

Biochar as an Electron Shuttle between Bacteria and FeO

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Geochemistry Articles â€“ August 2014. Organic Geochemistry, 2014, 76, e1-e37.	1.8	0
2	Biochar as an Electron Shuttle between Bacteria and Fe(III) Minerals. Environmental Science and Technology Letters, 2014, 1, 339-344.	8.7	432
3	Biochar as an electron shuttle for reductive dechlorination of pentachlorophenol by Geobacter sulfurreducens. Scientific Reports, 2015, 5, 16221.	3.3	236
4	Plant growth responses to biochar amendment of Mediterranean soils deficient in iron and phosphorus. Journal of Plant Nutrition and Soil Science, 2015, 178, 567-575.	1.9	13
5	The Electrochemical Properties of Biochars and How They Affect Soil Redox Properties and Processes. Agronomy, 2015, 5, 322-340.	3.0	122
6	Effect of biochar and liming on soil nitrous oxide emissions from a temperate maize cropping system. Soil, 2015, 1, 707-717.	4.9	36
7	The molar H:C _{org} ratio of biochar is a key factor in mitigating N ₂ O emissions from soil. Agriculture, Ecosystems and Environment, 2015, 202, 135-138.	5.3	164
8	A non-thermogenic source of black carbon in peat and coal. International Journal of Coal Geology, 2015, 144-145, 15-22.	5.0	17
9	Thermochemical conversion of lignin to functional materials: a review and future directions. Green Chemistry, 2015, 17, 4888-4907.	9.0	437
10	Plant growth improvement mediated by nitrate capture in co-composted biochar. Scientific Reports, 2015, 5, 11080.	3.3	289
11	Manipulation of Persistent Free Radicals in Biochar To Activate Persulfate for Contaminant Degradation. Environmental Science & Technology, 2015, 49, 5645-5653.	10.0	684
12	Engineered Biochar from Biofuel Residue: Characterization and Its Silver Removal Potential. ACS Applied Materials & Interfaces, 2015, 7, 10634-10640.	8.0	98
13	Oxidation of $\text{Fe(II)} \rightarrow \text{Fe(III)}$ by nitrite and by two nitrate-reducing $\text{Fe(II)} \rightarrow \text{Fe(III)}$ -oxidizing <i>A. cidovorax</i> strains. Geobiology, 2015, 13, 198-207.	2.4	43
14	Secondary Mineral Formation During Ferrihydrite Reduction by <i>Shewanella oneidensis</i> MR-1 Depends on Incubation Vessel Orientation and Resulting Gradients of Cells, Fe^{2+} and Fe Minerals. Geomicrobiology Journal, 2015, 32, 878-889.	2.0	23
15	Development of Biochar-Based Functional Materials: Toward a Sustainable Platform Carbon Material. Chemical Reviews, 2015, 115, 12251-12285.	47.7	1,149
16	The contentious nature of soil organic matter. Nature, 2015, 528, 60-68.	27.8	2,418
17	Application of Biochar Produced From Biowaste Materials for Environmental Protection and Sustainable Agriculture Production. , 2016, , 73-89.		12
18	DGGE-Profilng of Culturable Biochar-Enriched Microbial Communities. , 2016, , 78-108.		0

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19	Elucidating the Impacts of Biochar Applications on Nitrogen Cycling Microbial Communities. , 2016, , 163-198.		22
20	Soil biochar amendment shapes the composition of N ₂ O-reducing microbial communities. Science of the Total Environment, 2016, 562, 379-390.	8.0	117
21	Iron biofortification of wheat grains through integrated use of organic and chemical fertilizers in pH affected calcareous soil. Plant Physiology and Biochemistry, 2016, 104, 284-293.	5.8	72
22	Nutrient release and ammonium sorption by poultry litter and wood biochars in stormwater treatment. Science of the Total Environment, 2016, 553, 596-606.	8.0	97
23	Improved bioreduction of nitrobenzene by black carbon/biochar derived from crop residues. RSC Advances, 2016, 6, 84388-84396.	3.6	26
24	Electron Shuttles Enhance Anaerobic Ammonium Oxidation Coupled to Iron(III) Reduction. Environmental Science & Technology, 2016, 50, 9298-9307.	10.0	217
25	Influence of morphological and chemical features of biochar on hydrogen peroxide activation: implications on sulfamethazine degradation. RSC Advances, 2016, 6, 73186-73196.	3.6	98
