

CITATION REPORT

List of articles citing

Effects of biochar and greenwaste compost amendments on mobility, bioavailability and toxicity of inorganic and organic contaminants in a multi-element polluted soil

DOI: 10.1016/j.envpol.2010.02.003
Environmental Pollution, 2010, 158, 2282-7.

Source: <https://exaly.com/paper-pdf/48052124/citation-report.pdf>

Version: 2024-04-26

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
894	Mitigation and remediation technologies for organic contaminated soils. 2010 , 4, 373-386		21
893	Effects of chemical, biological, and physical aging as well as soil addition on the sorption of pyrene to activated carbon and biochar. 2011 , 45, 10445-53		283
892	In-situ sorbent amendments: a new direction in contaminated sediment management. 2011 , 45, 1163-8		299
891	<i>Lumbricus terrestris</i> L. does not impact on the remediation efficiency of compost and biochar amendments. 2011 , 54, S211-S216		31
890	Biochar application to metal-contaminated soil: Evaluating of Cd, Cu, Pb and Zn sorption behavior using single- and multi-element sorption experiment. 2011 , 57, 372-380		67
889	Carbon and trace element fluxes in the pore water of an urban soil following greenwaste compost, woody and biochar amendments, inoculated with the earthworm <i>Lumbricus terrestris</i> . 2011 , 43, 188-196		136
888	Effect of biochar on the fate of volatile petroleum hydrocarbons in an aerobic sandy soil. 2011 , 126, 208-15		61
887	Biochar for the mitigation of nitrate leaching from soil amended with biosolids. 2011 , 409, 3206-10		175
886	Effects of biochar and the earthworm <i>Eisenia fetida</i> on the bioavailability of polycyclic aromatic hydrocarbons and potentially toxic elements. <i>Environmental Pollution</i> , 2011 , 159, 616-22	9.3	221
885	The immobilisation and retention of soluble arsenic, cadmium and zinc by biochar. <i>Environmental Pollution</i> , 2011 , 159, 474-80	9.3	550
884	Impact of earthworms on trace element solubility in contaminated mine soils amended with green waste compost. <i>Environmental Pollution</i> , 2011 , 159, 1852-60	9.3	23
883	Contrasting effects of black carbon amendments on PAH bioaccumulation by <i>Chironomus plumosus</i> larvae in two distinct sediments: role of water absorption and particle ingestion. <i>Environmental Pollution</i> , 2011 , 159, 1905-13	9.3	34
882	A review of biochars' potential role in the remediation, revegetation and restoration of contaminated soils. <i>Environmental Pollution</i> , 2011 , 159, 3269-82	9.3	1047
881	Influence of soil properties on heavy metal sequestration by biochar amendment: 2. Copper desorption isotherms. 2011 , 82, 1438-47		38
880	Application of biochar on mine tailings: effects and perspectives for land reclamation. 2011 , 83, 1262-7		322
879	Contribution of a municipal solid waste incinerator to the trace metals in the surrounding soil. 2011 , 182, 523-33		32
878	Biochar reduces the bioavailability and phytotoxicity of heavy metals. 2011 , 348, 439-451		744

877	Comparisons of Microwave-Assisted Extraction, Simultaneous Distillation-Solvent Extraction, Soxhlet Extraction and Ultrasound Probe for Polycyclic Musks in Sediments: Recovery, Repeatability, Matrix Effects and Bioavailability. 2011 , 74, 489-495		22
876	Effect of spent mushroom substrate applied to vineyard soil on the behaviour of copper-based fungicide residues. 2011 , 92, 1849-57		12
875	Soil management in relation to sustainable agriculture and ecosystem services. 2011 , 36, S72-S87		296
874	The toxicity to plants of the sewage sludges containing multiwalled carbon nanotubes. <i>Journal of Hazardous Materials</i> , 2011 , 186, 436-42	12.8	51
873	Residues of bioenergy production chains as soil amendments: immediate and temporal phytotoxicity. <i>Journal of Hazardous Materials</i> , 2011 , 186, 2017-25	12.8	108
872	Screening biochars for heavy metal retention in soil: role of oxygen functional groups. <i>Journal of Hazardous Materials</i> , 2011 , 190, 432-41	12.8	443
871	Efficiency of green waste compost and biochar soil amendments for reducing lead and copper mobility and uptake to ryegrass. <i>Journal of Hazardous Materials</i> , 2011 , 191, 41-8	12.8	390
870	Using response surface methodology to assess the effects of iron and spent mushroom substrate on arsenic phytotoxicity in lettuce (<i>Lactuca sativa</i> L.). <i>Journal of Hazardous Materials</i> , 2011 , 192, 381-7	12.8	13
869	Germination tests for assessing biochar quality. 2012 , 41, 1014-22		124
868	Effect of biochar amendment on tylosin adsorption-desorption and transport in two different soils. 2012 , 41, 1185-92		56
867	Reviews of Environmental Contamination and Toxicology. 2012 ,		3
866	Biochar: a synthesis of its agronomic impact beyond carbon sequestration. 2012 , 41, 973-89		595
865	The fate of arsenic in soil-plant systems. 2012 , 215, 1-37		94
864	Enhanced bioremediation of PAH-contaminated soil by immobilized bacteria with plant residue and biochar as carriers. 2012 , 12, 1350-1359		135
863	Synthesis of porous MgO-biochar nanocomposites for removal of phosphate and nitrate from aqueous solutions. 2012 , 210, 26-32		411
862	The effects of biochars from rice residue on the formation of iron plaque and the accumulation of Cd, Zn, Pb, As in rice (<i>Oryza sativa</i> L.) seedlings. 2012 , 89, 856-62		209
861	Bisolute sorption and thermodynamic behavior of organic pollutants to biomass-derived biochars at two pyrolytic temperatures. 2012 , 46, 12476-83		112
860	Fast and slow rates of naphthalene sorption to biochars produced at different temperatures. 2012 , 46, 11104-11		224

859	Lead retention by broiler litter biochars in small arms range soil: impact of pyrolysis temperature. 2012 , 60, 5035-44		104
858	The role of drinking water sources, consumption of vegetables and seafood in relation to blood arsenic concentrations of Jamaican children with and without Autism Spectrum Disorders. 2012 , 433, 362-70		43
857	Immobilization of Cu(II), Pb(II) and Cd(II) by the addition of rice straw derived biochar to a simulated polluted Ultisol. <i>Journal of Hazardous Materials</i> , 2012 , 229-230, 145-50	12.8	366
856	Thermal Conversion of Biomass. 2012 , 1001-1042		5
855	Biochar: Carbon Sequestration, Land Remediation, and Impacts on Soil Microbiology. 2012 , 42, 2311-2364		116
854	Retention of heavy metals by carboxyl functional groups of biochars in small arms range soil. 2012 , 60, 1798-809		199
853	Macroscopic and molecular investigations of copper sorption by a steam-activated biochar. 2012 , 41, 1150-6		81
852	Retention of heavy metals in a Typic Kandudult amended with different manure-based biochars. 2012 , 41, 1138-49		58
851	Comparing Corn Stover and Switchgrass Biochar: Characterization and Sorption Properties. 2012 , 5,		7
850	Water extractable organic carbon in untreated and chemical treated biochars. 2012 , 87, 151-7		233
849	Enhanced dissipation of polycyclic aromatic hydrocarbons in the presence of fresh plant residues and their extracts. <i>Environmental Pollution</i> , 2012 , 161, 199-205	9.3	23
848	Activated carbon and biochar amendments decrease pore-water concentrations of polycyclic aromatic hydrocarbons (PAHs) in sewage sludge. 2012 , 111, 84-91		159
847	Sewage sludge-to-energy approaches based on anaerobic digestion and pyrolysis: Brief overview and energy efficiency assessment. 2012 , 16, 1657-1665		284
846	Biochar influences the microbial community structure during manure composting with agricultural wastes. 2012 , 416, 476-81		152
845	Increasing biochar surface area: Optimization of ball milling parameters. 2012 , 228, 115-120		81
844	Bioavailability assessment of hexachlorobenzene in soil as affected by wheat straw biochar. <i>Journal of Hazardous Materials</i> , 2012 , 217-218, 391-7	12.8	81
843	Sorption of copper (II) and sulphate to different biochars before and after composting with farmyard manure. 2012 , 63, 399-409		71
842	Biochar addition to an arsenic contaminated soil increases arsenic concentrations in the pore water but reduces uptake to tomato plants (<i>Solanum lycopersicum</i> L.). 2013 , 454-455, 598-603		180

841	Biochar in bioenergy cropping systems: impacts on soil faunal communities and linked ecosystem processes. 2013 , 5, 81-95		78
840	Modeling simple experiments of biochar erosion from soil. 2013 , 499, 140-145		38
839	Cadmium and lead bioavailability and their effects on polycyclic aromatic hydrocarbons biodegradation by spent mushroom substrate. 2013 , 20, 8690-9		28
838	Using biochar for remediation of soils contaminated with heavy metals and organic pollutants. 2013 , 20, 8472-83		503
837	Reduced bioaccumulation of PAHs by <i>Lactuca sativa</i> L. grown in contaminated soil amended with sewage sludge and sewage sludge derived biochar. <i>Environmental Pollution</i> , 2013 , 175, 64-8	9.3	101
836	Adsorption of As(III) and As(V) by Fe coated biochars and biochars produced from empty fruit bunch and rice husk. 2013 , 1, 981-988		165
835	Biochar and microbial signaling: production conditions determine effects on microbial communication. 2013 , 47, 11496-503		132
834	Biochar mitigates negative effects of salt additions on two herbaceous plant species. 2013 , 129, 62-8		145
833	Determination of polycyclic aromatic hydrocarbons in biochar and biochar amended soil. 2013 , 103, 60-67		100
832	Evaluation of biochars and activated carbons for in situ remediation of sediments impacted with organics, mercury, and methylmercury. 2013 , 47, 13721-9		117
831	Alleviation of phyto-toxicity of copper on agricultural plants. 2013 , 56, 505-517		8
830	Biochar and its effects on plant productivity and nutrient cycling: a meta-analysis. 2013 , 5, 202-214		900
829	Comparative Sorption of Pb and Cd by Biochars and Its Implication for Metal Immobilization in Soils. <i>Water, Air, and Soil Pollution</i> , 2013 , 224, 1	2.6	87
828	Bioremediation of petroleum-contaminated soil by biostimulation amended with biochar. 2013 , 85, 150-155		118
827	Chemical stabilization of cadmium in acidic soil using alkaline agronomic and industrial by-products. 2013 , 48, 1748-56		32
826	Transport of biochar particles in saturated granular media: effects of pyrolysis temperature and particle size. 2013 , 47, 821-8		220
825	Removal of Cu, Zn, and Cd from aqueous solutions by the dairy manure-derived biochar. 2013 , 20, 358-68		388
824	Biochars immobilize soil cadmium, but do not improve growth of emergent wetland species <i>Juncus subsecundus</i> in cadmium-contaminated soil. 2013 , 13, 140-151		79

823	Mobility, bioavailability and pH-dependent leaching of cadmium, zinc and lead in a contaminated soil amended with biochar. 2013 , 92, 1450-7		480
822	Production and characterization of slow pyrolysis biochar: influence of feedstock type and pyrolysis conditions. 2013 , 5, 104-115		475
821	The effects of biochar, wood vinegar and plants on glyphosate leaching and degradation. 2013 , 58, 1-7		41
820	Biochar production by sewage sludge pyrolysis. 2013 , 101, 72-78		358
819	Adsorption and catalytic hydrolysis of carbaryl and atrazine on pig manure-derived biochars: impact of structural properties of biochars. <i>Journal of Hazardous Materials</i> , 2013 , 244-245, 217-24	12.8	243
818	Impact of activated carbon, biochar and compost on the desorption and mineralization of phenanthrene in soil. <i>Environmental Pollution</i> , 2013 , 181, 200-10	9.3	51
817	Biochar soil amendment as a solution to prevent Cd-tainted rice from China: Results from a cross-site field experiment. 2013 , 58, 378-383		169
816	Heterogeneity of biochar properties as a function of feedstock sources and production temperatures. <i>Journal of Hazardous Materials</i> , 2013 , 256-257, 1-9	12.8	206
815	Removal of arsenic, methylene blue, and phosphate by biochar/AlOOH nanocomposite. 2013 , 226, 286-292		314
814	Preparation and characterization of a novel magnetic biochar for arsenic removal. 2013 , 130, 457-62		461
813	Extractability and bioavailability of Pb and As in historically contaminated orchard soil: effects of compost amendments. <i>Environmental Pollution</i> , 2013 , 177, 90-7	9.3	80
812	Solubility of lead and copper in biochar-amended small arms range soils: influence of soil organic carbon and pH. 2013 , 61, 7679-88		44
811	Effects of Time and Glucose-C on the Fractionation of Zn and Cu in a Slightly Acidic Soil. <i>Communications in Soil Science and Plant Analysis</i> , 2013 , 44, 722-732	1.5	5
810	Agroforestry and biochar to offset climate change: a review. 2013 , 33, 81-96		105
809	Feasibility Study Using Municipal Solid Waste Incineration Bottom Ash and Biochar from Binary Mixtures of Organic Waste as Agronomic Materials. 2013 , 17, 187-195		3
808	Uptake of organic pollutants and potentially toxic elements (PTEs) by crops. 2013 , 129-144		0
807	Adsorption Characteristics of Phenol in Aqueous Solution by <i>Pinus massoniana</i> Biochar. 2013 , 295-298, 1154-1160		4
806	The Research of Biochar Adsorption on Soil. 2013 , 448-453, 417-424		0

805	Biochar-Fungi Interactions in Soils. 2013 , 77-107	23
804	Biochar from Swine solids and digestate influence nutrient dynamics and carbon dioxide release in soil. 2013 , 42, 893-901	17
803	Mineral constituents profile of biochar derived from diversified waste biomasses: implications for agricultural applications. 2013 , 42, 545-52	74
802	Biochar and biosolids increase tree growth and improve soil quality for urban landscapes. 2013 , 42, 1372-85	44
801	Impact of Biochar on Organic Contaminants in Soil: A Tool for Mitigating Risk?. 2013 , 3, 349-375	66
800	Effect of Biochars from Rice Husk, Bran, and Straw on Heavy Metal Uptake by Pot-Grown Wheat Seedling in a Historically Contaminated Soil. 2013 , 8,	45
799	Adsorption of trace metals and deicing salt in soil amended with compost or biochar. 2014 ,	
798	Influence of Wood Biochar on Phenanthrene Catabolism in Soils. 2014 , 1, 60-74	7
797	Heavy metal pollution in Guangdong Province, China, and the strategies to manage the situation. 2014 , 2,	22
796	Assessment of Human and Ecosystem Risk Due to Agricultural Waste Compost Application on Soils: A Review. 2014 , 15, 312-328	7
795	Biochar soil amendment for sustainable agriculture with carbon and contaminant sequestration. 2014 , 5, 255-257	37
794	Kinetic leaching of high sulphur mine rejects amended with biochar: Buffering implication. 2014 , 71, 703-709	20
793	The impact of biochar on the bioaccessibility of (14)C-phenanthrene in aged soil. 2014 , 16, 2635-43	29
792	Characterization of nitrogen-rich biomaterial-derived biochars and their sorption for aromatic compounds. <i>Environmental Pollution</i> , 2014 , 195, 84-90	9.3 37
791	Immobilization of Ni and Cd in Soil by Biochar Derived From Unfertilized Dates. <i>Water, Air, and Soil Pollution</i> , 2014 , 225, 1	2.6 34
790	Methodological interference of biochar in the determination of extracellular enzyme activities in composting samples. 2014 , 5, 713-719	12
789	Biochar: an effective amendment for remediating contaminated soil. 2014 , 228, 83-99	7
788	Biochar application to hardrock mine tailings: Soil quality, microbial activity, and toxic element sorption. 2014 , 43, 35-48	73

