

# Biochar from Pyrolysis of Biosolids for Nutrient Adsorption

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Pyrolysis of Dried Wastewater Biosolids Can Be Energy Positive. <i>Water Environment Research</i> , 2016, 88, 804-810.	2.7	43
2	Recovery of agricultural nutrients from biorefineries. <i>Bioresource Technology</i> , 2016, 215, 186-198.	9.6	57
3	Pyrolysis of wastewater biosolids significantly reduces estrogenicity. <i>Journal of Hazardous Materials</i> , 2016, 317, 579-584.	12.4	41
4	Triclosan adsorption using wastewater biosolids-derived biochar. <i>Environmental Science: Water Research and Technology</i> , 2016, 2, 761-768.	2.4	71
5	Slow pyrolysis enhances the recovery and reuse of phosphorus and reduces metal leaching from biosolids. <i>Waste Management</i> , 2017, 64, 133-139.	7.4	43
6	Chemical and physical properties of <i>Paulownia elongata</i> biochar modified with oxidants for horticultural applications. <i>Industrial Crops and Products</i> , 2017, 97, 260-267.	5.2	41
7	Autocatalytic Pyrolysis of Wastewater Biosolids for Product Upgrading. <i>Environmental Science &amp; Technology</i> , 2017, 51, 9808-9816.	10.0	37
8	Combined effects of dissolved humic acids and tourmaline on the accumulation of 2, 2,4,4,5,5-hexabrominated diphenyl ether (BDE-153) in <i>Lactuca sativa</i> . <i>Environmental Pollution</i> , 2017, 231, 68-77.	7.5	15
9	Does the combination of biochar and clinoptilolite enhance nutrient recovery from the liquid fraction of biogas digestate?. <i>Environmental Technology (United Kingdom)</i> , 2017, 38, 1313-1323.	2.2	22
10	Effect of pyrolysis on the removal of antibiotic resistance genes and class I integrons from municipal wastewater biosolids. <i>Environmental Science: Water Research and Technology</i> , 2018, 4, 1807-1818.	2.4	27
11	Physical and chemical properties of pyrolyzed biosolids for utilization in sand-based turfgrass rootzones. <i>Waste Management</i> , 2018, 76, 98-105.	7.4	16
12	Characteristics and applications of biochars derived from wastewater solids. <i>Renewable and Sustainable Energy Reviews</i> , 2018, 90, 650-664.	16.4	73
13	Biosolids-Derived Biochar for Triclosan Removal from Wastewater. <i>Environmental Engineering Science</i> , 2018, 35, 513-524.	1.6	39
14	Biochar-organic amendment mixtures added to simulated golf greens under reduced chemical fertilization increase creeping bentgrass growth. <i>Industrial Crops and Products</i> , 2018, 111, 667-672.	5.2	15
15	Sub-Pilot-Scale Autocatalytic Pyrolysis of Wastewater Biosolids for Enhanced Energy Recovery. <i>Catalysts</i> , 2018, 8, 524.	3.5	9
16	Kinetic Analysis of Dried Biosolid Pyrolysis. <i>Energy &amp; Fuels</i> , 2019, 33, 8766-8776.	5.1	8
17	Comment on "Pyrolysis of dried wastewater biosolids can be energy positive". <i>Water Environment Research</i> , 2019, 91, 813-815.	2.7	2
18	Adsorption of organic micropollutants to biosolids-derived biochar: estimation of thermodynamic parameters. <i>Environmental Science: Water Research and Technology</i> , 2019, 5, 1132-1144.	2.4	27

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19	Comment on "Patented blunderings, efficiency awareness, and self-sustainability claims in the pyrolysis energy from waste sector". Resources, Conservation and Recycling, 2019, 143, 329-330.	10.8	1
20	Transformation of biosolids to biochar: A case study. Environmental Progress and Sustainable Energy, 2019, 38, 13113.	2.3	19
21	Influence of pyrolysis temperature on production of digested sludge biochar and its application for ammonium removal from municipal wastewater. Journal of Cleaner Production, 2019, 209, 927-936.	9.3	179
22	Developments in biochar application for pesticide remediation: Current knowledge and future research directions. Journal of Environmental Management, 2019, 232, 505-513.	7.8	140
23	Acidic surface functional groups control chemisorption of ammonium onto carbon materials in aqueous media. Science of the Total Environment, 2020, 698, 134193.	8.0	44
24	Valorization of Spent Coffee Grounds, Biochar and other residues to Produce Lightweight Clay Ceramic Aggregates Suitable for Nursery Grapevine Production. Horticulturae, 2020, 6, 58.	2.8	13
25	A critical literature review on biosolids to biochar: an alternative biosolids management option. Reviews in Environmental Science and Biotechnology, 2020, 19, 807-841.	8.1	49
26	The state of technologies and research for energy recovery from municipal wastewater sludge and biosolids. Current Opinion in Environmental Science and Health, 2020, 14, 31-36.	4.1	34
27	Adsorbent materials for ammonium and ammonia removal: A review. Journal of Cleaner Production, 2021, 283, 124611.	9.3	129
28	Current status of biomethane production using aqueous liquid from pyrolysis and hydrothermal liquefaction of sewage sludge and similar biomass. Reviews in Environmental Science and Biotechnology, 2021, 20, 237-255.	8.1	10
29	Insights into adsorption of ammonium by biochar derived from low temperature pyrolysis of coffee husk. Biomass Conversion and Biorefinery, 2023, 13, 2193-2205.	4.6	17
30	Sludge-derived biochars: A review on the influence of synthesis conditions on pollutants removal efficiency from wastewaters. Renewable and Sustainable Energy Reviews, 2021, 144, 111068.	16.4	72
31	Autocatalytic sludge pyrolysis by biochar derived from pharmaceutical sludge for biogas upgrading. Energy, 2021, 229, 120802.	8.8	11
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34	Paper mill sludge biochar to enhance energy recovery from pyrolysis: A comprehensive evaluation and comparison. Energy, 2022, 239, 121925.	8.8	22
35	Biochar and compost effects on soil microbial communities and nitrogen induced respiration in turfgrass soils. PLoS ONE, 2020, 15, e0242209.	2.5	39
36	Synthesized akhtenskites remove ammonium and manganese from aqueous solution: removal mechanism and the effect of structural cations. RSC Advances, 2021, 11, 33798-33808.	3.6	3