26	Effects of three different biochars on aggregate stability, organic carbon mobility and micronutrient bioavailability. Journal of Environmental Management, 2016, 181, 770-778.	7.8	65
27	Insoluble/immobilized redox mediators for catalyzing anaerobic bio-reduction of contaminants. Reviews in Environmental Science and Biotechnology, 2016, 15, 379-409.	8.1	32
28	Enhanced bioleaching efficiency of metals from E-wastes driven by biochar. Journal of Hazardous Materials, 2016, 320, 393-400.	12.4	66
29	Excellent reactive Ni/Fe bimetallic catalyst supported by biochar for the remediation of decabromodiphenyl contaminated soil: Reactivity, mechanism, pathways and reducing secondary risks. Journal of Hazardous Materials, 2016, 320, 341-349.	12.4	79
30	Iron Biofortification of Cereals Grown Under Calcareous Soils: Problems and Solutions. , 2016, , 231-258.		8
31	The electron donating capacity of biochar is dramatically underestimated. Scientific Reports, 2016, 6, 32870.	3.3	106
32	Asynchronous reductive release of iron and organic carbon from hematite-humic acid complexes. Chemical Geology, 2016, 430, 13-20.	3.3	44
33	Biochar-Facilitated Microbial Reduction of Hematite. Environmental Science & Technology, 2016, 50, 2389-2395.	10.0	164
34	Enhanced bioreduction of iron and arsenic in sediment by biochar amendment influencing microbial community composition and dissolved organic matter content and composition. Journal of Hazardous Materials, 2016, 311, 20-29.	12.4	188
35	Biochar interferes with kiwifruit Fe-nutrition in calcareous soil. Geoderma, 2016, 272, 10-19.	5.1	29
36	Wood-Derived Black Carbon (Biochar) as a Microbial Electron Donor and Acceptor. Environmental Science and Technology Letters, 2016, 3, 62-66.	8.7	261

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37	Biochar-induced N ₂ O emission reductions after field incorporation in a loam soil. <i>Geoderma</i> , 2016, 267, 10-16.	5.1	84
38	Biochar as Electron Acceptor for Microbial Extracellular Respiration. <i>Geomicrobiology Journal</i> , 2016, 33, 530-536.	2.0	56
39	Solid-Phase Speciation and Solubility of Phosphorus in an Acid Sulfate Paddy Soil during Soil Reduction and Reoxidation as Affected by Oil Palm Ash and Biochar. <i>Journal of Agricultural and Food Chemistry</i> , 2017, 65, 704-710.	5.2	23
40	Biochar decreases nitrogen oxide and enhances methane emissions via altering microbial community composition of anaerobic paddy soil. <i>Science of the Total Environment</i> , 2017, 581-582, 689-696.	8.0	84
41	Improving iron bioavailability and nutritional value of maize (<i>Zea mays</i>) in sulfur-treated calcareous soil. <i>Archives of Agronomy and Soil Science</i> , 2017, 63, 1255-1266.	2.6	10
42	Nanoscale analyses of the surface structure and composition of biochars extracted from field trials or after co-composting using advanced analytical electron microscopy. <i>Geoderma</i> , 2017, 294, 70-79.	5.1	84
43	Toward a Better Assessment of Biochar's Nitrous Oxide Mitigation Potential at the Field Scale. <i>Journal of Environmental Quality</i> , 2017, 46, 237-246.	2.0	66
44	Bacterial Community Composition Associated with Pyrogenic Organic Matter (Biochar) Varies with Pyrolysis Temperature and Colonization Environment. <i>MSphere</i> , 2017, 2, .	2.9	46
45	Hydrothermal Carbon-Mediated Fenton-Like Reaction Mechanism in the Degradation of Alachlor: Direct Electron Transfer from Hydrothermal Carbon to Fe(III). <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 17115-17124.	8.0	163
46	Improved quinoa growth, physiological response, and seed nutritional quality in three soils having different stresses by the application of acidified biochar and compost. <i>Plant Physiology and Biochemistry</i> , 2017, 116, 127-138.	5.8	86