787	Impact of soil amendments and the plant rhizosphere on PAH behaviour in soil. <i>Environmental Pollution</i> , 2014 , 188, 124-31	9.3	28
786	Biochar- and phosphate-induced immobilization of heavy metals in contaminated soil and water: implication on simultaneous remediation of contaminated soil and groundwater. 2014 , 21, 4665-74		75
785	Biochar as a sorbent for contaminant management in soil and water: a review. 2014 , 99, 19-33		2439
784	Changes in the molecular composition of organic matter leached from an agricultural topsoil following addition of biomass-derived black carbon (biochar). 2014 , 69, 52-60		30
783	Increased bioavailability of metals in two contrasting agricultural soils treated with waste wood-derived biochar and ash. 2014 , 21, 3230-40		56
782	Trace element concentrations in leachates and mustard plant tissue (<i>Sinapis alba</i> L.) after biochar application to temperate soils. 2014 , 481, 498-508		48
781	Assessing the influence of compost and biochar amendments on the mobility and toxicity of metals and arsenic in a naturally contaminated mine soil. <i>Environmental Pollution</i> , 2014 , 186, 195-202	9.3	297
780	The effects of sewage sludge and sewage sludge biochar on PAHs and potentially toxic element bioaccumulation in <i>Cucumis sativa</i> L. 2014 , 105, 53-61		156
779	Biochar influences the microbial community structure during tomato stalk composting with chicken manure. 2014 , 154, 148-54		152
778	Does Biochar Addition Influence the Change Points of Soil Phosphorus Leaching?. 2014 , 13, 499-506		14
777	Application of biochar to soil reduces cancer risk via rice consumption: a case study in Miaoqian village, Longyan, China. 2014 , 68, 154-61		129
776	Simplifying pyrolysis: Using gasification to produce corn stover and wheat straw biochar for sorptive and horticultural media. 2014 , 53, 228-235		48
775	Characterization of biochar-derived dissolved organic matter using UV-visible absorption and excitation-emission fluorescence spectroscopies. 2014 , 103, 197-204		117
774	Suitability of biochars (pyro- and hydrochars) for metal immobilization on former sewage-field soils. 2014 , 65, 139-148		60
773	Short-term effects of biochar on soil heavy metal mobility are controlled by intra-particle diffusion and soil pH increase. 2014 , 65, 149-161		193
772	Elemental Composition Analysis of Plants and Composts Used for Soil Remediation by Laser-Induced Breakdown Spectroscopy. 2014 , 42, 791-798		18
771	Effect of biochar addition on soil microbial community in a wheat crop. 2014 , 60, 9-15		129
770	Remediation of heavy metal(loid)s contaminated soils--to mobilize or to immobilize?. <i>Journal of Hazardous Materials</i> , 2014 , 266, 141-66	12.8	1170

769	Field study on the accumulation of trace elements by vegetables produced in the vicinity of abandoned pyrite mines. 2014 , 470-471, 1233-42		30
768	Stabilization of sewage sludge by different biochars towards reducing freely dissolved polycyclic aromatic hydrocarbons (PAHs) content. 2014 , 156, 139-45		62
767	Predicting the effects of biochar on volatile petroleum hydrocarbon biodegradation and emanation from soil: A bacterial community finger-print analysis inferred modelling approach. 2014 , 68, 20-30		30
766	Production and characterization of biochar from three-phase olive mill waste through slow pyrolysis. 2014 , 71, 330-339		63
765	Adsorption of 15 different pesticides on untreated and phosphoric acid treated biochar and charcoal from water. 2014 , 2, 2013-2025		106
764	Interaction of organic and inorganic fractions of biochar with Pb(II) ion: further elucidation of mechanisms for Pb(II) removal by biochar. 2014 , 4, 44930-44937		79
763	Soil application of biochar produced from biomass grown on trace element contaminated land. 2014 , 146, 100-106		36
762	Influence of molecular structure and adsorbent properties on sorption of organic compounds to a temperature series of wood chars. 2014 , 48, 4790-8		114
761	Effects of biochar and activated carbon amendment on maize growth and the uptake and measured availability of polycyclic aromatic hydrocarbons (PAHs) and potentially toxic elements (PTEs). <i>Environmental Pollution</i> , 2014 , 193, 79-87	9.3	84
760	The effect of low-temperature transformation of mixtures of sewage sludge and plant materials on content, leachability and toxicity of heavy metals. 2014 , 117, 33-9		34
759	Effect of bamboo and rice straw biochars on the bioavailability of Cd, Cu, Pb and Zn to <i>Sedum plumbizincicola</i> . 2014 , 191, 124-132		247
758	Mobility and phytoavailability of Cu, Cr, Zn, and As in a contaminated soil at a wood preservation site after 4 years of aided phytostabilization. 2014 , 21, 10307-19		23
757	Species-dependent effects of biochar amendment on bioaccumulation of atrazine in earthworms. <i>Environmental Pollution</i> , 2014 , 186, 241-7	9.3	53
756	Effects of biochar amendment on root traits and contaminant availability of maize plants in a copper and arsenic impacted soil. 2014 , 379, 351-360		74
755	Metal contaminated biochar and wood ash negatively affect plant growth and soil quality after land application. <i>Journal of Hazardous Materials</i> , 2014 , 276, 362-70	12.8	43
754	Reviews of Environmental Contamination and Toxicology Volume 228. 2014 ,		2
753	Interaction Mechanisms between Biochar and Organic Pollutants. 2015 , 225-257		2
752	Aqueous Contaminant Removal and Stormwater Treatment Using Biochar. 2015 , 341-376		3

751	Application of Biochar for Soil Remediation. 2015 , 295-324		16
750	Aqueous leaching of organic acids and dissolved organic carbon from various biochars prepared at different temperatures. 2015 , 44, 684-95		48
749	Content of Heavy Metals in BioChars and Assessment of Ecological Risk on Their Application to Soil. 2015 ,		1
748	Biochar addition enhanced growth of <i>Dactylis glomerata</i> L. and immobilized Zn and Cd but mobilized Cu and Pb on a former sewage field soil. 2015 , 66, 505-515		25
747	Biochar Soil Amendment Effects on Arsenic Availability to Mountain Brome (). 2015 , 44, 1315-20		8
746	Potential for Recycling Nutrients from Biosolids Amended with Clay and Lime in Coarse-Textured Water Repellence, Acidic Soils of Western Australia. 2015 , 2015, 1-11		3
745	Suppression of Chlorantraniliprole Sorption on Biochar in Soil-Biochar Systems. 2015 , 95, 401-6		9
744	Biochar-mediated reductions in greenhouse gas emissions from soil amended with anaerobic digestates. 2015 , 79, 39-49		43
743	Effect of fresh and mature organic amendments on the phytoremediation of technosols contaminated with high concentrations of trace elements. 2015 , 159, 37-47		37
742	Effect of biochar on leaching of organic carbon, nitrogen, and phosphorus from compost in bioretention systems. 2015 , 521-522, 37-45		91
741	Bioremediation of soils contaminated with polycyclic aromatic hydrocarbons, petroleum, pesticides, chlorophenols and heavy metals by composting: Applications, microbes and future research needs. 2015 , 33, 745-55		559
740	Immobilization of Trace Metals in Contaminated Urban Soil Amended with Compost and Biochar. <i>Water, Air, and Soil Pollution</i> , 2015 , 226, 1	2.6	26
739	Effects of Biochars and Compost Mixtures and Inorganic Additives on Immobilisation of Heavy Metals in Contaminated Soils. <i>Water, Air, and Soil Pollution</i> , 2015 , 226, 1	2.6	50
738	Biochar and forest restoration: a review and meta-analysis of tree growth responses. 2015 , 46, 931-946		112
737	SMART biochar technology: A shifting paradigm towards advanced materials and healthcare research. <i>Environmental Technology and Innovation</i> , 2015 , 4, 206-209	7	155
736	Plants, Pollutants and Remediation. 2015 ,		16
735	Plants for Remediation: Uptake, Translocation and Transformation of Organic Pollutants. 2015 , 241-308		9
734	Influence of biochar application methods on the phytostabilization of a hydrophobic soil contaminated with lead and acid tar. 2015 , 150, 226-234		28

733	Application of organic amendments to restore degraded soil: effects on soil microbial properties. 2015 , 187, 109		39
732	Multifaceted application of crop residue biochar as a tool for sustainable agriculture: An ecological perspective. 2015 , 77, 324-347		85
731	Effect of biochar on heavy metal immobilization and uptake by lettuce (<i>Lactuca sativa</i> L.) in agricultural soil. 2015 , 74, 1249-1259		153
730	Plant growth and metal uptake by a non-hyperaccumulating species (<i>Lolium perenne</i>) and a Cd-Zn hyperaccumulator (<i>Noccaea caerulea</i>) in contaminated soils amended with biochar. 2015 , 395, 57-73		79
729	Growth, survival, and heavy metal (Cd and Ni) uptake of spinach (<i>Spinacia oleracea</i>) and fenugreek (<i>Trigonella corniculata</i>) in a biochar-amended sewage-irrigated contaminated soil. 2015 , 178, 209-217		49
728	Impact of humic acid coating on sorption of naphthalene by biochars. 2015 , 94, 946-954		27
727	Immobilization of Lead and Cadmium in Contaminated Soil Using Amendments: A Review. <i>Pedosphere</i> , 2015 , 25, 555-568	5	160
726	Bioremediation of multi-polluted soil by spent mushroom (<i>Agaricus bisporus</i>) substrate: Polycyclic aromatic hydrocarbons degradation and Pb availability. <i>Journal of Hazardous Materials</i> , 2015 , 300, 281-288	12.8	51
725	Resolution of Adsorption and Partition Components of Organic Compounds on Black Carbons. 2015 , 49, 9116-23		37
724	Slash-and-char: An ancient agricultural technique holds new promise for management of soils contaminated by Cd, Pb and Zn. <i>Environmental Pollution</i> , 2015 , 205, 333-9	9.3	30
723	The influence of various biochars on the bioaccessibility and bioaccumulation of PAHs and potentially toxic elements to turnips (<i>Brassica rapa</i> L.). <i>Journal of Hazardous Materials</i> , 2015 , 300, 243-253	12.8	181
722	Biochar and activated carbon for enhanced trace organic contaminant retention in stormwater infiltration systems. 2015 , 49, 6222-30		74
721	Effect of dried olive pomace derived biochar on the mobility of cadmium and nickel in soil. 2015 , 3, 1163-1176		22
720	Pattern of pore water nutrients in planted and non-planted soilless substrates as affected by the addition of biochars from wood gasification. 2015 , 51, 625-635		22
719	A preliminary assessment of the potential of using an acacia-biochar system for spent mine site rehabilitation. 2015 , 22, 2138-44		38
718	Green waste compost as an amendment during induced phytoextraction of mercury-contaminated soil. 2015 , 22, 3528-37		38
717	Influence of pyrolysis temperature on physical and chemical properties of biochar made from sewage sludge. 2015 , 112, 284-289		232
716	The conversion of sewage sludge into biochar reduces polycyclic aromatic hydrocarbon content and ecotoxicity but increases trace metal content. 2015 , 75, 235-244		121

715	Mitigating heavy metal accumulation into rice (<i>Oryza sativa</i> L.) using biochar amendment--a field experiment in Hunan, China. 2015 , 22, 11097-108		102
714	Changes in macro- and micronutrient contents of grasses and forbs following <i>Miscanthus x giganteus</i> feedstock, hydrochar and biochar application to temperate grassland. 2015 , 70, 582-599		21
713	Influence of combined use of iodide and compost on Hg accumulation by <i>Lepidium sativum</i> L. 2015 , 150, 499-507		11
712	Efficiency of biochar and compost (or composting) combined amendments for reducing Cd, Cu, Zn and Pb bioavailability, mobility and ecological risk in wetland soil. 2015 , 5, 34541-34548		113
711	Assessment of amendments for the immobilization of Cu in soils containing EDDS leachates. 2015 , 22, 16525-34		11
710	Biochar for Sustainable Soil Health: A Review of Prospects and Concerns. <i>Pedosphere</i> , 2015 , 25, 639-653	5	88
709	Effect of nitrate and ammonium fertilization on Zn, Pb, and Cd phytostabilization by <i>Populus euramericana</i> Dorskamp in contaminated technosol. 2015 , 22, 18759-71		12
708	Contrasting effects of organic amendments on phytoextraction of heavy metals in a contaminated sediment. 2015 , 397, 331-345		16
707	Elaboration, characteristics and advantages of biochars for the management of contaminated soils with a specific overview on <i>Miscanthus</i> biochars. 2015 , 162, 275-89		60
706	Biochar: An Emerging Panacea for Remediation of Soil Contaminants from Mining, Industry and Sewage Wastes. <i>Pedosphere</i> , 2015 , 25, 654-665	5	74
705	Synergistic Effects of Biochar and NPK Fertilizer on Soybean Yield in an Alkaline Soil. <i>Pedosphere</i> , 2015 , 25, 713-719	5	60
704	Biochar-Soil Interactions in Four Agricultural Soils. <i>Pedosphere</i> , 2015 , 25, 729-736	5	22
703	Birch (<i>Betula</i> spp.) wood biochar is a potential soil amendment to reduce glyphosate leaching in agricultural soils. 2015 , 164, 46-52		19
702	Trace element biogeochemistry in the soil-water-plant system of a temperate agricultural soil amended with different biochars. 2015 , 22, 4513-26		21
701	Combination of biochar amendment and mycoremediation for polycyclic aromatic hydrocarbons immobilization and biodegradation in creosote-contaminated soil. <i>Journal of Hazardous Materials</i> , 2015 , 285, 259-66	12.8	99
700	Phytoremediation and Biochar Application as an Amendment. 2015 , 253-263		3
699	Concomitant reduction and immobilization of chromium in relation to its bioavailability in soils. 2015 , 22, 8969-78		57
698	Viability of organic wastes and biochars as amendments for the remediation of heavy metal-contaminated soils. 2015 , 119, 190-198		83

697	Characteristics and Applications of Biochar for Environmental Remediation: A Review. 2015 , 45, 939-969	276
696	Phytoremediation of Metal-Contaminated Soils Using Organic Amendments. 2015 , 503-523	6
695	Biochar immobilizes cadmium and zinc and improves phytoextraction potential of willow plants on extremely contaminated soil. 2016 , 61, 303-308	23
694	Production and Utilization of Biochar From Organic Wastes for Pollutant Control on Contaminated Sites. 2016 , 91-116	7
693	Effect of Biochar Amendment on Bioavailability and Accumulation of Cadmium and Trace Elements in <i>Brassica chinensis</i> L. (Chinese Cabbage). 2016 , 8, 23	3
692	Biochar-carrying hydrocarbon decomposers promote degradation during the early stage of bioremediation. 2016 , 13, 5739-5752	30
691	Engineered Soils Using Amendments for In Situ Rehabilitation of Mine Lands. 2016 , 131-146	2
690	Systems Integration for Biochar in European Forestry: Drivers and Strategies. 70-95	
689	Comparative short-term effects of sewage sludge and its biochar on soil properties, maize growth and uptake of nutrients on a tropical clay soil in Zimbabwe. 2016 , 15, 1395-1406	37
688	Effect of activated carbon or biochars on toxicity of different soils contaminated by mixture of native polycyclic aromatic hydrocarbons and heavy metals. 2016 , 35, 1321-8	17
687	Carbon Sequestration in Restored Soils by Applying Organic Amendments. 2016 , 27, 620-629	27
686	Evaluation of solid phase extraction efficiency of functionalized biochar for polyphenols from <i>Punica granatum</i> . 2016 , 11, 200-208	3
685	Influence of Soil Aging and Stabilization with Compost on Zn and Cu Fractionation, Stability, and Mobility. 2016 , 44, 272-283	12
684	Microbial Ecology Analysis of Biochar-Augmented Soils. 2016 , 1-40	5
683	Potential Application of Biochar for Bioremediation of Contaminated Systems. 2016 , 221-246	10
682	Interactions of Biochar and Biological Degradation of Aromatic Hydrocarbons in Contaminated Soil. 2016 , 247-267	3
681	Leaching of PAHs from agricultural soils treated with oil shale combustion ash: an experimental study. 2016 , 23, 20862-20870	2
680	Comparison of heavy metal immobilization in contaminated soils amended with peat moss and peat moss-derived biochar. 2016 , 18, 514-20	19

