019, 19, 865-877.	1.7	12
14	Eco-Friendly Synthesis of Hydrogels from Starch, Citric Acid, and Itaconic Acid: Swelling Capacity and Metal Chelation Properties. Starch/Staerke, 2020, 72, 1900008.	1.1	12
15	Impact of Soil Biochar Incorporation on the Uptake of Heavy Metals Present in Wastewater by Spinach Plants. Water, Air, and Soil Pollution, 2020, 231, 1.	1.1	11
16	Elemental composition of biochars is affected by methods used for its determination. Journal of Analytical and Applied Pyrolysis, 2021, 156, 105174.	2.6	11
17	Wheat straw biochar amendment significantly reduces nutrient leaching and increases green pepper yield in a less fertile soil. Environmental Technology and Innovation, 2022, 28, 102655.	3.0	9
18	Biochar applied to soil under wastewater irrigation remained environmentally viable for the second season of potato cultivation. Journal of Environmental Management, 2020, 254, 109822.	3.8	8

#	ARTICLE	IF	CITATIONS
19	Impact of Silver Nanoparticles in Wastewater on Heavy Metal Transport in Soil and Uptake by Radish Plants. <i>Water, Air, and Soil Pollution</i> , 2021, 232, 1.	1.1	8
20	Effects of Biochar and Biochar-Compost Mix as Soil Amendments on Soil Quality and Yield of Potatoes Irrigated with Wastewater. <i>Journal of Soil Science and Plant Nutrition</i> , 2021, 21, 2600-2612.	1.7	8
21	Effects of nitric acid modification on hydrochar's combustion, fuel and thermal properties are dependent on feedstock type. <i>Bioresource Technology</i> , 2022, 354, 127245.	4.8	7
22	Effect of hydrogel based soil amendments on yield and growth of wastewater irrigated potato and spinach grown in a sandy soil. <i>Environmental Technology and Innovation</i> , 2021, 23, 101730.	3.0	5
23	Barley Straw Biochar and Compost Affect Heavy Metal Transport in Soil and Uptake by Potatoes Grown under Wastewater Irrigation. <i>Sustainability</i> , 2022, 14, 5665.	1.6	4
24	Biochar production from lignocellulosic and nonlignocellulosic biomass using conventional and microwave heating. , 2022, , 85-95.		0