47	Significant enhancement by biochar of caproate production via chain elongation. <i>Water Research</i> , 2017, 119, 150-159.	11.3	124
48	Effects and mechanisms of biochar-microbe interactions in soil improvement and pollution remediation: A review. <i>Environmental Pollution</i> , 2017, 227, 98-115.	7.5	634
50	Effects of humic acid concentration on the microbially-mediated reductive solubilization of Pu(IV) polymers. <i>Journal of Hazardous Materials</i> , 2017, 339, 347-353.	12.4	12
51	Rapid electron transfer by the carbon matrix in natural pyrogenic carbon. <i>Nature Communications</i> , 2017, 8, 14873.	12.8	385
52	Impact of different feedstocks derived biochar amendment with cadmium low uptake affinity cultivar of pak choi (<i>Brassica rapa</i> ssp. <i>chinensis</i> L.) on phytoavoidance of Cd to reduce potential dietary toxicity. <i>Ecotoxicology and Environmental Safety</i> , 2017, 141, 129-138.	6.0	84
53	Straw amendment to paddy soil stimulates denitrification but biochar amendment promotes anaerobic ammonia oxidation. <i>Journal of Soils and Sediments</i> , 2017, 17, 2428-2437.	3.0	41
54	Catalytic role of iron in the formation of silver nanoparticles in photo-irradiated Ag ⁺ -dissolved organic matter solution. <i>Environmental Pollution</i> , 2017, 225, 66-73.	7.5	18
55	Potential role of biochars in decreasing soil acidification - A critical review. <i>Science of the Total Environment</i> , 2017, 581-582, 601-611.	8.0	343

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56	Biochar increases nitrogen retention and lowers greenhouse gas emissions when added to composting poultry litter. <i>Waste Management</i> , 2017, 61, 138-149.	7.4	119
57	Understanding, measuring and tuning the electrochemical properties of biochar for environmental applications. <i>Reviews in Environmental Science and Biotechnology</i> , 2017, 16, 695-715.	8.1	68
58	Organic coating on biochar explains its nutrient retention and stimulation of soil fertility. <i>Nature Communications</i> , 2017, 8, 1089.	12.8	371
59	Photochemistry of Hydrochar: Reactive Oxygen Species Generation and Sulfadimidine Degradation. <i>Environmental Science & Technology</i> , 2017, 51, 11278-11287.	10.0	208
60	The key role of biochar in the rapid removal of decabromodiphenyl ether from aqueous solution by biochar-supported Ni/Fe bimetallic nanoparticles. <i>Journal of Nanoparticle Research</i> , 2017, 19, 1.	1.9	12
61	Effects of biochar on dechlorination of hexachlorobenzene and the bacterial community in paddy soil. <i>Chemosphere</i> , 2017, 186, 116-123.	8.2	32
62	Activity and Reactivity of Pyrogenic Carbonaceous Matter toward Organic Compounds. <i>Environmental Science & Technology</i> , 2017, 51, 8893-8908.	10.0	213
63	Redox-Active Oxygen-Containing Functional Groups in Activated Carbon Facilitate Microbial Reduction of Ferrihydrite. <i>Environmental Science & Technology</i> , 2017, 51, 9709-9717.	10.0	113
64	Pyrogenic temperature affects the particle size of biochar-supported nanoscaled zero valent iron (nZVI) and its silver removal capacity. <i>Chemical Speciation and Bioavailability</i> , 2017, 29, 179-185.	2.0	13
65	Black Carbon (Biochar) In Water/Soil Environments: Molecular Structure, Sorption, Stability, and Potential Risk. <i>Environmental Science & Technology</i> , 2017, 51, 13517-13532.	10.0	441
66	Soil biochar amendment affects the diversity of nosZ transcripts: Implications for N ₂ O formation. <i>Scientific Reports</i> , 2017, 7, 3338.	3.3	55
67	BIOCHAR AS A TOOL TO REDUCE THE AGRICULTURAL GREENHOUSE-GAS BURDEN “KNOWN, UNKNOWN AND FUTURE RESEARCH NEEDS. <i>Journal of Environmental Engineering and Landscape Management</i> , 2017, 25, 114-139.	1.0	144
68	Applications of biochar in redox-mediated reactions. <i>Bioresource Technology</i> , 2017, 246, 271-281.	9.6	322