679	Bioremediation of polychlorinated-p-dioxins/dibenzofurans contaminated soil using simulated compost-amended landfill reactors under hypoxic conditions. <i>Journal of Hazardous Materials</i> , 2016 , 312, 159-168	12.8	23
678	Optimization of typical diffuse herbicide pollution control by soil amendment configurations under four levels of rainfall intensities. 2016 , 175, 1-8		15
677	Sorption of copper(II) from synthetic oil sands process-affected water (OSPW) by pine sawdust biochars: effects of pyrolysis temperature and steam activation. 2016 , 16, 2081-2089		18
676	Trace element bioavailability, yield and seed quality of rapeseed (<i>Brassica napus</i> L.) modulated by biochar incorporation into a contaminated technosol. 2016 , 156, 150-162		22
675	DOM fractionated from pig waste affecting the solubility of PAHs along with non-ionic surfactant. 2016 , 57, 18293-18299		
674	Biochar amendment reduced methylmercury accumulation in rice plants. <i>Journal of Hazardous Materials</i> , 2016 , 313, 1-8	12.8	76
673	Influence of feedstock on the copper removal capacity of waste-derived biochars. 2016 , 212, 199-206		56
672	Contributions of a compost-biochar mixture to the metal sorption capacity of a mine tailing. 2016 , 23, 2595-602		14
671	Biochar pricing hampers biochar farming. 2016 , 18, 1225-1231		56
670	Compost as a Soil Amendment to Remediate Heavy Metal-Contaminated Agricultural Soil: Mechanisms, Efficacy, Problems, and Strategies. <i>Water, Air, and Soil Pollution</i> , 2016 , 227, 1	2.6	106
669	In situ stabilization of heavy metals in multiple-metal contaminated paddy soil using different steel slag-based silicon fertilizer. 2016 , 23, 23638-23647		33
668	Role of Biochar in Remediating Heavy Metals in Soil. 2016 , 421-437		8
667	Bioavailability and bioaccessibility of polycyclic aromatic hydrocarbons (PAHs) in historically contaminated soils after lab incubation with sewage sludge-derived biochars. 2016 , 163, 480-489		24
666	Assessing the combination of iron sulfate and organic materials as amendment for an arsenic and copper contaminated soil. A chemical and ecotoxicological approach. 2016 , 165, 539-546		22
665	Impact of two contrasting biochars on the bioaccessibility of 14C-naphthalene in soil. <i>Environmental Technology and Innovation</i> , 2016 , 6, 80-93	7	12
664	Soil Science: Agricultural and Environmental Perspectives. 2016 ,		7
663	Properties of biochars from conventional and alternative feedstocks and their suitability for metal immobilization in industrial soil. 2016 , 23, 21249-21261		22
662	Combination of biochar amendment and phytoremediation for hydrocarbon removal in petroleum-contaminated soil. 2016 , 23, 21219-21228		30

661	Risks and benefits of marginal biomass-derived biochars for plant growth. 2016 , 569-570, 496-506		47
660	Soil Amendments for Heavy Metal Immobilization Using Different Crops. 2016 , 371-399		0
659	Biochar for Waste Management and Environmental Sustainability. 2016 , 273-291		4
658	Addition of biochar to sewage sludge decreases freely dissolved PAHs content and toxicity of sewage sludge-amended soil. <i>Environmental Pollution</i> , 2016 , 218, 242-251	9.3	53
657	Effect of ageing on the availability of heavy metals in soils amended with compost and biochar: evaluation of changes in soil and amendment properties. 2016 , 23, 20619-20627		13
656	Effect of pyrolysis temperature on potential toxicity of biochar if applied to the environment. <i>Environmental Pollution</i> , 2016 , 218, 1-7	9.3	101
655	Biochar prepared from castor oil cake at different temperatures: A voltammetric study applied for Pb(2+), Cd(2+) and Cu(2+) ions preconcentration. <i>Journal of Hazardous Materials</i> , 2016 , 318, 526-532	12.8	44
654	Novel Biochar-Plant Tandem Approach for Remediating Hexachlorobenzene Contaminated Soils: Proof-of-Concept and New Insight into the Rhizosphere. 2016 , 64, 5464-71		38
653	Development of a cell immobilization technique with polyvinyl alcohol for diesel remediation in seawater. 2016 , 113, 397-407		12
652	Effect of low-temperature biochar derived from pig manure and poultry litter on mobile and organic matter-bound forms of Cu, Cd, Pb and Zn in sandy soil. 2016 , 32, 357-367		31
651	H/C atomic ratio as a smart linkage between pyrolytic temperatures, aromatic clusters and sorption properties of biochars derived from diverse precursory materials. 2016 , 6, 22644		106
650	Sorption of Lincomycin by Manure-Derived Biochars from Water. 2016 , 45, 519-27		25
649	The effect of biochar and crop straws on heavy metal bioavailability and plant accumulation in a Cd and Pb polluted soil. <i>Ecotoxicology and Environmental Safety</i> , 2016 , 132, 94-100	7	147
648	Remediation of lead contaminated soil by biochar-supported nano-hydroxyapatite. <i>Ecotoxicology and Environmental Safety</i> , 2016 , 132, 224-30	7	80
647	Influence of biochars, compost and iron grit, alone and in combination, on copper solubility and phytotoxicity in a Cu-contaminated soil from a wood preservation site. 2016 , 566-567, 816-825		46
646	Dissipation of fomesafen in biochar-amended soil and its availability to corn (<i>Zea mays</i> L.) and earthworm (<i>Eisenia fetida</i>). 2016 , 16, 2439-2448		40
645	Effects of biochar and alkaline amendments on cadmium immobilization, selected nutrient and cadmium concentrations of lettuce (<i>Lactuca sativa</i>) in two contrasting soils. 2016 , 5, 397		56
644	The influence of humic substance on Cd accumulation of phytostabilizer <i>Athyrium wardii</i> (Hook.) grown in Cd-contaminated soils. 2016 , 23, 18524-32		6

643	Changes in heavy metal extractability from contaminated soils remediated with organic waste or biochar. 2016 , 279, 132-140		52
642	Characterization of biochars produced from peanut hulls and pine wood with different pyrolysis conditions. 2016 , 3,		12
641	Effects of biochar amendment on relieving cadmium stress and reducing cadmium accumulation in pepper. 2016 , 23, 12323-31		17
640	Concentrations of polycyclic aromatic hydrocarbons in New York City community garden soils: Potential sources and influential factors. 2016 , 35, 357-67		20
639	Amendment of biochar reduces the release of toxic elements under dynamic redox conditions in a contaminated floodplain soil. 2016 , 142, 41-7		149
638	Effect of biochars and microorganisms on cadmium accumulation in rice grains grown in Cd-contaminated soil. 2016 , 23, 962-73		68
637	Insight into biochar properties and its cost analysis. 2016 , 84, 76-86		174
636	Spectroscopic characterization of dissolved organic matter derived from different biochars and their polycyclic aromatic hydrocarbons (PAHs) binding affinity. 2016 , 152, 399-406		78
635	A novel bioremediation strategy for petroleum hydrocarbon pollutants using salt tolerant <i>Corynebacterium variabile</i> HRJ4 and biochar. <i>Journal of Environmental Sciences</i> , 2016 , 47, 7-13	6.4	66
634	Varying effect of biochar on Cd, Pb and As mobility in a multi-metal contaminated paddy soil. 2016 , 152, 196-206		138
633	Bioaugmentation with Immobilized Microorganisms to Enhance Phytoremediation of PCB-Contaminated Soil. 2016 , 25, 419-430		14
632	Quantification of <i>Aspergillus fumigatus</i> and enteric bacteria in European compost and biochar. 2016 , 24, 20-29		11
631	Biochar and compost amendments enhance copper immobilisation and support plant growth in contaminated soils. 2016 , 171, 101-112		66
630	Polycyclic aromatic hydrocarbons (PAHs) removal by sorption: A review. 2016 , 148, 336-53		258
629	Biochar amendment in the green roof substrate affects runoff quality and quantity. 2016 , 88, 1-9		44
628	Influence of Dissolved Organic Matter on Sorption and Desorption of 1,2,4-trichlorobenzene and 1,2,4,5-tetrachlorobenzene onto Wood Char. 2016 , 25, 210-222		2
627	Assessing biochar ecotoxicology for soil amendment by root phytotoxicity bioassays. 2016 , 188, 166		36
626	Enhanced bioreduction of iron and arsenic in sediment by biochar amendment influencing microbial community composition and dissolved organic matter content and composition. <i>Journal of Hazardous Materials</i> , 2016 , 311, 20-9	12.8	132

625	Characterization of Cu(II) and Cd(II) resistance mechanisms in <i>Sphingobium</i> sp. PHE-SPH and <i>Ochrobactrum</i> sp. PHE-OCH and their potential application in the bioremediation of heavy metal-phenanthrene co-contaminated sites. 2016 , 23, 6861-72		16
624	Availability and transfer to grain of As, Cd, Cu, Ni, Pb and Zn in a barley agri-system: Impact of biochar, organic and mineral fertilizers. 2016 , 219, 171-178		72
623	Effects of biochar on growth of Asian lotus (<i>Nelumbo nucifera</i> Gaertn.) and cadmium uptake in artificially cadmium-polluted water. 2016 , 198, 311-317		6
622	Correlations and adsorption mechanisms of aromatic compounds on a high heat temperature treated bamboo biochar. <i>Environmental Pollution</i> , 2016 , 210, 57-64	9.3	73
621	The influence of biochar type on long-term stabilization for Cd and Cu in contaminated paddy soils. <i>Journal of Hazardous Materials</i> , 2016 , 304, 40-8	12.8	150
620	Low uptake affinity cultivars with biochar to tackle Cd-tainted rice--A field study over four rice seasons in Hunan, China. 2016 , 541, 1489-1498		122
619	Agronomic and remedial benefits and risks of applying biochar to soil: Current knowledge and future research directions. 2016 , 87, 1-12		219
618	Contribution of waste and biochar amendment to the sorption of metals in a copper mine tailing. 2016 , 137, 120-125		52
617	Mechanisms of biochar-mediated alleviation of toxicity of trace elements in plants: a critical review. 2016 , 23, 2230-48		279
616	Lead and copper immobilization in a shooting range soil using soybean stover- and pine needle-derived biochars: Chemical, microbial and spectroscopic assessments. <i>Journal of Hazardous Materials</i> , 2016 , 301, 179-86	12.8	140
615	Compost addition reduces porosity and chlordecone transfer in soil microstructure. 2016 , 23, 98-108		14
614	Phytostabilization of As, Sb and Pb by two willow species (<i>S. viminalis</i> and <i>S. purpurea</i>) on former mine technosols. 2016 , 136, 44-52		78
613	Effect of biochar on the extractability of heavy metals (Cd, Cu, Pb, and Zn) and enzyme activity in soil. 2016 , 23, 974-84		307
612	Automatic flow-through dynamic extraction: A fast tool to evaluate char-based remediation of multi-element contaminated mine soils. 2016 , 148, 686-93		7
611	Bioavailability of Cd and Zn in soils treated with biochars derived from tobacco stalk and dead pigs. 2017 , 17, 751-762		101
610	Biochar-induced changes in soil properties affected immobilization/mobilization of metals/metalloids in contaminated soils. 2017 , 17, 717-730		148
609	Biochar for crop production: potential benefits and risks. 2017 , 17, 685-716		222
608	Evaluation of organic amendment on the effect of cadmium bioavailability in contaminated soils using the DGT technique and traditional methods. 2017 , 24, 7959-7968		16

607	Effects of biochar on copper immobilization and soil microbial communities in a metal-contaminated soil. 2017 , 17, 1237-1250	53
606	Chicken-manure-derived biochar reduced bioavailability of copper in a contaminated soil. 2017 , 17, 741-750	60
605	Effect of bamboo and rice straw biochars on the mobility and redistribution of heavy metals (Cd, Cu, Pb and Zn) in contaminated soil. 2017 , 186, 285-292	364
604	Polycyclic aromatic hydrocarbons and volatile organic compounds in biochar and biochar-amended soil: a review. 2017 , 9, 990-1004	78
603	Biochar for Agriculture in Pakistan. 2017 , 57-114	6
602	Phytoremediation of urban soils contaminated with trace metals using <i>Noccaea caerulescens</i> : comparing non-metallicolous populations to the metallicolous 'Ganges' in field trials. 2017 , 24, 8176-8188	26
601	Wood-derived-biochar combined with compost or iron grit for in situ stabilization of Cd, Pb, and Zn in a contaminated soil. 2017 , 24, 7468-7481	36
600	In situ upgrading of pyrolysis biofuels by bentonite clay with simultaneous production of heterogeneous adsorbents for water treatment. 2017 , 195, 273-283	19
599	Effects of the biochar aromaticity and molecular structures of the chlorinated organic compounds on the adsorption characteristics. 2017 , 24, 5554-5565	26
598	Remediation of Cu, Pb, Zn and Cd-contaminated agricultural soil using a combined red mud and compost amendment. 2017 , 118, 73-81	99
597	Evaluation of biochar amended biosolids co-composting to improve the nutrient transformation and its correlation as a function for the production of nutrient-rich compost. 2017 , 237, 156-166	95
596	Impact of Biochar on Soil Fertility and Behaviour of Xenobiotics in Soil. 2017 , 299-318	
595	Characterization of lignocellulosic compositions' degradation during chicken manure composting with added biochar by phospholipid fatty acid (PLFA) and correlation analysis. 2017 , 586, 1003-1011	40
594	Mobility and phytoavailability of As and Pb in a contaminated soil using pine sawdust biochar under systematic change of redox conditions. 2017 , 178, 110-118	185
593	Characterizing Biochar as Alternative Sorbent for Oil Spill Remediation. 2017 , 7, 43912	34
592	Waste walnut shell valorization to iron loaded biochar and its application to arsenic removal. 2017 , 3, 29-36	19
591	Mitigating Negative Microbial Effects of p-Nitrophenol, Phenol, Copper and Cadmium in a Sandy Loam Soil Using Biochar. <i>Water, Air, and Soil Pollution</i> , 2017 , 228, 1	2.6 2
590	Roles of Phosphoric Acid in Biochar Formation: Synchronously Improving Carbon Retention and Sorption Capacity. 2017 , 46, 393-401	70

589	Research progress on aging of organic pollutants in geosorbents: a review. 2017 , 36, 27-43		9
588	Biological technologies for the remediation of co-contaminated soil. 2017 , 37, 1062-1076		341
587	Changes in heavy metal mobility and availability from contaminated wetland soil remediated with combined biochar-compost. 2017 , 181, 281-288		221
586	Stabilization of metal(loid)s in two contaminated agricultural soils: Comparing biochar to its non-pyrolysed source material. 2017 , 181, 150-159		27
585	Remediation of Soils Polluted with Inorganic Contaminants: Role of Organic Amendments. 2017 , 313-337		3
584	Bioaccessibility of polycyclic aromatic hydrocarbons in activated carbon or biochar amended vegetated (<i>Salix viminalis</i>) soil. <i>Environmental Pollution</i> , 2017 , 227, 406-413	9-3	26
583	Enhancing Cleanup of Environmental Pollutants. 2017 ,		7
582	Improved contaminant removal in vegetated stormwater biofilters amended with biochar. 2017 , 3, 726-734		40
581	Effects and mechanisms of biochar-microbe interactions in soil improvement and pollution remediation: A review. <i>Environmental Pollution</i> , 2017 , 227, 98-115	9-3	381
580	Organic Carbon Amendments for Enhanced Biological Attenuation of Trace Organic Contaminants in Biochar-Amended Stormwater Biofilters. 2017 , 51, 9184-9193		33
579	First "charosphere" view towards the transport and transformation of Cd with addition of manure derived biochar. <i>Environmental Pollution</i> , 2017 , 227, 175-182	9-3	34
578	Biochar properties and eco-friendly applications for climate change mitigation, waste management, and wastewater treatment: A review. 2017 , 79, 255-273		312
577	Value of biochars from <i>Miscanthus x giganteus</i> cultivated on contaminated soils to decrease the availability of metals in multicontaminated aqueous solutions. 2017 , 24, 18204-18217		7
576	Soil contamination with cadmium, consequences and remediation using organic amendments. 2017 , 601-602, 1591-1605		281
575	Pyrogenic carbon and its role in contaminant immobilization in soils. 2017 , 47, 795-876		59
574	Role of biochar on composting of organic wastes and remediation of contaminated soils-a review. 2017 , 24, 16560-16577		131
573	Effects of carbon nanotube and biochar on bioavailability of Pb, Cu and Sb in multi-metal contaminated soil. 2017 , 39, 1409-1420		34
572	Bioavailability and toxicity of pyrene in soils upon biochar and compost addition. 2017 , 595, 132-140		30