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37	Recent advancements on biochars enrichment with ammonium and nitrates from wastewaters: A critical review on benefits for environment and agriculture. <i>Journal of Environmental Management</i> , 2022, 305, 114368.	7.8	29
38	Mechanistic insights of removing pollutant in adsorption and advanced oxidation processes by sludge biochar. <i>Journal of Hazardous Materials</i> , 2022, 430, 128375.	12.4	41
39	Application of the engineered sewage sludge-derived biochar to minimize water eutrophication by removal of ammonium and phosphate ions from water. <i>Journal of Cleaner Production</i> , 2022, 331, 129994.	9.3	26
40	Effect of Banana-Waste Biochar and Compost Mixtures on Growth Responses and Physiological Traits of Seashore Paspalum Subjected to Six Different Water Conditions. <i>Sustainability</i> , 2022, 14, 1541.	3.2	7
41	Enhancing plant N uptake with biochar-based fertilizers: limitation of sorption and prospects. <i>Plant and Soil</i> , 2022, 475, 213-236.	3.7	30
42	Seasonal Paspalum vaginatum Physiological Characteristics Change with Agricultural Byproduct Biochar in Sandy Potting Soil. <i>Biology</i> , 2022, 11, 560.	2.8	1
43	Lab-scale data and microbial community structure suggest shortcut nitrogen removal as the predominant nitrogen removal mechanism in post-aerobic digestion (PAD). <i>Water Environment Research</i> , 2022, 94, .	2.7	3
44	Conversion of Industrial Sludge into Activated Biochar for Effective Cationic Dye Removal: Characterization and Adsorption Properties Assessment. <i>Water (Switzerland)</i> , 2022, 14, 2206.	2.7	4
45	Installation for the Processing of Plant Waste into Activated Carbon. <i>Lecture Notes in Mechanical Engineering</i> , 2023, , 809-818.	0.4	2
46	Nitrogen Pollution Originating from Wastewater and Agriculture: Advances in Treatment and Management. <i>Reviews of Environmental Contamination and Toxicology</i> , 2022, 260, .	1.3	1
47	Pyrolysis transports, and transforms, PFAS from biosolids to py-liquid. <i>Environmental Science: Water Research and Technology</i> , 2023, 9, 386-395.	2.4	3
48	Continuous adsorption of ammonium from primary and digester effluents using biosolids-derived biochar and cation exchange resin. <i>Journal of Water Process Engineering</i> , 2023, 53, 103692.	5.6	1
49	Advances and prospects of biochar in improving soil fertility, biochemical quality, and environmental applications. <i>Frontiers in Environmental Science</i> , 0, 11, .	3.3	17
50	Adsorptive Techniques for the Removal of Pharmaceutically Active Compounds—Materials and Mechanisms. <i>Green Energy and Technology</i> , 2023, , 159-179.	0.6	0
51	Pyrolysis “a tool in the wastewater solids handling portfolio, not a silver bullet: benefits, drawbacks, and future directions. <i>Water Environment Research</i> , 0, , .	2.7	0
52	Compositional characterization of nine agricultural waste biochars: The relations between alkaline metals and cation exchange capacity with ammonium adsorption capability. <i>Journal of Environmental Chemical Engineering</i> , 2023, 11, 110003.	6.7	9
53	Biochar pyrolyzed with concentrated solar radiation for enhanced nitrate adsorption. <i>Journal of Analytical and Applied Pyrolysis</i> , 2023, 174, 106131.	5.5	6
54	Ammonium nitrogen (NH <sub>4</sub> <sup>+</sup> -N) recovery from synthetic wastewater using biosolids-derived biochar. <i>Bioresource Technology Reports</i> , 2023, 23, 101592.	2.7	0

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55	Biosolids-Derived Biochar Improves Biomethane Production in the Anaerobic Digestion of Chicken Manure. Resources, 2023, 12, 123.	3.5	0
56	Thermal Processing of Solid Vegetable Waste by Slow Conductive Pyrolysis. Ecology and Industry of Russia, 2023, 27, 9-14.	0.4	0
57	Perspective Chapter: The Role of Biochar in Soil Amelioration. , 0, , .		0
58	Biochar from sewage sludge: Effect of pyrolysis on functional properties and pollutants fate. Environmental Quality Management, 0, , .	1.9	0
59	Efficient Adsorption of Nitrogen and Phosphorus in Wastewater by Biochar. Molecules, 2024, 29, 1005.	3.8	0