69	Cost-effective enhanced iron bioavailability in rice grain grown on calcareous soil by sulfur mediation and its effect on heavy metals mineralization. <i>Environmental Science and Pollution Research</i> , 2017, 24, 1219-1228.	5.3	16
70	Does soil aging affect the N ₂ O mitigation potential of biochar? A combined microcosm and field study. <i>GCB Bioenergy</i> , 2017, 9, 953-964.	5.6	65
71	Biochar increases arsenic release from an anaerobic paddy soil due to enhanced microbial reduction of iron and arsenic. <i>Environmental Pollution</i> , 2017, 220, 514-522.	7.5	143
72	Biochar Addition Increases the Rates of Dissimilatory Iron Reduction and Methanogenesis in Ferrihydrite Enrichments. <i>Frontiers in Microbiology</i> , 2017, 8, 589.	3.5	31
73	Persistent free radicals in carbon-based materials on transformation of refractory organic contaminants (ROCs) in water: A critical review. <i>Water Research</i> , 2018, 137, 130-143.	11.3	255

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74	Improvement in productivity, nutritional quality, and antioxidative defense mechanisms of sunflower (<i>Helianthus annuus</i> L.) and maize (<i>Zea mays</i> L.) in nickel contaminated soil amended with different biochar and zeolite ratios. <i>Journal of Environmental Management</i> , 2018, 218, 256-270.	7.8	66
75	Dynamic biochar effects on soil nitrous oxide emissions and underlying microbial processes during the maize growing season. <i>Soil Biology and Biochemistry</i> , 2018, 122, 81-90.	8.8	52
76	Insight into Multiple and Multilevel Structures of Biochars and Their Potential Environmental Applications: A Critical Review. <i>Environmental Science & Technology</i> , 2018, 52, 5027-5047.	10.0	593
77	Biochar affects community composition of nitrous oxide reducers in a field experiment. <i>Soil Biology and Biochemistry</i> , 2018, 119, 143-151.	8.8	46
78	Red mud-modified biochar reduces soil arsenic availability and changes bacterial composition. <i>Environmental Chemistry Letters</i> , 2018, 16, 615-622.	16.2	60
79	Use of magnetic biochars for the immobilization of heavy metals in a multi-contaminated soil. <i>Science of the Total Environment</i> , 2018, 622-623, 892-899.	8.0	120
80	Characterization of biochar derived from rice husks and its potential in chlorobenzene degradation. <i>Carbon</i> , 2018, 130, 730-740.	10.3	179
81	Removal of hexavalent chromium in aqueous solutions using biochar: Chemical and spectroscopic investigations. <i>Science of the Total Environment</i> , 2018, 625, 1567-1573.	8.0	190
82	Humic substances, their microbial interactions and effects on biological transformations of organic pollutants in water and soil: A review. <i>Chemosphere</i> , 2018, 202, 420-437.	8.2	236
83	Microbial reduction of Ferrihydrite in the presence of reduced Graphene oxide materials: Alteration of Fe(III) reduction rate, biomineralization product and settling behavior. <i>Chemical Geology</i> , 2018, 476, 272-279.	3.3	15
84	Enhanced iron(III) reduction following amendment of paddy soils with biochar and glucose modified biochar. <i>Environmental Science and Pollution Research</i> , 2018, 25, 91-103.	5.3	23
85	Effect of biochar on photosynthetic microorganism growth and iron cycling in paddy soil under different phosphate levels. <i>Science of the Total Environment</i> , 2018, 612, 223-230.	8.0	35
86	Humic acids facilitated microbial reduction of polymeric Pu(IV) under anaerobic conditions. <i>Science of the Total Environment</i> , 2018, 610-611, 1321-1328.	8.0	11
87	Redox-active reactions in denitrification provided by biochars pyrolyzed at different temperatures. <i>Science of the Total Environment</i> , 2018, 615, 1547-1556.	8.0	82
88	Transcriptional Activity of Arsenic-Reducing Bacteria and Genes Regulated by Lactate and Biochar during Arsenic Transformation in Flooded Paddy Soil. <i>Environmental Science & Technology</i> , 2018, 52, 61-70.	10.0	105