571	Tourmaline and biochar for the remediation of acid soil polluted with heavy metals. 2017 , 5, 2107-2114		42
570	Removal of Cr (VI) from aqueous solution using magnetic biochar synthesized by a single step method. 2017 , 38, 1665-1674		23
569	Impact of multiwall carbon nanotubes on the accumulation and distribution of carbamazepine in collard greens (<i>Brassica oleracea</i>). <i>Environmental Science: Nano</i> , 2017 , 4, 149-159	7.1	33
568	Bioavailability assessment of thiacloprid in soil as affected by biochar. 2017 , 171, 185-191		23
567	Characteristics of different types of biochar and effects on the toxicity of heavy metals to germinating sorghum seeds. 2017 , 182, 157-165		35
566	Effects of the amendment of biochars and carbon nanotubes on the bioavailability of hexabromocyclododecanes (HBCDs) in soil to ecologically different species of earthworms. <i>Environmental Pollution</i> , 2017 , 222, 191-200	9.3	15
565	Long-term Cu stabilization and biomass yields of Giant reed and poplar after adding a biochar, alone or with iron grit, into a contaminated soil from a wood preservation site. 2017 , 579, 620-627		21
564	Application of Green Manure and Pig Manure to Cd-Contaminated Paddy Soil Increases the Risk of Cd Uptake by Rice and Cd Downward Migration into Groundwater: Field Micro-Plot Trials. <i>Water, Air, and Soil Pollution</i> , 2017 , 228, 1	2.6	9
563	Obsolete Laws: Economic and Moral Aspects, Case Study-Composting Standards. 2017 , 23, 1667-1672		5
562	A comparative study on the influence of different organic amendments on trace element mobility and microbial functionality of a polluted mine soil. 2017 , 188, 287-296		16
561	Role of oxygen-containing functional groups in forest fire-generated and pyrolytic chars for immobilization of copper and nickel. <i>Environmental Pollution</i> , 2017 , 220, 946-954	9.3	6
560	Potential Sex Differences Relative to Autism Spectrum Disorder and Metals. 2017 , 4, 405-414		14
559	Co-occurrence and interactions of pollutants, and their impacts on soil remediation: A review. 2017 , 47, 1528-1553		286
558	Modulation of trace element bioavailability for two earthworm species after biochar amendment into a contaminated technosol. 2017 , 26, 1378-1391		2
557	Modeling desorption kinetics of the native and applied zinc in biochar-amended calcareous soils of different land uses. 2017 , 76, 1		13
556	Environmental application of biochar: Current status and perspectives. 2017 , 246, 110-122		370
555	A RECONNAISSANCE-SCALE GIS-BASED MULTICRITERIA DECISION ANALYSIS TO SUPPORT SUSTAINABLE BIOCHAR USE: POLAND AS A CASE STUDY. 2017 , 25, 208-222		15
554	Dynamic Effects of Biochar on the Bacterial Community Structure in Soil Contaminated with Polycyclic Aromatic Hydrocarbons. 2017 , 65, 6789-6796		36

553	Arsenic removal in aqueous solution by a novel Fe-Mn modified biochar composite: Characterization and mechanism. <i>Ecotoxicology and Environmental Safety</i> , 2017 , 144, 514-521	7	120
552	Potential use of lime combined with additives on (im)mobilization and phytoavailability of heavy metals from Pb/Zn smelter contaminated soils. <i>Ecotoxicology and Environmental Safety</i> , 2017 , 145, 313-323	7	66
551	In situ immobilization of Cd by organic amendments and their effect on antioxidant enzyme defense mechanism in mung bean (<i>Vigna radiata</i> L.) seedlings. 2017 , 118, 561-570		20
550	Biochar based remediation of water and soil contaminated by phenanthrene and pentachlorophenol. 2017 , 186, 193-201		45
549	Tracing Pb Pollution Penetration in Temperate Podzols. 2017 , 28, 2432-2445		6
548	The influence of particle size and feedstock of biochar on the accumulation of Cd, Zn, Pb, and As by <i>Brassica chinensis</i> L. 2017 , 24, 22340-22352		21
547	Biochar Influence as a Soil Amendment for Essential Plant Nutrient Uptake. 2017 , 47-67		3
546	Beneficial effects of tobacco biochar combined with mineral additives on (im)mobilization and (bio)availability of Pb, Cd, Cu and Zn from Pb/Zn smelter contaminated soils. <i>Ecotoxicology and Environmental Safety</i> , 2017 , 145, 528-538	7	41
545	Adsorption characteristics of phenol and heavy metals on biochar from <i>Hizikia fusiformis</i> . 2017 , 76, 1		13
544	Impact of thermal treatment of mixtures of sewage sludge and plant material on selected chemical properties and <i>Vibrio fischeri</i> response. 2017 , 24, 443-455		
543	Comparative responses of early-successional plants to charcoal soil amendments. 2017 , 8, e01933		19
542	Heterogeneity of zeolite combined with biochar properties as a function of sewage sludge composting and production of nutrient-rich compost. 2017 , 68, 760-773		60
541	Assessment of PAH contaminated land: Implementing a risk-based approach. <i>Environmental Technology and Innovation</i> , 2017 , 8, 84-95	7	8
540	Activated biochars reduce the exposure of polycyclic aromatic hydrocarbons in industrially contaminated soils. 2017 , 310, 33-40		73
539	The effects of combinations of biochar, lime, and organic fertilizer on nitrification and nitrifiers. 2017 , 53, 77-87		62
538	The interactions of composting and biochar and their implications for soil amendment and pollution remediation: a review. 2017 , 37, 754-764		246
537	Effect of biochar activation by different methods on toxicity of soil contaminated by industrial activity. <i>Ecotoxicology and Environmental Safety</i> , 2017 , 136, 119-125	7	67
536	Effects of Peanut Shell Biochar on the Adsorption of Cd(II) by Paddy Soil. 2017 , 98, 413-419		4

535	Biochar from Pyrolysis of Deinking Paper Sludge and Its Use in the Remediation of Zn-polluted Soils. 2017 , 28, 355-360		30
534	Biochar from Biomass: A Strategy for Carbon Dioxide Sequestration, Soil Amendment, Power Generation, and CO ₂ Utilization. 2017 , 1937-1974		6
533	Effect of biochar amendments on the mobility and (bio) availability of As, Sb and Pb in a contaminated mine technosol. 2017 , 182, 138-148		40
532	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	9-3	98
531	Rapid in situ toxicity testing with luminescent bacteria <i>Photobacterium luminescens</i> and <i>Vibrio fischeri</i> adapted to a small portable luminometer. 2017 , 24, 3748-3758		8
530	Use of Biochar as an Amendment for Remediation of Heavy Metal-Contaminated Soils: Prospects and Challenges. <i>Pedosphere</i> , 2017 , 27, 991-1014	5	103
529	Biochars Reduce Mine Land Soil Bioavailable Metals. 2017 , 46, 411-419		49
528	Is There a Positive Synergistic Effect of Biochar and Compost Soil Amendments on Plant Growth and Physiological Performance?. 2017 , 7, 13		28
527	Reduction of Furfural to Furfuryl Alcohol in Liquid Phase over a Biochar-Supported Platinum Catalyst. 2017 , 10, 286		20
526	Influence of <i>Gliricidia sepium</i> Biochar on Attenuate Perchlorate-Induced Heavy Metal Release in Serpentine Soil. 2017 , 2017, 1-8		11
525	Properties of biochar derived from wood and high-nutrient biomasses with the aim of agronomic and environmental benefits. <i>PLoS ONE</i> , 2017 , 12, e0176884	3-7	233
524	Effect of culturing temperatures on cadmium phytotoxicity alleviation by biochar. 2017 , 24, 23843-23849		7
523	Effects of Biochar on Plant Growth and Cadmium Uptake: Case Studies on Asian Lotus (<i>Nelumbo nucifera</i>) and Chinese Sage (<i>Salvia miltiorrhiza</i>). 2017 ,		3
522	Crop response to soils amended with biochar: expected benefits and unintended risks. 2017 , 11,		14
521	Minimizing the risk to human health due to the ingestion of arsenic and toxic metals in vegetables by the application of biochar, farmyard manure and peat moss. 2018 , 214, 172-183		26
520	Application of soil amendments to contaminated soils for heavy metal immobilization and improved soil quality—critical review. 2018 , 64, 156-167		110
519	Degradation of polycyclic aromatic hydrocarbons in a mixed contaminated soil supported by phytostabilisation, organic and inorganic soil additives. 2018 , 628-629, 1287-1295		28
518	Biochar aging in contaminated soil promotes Zn immobilization due to changes in biochar surface structural and chemical properties. 2018 , 626, 953-961		99

517	Impacts of biochar and oyster shells waste on the immobilization of arsenic in highly contaminated soils. 2018 , 217, 646-653		39
516	Review of interactions between phosphorus and arsenic in soils from four case studies. 2018 , 19, 10		50
515	Role of Ca-bentonite to improve the humification, enzymatic activities, nutrient transformation and end product quality during sewage sludge composting. 2018 , 262, 80-89		21
514	Feasibility of medical stone amendment for sewage sludge co-composting and production of nutrient-rich compost. 2018 , 216, 49-61		21
513	Contrasting effects of alkaline amendments on the bioavailability and uptake of Cd in rice plants in a Cd-contaminated acid paddy soil. 2018 , 25, 8827-8835		52
512	Biochar and Conservation Agriculture Nexus: Synergy and Research Gaps for Enhanced Sustainable Productivity in Degraded Soils Review. Communications in Soil Science and Plant Analysis , 2018 , 49, 389-403 ⁵		6
511	Effects of bamboo biochar on soybean root nodulation in multi-elements contaminated soils. <i>Ecotoxicology and Environmental Safety</i> , 2018 , 150, 62-69	7	37
510	Rhizoremediation of petroleum hydrocarbon-contaminated soils: Improvement opportunities and field applications. 2018 , 147, 202-219		56
509	Sorption, bioavailability and ecotoxic effects of hydrophobic organic compounds in biochar amended soils. 2018 , 624, 78-86		37
508	Fractionation and leaching of heavy metals in soils amended with a new biochar nanocomposite. 2018 , 25, 6826-6837		5
507	Cost effective and practically viable oil spillage mitigation: Comprehensive study with biochar. 2018 , 128, 32-40		19
506	Interactions of food waste compost with metals and metal-chelant complexes during soil remediation. 2018 , 192, 199-206		24
505	Remediation of an acidic mine spoil: Miscanthus biochar and lime amendment affects metal availability, plant growth, and soil enzyme activity. 2018 , 205, 709-718		65
504	Three-dimensional ionic liquid-ferrite functionalized graphene oxide nanocomposite for pipette-tip solid phase extraction of 16 polycyclic aromatic hydrocarbons in human blood sample. 2018 , 1552, 1-9		45
503	Changes in heavy metal bioavailability and speciation from a Pb-Zn mining soil amended with biochars from co-pyrolysis of rice straw and swine manure. 2018 , 633, 300-307		133
502	Remediation of soils contaminated with heavy metals with an emphasis on immobilization technology. 2018 , 40, 927-953		122
501	Effects of biochars on the bioaccessibility of phenanthrene/pyrene/zinc/lead and microbial community structure in a soil under aerobic and anaerobic conditions. <i>Journal of Environmental Sciences</i> , 2018 , 63, 296-306	6.4	13
500	Correlations and adsorption mechanisms of aromatic compounds on biochars produced from various biomass at 700 °C. <i>Environmental Pollution</i> , 2018 , 233, 64-70	9.3	58

499	Vermicompost and biochar as bio-conditioners to immobilize heavy metal and improve soil fertility on cadmium contaminated soil under acid rain stress. 2018 , 621, 1057-1065		60
498	Soil amendments: a tool to reduce heavy metal uptake in crops for production of safe food. 2018 , 17, 187-203		21
497	Strong binding of apolar hydrophobic organic contaminants by dissolved black carbon released from biochar: A mechanism of pseudomicelle partition and environmental implications. <i>Environmental Pollution</i> , 2018 , 232, 402-410	9.3	58
496	Biochar accelerates PAHs biodegradation in petroleum-polluted soil by biostimulation strategy. <i>Journal of Hazardous Materials</i> , 2018 , 343, 276-284	12.8	132
495	Chemical stabilization of Cd-contaminated soil using biochar. 2018 , 88, 122-130		54
494	Biochar composites with nano zerovalent iron and eggshell powder for nitrate removal from aqueous solution with coexisting chloride ions. 2018 , 25, 25757-25771		45
493	Cadmium solubility and bioavailability in soils amended with acidic and neutral biochar. 2018 , 610-611, 1457-1466		50
492	The factors affecting biochar application in restoring heavy metal-polluted soil and its potential applications. 2018 , 34, 177-197		9
491	Composition of microbial community in pig manure biochar-amended soils and the linkage to the heavy metals accumulation in rice at harvest. 2018 , 29, 2189-2198		19
490	Facile fabrication of superhydrophobic/superoleophilic microporous membranes by spray-coating ytterbium oxide particles for efficient oil-water separation. 2018 , 548, 390-397		49
489	Simultaneous alleviation of cadmium and arsenic accumulation in rice by applying zero-valent iron and biochar to contaminated paddy soils. 2018 , 195, 260-271		167
488	Investigations of microbial degradation of polycyclic aromatic hydrocarbons based on C-labeled phenanthrene in a soil co-contaminated with trace elements using a plant assisted approach. 2018 , 25, 6364-6377		7
487	Opportunities and challenges in the use of mineral nutrition for minimizing arsenic toxicity and accumulation in rice: A critical review. 2018 , 194, 171-188		57
486	A combination of ferric nitrate/EDDS-enhanced washing and sludge-derived biochar stabilization of metal-contaminated soils. 2018 , 616-617, 572-582		114
485	Mineral additive enhanced carbon retention and stabilization in sewage sludge-derived biochar. 2018 , 115, 70-78		34
484	Release of nutrients and heavy metals from biochar-amended soil under environmentally relevant conditions. 2018 , 25, 2517-2527		23
483	Metal availability, soil nutrient, and enzyme activity in response to application of organic amendments in Cd-contaminated soil. 2018 , 25, 2425-2435		10
482	Remediation of Cr(VI)-contaminated soil with co-composting of three different biomass solid wastes. 2018 , 18, 897-905		15

481	Influence of compost and biochar on microbial communities and the sorption/degradation of PAHs and NSO-substituted PAHs in contaminated soils. <i>Journal of Hazardous Materials</i> , 2018 , 345, 107-113	12.8	54
480	Cd, Pb, and Zn mobility and (bio)availability in contaminated soils from a former smelting site amended with biochar. 2018 , 25, 25744-25756		31
479	Review on utilization of biochar for metal-contaminated soil and sediment remediation. <i>Journal of Environmental Sciences</i> , 2018 , 63, 156-173	6.4	132
478	Review of the Spatial Distribution, Source and Extent of Heavy Metal Pollution of Soil in China: Impacts and Mitigation Approaches. 2018 , 8, 53-70		55
477	Growth and yield response of maize to rice husk biochar. 2018 , 12, 1813-1819		5
476	Biotechnological Strategies for Effective Remediation of Polluted Soils. 2018 ,		11
475	Biochar Amendment to Soil for Sustainable Agriculture. 2018 , 207-227		3
474	Sustainable Agriculture Reviews 32. 2018 ,		
473	Biochar and Soil Remediation. 2018 , 85-99		
472	Synthesis and Characterization of Novel Fe-Mn-Ce Ternary Oxide?Biochar Composites as Highly Efficient Adsorbents for As(III) Removal from Aqueous Solutions. 2018 , 11,		9
471	The Effect of Biochar on Residual Polyaromatic Hydrocarbon Concentrations in Bioremediation. 2018 ,		
470	Effects of softwood biochar on the status of nitrogen species and elements of potential toxicity in soils. <i>Ecotoxicology and Environmental Safety</i> , 2018 , 166, 383-389	7	10
469	Contrasting dynamics of polychlorinated biphenyl dissipation and fungal community composition in low and high organic carbon soils with biochar amendment. 2018 , 25, 33432-33442		9
468	Managing Beef Backgrounding Residual Soil Contaminants by Alum and Biochar Amendments. 2018 , 47, 1275-1283		
467	Distribution and transformation of lead in rice plants grown in contaminated soil amended with biochar and lime. <i>Ecotoxicology and Environmental Safety</i> , 2018 , 165, 589-596	7	25
466	Effects of bacterial-feeding nematodes and organic matter on microbial activity and oil degradation in contaminated soil. 2018 , 25, 35614-35622		7
465	An extensive review on restoration technologies for mining tailings. 2018 , 25, 33911-33925		35
464	Thermogravimetric pyrolysis for neem char using novel agricultural waste: a study of process optimization and statistical modeling. <i>Biomass Conversion and Biorefinery</i> , 2018 , 8, 857-871	2.3	9

463	Phytomanagement and Remediation of Cu-Contaminated Soils by High Yielding Crops at a Former Wood Preservation Site: Sunflower Biomass and Ionome. 2018 , 6,		25
462	Organic matter facilitates the binding of Pb to iron oxides in a subtropical contaminated soil. 2018 , 25, 32130-32139		7
461	Assisted phytostabilisation of As, Pb and Sb-contaminated Technosols with mineral and organic amendments using Douglas fir (<i>Pseudotsuga menziesii</i> (Mirb.) Franco). 2018 , 25, 32292-32302		4
460	Pollution status of agricultural land in China: impact of land use and geographical position. 2018 , 13, 234-242		12
459	The interactions of metal concentrations and soil properties on toxic metal accumulation of native plants in vanadium mining area. 2018 , 222, 216-226		42
458	Combined application of biochar, compost, and bacterial consortia with Italian ryegrass enhanced phytoremediation of petroleum hydrocarbon contaminated soil. 2018 , 153, 80-88		74
457	Controls on accumulation and soil solution partitioning of heavy metals across upland sites in United Kingdom (UK). 2018 , 222, 260-267		11
456	Effects of biochar on the fate and toxicity of herbicide fenoxaprop-ethyl in soil. 2018 , 5, 171875		6
455	Chemical and ecotoxicological effects of the use of drinking-water treatment residuals for the remediation of soils degraded by mining activities. <i>Ecotoxicology and Environmental Safety</i> , 2018 , 161, 281-289	7	7
454	Potential of <i>Cassia alata</i> L. Coupled with Biochar for Heavy Metal Stabilization in Multi-Metal Mine Tailings. 2018 , 15,		18
453	Amending potential of organic and industrial by-products applied to heavy metal-rich mining soils. <i>Ecotoxicology and Environmental Safety</i> , 2018 , 162, 581-590	7	23
452	Assisted Phytoremediation of a Multi-contaminated Industrial Soil Using Biochar and Garden Soil Amendments Associated with <i>Salix alba</i> or <i>Salix viminalis</i> : Abilities to Stabilize As, Pb, and Cu. <i>Water, Air, and Soil Pollution</i> , 2018 , 229, 1	2.6	12
451	Effects of biochar amendment on net greenhouse gas emissions and soil fertility in a double rice cropping system: A 4-year field experiment. 2018 , 262, 83-96		65
450	Impact of Biochar on the Bioremediation and Phytoremediation of Heavy Metal(loid)s in Soil. 2018 ,		10
449	Amending anaerobic bioreactors with pyrogenic carbonaceous materials: the influence of material properties on methane generation. 2018 , 4, 1794-1806		13
448	Contrasting impacts of pre- and post-application aging of biochar on the immobilization of Cd in contaminated soils. <i>Environmental Pollution</i> , 2018 , 242, 1362-1370	9.3	78
447	Properties and Beneficial Uses of (Bio)Chars, with Special Attention to Products from Sewage Sludge Pyrolysis. 2018 , 7, 20		51
446	Toxicity assessment of fresh and weathered petroleum hydrocarbons in contaminated soil- a review. 2018 , 212, 755-767		87

445	Biochars from olive mill waste have contrasting effects on plants, fungi and phytoparasitic nematodes. <i>PLoS ONE</i> , 2018 , 13, e0198728	3-7	24
444	Biochar Effects on Rice Paddy: Meta-analysis. 2018 , 1-32		21
443	Application of pyrogenic carbonaceous product for immobilisation of potentially toxic elements in railway sleepers and polluted soil. <i>International Journal of Environmental Science and Technology</i> , 2019 , 16, 23-36	3-3	3
442	Application potential of biochar in environment: Insight from degradation of biochar-derived DOM and complexation of DOM with heavy metals. 2019 , 646, 220-228		122
441	Co-application of activated carbon and compost to contaminated soils: toxic elements mobility and PAH degradation and availability. <i>International Journal of Environmental Science and Technology</i> , 2019 , 16, 1057-1068	3-3	12
440	Biochar reduced soil extractable Cd but increased its accumulation in rice (<i>Oryza sativa</i> L.) cultivated on contaminated soils. 2019 , 19, 862-871		14
439	Environmental Microbial Health Under Changing Climates: State, Implication and Initiatives for High-Performance Soils. 2019 , 1-32		
438	Effects of Hardwood Biochar on Soil Acidity, Nutrient Dynamics, and Sweet Corn Productivity. <i>Communications in Soil Science and Plant Analysis</i> , 2019 , 50, 1732-1742	1-5	8
437	Availability of lead in agricultural soils amended with compost of biosolid with wood shavings and yard trimmings. 2019 , 26, 30324-30332		5
436	Phytostabilization of Zn and Cd in Mine Soil Using Corn in Combination with Biochars and Manure-Based Compost. 2019 , 6, 69		12
435	Cotransport of <i>Herbaspirillum chlorophenicum</i> FA1 and heavy metals in saturated porous media: Effect of ion type and concentration. <i>Environmental Pollution</i> , 2019 , 254, 112940	9-3	2
434	Influence of Pyrolyzed Grape-Seeds/Sewage Sludge Blends on the Availability of P, Fe, Cu, As and Cd to Maize. 2019 , 9, 406		3
433	Removal of hexavalent chromium in soil by lignin-based weakly acidic cation exchange resin. 2019 , 27, 2544-2550		5
432	Chlorine weaken the immobilization of Cd in soil-rice systems by biochar. 2019 , 235, 1172-1179		15
431	Effects of biochar amendment on the availability of trace elements and the properties of dissolved organic matter in contaminated soils. <i>Environmental Technology and Innovation</i> , 2019 , 16, 100492	7	15
430	Mechanisms of arsenic assimilation by plants and countermeasures to attenuate its accumulation in crops other than rice. <i>Ecotoxicology and Environmental Safety</i> , 2019 , 185, 109701	7	26
429	Role of different microorganisms in remediating PAH-contaminated soils treated with compost or fungi. 2019 , 252, 109675		10
428	In situ transformations of bonechar and tri-poly phosphate amendments in phosphorus-limited subsurface soils. 2019 , 109, 104398		4

427	Effects of an Integrated Carbide Slag-Mushroom Dreg-Calcium Superphosphate Amendment on the Stabilization Process of Pb, Cu, Zn and Cd in Contaminated Soils. <i>Sustainability</i> , 2019 , 11, 4957	3.6	1
426	Earthworm activities weaken the immobilizing effect of biochar as amendment for metal polluted soils. 2019 , 696, 133729		14
425	Exploring the benefits of biochar over other organic amendments for reducing of metal toxicity in <i>Withania somnifera</i> . 2019 , 1, 293-307		3
424	Cultivation of microalgae <i>Chlorella</i> sp. in municipal sewage for biofuel production and utilization of biochar derived from residue for the conversion of hematite iron ore (Fe ₂ O ₃) to iron (Fe) □ Integrated algal biorefinery. 2019 , 189, 116128		23
423	Biochar efficiency in copper removal from Haplic soils. <i>International Journal of Environmental Science and Technology</i> , 2019 , 16, 4899-4912	3.3	23
422	Biochar DOM for plant promotion but not residual biochar for metal immobilization depended on pyrolysis temperature. 2019 , 662, 571-580		40
421	An explanation of soil amendments to reduce cadmium phytoavailability and transfer to food chain. 2019 , 660, 80-96		149
420	Influence of different organic geo-sorbents on <i>Spinacia oleracea</i> grown in chromite mine-degraded soil: a greenhouse study. 2019 , 19, 2417-2432		9
419	Wood ash decreases cadmium toxicity to the soil nematode <i>Caenorhabditis elegans</i> . <i>Ecotoxicology and Environmental Safety</i> , 2019 , 172, 290-295	7	4
418	Biochar for environmental management: Mitigating greenhouse gas emissions, contaminant treatment, and potential negative impacts. 2019 , 373, 902-922		147
417	Cadmium immobilization and alleviation of its toxicity for soybean grown in a clay loam contaminated soil using sugarcane bagasse-derived biochar. 2019 , 26, 21849-21857		12
416	A paddy field study of arsenic and cadmium pollution control by using iron-modified biochar and silica sol together. 2019 , 26, 24979-24987		20
415	Remediation of heavy metal contaminated soils by biochar: Mechanisms, potential risks and applications in China. <i>Environmental Pollution</i> , 2019 , 252, 846-855	9.3	226
414	Influence of soil water content and soil amendments on trace metal release and seedling growth in serpentine soil. 2019 , 19, 3908-3921		2
413	Biochar-supported nanomaterials for environmental applications. 2019 , 78, 21-33		47
412	Soil biota, carbon cycling and crop plant biomass responses to biochar in a temperate mesocosm experiment. 2019 , 440, 341-356		8
411	Enhanced mercury removal by transplanting sulfur-containing functional groups to biochar through plasma. 2019 , 253, 703-712		37
410	Climatic and soil-mineralogical controls on the mobility of trace metal contamination released by informal electronic waste (e-waste) processing. 2019 , 232, 130-139		10

409	Opportunities and challenges in the remediation of metal-contaminated soils by using tobacco (<i>Nicotiana tabacum</i> L.): a critical review. 2019 , 26, 18053-18070		9
408	Characterization and Determination of the Toxicological Risk of Biochar Using Invertebrate Toxicity Tests in the State of Aguascalientes, México. 2019 , 9, 1706		9
407	Biochar combined with compost to reduce the mobility, bioavailability and plant uptake of 2,2',4,4'-tetrabrominated diphenyl ether in soil. <i>Journal of Hazardous Materials</i> , 2019 , 374, 341-348	12.8	21
406	Response of microbial communities to biochar-amended soils: a critical review. 2019 , 1, 3-22		175
405	Analysis of the effect of green roof substrate amended with biochar on water quality and quantity of rainfall runoff. 2019 , 191, 304		12
404	Simultaneous attenuation of phytoaccumulation of Cd and As in soil treated with inorganic and organic amendments. <i>Environmental Pollution</i> , 2019 , 250, 464-474	9.3	24
403	Soil amendments enhanced the growth of <i>Nicotiana glauca</i> L. and <i>Petunia hybrida</i> L. by stabilizing heavy metals from wastewater. 2019 , 242, 46-55		19
402	Influence of rice straw biochar on growth, antioxidant capacity and copper uptake in ramie (<i>Boehmeria nivea</i> L.) grown as forage in aged copper-contaminated soil. 2019 , 138, 121-129		68
401	Municipal solid wastes as a resource for environmental recovery: Impact of water treatment residuals and compost on the microbial and biochemical features of As and trace metal-polluted soils. <i>Ecotoxicology and Environmental Safety</i> , 2019 , 174, 445-454	7	25
400	Comparative effectiveness of different biochars and conventional organic materials on growth, photosynthesis and cadmium accumulation in cereals. 2019 , 227, 72-81		46
399	Cultivation of C4 perennial energy grasses on heavy metal contaminated arable land: Impact on soil, biomass, and photosynthetic traits. <i>Environmental Pollution</i> , 2019 , 250, 300-311	9.3	19
398	Soil nutrients status affected by simple and enriched biochar application under salinity conditions. 2019 , 191, 257		16
397	Impact of biochar on mobilization, methylation, and ethylation of mercury under dynamic redox conditions in a contaminated floodplain soil. 2019 , 127, 276-290		54
396	Effect of oxygen supply strategy on nitrogen removal of biochar-based vertical subsurface flow constructed wetland: Intermittent aeration and tidal flow. 2019 , 223, 366-374		44
395	The adverse effect of biochar to aquatic algae- the role of free radicals. <i>Environmental Pollution</i> , 2019 , 248, 429-437	9.3	23
394	Determination of total arsenic in soil by gas chromatography after pyrolysis. 2019 , 146, 568-574		5
393	Impact of biochar-supported zerovalent iron nanocomposite on the anaerobic digestion of sewage sludge. 2019 , 26, 10292-10305		30
392	Wheat straw biochar reduces environmental cadmium bioavailability. 2019 , 126, 69-75		76

391	Role of compost biochar amendment on the (im)mobilization of cadmium and zinc for Chinese cabbage (<i>Brassica rapa</i> L.) from contaminated soil. 2019 , 19, 3883-3897		14
390	Temporal Changes in the Efficiency of Biochar- and Compost-Based Amendments on Copper Immobilization in Vineyard Soils. 2019 , 3, 78		0
389	Potential microbial remediation of pyrene polluted soil: the role of biochar. 2019 , 57, 807		6
388	Cadmium and lead immobilization in a calcareous contaminated soil using the cost-effective amendments. 2019 , 12, 1		3
387	A laboratory assay of in situ stabilization of toxic metals in contaminated boreal forest soil using organic and inorganic amendments. 2019 , 1-11		2
386	Soil-applied biochar increases microbial diversity and wheat plant performance under herbicide fomesafen stress. <i>Ecotoxicology and Environmental Safety</i> , 2019 , 171, 75-83	7	39
385	Mechanistic understanding and future prospect of microbe-enhanced phytoremediation of polycyclic aromatic hydrocarbons in soil. <i>Environmental Technology and Innovation</i> , 2019 , 13, 318-330	7	40
384	Multi-element fingerprinting of waters to evaluate connectivity among depressional wetlands. 2019 , 97, 398-409		9
383	Potential of Biochar for Managing Metal Contaminated Areas, in Synergy With Phytomanagement or Other Management Options. 2019 , 91-111		4
382	Biochar as an (Im)mobilizing Agent for the Potentially Toxic Elements in Contaminated Soils. 2019 , 255-274		9
381	On the Carbon Abatement Potential and Economic Viability of Biochar Production Systems. 2019 , 385-408		2
380	Biochars and Biochar Composites. 2019 , 169-209		19
379	Effect of Biochar and Amendments on Pb and As Phytotoxicity and Phytoavailability in a Technosol. 2019 , 47, 1800220		11
378	The efficiency and economic aspects of phytoremediation technology using <i>Phalaris arundinacea</i> L. and <i>Brassica napus</i> L. combined with compost and nano SiO fertilization for the removal of PAH's from soil. 2019 , 234, 311-319		16
377	Enhanced Cu and Cd sorption after soil aging of woodchip-derived biochar: What were the driving factors?. 2019 , 216, 463-471		41
376	LaMnO ₃ nanoparticles supported on N doped porous carbon as efficient photocatalyst. 2019 , 159, 59-68		18
375	Biochar for Effective Cleaning of Contaminated Dumpsite Soil: A Sustainable and Cost-Effective Remediation Technique for Developing Nations. 2019 , 3-29		
374	In situ chemical stabilization of trace element-contaminated soil [Field demonstrations and barriers to transition from laboratory to the field] A review. 2019 , 100, 335-351		48

373	Response of summer savory at two different growth stages to biochar amendment under NaCl stress. 2019 , 65, 1120-1133	6
372	Changes in the pattern of polycyclic aromatic hydrocarbons in soil treated with biochar from a multiyear field experiment. 2019 , 219, 662-670	22
371	Influence of pyrolysis temperature and feedstock on carbon fractions of biochar produced from pyrolysis of rice straw, pine wood, pig manure and sewage sludge. 2019 , 218, 624-631	93
370	Developments in biochar application for pesticide remediation: Current knowledge and future research directions. 2019 , 232, 505-513	84
369	The effects of activated biochar addition on remediation efficiency of co-composting with contaminated wetland soil. 2019 , 140, 278-285	282
368	Synthesis of magnetic biochar composites for enhanced uranium(VI) adsorption. 2019 , 651, 1020-1028	142
367	Peat moss-derived biochars as effective sorbents for VOCs' removal in groundwater. 2019 , 41, 1637-1646	13
366	Immobilization of heavy metals in contaminated soil after mining activity by using biochar and other industrial by-products: the significant role of minerals on the biochar surfaces. 2019 , 40, 3200-3215	25
365	Progresses in restoration of post-mining landscape in Africa. 2019 , 30, 381-396	66
364	Iron Fractionation in the Calcareous Soils of Different Land Uses as Influenced by Biochar. 2020 , 11, 2321-2330	4
363	Biochar: A Sustainable Tool in Soil Pollutant Bioremediation. 2020 , 475-494	3
362	Benefits of arbuscular mycorrhizal fungi in reducing organic contaminant residues in crops: Implications for cleaner agricultural production. 2020 , 50, 1580-1612	14
361	The mechanisms of biochar interactions with microorganisms in soil. 2020 , 42, 2495-2518	52
360	Aided phytostabilisation over two years using iron sulphate and organic amendments: Effects on soil quality and rye production. 2020 , 240, 124827	11
359	Understanding structure-performance correlation of biochar materials in environmental remediation and electrochemical devices. 2020 , 382, 122977	59
358	Suppressed formation of polycyclic aromatic hydrocarbons (PAHs) during pyrolytic production of Fe-enriched composite biochar. <i>Journal of Hazardous Materials</i> , 2020 , 382, 121033	12.8 25
357	Biochar for Water and Soil Remediation: Production, Characterization, and Application. 2020 , 153-196	5
356	Co-composting of oil-based drilling cuttings by bagasse. 2020 , 43, 1-12	10