89	Simultaneous alleviation of cadmium and arsenic accumulation in rice by applying zero-valent iron and biochar to contaminated paddy soils. <i>Chemosphere</i> , 2018, 195, 260-271.	8.2	281
90	Roles of different active metal-reducing bacteria in arsenic release from arsenic-contaminated paddy soil amended with biochar. <i>Journal of Hazardous Materials</i> , 2018, 344, 958-967.	12.4	123
91	Biochar accelerates microbial reductive debromination of 2,2,4,4-tetrabromodiphenyl ether (BDE-47) in anaerobic mangrove sediments. <i>Journal of Hazardous Materials</i> , 2018, 341, 177-186.	12.4	91

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92	Prominent Conductor Mechanism-Induced Electron Transfer of Biochar Produced by Pyrolysis of Nickel-Enriched Biomass. <i>Catalysts</i> , 2018, 8, 573.	3.5	4
93	<i>Pyrolysis of Wood Excelsior Residues for Biochar and Renewable Energy Production</i>, 2018, , .		2
94	Black carbon yields highest nutrient and lowest arsenic release when using rice residuals in paddy soils. <i>Scientific Reports</i> , 2018, 8, 17004.	3.3	21
95	Biochar Modulates Methanogenesis through Electron Syntrophy of Microorganisms with Ethanol as a Substrate. <i>Environmental Science & Technology</i> , 2018, 52, 12198-12207.	10.0	172
96	Application of surface complexation modeling to trace metals uptake by biochar-amended agricultural soils. <i>Applied Geochemistry</i> , 2018, 88, 103-112.	3.0	30
97	Effect of dissolved organic carbon from sludge, Rice straw and spent coffee ground biochar on the mobility of arsenic in soil. <i>Science of the Total Environment</i> , 2018, 636, 1241-1248.	8.0	111
98	Remediation of arsenic-contaminated paddy soil by iron-modified biochar. <i>Environmental Science and Pollution Research</i> , 2018, 25, 20792-20801.	5.3	91
99	Biochar enhanced biological nitrobenzene reduction with a mixed culture in anaerobic systems: Short-term and long-term assessments. <i>Chemical Engineering Journal</i> , 2018, 351, 912-921.	12.7	52
100	Activate persulfate for catalytic degradation of adsorbed anthracene on coking residues: Role of persistent free radicals. <i>Chemical Engineering Journal</i> , 2018, 351, 631-640.	12.7	36
101	Simultaneous Quantification of Electron Transfer by Carbon Matrices and Functional Groups in Pyrogenic Carbon. <i>Environmental Science & Technology</i> , 2018, 52, 8538-8547.	10.0	95
102	Typical Soil Redox Processes in Pentachlorophenol Polluted Soil Following Biochar Addition. <i>Frontiers in Microbiology</i> , 2018, 9, 579.	3.5	28
103	Fate of As(III) and As(V) during Microbial Reduction of Arsenic-Bearing Ferrihydrite Facilitated by Activated Carbon. <i>ACS Earth and Space Chemistry</i> , 2018, 2, 878-887.	2.7	30
104	Enhanced nitrate removal and high selectivity towards dinitrogen for groundwater remediation using biochar-supported nano zero-valent iron. <i>Chemical Engineering Journal</i> , 2018, 353, 595-605.	12.7	137
105	Characterization and quantification of electron donating capacity and its structure dependence in biochar derived from three waste biomasses. <i>Chemosphere</i> , 2018, 211, 1073-1081.	8.2	127
106	Particle size dependence of the physicochemical properties of biochar. <i>Chemosphere</i> , 2018, 212, 385-392.	8.2	63
107	Surface properties of activated sludge-derived biochar determine the facilitating effects on <i>Geobacter</i> co-cultures. <i>Water Research</i> , 2018, 142, 441-451.	11.3	104
108	Arsenic immobilization through regulated ferrolysis in paddy field amendment with bismuth impregnated biochar. <i>Science of the Total Environment</i> , 2019, 648, 993-1001.	8.0	68
109	Reconsideration of heterostructures of biochars: Morphology, particle size, elemental composition, reactivity and toxicity. <i>Environmental Pollution</i> , 2019, 254, 113017.	7.5	28

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110	Soil organic matter amount determines the behavior of iron and arsenic in paddy soil with microbial fuel cells. <i>Chemosphere</i> , 2019, 237, 124459.	8.2	48