355	Assessment of biochar and/or nano zero-valent iron for the stabilisation of Zn, Pb and Cd: A temporal study of solid phase geochemistry under changing soil conditions. 2020 , 242, 125248		29
354	Effects of biochar and organic substrates on biodegradation of polycyclic aromatic hydrocarbons and microbial community structure in PAHs-contaminated soils. <i>Journal of Hazardous Materials</i> , 2020 , 385, 121595	12.8	49
353	Responses of enzymatic activity and microbial communities to biochar/compost amendment in sulfamethoxazole polluted wetland soil. <i>Journal of Hazardous Materials</i> , 2020 , 385, 121533	12.8	68
352	Physicochemical features, metal availability and enzyme activity in heavy metal-polluted soil remediated by biochar and compost. 2020 , 701, 134751		109
351	Immobilization of metribuzin degrading bacterial consortium MB3R on biochar enhances bioremediation of potato vegetated soil and restores bacterial community structure. <i>Journal of Hazardous Materials</i> , 2020 , 390, 121493	12.8	16
350	Remediation of cadmium-contaminated soil with biochar simultaneously improves biochar's recalcitrance. <i>Environmental Pollution</i> , 2020 , 256, 113436	9.3	28
349	Fire Phoenix facilitates phytoremediation of PAH-Cd co-contaminated soil through promotion of beneficial rhizosphere bacterial communities. 2020 , 136, 105421		55
348	Influence of green waste compost on Pb-polluted soil remediation, soil quality improvement, and uptake by Pakchoi cabbage (<i>Brassica campestris</i> L. ssp). 2020 , 27, 7693-7701		7
347	Biochar reduced the uptake of toxic heavy metals and their associated health risk via rice (<i>Oryza sativa</i> L.) grown in Cr-Mn mine contaminated soils. <i>Environmental Technology and Innovation</i> , 2020 , 17, 100590	7	20
346	Assisted phytoremediation of a former mine soil using biochar and iron sulphate: Effects on As soil immobilization and accumulation in three Salicaceae species. 2020 , 710, 136203		22
345	Limited Cu(II) binding to biochar DOM: Evidence from C K-edge NEXAFS and EEM-PARAFAC combined with two-dimensional correlation analysis. 2020 , 701, 134919		36
344	Soil amendments for immobilization of potentially toxic elements in contaminated soils: A critical review. 2020 , 134, 105046		352
343	Biochar efficacy for reducing heavy metals uptake by Cilantro (<i>Coriandrum sativum</i>) and spinach (<i>Spinacia oleracea</i>) to minimize human health risk. 2020 , 244, 125543		22
342	Leaching behavior of Cd, Zn and nutrients (K, P, S) from a contaminated soil as affected by amendment with biochar. 2020 , 245, 125561		10
341	An examination of the role of biochar and biochar water-extractable substances on the sorption of ionizable herbicides in rice paddy soils. 2020 , 706, 135682		9
340	Application of biochars and solid fraction of digestate to decrease soil solution Cd, Pb and Zn concentrations in contaminated sandy soils. 2020 , 42, 1589-1600		6
339	Biochar amendment increases bacterial diversity and vegetation cover in trace element-polluted soils: A long-term field experiment. 2020 , 150, 108014		8
338	The Trends in Research on the Effects of Biochar on Soil. <i>Sustainability</i> , 2020 , 12, 7810	3.6	5

337	Biochar characteristics, applications and importance in health risk reduction through metal immobilization. <i>Environmental Technology and Innovation</i> , 2020 , 20, 101121	7	8
336	Speciation, toxicity mechanism and remediation ways of heavy metals during composting: A novel theoretical microbial remediation method is proposed. 2020 , 272, 111109		28
335	Biochar: A Panacea for Agriculture or Just Carbon?. 2020 , 6, 37		5
334	Biochar Effects on Amelioration of Adverse Salinity Effects in Soils. 2020 ,		5
333	Kinetic Monitoring of Bioremediators for Biodegradation of Gasoil-Polluted Soil. <i>Water, Air, and Soil Pollution</i> , 2020 , 231, 1	2.6	4
332	Ozone and Ammonium Hydroxide Modification of Biochar Prepared from <i>Pisum sativum</i> Peels Improves the Adsorption of Copper (II) from an Aqueous Medium. 2020 , 7, 973-1007		10
331	Surface quinone-induced formation of aqueous reactive sulfur species controls pine wood biochar-mediated reductive dechlorination of hexachloroethane by sulfide. 2020 , 22, 1898-1907		3
330	Biochar Affects Heavy Metal Uptake in Plants through Interactions in the Rhizosphere. 2020 , 10, 5105		9
329	Effectiveness, stabilization, and potential feasible analysis of a biochar material on simultaneous remediation and quality improvement of vanadium contaminated soil. 2020 , 277, 123506		14
328	Bibliometric analysis of the evolution of biochar research trends and scientific production. 2020 , 22, 1967-19974		
327	Assessing the Influence of Compost and Biochar Amendments on the Mobility and Uptake of Heavy Metals by Green Leafy Vegetables. 2020 , 17,		9
326	A model of eco-friendly cooking stove and a potential application of soot for remediation of heavy metals in the environment. 2020 , 1-17		1
325	Biochar-Facilitated Soil Remediation: Mechanisms and Efficacy Variations. 2020 , 8,		62
324	Unconventional bioresources and their prospects. 2020 , 103-119		
323	The Use of Biochar as a Soil Amendment to Reduce Potentially Toxic Metals (PTMs) Phytoavailability. 2020 ,		2
322	Sustainable use of biochar for resource recovery and pharmaceutical removal from human urine: A critical review. 2020 , 1-33		7
321	Interactive Effects of Biochar and Sewage Sludge on Bioavailability and Plant Uptake of Cu, Fe, and Zn, and Spinach (<i>Spinacia oleracea</i> L.) Yields under Wastewater Irrigation. 2020 , 10, 1901		0
320	Combining biochar and zerovalent iron (BZVI) as a paddy field soil amendment for heavy cadmium (Cd) contamination decreases Cd but increases zinc and iron concentrations in rice grains: a field-scale evaluation. 2020 , 141, 222-233		5

319	Bioremediation and Biotechnology, Vol 2. 2020 ,		0
318	Nutrient Release Pattern and Greenhouse-Grown Swiss Chard Response to Biochar Inoculated with Vermicast. 2020 , 2020, 1-9		
317	Efficiency and mechanisms of fermented horse manure, vermicompost, bamboo biochar, and fly ash on Cd accumulation in rice. 2020 , 27, 27859-27869		2
316	Apricot shell- and apple tree-derived biochar affect the fractionation and bioavailability of Zn and Cd as well as the microbial activity in smelter contaminated soil. <i>Environmental Pollution</i> , 2020 , 264, 114773	9.3	50
315	Efficient As(III) Removal by Novel MoS-Impregnated Fe-Oxide-Biochar Composites: Characterization and Mechanisms. 2020 , 5, 13224-13235		10
314	Effects of Different In Situ Remediation Strategies for an As-Polluted Soil on Human Health Risk, Soil Properties, and Vegetation. 2020 , 10, 759		4
313	Addition of softwood biochar to contaminated soils decreases the mobility, leachability and bioaccessibility of potentially toxic elements. 2020 , 739, 139946		13
312	Biochar amendment as a remediation strategy for surface soils impacted by crude oil. <i>Environmental Pollution</i> , 2020 , 265, 115006	9.3	17
311	Wheat Straw Biochar as a Specific Sorbent of Cobalt in Soil. 2020 , 13,		9
310	Application of biochar, compost and ZVI nanoparticles for the remediation of As, Cu, Pb and Zn polluted soil. 2020 , 27, 33681-33691		11
309	Copper uptake, essentiality, toxicity, detoxification and risk assessment in soil-plant environment. 2020 , 259, 127436		88
308	Challenging Global Waste Management - Bioremediation to Detoxify Asbestos. 2020 , 8,		5
307	Trialling Water-Treatment Residuals in the Remediation of Former Mine Site Soils: Investigating Improvements Achieved for Plants, Earthworms, and Soil Solution. 2020 , 39, 1277-1291		2
306	Effects of biochar on methane emission from paddy soil: Focusing on DOM and microbial communities. 2020 , 743, 140725		15
305	The Role of Biochar and Soil Properties in Determining the Available Content of Al, Cu, Zn, Mn, and Cd in Soil. 2020 , 10, 885		6
304	Biochar in soil mitigates dimethoate hazard to soil pore water exposed biota. <i>Journal of Hazardous Materials</i> , 2020 , 400, 123304	12.8	7
303	Biochars evaluation for chromium pollution abatement in chromite mine wastewater and overburden of Sukinda, Odisha, India. 2020 , 13,		2
302	Effects of biochar on soil fertility and crop productivity in arid regions: a review. 2020 , 13,		38

301	Dissolved organic matter released from rice straw and straw biochar: Contrasting molecular composition and lead binding behaviors. 2020 , 739, 140378		28
300	Evaluation of fly ash, apatite and rice straw derived-biochar in varying combinations for in situ remediation of soils contaminated with multiple heavy metals. 2020 , 66, 379-388		3
299	Growing Biofuel Feedstocks in Copper-Contaminated Soils of a Former Superfund Site. 2020 , 10, 1499		2
298	Phytoremediation and Bioremediation of Pesticide-Contaminated Soil. 2020 , 10, 1217		24
297	Micro/nano biochar for sustainable plant health: Present status and future prospects. 2020 , 323-357		1
296	Effect of Dry Olive ResidueBased Biochar and Arbuscular Mycorrhizal Fungi Inoculation on the Nutrient Status and Trace Element Contents in Wheat Grown in the As-, Cd-, Pb-, and Zn-Contaminated Soils. 2020 , 20, 1067-1079		6
295	Element composition of soils to assess the success of wetland restoration. 2020 , 31, 1641		2
294	Analysis of the complexation behaviors of Cu(II) with DOM from sludge-based biochars and agricultural soil: Effect of pyrolysis temperature. 2020 , 250, 126184		27
293	Sulfate application decreases translocation of arsenic and cadmium within wheat (<i>Triticum aestivum</i> L.) plant. 2020 , 713, 136665		18
292	Enhanced biodegradation of n-Hexadecane in solid-phase of soil by employing immobilized <i>Pseudomonas Aeruginosa</i> on size-optimized coconut fibers. <i>Journal of Hazardous Materials</i> , 2020 , 389, 122134	12.8	13
291	Contrasting effects of biochar and hydrothermally treated coal gangue on leachability, bioavailability, speciation and accumulation of heavy metals by rapeseed in copper mine tailings. <i>Ecotoxicology and Environmental Safety</i> , 2020 , 191, 110244	7	31
290	Phytostabalization of the heavy metals in the soil with biochar applications, the impact on chlorophyll, carotene, soil fertility and tomato crop yield. 2020 , 255, 120318		35
289	Performance of the emerging biochar on the stabilization of potentially toxic metals in smelter- and mining-contaminated soils. 2020 , 27, 43428-43438		10
288	Stabilization of heavy metal-contaminated soils by biochar: Challenges and recommendations. 2020 , 729, 139060		94
287	Bioaugmentation Treatment of a PAH-Polluted Soil in a Slurry Bioreactor. 2020 , 10, 2837		13
286	Effect of biochar and redmud amendment combinations on <i>Salix triandra</i> growth, metal(loid) accumulation and oxidative stress response. <i>Ecotoxicology and Environmental Safety</i> , 2020 , 195, 110466 ⁷		5
285	Effect of ageing process on bisphenol A sorption and retention in agricultural soils amended with biochar. 2020 , 27, 17401-17411		4
284	Biochar Applications in Agriculture and Environment Management. 2020 ,		4

- 283 Multifarious Benefits of Biochar Application in Different Soil Types. **2020**, 259-272
- 282 The effect of low-temperature biochar and its non-pyrolyzed composted biosolids source on the geochemical fractionation of Pb and Cd in calcareous river sediments. **2020**, 79, 1 0
- 281 The comparison of dissolved organic matter in hydrochars and biochars from pig manure. **2020**, 720, 137423 29
- 280 Biochar application for the improvement of water-soil environments and carbon emissions under freeze-thaw conditions: An in-situ field trial. **2020**, 723, 138007 14
- 279 Copper removal from contaminated soil through electrokinetic process with reactive filter media. **2020**, 252, 126607 11
- 278 An analysis of the versatility and effectiveness of composts for sequestering heavy metal ions, dyes and xenobiotics from soils and aqueous milieu. *Ecotoxicology and Environmental Safety*, **2020**, 197, 110587 21
- 277 Remediation of crude oil-contaminated coastal marsh soil: Integrated effect of biochar, rhamnolipid biosurfactant and nitrogen application. *Journal of Hazardous Materials*, **2020**, 396, 122595 12.8 33
- 276 The use of biochar for sustainable treatment of contaminated soils. **2020**, 119-167 3
- 275 Effects of biochar, ochre and manure amendments associated with a metalicolous ecotype of *Agrostis capillaris* on As and Pb stabilization of a former mine technosol. **2021**, 43, 1491-1505 9
- 274 A comprehensive assessment of potential hazard caused by organic compounds in biochar for agricultural use. *Journal of Hazardous Materials*, **2021**, 403, 123644 12.8 17
- 273 Synergistic effect of organo-mineral amendments and plant growth-promoting rhizobacteria (PGPR) on the establishment of vegetation cover and amelioration of mine tailings. **2021**, 262, 127803 19
- 272 Effects of carbon-based materials and redmuds on metal(loid) immobilization and growth of *Salix dasyclados* Wimm. on a former mine Technosol contaminated by arsenic and lead. **2021**, 32, 467-481 14
- 271 Biochar as a support for nanocatalysts and other reagents: Recent advances and applications. **2021**, 426, 213585 34
- 270 Rapid fabrication of textured membrane with super-wettability using simple spray-coating of Pd-doped WO₃ nanoparticles for efficient oil-water separation. **2021**, 609, 125643 11
- 269 Coconut husk biochar amendment enhances nutrient retention by suppressing nitrification in agricultural soil following anaerobic digestate application. *Environmental Pollution*, **2021**, 268, 115684 9.3 24
- 268 Comparison of plant Cd accumulation from a Cd-contaminated soil amended with biochar produced from various feedstocks. **2021**, 28, 12699-12706 1
- 267 The roles of co-composted biochar (COMBI) in improving soil quality, crop productivity, and toxic metal amelioration. **2021**, 277, 111443 36
- 266 Does biochar inhibit the bioavailability and bioaccumulation of As and Cd in co-contaminated soils? A meta-analysis. **2021**, 762, 143117 13

265	Survival and early growth of 51 tropical tree species in areas degraded by artisanal gold mining in the Peruvian Amazon. 2021 , 159, 106097		3
264	Managing cadmium in agricultural systems. 2021 , 166, 1-129		19
263	A waste corn cob core-derived SiO ₂ @ graphene-like carbon nanocomposite and its application in lithium-ion battery. 2021 , 32, 1278-1288		4
262	Mercury speciation in mine tailings amended with biochar: Effects on mercury bioavailability, methylation potential and mobility. 2021 , 760, 143959		9
261	Low light intensity and compost modified biochar enhanced maize growth on contaminated soil and minimized Pb induced oxidative stress. 2021 , 9, 104764		3
260	Conventional and amended bioretention soil media for targeted pollutant treatment: A critical review to guide the state of the practice. 2021 , 189, 116648		26
259	Enhanced copper removal from contaminated kaolinite soil by electrokinetic process using compost reactive filter media. <i>Journal of Hazardous Materials</i> , 2021 , 402, 123891	12.8	10
258	Mine spoil remediation via biochar addition to immobilise potentially toxic elements and promote plant growth for phytostabilisation. 2021 , 277, 111500		5
257	Biochar amendments show potential for restoration of degraded, contaminated, and infertile soils in agricultural and forested landscapes. 2021 , 209-236		2
256	Analysis of the long-term effectiveness of biochar immobilization remediation on heavy metal contaminated soil and the potential environmental factors weakening the remediation effect: A review. <i>Ecotoxicology and Environmental Safety</i> , 2021 , 207, 111261	7	57
255	Effect of pyrolysis temperature on the bioavailability of heavy metals in rice straw-derived biochar. 2021 , 28, 2198-2208		5
254	Contrasted tolerance of <i>Agrostis capillaris</i> metalicolous and non-metallicolous ecotypes in the context of a mining technosol amended by biochar, compost and iron sulfate. 2021 , 43, 1457-1475		10
253	The Current Scenario and Prospects of Immobilization Remediation Technique for the Management of Heavy Metals Contaminated Soils. 2021 , 155-185		17
252	Woody biochar potential for abandoned mine land restoration in the U.S.: a review. 2021 , 3, 7-22		9
251	Evaluation of engineered sorbents for the sorption of mercury from contaminated bank soils: a column study. 2021 , 28, 22651-22663		0
250	Alteration of plant physiology by the application of biochar for remediation of organic pollutants. 2021 , 475-492		2
249	Immobilization and assessment of heavy metals in chicken manure compost amended with rice straw-derived biochar. 2021 , 33, 1-10		3
248	Biochar from Biomass: A Strategy for Carbon Dioxide Sequestration, Soil Amendment, Power Generation, CO ₂ Utilization, and Removal of Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS) in the Environment. 2021 , 1-64		

247	Effects of Plant and Soil Amendment on Remediation Performance and Methane Mitigation in Petroleum-Contaminated Soil. 2021 , 31, 104-114		1
246	One-time application of biochar influenced crop yield across three cropping cycles on tropical sandy loam soil in Ghana. 2021 , 7, e06267		4
245	Microbiological Indicators of Heavy Metals and Carbon-Containing Preparations Applied to Agrosoddy-Podzolic Soils Differing in Humus Content. 2021 , 54, 448-458		6
244	Effect of soil characteristics on cadmium absorption and plant growth of <i>Theobroma cacao</i> L. seedlings. 2021 , 101, 5437-5445		1
243	Ecotoxicological assessment of sewage sludge-derived biochars-amended soil. <i>Environmental Pollution</i> , 2021 , 275, 116484	9.3	5
242	Examining the effectiveness of biomass-derived biochar for the amelioration of tropospheric ozone-induced phytotoxicity in the Indian wheat cultivar HD 2967. <i>Journal of Hazardous Materials</i> , 2021 , 408, 124968	12.8	2
241	Contrasting effects of rice husk pyrolysis temperature on silicon dissolution and retention of cadmium (Cd) and dimethylarsinic acid (DMA). 2021 , 765, 144428		8
240	Biochar-templated surface precipitation and inner-sphere complexation effectively removes arsenic from acid mine drainage. 2021 , 28, 45519-45533		1
239	Oxidized biochar obtained from rice straw as adsorbent to remove uranium (VI) from aqueous solutions. 2021 , 9, 105104		27
238	Combined use of lime, bentonite, and biochar for immobilization of Cd and mobilization of Se in paddy soil. 2021 , 28, 45050-45063		3
237	A Systematic Approach to Comprehend the Role of Atmospheric Black Carbon in Different Environmental Segments. 2021 , 5, 253-274		0
236	Bacterial community tolerance to Cu in soils with geochemical baseline concentrations (GBCs) of heavy metals: Importance for pollution induced community tolerance (PICT) determinations using the leucine incorporation method. 2021 , 155, 108157		3
235	Recent advances in biochar engineering for soil contaminated with complex chemical mixtures: Remediation strategies and future perspectives. 2021 , 767, 144351		30
234	Physiological and molecular responses of flax (<i>Linum usitatissimum</i> L.) cultivars under a multicontaminated technosol amended with biochar. 2021 , 28, 53728-53745		1
233	A complete review on biochar: Production, property, multifaceted applications, interaction mechanism and computational approach. 2021 , 292, 120243		29
232	Effects on metal availability of the application of tree biochar and municipal waste biosolid in a metalliferous mine tailings substrate. 2021 , 1		0
231	Increase in arsenic methylation and volatilization during manure composting with biochar amendment in an aeration bioreactor. <i>Journal of Hazardous Materials</i> , 2021 , 411, 125123	12.8	2
230	Engineered algal biochar for contaminant remediation and electrochemical applications. 2021 , 774, 145676		44

229	Phytotoxicity of Heavy Metals in Contaminated Podzolic Soils of Different Fertility Levels. 2021 , 54, 964-974		3
228	A comprehensive review of biochar-derived dissolved matters in biochar application: Production, characteristics, and potential environmental effects and mechanisms. 2021 , 9, 105258		10
227	Research progress and mechanism of nanomaterials-mediated in-situ remediation of cadmium-contaminated soil: A critical review. <i>Journal of Environmental Sciences</i> , 2021 , 104, 351-364	6.4	18
226	Use of Organic Amendments in Phytoremediation of Metal-Contaminated Soils: Prospects and Challenges. 2021 , 205-233		0
225	Utilization of <i>Citrullus lanatus</i> L. seeds to synthesize a novel MnFeO-biochar adsorbent for the removal of U(VI) from wastewater: Insights and comparison between modified and raw biochar. 2021 , 771, 144955		21
224	Past, present, and future perspectives on the assessment of bioavailability/bioaccessibility of polycyclic aromatic hydrocarbons: A 20-year systemic review based on scientific econometrics. 2021 , 774, 145585		8
223	Remediation of heavy metal polluted soil by utilizing organic amendments and two plant species (<i>Ailanthus altissima</i> and <i>Melia azedarach</i>). 2021 , 14, 1		2
222	Nutrient alterations following biochar application to a Cd-contaminated solution and soil. 2021 , 3, 457-468		0
221	Biochar Assisted Remediation of Toxic Metals and Metalloids. 2021 , 131-162		1
220	Sustainable Soil Remediation Using Organic Amendments. 2021 , 299-312		
219	Application of Biochar Produced from Crop Residues on Trace Elements Contaminated Soils: Effects on Soil Properties, Enzymatic Activities and <i>Brassica rapa</i> Growth. 2021 , 11, 1394		2
218	Versatility and effectiveness of the commercial composts for ecological restoration of heavy metal contaminated soil for sunflower crop. 2021 , 34, 102025		2
217	Interactive effects of biochar type and pH on the bioavailability of As and Cd and microbial activities in co-contaminated soils. <i>Environmental Technology and Innovation</i> , 2021 , 23, 101767	7	3
216	Pyrolysis Treatment Enables Safe Application of Sewage Sludge in Horticulture: Tracking Potentially Toxic Elements Through the Biochar-SoilPlant System in Tomato. 1		0
215	Towards a Soil Remediation Strategy Using Biochar: Effects on Soil Chemical Properties and Bioavailability of Potentially Toxic Elements. 2021 , 9,		10
214	Evaluating the potential of KOH-modified composite biochar amendment to alleviate the ecotoxicity of perfluorooctanoic acid-contaminated sediment on <i>Bellamyia aeruginosa</i> . <i>Ecotoxicology and Environmental Safety</i> , 2021 , 219, 112346	7	1
213	Organic and inorganic amendments for the remediation of nickel contaminated soil and its improvement on <i>Brassica napus</i> growth and oxidative defense. <i>Journal of Hazardous Materials</i> , 2021 , 416, 125921	12.8	6
212	Mitigation of petroleum-hydrocarbon-contaminated hazardous soils using organic amendments: A review. <i>Journal of Hazardous Materials</i> , 2021 , 416, 125702	12.8	14

211	Bioaugmentation and bioaugmentation-assisted phytoremediation of heavy metal contaminated soil by a synergistic effect of cyanobacteria inoculation, biochar, and purslane (<i>Portulaca oleracea</i> L.). 2021 , 1		4
210	Bibliometric Analysis of Current Status on Bioremediation of Petroleum Contaminated Soils during 2000-2019. 2021 , 18,		0
209	Agricultural Waste-Based Biochar for Agronomic Applications. 2021 , 11, 8914		3
208	Selenium-amended biochar mitigates inorganic mercury and methylmercury accumulation in rice (<i>Oryza sativa</i> L.). <i>Environmental Pollution</i> , 2021 , 291, 118259	9.3	2
207	Sustainable Approach and Safe Use of Biochar and Its Possible Consequences. <i>Sustainability</i> , 2021 , 13, 10362	3.6	8
206	Preparation and characterization of magnetic covalent organic framework and its application for efficient adsorption of Benzo[a]pyrene. 1		0
205	Effects of biochar on the migration and transformation of metal species in a highly acid soil contaminated with multiple metals and leached with solutions of different pH. 2021 , 278, 130344		9
204	Soils and Beyond: Optimizing Sustainability Opportunities for Biochar. <i>Sustainability</i> , 2021 , 13, 10079	3.6	2
203	Biochar coupling with phosphorus fertilization modifies antioxidant activity, osmolyte accumulation and reactive oxygen species synthesis in the leaves and xylem sap of rice cultivars under high-temperature stress. 2021 , 27, 2083-2100		17
202	Soil conditioners improve rhizodegradation of aged petroleum hydrocarbons and enhance the growth of <i>Lolium multiflorum</i> . 2021 , 1		1
201	Biochars and Engineered Biochars for Water and Soil Remediation: A Review. <i>Sustainability</i> , 2021 , 13, 9932	3.6	8
200	Strategies for reducing Cd concentration in paddy soil for rice safety. 2021 , 316, 128116		6
199	Nanobiochar and biochar based nanocomposites: Advances and applications. 2021 , 5, 100191		6
198	(Im)mobilization of arsenic, chromium, and nickel in soils via biochar: A meta-analysis. <i>Environmental Pollution</i> , 2021 , 286, 117199	9.3	12
197	The impact of different biochars on <i>Stemphylium</i> leaf blight (SLB) suppression and productivity of onion (<i>Allium cepa</i> L.). 2021 , 33, 101575		
196	Rhizosphere dissolved organic matter and iron plaque modified by organic amendments and its relations to cadmium bioavailability and accumulation in rice. 2021 , 792, 148216		8
195	Comparison of the effects of large-grained and nano-sized biochar, ferrihydrite, and complexes thereof on Cd and As in a contaminated soil-plant system. 2021 , 280, 130731		2
194	Effects of sheep bone biochar on soil quality, maize growth, and fractionation and phytoavailability of Cd and Zn in a mining-contaminated soil. 2021 , 282, 131016		8

193	A critical review of the possible adverse effects of biochar in the soil environment. 2021 , 796, 148756		21
192	PAHs sorption to biochar colloids changes their mobility over time. 2021 , 603, 126839		1
191	Preparation of binder-less activated char briquettes from pyrolysis of sewage sludge for liquid-phase adsorption of methylene blue. 2021 , 299, 113601		4
190	Biochar and earthworms synergistically improve soil structure, microbial abundance, activities and pyraclostrobin degradation. 2021 , 168, 104154		6
189	Arsenic contamination, impact and mitigation strategies in rice agro-environment: An inclusive insight. 2021 , 800, 149477		7
188	The effects of a combined amendment on growth, cadmium adsorption by five fruit vegetables, and soil fertility in contaminated greenhouse under rotation system. 2021 , 285, 131499		5
187	Assessment of compost and three biochars associated with <i>Ailanthus altissima</i> (Miller) Swingle for lead and arsenic stabilization in a post-mining Technosol. <i>Pedosphere</i> , 2021 , 31, 944-953	5	2
186	Biochar ageing in polluted soils and trace elements immobilisation in a 2-year field experiment. <i>Environmental Pollution</i> , 2021 , 290, 118025	9.3	4
185	Biochar as environmental armour and its diverse role towards protecting soil, water and air. 2022 , 806, 150444		12
184	Determination of priority control factors for the management of soil trace metal(loid)s based on source-oriented health risk assessment. <i>Journal of Hazardous Materials</i> , 2022 , 423, 127116	12.8	9
183	Nanomaterials for soil remediation: Pollutant immobilization and opportunities for hybrid technologies. 2021 , 701-723		1
182	Effects of amendments on the bioavailability, transformation and accumulation of heavy metals by pakchoi cabbage in a multi-element contaminated soil. 2021 , 11, 4395-4405		5
181	Biochar from Biomass: A Strategy for Carbon Dioxide Sequestration, Soil Amendment, Power Generation, and CO ₂ Utilization. 2015 , 1-31		3
180	Use of Biochar in Sustainable Agriculture. 2019 , 501-528		1
179	Recent Development in Bioremediation of Soil Pollutants Through Biochar for Environmental Sustainability. 2020 , 123-140		7
178	Enhancing Decontamination of PAHs-Polluted Soils: Role of Organic and Mineral Amendments. 2017 , 339-368		1
177	Arsenic Behaviour in Soil-Plant System: Biogeochemical Reactions and Chemical Speciation Influences. 2017 , 97-140		48
176	Biochar Facilitated Hydroxyapatite/Calcium Silicate Hydrate for Remediation of Heavy Metals Contaminated Soils. <i>Water, Air, and Soil Pollution</i> , 2020 , 231, 1	2.6	17

175	Aided phytostabilisation of As- and Cu-contaminated soils using white lupin and combined iron and organic amendments. 2018 , 205, 142-150		23
174	The remediation of PAH contaminated sediment with mangrove plant and its derived biochars. 2020 , 268, 110410		10
173	Biochars obtained from arabica coffee husks by a pyrolysis process: characterization and application in Fe(II) removal in aqueous systems. 2020 , 44, 3310-3322		11
172	Changes in soil pH and nutrient extractability after co-applying biochar and paper mill biosolids. 1-12		5
171	Risk Evaluation of Pyrolyzed Biochar from Multiple Wastes. 2019 , 2019, 1-28		22
170	Soil. 2014 , 75-96		3
169	Leaching of potentially toxic elements from biochars intended for soil improvement. 2020 , 107, 235-242		1
168	Biochar in co-contaminated soil manipulates arsenic solubility and microbiological community structure, and promotes organochlorine degradation. <i>PLoS ONE</i> , 2015 , 10, e0125393	3-7	31
167	Role of biochar on soil fertility improvement and greenhouse gases sequestration. 2019 , 3,		2
166	De Gruyter. 2013 , 32,		5
165	REVIEW: DISSOLVED ORGANIC CARBON CONTENT OF BIOCHAR VARYING WITH THE TYPE OF FEEDSTOCK AND THE PYROLYSIS TEMPERATURE. 2017 ,		1
164	Heavy Metals Uptake in Maize Grains and Leaves in Different Agro Ecological Zones in Uasin Gishu County. 2017 , 08, 1435-1444		6
163	Effect of Lyophilization on Survivability and Growth Kinetic of Trichoderma Strains Preserved on Various Agriculture By-Products. 2017 , 66, 181-188		4
162	Biochar-rhizosphere interactions - A review. 2017 , 66, 151-161		15
161	Feasibility Study of Chromium Removal from Paint Sludge with Biological Sludge, Using Vermicompost by <i>Eisenia fetida</i> (Case Study: Saipa Automotive Industry). 2018 , 10,		6
160	Comparative characterization of biochars produced at three selected pyrolysis temperatures from common woody and herbaceous waste streams. 2019 , 7, e6784		26
159	Increase of Metal Accumulation in Plants Grown on Biochar Biochar Ecotoxicity for Germinating Seeds. 2015 , 6, 508-511		2
158	Mitigating Cadmium (Cd) Toxicity in Montane Forest Soils Using Biochar: Laboratory Trial for Soils from Horton Plains, Sri Lanka. 2021 , 11, 504-520		

- 157 Ecological Intensification for Soil Management: Biochar – A Natural Solution for Soil from Agricultural Residues. **2021**, 403-455
- 156 Remediation of metal-contaminated mine tailings by the application of organic and mineral amendments. 1 3
- 155 The Combined Effect of *Pseudomonas stutzeri* and Biochar on the Growth Dynamics and Tolerance of Lettuce Plants (*Lactuca sativa*) to Cadmium Stress. **2021**, 7, 430 0
- 154 Assessment and promotion of strategies and techniques for the reuse of agricultural straw residues in China. **2013**, 3, 22-25
- 153 Une innovation agroécologique : la séquestration des pesticides. **2015**, Numéro 16, 24 0
- 152 Thermal Conversion of Biomass. **2015**, 1-34
- 151 Thermal Conversion of Biomass. **2017**, 1813-1854
- 150 Effects of biochar pyrolysis temperature on its characteristics and heavy metal adsorption. **2016**, 419-422
- 149 Evaluation of Different Organic Materials in Reducing Cadmium Phytoavailability of Radish Grown in Contaminated Soil. *Hantguk Tŏyang Piryo Hakhoe Chi Hantguk Tŏyang Piryo Hakhoe*, **2017**, 50, 12-20 0.2
- 148 Chemical Characterization of Mine Sites. **2017**, 17-32 0
- 147 Bioremediation of Environmental Pollutants. **2018**, 80-104
- 146 Sorption Properties of Lead and Cadmium onto Kaolinite under the Presence of Hydroxamate Siderophore and Immobilization Using Magnesium Oxide. **2018**, 41, 73-81
- 145 Remediation of Soil Contaminated with Heavy Metals by Using Nanomaterials. **2018**, 08, 127-136
- 144 Artan Dozdaki Biyokimya ve Solucan Gbresi Uygulamalarının Buđayda ve Toprakta Besin Elementi Biriřerine Etkilerinin Belirlenmesi. 1
- 143 Biochar: A New Environmental Paradigm in Management of Agricultural Soils and Mitigation of GHG Emission. **2020**, 223-258 1
- 142 Potential management practices of saltwater intrusion impacts on soil health and water quality: a review. **2021**, 12, 1327-1343 0
- 141 Phytoremediation of Contaminated Soils Using Trees. **2020**, 419-437
- 140 Contribution of Biochar in Improving Soil Health. **2020**, 99-113

139 Bioremediation of Environmental Pollutants. **2022**, 110-134

138 Phytoremediation of Heavy Metals Using Salix (Willows). **2020**, 161-174

4

137 Insight into the Influencing Mechanism of Endophytic Bacteria on the Adsorption of Heavy Metals by Plants: A Review. **2021**, 13, 1401-1414

2

136 Effect of Biochar Application Depth on a Former Mine Technosol: Impact on Metal(Loid)s and Alnus Growth. **2021**, 8, 120

0

135 Biochar-Based Adsorbents for the Removal of Organic Pollutants from Aqueous Systems. **2020**, 147-174

134 Nano agrochemical zinc oxide influences microbial activity, carbon, and nitrogen cycling of applied manures in the soil-plant system. *Environmental Pollution*, **2021**, 293, 118559

9.3 0

133 Response of Plant Root Growth to Biochar Amendment: A Meta-Analysis. **2021**, 11, 2442

3

132 Diminishing Heavy Metal Hazards of Contaminated Soil via Biochar Supplementation. *Sustainability*, **2021**, 13, 12742