111	Effects and mechanism of riboflavin on the growth of <i>Alcaligenes faecalis</i> under bias conditions. <i>RSC Advances</i> , 2019, 9, 22957-22965.	3.6	0
112	The amazing potential of fungi: 50 ways we can exploit fungi industrially. <i>Fungal Diversity</i> , 2019, 97, 1-136.	12.3	459
113	Effects of post-pyrolysis air oxidation on the chemical composition of biomass chars investigated by solid-state nuclear magnetic resonance spectroscopy. <i>Carbon</i> , 2019, 153, 173-178.	10.3	10
114	Photo-induced redox coupling of dissolved organic matter and iron in biochars and soil system: Enhanced mobility of arsenic. <i>Science of the Total Environment</i> , 2019, 689, 1037-1043.	8.0	34
115	Electroactive Biochar for Large-Scale Environmental Applications of Microbial Electrochemistry. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 18198-18212.	6.7	46
116	The effect of biochar amendment on N-cycling genes in soils: A meta-analysis. <i>Science of the Total Environment</i> , 2019, 696, 133984.	8.0	85
117	Study on the degradation of accumulated bisphenol S and regeneration of magnetic sludge-derived biochar upon microwave irradiation in the presence of hydrogen peroxide for application in integrated process. <i>Bioresource Technology</i> , 2019, 293, 122072.	9.6	28
118	Biochar enhanced microbial degradation of 17 β -estradiol. <i>Environmental Sciences: Processes and Impacts</i> , 2019, 21, 1736-1744.	3.5	10
119	Biochar alleviates Cd phytotoxicity by minimizing bioavailability and oxidative stress in pak choi (<i>Brassica chinensis</i> L.) cultivated in Cd-polluted soil. <i>Journal of Environmental Management</i> , 2019, 250, 109500.	7.8	152
120	Characterization of biochars derived from different materials and their effects on microbial dechlorination of pentachlorophenol in a consortium. <i>RSC Advances</i> , 2019, 9, 917-923.	3.6	32
121	TiO ₂ supported on <i>Salvinia molesta</i> biochar for heterogeneous photocatalytic degradation of Acid Orange 7 dye. <i>Journal of Environmental Chemical Engineering</i> , 2019, 7, 102879.	6.7	69
122	A novel TiO ₂ /biochar composite catalysts for photocatalytic degradation of methyl orange. <i>Chemosphere</i> , 2019, 222, 391-398.	8.2	238
123	Biochar and ash derived from silicon-rich rice husk decrease inorganic arsenic species in rice grain. <i>Science of the Total Environment</i> , 2019, 684, 360-370.	8.0	30
124	Interaction with low molecular weight organic acids affects the electron shuttling of biochar for Cr(VI) reduction. <i>Journal of Hazardous Materials</i> , 2019, 378, 120705.	12.4	90
125	Unveiling the mechanism of biochar-activated hydrogen peroxide on the degradation of ciprofloxacin. <i>Chemical Engineering Journal</i> , 2019, 374, 520-530.	12.7	122
126	The synergistic interaction between sulfate-reducing bacteria and pyrogenic carbonaceous matter in DDT decay. <i>Chemosphere</i> , 2019, 233, 252-260.	8.2	6
127	Enhanced ciprofloxacin removal by sludge-derived biochar: Effect of humic acid. <i>Chemosphere</i> , 2019, 231, 495-501.	8.2	53

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128	Biochar-Mediated Anaerobic Oxidation of Methane. <i>Environmental Science & Technology</i> , 2019, 53, 6660-6668.	10.0	92
129	Graphite oxide- and graphene oxide-supported catalysts for microwave-assisted glucose isomerisation in water. <i>Green Chemistry</i> , 2019, 21, 4341-4353.	9.0	80
130	Accelerated Microbial Reduction of Azo Dye by Using Biochar from Iron-Rich-Biomass Pyrolysis. <i>Materials</i> , 2019, 12, 1079.	2.9	11
131	Efficient removal of atrazine by iron-modified biochar loaded <i>Acinetobacter lwoffii</i> DNS32. <i>Science of the Total Environment</i> , 2019, 682, 59-69.	8.0	61
132	The effect of a biochar temperature series on denitrification: which biochar properties matter?. <i>Soil Biology and Biochemistry</i> , 2019, 135, 173-183.	8.8	49
133	Selective enhancement of Mn bioleaching from ferromanganese ores in presence of electron shuttles using dissimilatory Mn reducing consortia. <i>Hydrometallurgy</i> , 2019, 186, 269-274.	4.3	9
134	N-doped graphitic biochars from C-phycoerythrin extracted <i>Spirulina</i> residue for catalytic persulfate activation toward nonradical disinfection and organic oxidation. <i>Water Research</i> , 2019, 159, 77-86.	11.3	347
135	Coagulation treatment of swine wastewater by the method of in-situ forming layered double hydroxides and sludge recycling for preparation of biochar composite catalyst. <i>Chemical Engineering Journal</i> , 2019, 369, 784-792.	12.7	82
136	Sonocatalytic activity of biochar-supported ZnO nanorods in degradation of gemifloxacin: Synergy study, effect of parameters and phytotoxicity evaluation. <i>Ultrasonics Sonochemistry</i> , 2019, 55, 44-56.	8.2	183
137	Magnetic biochar catalysts from anaerobic digested sludge: Production, application and environment impact. <i>Environment International</i> , 2019, 126, 302-308.	10.0	76
138	Biochar-supported nZVI (nZVI/BC) for contaminant removal from soil and water: A critical review. <i>Journal of Hazardous Materials</i> , 2019, 373, 820-834.	12.4	307
139	Biochar's role as an electron shuttle for mediating soil N ₂ O emissions. <i>Soil Biology and Biochemistry</i> , 2019, 133, 94-96.	8.8	61
140	Bioleaching of Electronic Waste Using Extreme Acidophiles. , 2019, , 153-174.		12
141	Temporal changes in magnetic signal of burnt soils “ A compelling three years pilot study. <i>Science of the Total Environment</i> , 2019, 669, 729-738.	8.0	15
142	Influence of graphene oxide and biochar on anaerobic degradation of petroleum hydrocarbons. <i>Journal of Bioscience and Bioengineering</i> , 2019, 128, 72-79.	2.2	27
143	Biochar mediates activation of aged nanoscale ZVI by <i>Shewanella putrefaciens</i> CN32 to enhance the degradation of Pentachlorophenol. <i>Chemical Engineering Journal</i> , 2019, 368, 148-156.	12.7	44
144	The use of biochar in animal feeding. <i>PeerJ</i> , 2019, 7, e7373.	2.0	101
145	Microbial recycling cells (MRCs): A new platform of microbial electrochemical technologies based on biocompatible materials, aimed at cycling carbon and nutrients in agro-food systems. <i>Science of the Total Environment</i> , 2019, 649, 1349-1361.	8.0	34

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146	Cotransport of biochar and <i>Shewanella oneidensis</i> MR-1 in saturated porous media: Impacts of electrostatic interaction, extracellular electron transfer and microbial taxis. <i>Science of the Total Environment</i> , 2019, 658, 95-104.	8.0	25
147	Assessment of biochar and zero-valent iron for in-situ remediation of chromated copper arsenate contaminated soil. <i>Science of the Total Environment</i> , 2019, 655, 414-422.	8.0	58
148	Review of biochar for the management of contaminated soil: Preparation, application and prospect. <i>Science of the Total Environment</i> , 2019, 659, 473-490.	8.0	310
149	Nonnegligible role of biomass types and its compositions on the formation of persistent free radicals in biochar: Insight into the influences on Fenton-like process. <i>Chemical Engineering Journal</i> , 2019, 361, 353-363.	12.7	184
150	Redox-Mediated Biochar-Contaminant Interactions in Soil. , 2019, , 409-419.		5
151	Future Biochar Research Directions. , 2019, , 423-435.		4
152	Modeling the Surface Chemistry of Biochars. , 2019, , 59-72.		2
153	Maghemite (Fe_3O_4) nanoparticles enhance dissimilatory ferrihydrite reduction by <i>Geobacter sulfurreducens</i> : Impacts on iron mineralogical change and bacterial interactions. <i>Journal of Environmental Sciences</i> , 2019, 78, 193-203.	6.1	23
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