3.6 6

131 Biochar applications enhance the phytoextraction potential of *Salix smithiana* [Willd.] (willow) in heavily contaminated soil: potential for a sustainable remediation method?. 1

0

130 Biochar and nitrogen fertilizer increase *Glomus* synergism and abundance and promote *Trifolium pratense* growth while inhibiting pollutant accumulation. **2021**, 133, 108377

0

129 Application of Biochar for Wastewater Treatment. **2021**, 67-90

0

128 Biochar-based land development.

0

127 Nanobiochar-rhizosphere interactions: Implications for the remediation of heavy-metal contaminated soils.. *Environmental Pollution*, **2022**, 299, 118810

9.3 4

126 Effect of biochar on transformation of dissolved organic matter and DTPA-extractable Cu and Cd during sediment composting.. **2022**, 1

0

125 Effects of different feedstocks-based biochar on soil remediation: A review.. *Environmental Pollution*, **2021**, 294, 118655

9.3 11

124 Oil-water separation using surface engineered superhydrophobic and superoleophilic membrane for the production of clean water. **2022**, 45, 102473

2

123 Simultaneous mitigation of Cd and As availability in soil-rice continuum via the addition of an Fe-based desulfurization material.. **2021**, 152603

0

122 Does biochar application in heavy metal-contaminated soils affect soil micronutrient dynamics?. **2021**, 133349

4

121	Water treatment sludge conversion to biochar as cementitious material in cement composite.. 2022 , 306, 114463		1
120	Hydrogen-rich syngas production from biomass pyrolysis and catalytic reforming using biochar-based catalysts. 2022 , 313, 123006		3
119	Effects of wetland plant biochars on heavy metal immobilization and enzyme activity in soils from the Yellow River estuary.. 2022 , 1		
118	Potentially Toxic Elements Contamination of Soils Affected by Mining Activities in the Portuguese Sector of the Iberian Pyrite Belt and Optional Remediation Actions: A Review. 2022 , 9, 11		4
117	Biochar Produced from Organic Waste Digestate and Its Potential Utilization for Soil Remediation: An Overview. 2022 , 263-292		0
116	Soil heavy metal pollution from Pb/Zn smelting regions in China and the remediation potential of biomineralization. <i>Journal of Environmental Sciences</i> , 2022 ,	6.4	5
115	Lignite Derived Humic Products And Cattle Manure Biochar Are Effective Soil Amendments In Cadmium Contaminated And Uncontaminated Soils. 2022 , 100186		1
114	Poultry Litter Biochar as a Gentle Soil Amendment in Multi-Contaminated Soil: Quality Evaluation on Nutrient Preservation and Contaminant Immobilization. 2022 , 12, 405		2
113	Crop Plants Under Metal Stress and Its Remediation. 2022 , 57-71		0
112	Advances of nanotechnology in plant development and crop protection. 2022 , 143-157		0
111	Biochar actions for the mitigation of plant abiotic stress. 2022 ,		2
110	Metal(loid)s Spatial Distribution, Accumulation, and Potential Health Risk Assessment in Soil-Wheat Systems near a Pb/Zn Smelter in Henan Province, Central China.. 2022 , 19,		6
109	Influence of selenium combined with rice straw on the inhibition of copper phytotoxicity to pak choi. 2022 , 34, 61-73		
108	Impact of Biochar Amendment on Soil Properties and Organic Matter Composition in Trace Element-Contaminated Soil.. 2022 , 19,		0
107	Iron plaque formation, characteristics, and its role as a barrier and/or facilitator to heavy metal uptake in hydrophyte rice (<i>Oryza sativa</i> L.).. 2022 , 1		1
106	Sustainable biochar effects on the remediation of contaminated soil: A 2-crop season site practice near a lead-zinc smelter in Feng County, China.. <i>Environmental Pollution</i> , 2022 , 119095	9.3	1
105	Zero valent iron nanoparticles and organic fertilizer assisted phytoremediation in a mining soil: Arsenic and mercury accumulation and effects on the antioxidative system of <i>Medicago sativa</i> L.. <i>Journal of Hazardous Materials</i> , 2022 , 433, 128748	12.8	2
104	Role of Biochar in Wastewater Treatment and Sustainability. 2022 , 339-349		

103	Efficacy of Various Amendments for the Phytomanagement of Heavy Metal Contaminated Sites and Sustainable Agriculture. A Review. 2022 , 239-272		0
102	Alleviation of Cd stress in maize by compost mixed biochar. 2022 , 102014		0
101	Vegetation Regulates Element Composition of Soils by Enhancing Organic Matter Accumulation in the Salt Marshes of Liao River Delta, China. 2022 , 9,		0
100	Field assessment of organic amendments and spring barley to phytomanage a Cu/PAH-contaminated soil.. 2022 ,		0
99	Biochar Addition Decreases the Mobility, Bioavailability, and Phytotoxicity of Potentially Toxic Elements in an Agricultural Contaminated Soil. <i>Communications in Soil Science and Plant Analysis</i> , 1-17	1.5	
98	Image_1.jpg. 2018 ,		
97	Image_2.JPEG. 2018 ,		
96	Image_3.JPEG. 2018 ,		
95	Image_4.JPEG. 2018 ,		
94	Image_5.JPEG. 2018 ,		
93	Image_6.JPEG. 2018 ,		
92	Image_7.JPEG. 2018 ,		
91	Image_8.JPEG. 2018 ,		
90	Table_1.DOCX. 2018 ,		
89	Table_2.DOCX. 2018 ,		
88	Nano-biochar modulates the formation of iron plaque through facilitating iron-involved redox reactions on aquatic plant root surfaces. <i>Environmental Science: Nano</i> ,	7.1	0
87	Softwood-derived Biochar as a Green Material for the Recovery of Environmental Media Contaminated with Potentially Toxic Elements. <i>Water, Air, and Soil Pollution</i> , 2022 , 233, 1	2.6	0
86	Surface Charge Governs the Adsorption Behaviour of Glyphosate in the Australian Oxisol Soil System. <i>Communications in Soil Science and Plant Analysis</i> , 1-3	1.5	1

85	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	3.6	0
84	Variation of microbial activities and communities in petroleum-contaminated soils induced by the addition of organic materials and bacterivorous nematodes.. <i>Ecotoxicology and Environmental Safety</i> , 2022 , 237, 113559	7	0
83	Removing mercury from flue gas by sulfur-doped zeolite-templated carbon: Synthesize and adsorption mechanism. <i>Separation and Purification Technology</i> , 2022 , 294, 121228	8.3	0
82	Effects of Wood-derived Biochar Application on Soil Chemical Properties and Growth of Lettuce (<i>Lactuca sativa</i> L.). <i>Hantguk Tboyang Piryo Hakhoe Chi Hantguk Tboyang Piryo Hakhoe</i> , 2019 , 52, 457-466	0.2	2
81	The remediation potential of biochar derived from different biomass for typical pollution in agricultural soil. 2022 , 71-83		
80	Biochar for sustainable immobilization of potentially toxic elements in contaminated farmland. 2022 , 293-304		0
79	Role of biochar and compost in cadmium immobilization and on the growth of <i>Spinacia oleracea</i> . <i>PLoS ONE</i> , 2022 , 17, e0263289	3.7	0
78	Time effect of rice straw and engineered bacteria on reducing exogenous Cu mobility in three typical Chinese soils. <i>Pedosphere</i> , 2022 ,	5	0
77	Biochar from Biomass: A Strategy for Carbon Dioxide Sequestration, Soil Amendment, Power Generation, CO ₂ Utilization, and Removal of Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS) in the Environment. 2022 , 1023-1085		0
76	Biochar Impregnated Nanomaterials for Environmental Cleanup. <i>Water Science and Technology Library</i> , 2022 , 331-345	0.3	
75	Remediation of Cu and As contaminated water and soil utilizing biochar supported layered double hydroxide: Mechanisms and soil environment altering. <i>Journal of Environmental Sciences</i> , 2022 ,	6.4	0
74	Organic amendments minimize the migration of potentially toxic elements in soil-plant system in degraded agricultural lands. <i>Biomass Conversion and Biorefinery</i> ,	2.3	0
73	Carbonaceous amendment addition as an alternative to decrease phytotoxicity of sediments from the Matanza-Riachuelo Basin (Argentina). <i>Environmental Technology and Innovation</i> , 2022 , 28, 102687	7	
72	A comparative study of the sorption of O-PAHs and PAHs onto soils to understand their transport in soils and groundwater. <i>Journal of Environmental Sciences</i> , 2023 , 124, 61-75	6.4	0
71	Application of biochar for attenuating heavy metals in contaminated soil: potential implications and research gaps. 2022 , 77-110		
70	Biochar: Production, Application and the Future.		
69	Lead (Pb) stabilization in a polluted calcareous soil using cost-effective biochar and zeolite amendments after spinach cultivation. <i>Pedosphere</i> , 2022 ,	5	1
68	Noval porous phosphate-solubilizing bacteria beads loaded with BC/nZVI enhanced the transformation of lead fractions and its microecological regulation mechanism in soil. <i>Journal of Hazardous Materials</i> , 2022 , 437, 129402	12.8	0

67	Biochar application strategies for polycyclic aromatic hydrocarbons removal from soils. <i>Environmental Research</i> , 2022 , 213, 113599	7.9	1
66	Integrated Application of Green Nanotechnology, Bioremediation, and Solubility Enhancing Chemicals for Improving Phytoremediation Efficiency: A Case Study in Egypt. 2022 , 455-478		
65	Comparative remediation rate of biostimulation, bioaugmentation, and phytoremediation in hydrocarbon contaminants. <i>International Journal of Environmental Science and Technology</i> ,	3.3	0
64	An assessment of biochar as a potential amendment to enhance plant nutrient uptake. <i>Environmental Research</i> , 2022 , 113909	7.9	0
63	New insight into the mechanism underlying the effect of biochar on phenanthrene degradation in contaminated soil revealed through DNA-SIP. <i>Journal of Hazardous Materials</i> , 2022 , 438, 129466	12.8	0
62	Engineered Biochar as Adsorbent for the Removal of Contaminants from Aqueous Medium. 2022 , 353-381		0
61	Insights Into the Production of Biochar from Organic Waste. 2022 , 291-319		
60	Trace Element Contents in Petrol-Contaminated Soil Following the Application of Compost and Mineral Materials. 2022 , 15, 5233		
59	Long-Term Field Biochar Application for Rice Production: Effects on Soil Nutrient Supply, Carbon Sequestration, Crop Yield and Grain Minerals. 2022 , 12, 1924		1
58	The utilization of biochar alone and in combination with compost for removal of potentially toxic metals accumulated in soils associated with land-use patterns.		
57	Adsorption of lead ions by green waste compost and its mechanism.		
56	Combined treatment of heavy metals in water and soil by biochar and manganese-oxidizing bacteria.		
55	Walnut shell biochar based sorptive remediation of estrogens polluted simulated wastewater: Characterization, adsorption mechanism and degradation by persistent free radicals. 2022 , 102870		1
54	Combined Effect of Organic Amendments and Seed Placement Techniques on Sorghum Yield Under Salt-Stressed Conditions.		0
53	Assessment of potential exposure to As, Cd, Pb and Zn in vegetable garden soils and vegetables in a mining region. 2022 , 12,		0
52	Long-term immobilization of cadmium and lead with biochar in frozen-thawed soils of farmland in China. 2022 , 313, 120143		0
51	Emerging technologies for enhanced removal of residual antibiotics from source-separated urine and wastewaters: A review. 2022 , 322, 116065		2
50	Biochar application for greenhouse gas mitigation, contaminants immobilization and soil fertility enhancement: A state-of-the-art review. 2022 , 853, 158562		3

- 49 Preparation, structure and properties of bamboo charcoal and its modified polyester fiber. 1-11 0
- 48 Effect of biochar application method and amount on the soil quality and maize yield in Mollisols of Northeast China. **2022**, 4, 0
- 47 Analysis of the effects of prepyrolysis hydrothermal treatment on phosphorus recovery from sewage sludge using a life cycle assessment. **2022**, 377, 134312 0
- 46 A Review on Detection Techniques, Health Hazards and Human Health Risk Assessment of Arsenic Pollution in Soil and Groundwater. **2022**, 12, 1326 0
- 45 Stabilization of Soil Co-Contaminated with Mercury and Arsenic by Different Types of Biochar. **2022**, 14, 13637 0
- 44 Effect of Biochar Addition on Mechanism of Heavy Metal Migration and Transformation in Biogas Residue Aerobic Compost. **2022**, 8, 523 0
- 43 The Effects of Rabbit-Manure-Derived Biochar Co-Application with Compost on the Availability and Heavy Metal Uptake by Green Leafy Vegetables. **2022**, 12, 2552 1
- 42 Biochar Applications Reduces the Mobility of Cadmium Under Differing Soil Moisture Regimes. 0
- 41 Remediation of arsenic-spiked soil by biochar-loaded nanoscale zero-valent iron: Performance, mechanism, and microbial response. **2022**, 134985 0
- 40 Role and importance of microorganisms in plant nutrition and remediation of potentially toxic elements contaminated soils. **2023**, 179-208 0
- 39 Three-dimensional ordered zeolite-templated carbon with covalent sulfur for efficient removal of elemental mercury: Experimental study and molecular dynamic simulation. **2023**, 239, 107540 0
- 38 Patent mining on soil pollution remediation technology from the perspective of technological trajectory. **2022**, 120661 0
- 37 Different feedstocks of biochar affected the bioavailability and uptake of heavy metals by wheat (*Triticum aestivum* L.) plants grown in metal contaminated soil. **2023**, 217, 114845 3
- 36 Research status on remediation of eutrophic water by submerged macrophytes: A review. **2023**, 169, 671-684 1
- 35 Treatment of Highway Stormwater Runoff Using Sustainable Biochar: A Review. **2023**, 149, 1
- 34 Advances in the Study of Heavy Metal Adsorption from Water and Soil by Modified Biochar. **2022**, 14, 3894 0
- 33 Mechanisms of Biochar Effects on Plant Growth of Seepweed (*Suaeda salsa*) and Hybrid Sorrel (*Rumex patientia* [*Rumex tianschanicus*]) in a Coastal Saline Soil over Two Cropping Seasons: Soil-Plant-Microbe Interactions. 0
- 32 Pros and Cons of Biochar to Soil Potentially Toxic Element Mobilization and Phytoavailability: Environmental Implications. 1

31	Application of biochar and compost improved soil properties and enhanced plant growth in a Pb/Zn mine tailings soil.	1
30	Pyrolysis temperature influences the capacity of biochar to immobilize copper and arsenic in mining soil remediation.	0
29	Global perspectives for biochar application in the remediation of heavy metal-contaminated soil: a bibliometric analysis over the past three decades. 1-15	0
28	Adsorption Characteristics of Modified Bamboo Charcoal on Cu(II) and Cd(II) in Water. 2022 , 10, 787	0
27	Effect of manure and biochar on the aluminum, copper, and iron bioaccumulation by <i>Salicornia</i> species in soil.	0
26	Symbiosis Mechanisms and Usage of Other Additives Like Biochar in Soil Quality Management. 2023 , 271-305	0
25	A state-of-the-art review on cadmium uptake, toxicity, and tolerance in rice: From physiological response to remediation process. 2023 , 220, 115098	1
24	Combined effects of earthworms and biochar on PAHs-contaminated soil remediation: A review. 2023 , 5,	0
23	The influence of compost amendments on bioaccumulation of potentially toxic elements by pea plant cultivated in mine degraded soils. 2023 , 16,	0
22	Sustainability assessment of biochar applications. 2023 , 415-441	0
21	Role of biochar in polyaromatic hydrocarbons remediation and environment management. 2023 , 365-385	0
20	Nanoscale zero-valent iron mitigates arsenic mobilization and accumulation in <i>Sinapis alba</i> grown on a metal(loid)-polluted soil treated with a dunite mining waste-compost amendment.	0
19	Whole-Process Risk Management of Soil Amendments for Remediation of Heavy Metals in Agricultural Soil: A Review. 2023 , 20, 1869	1
18	Invasive Wetland Weeds Derived Biochar Properties Affecting Soil Carbon Dynamics of South Indian Tropical Ultisol.	0
17	Photoreduction of Hg(II) by typical dissolved organic matter in paddy environments. 2023 , 327, 138437	0
16	A comprehensive review on the impact of emerging organophosphorous pesticides and their remedial measures: Special focus on acephate. 2023 , 20, 100813	0
15	Biochar, compost and/or NPK fertilizer affect the uptake of potentially toxic elements and promote the yield of lettuce grown in an abandoned gold mine tailing. 2023 , 100066	0
14	Study on the cadmium and copper binding characteristics of dissolved organic matter released from human-feces-biochar (HFDOM) using parallel factor analysis (PARAFAC) and two-dimensional correlation spectroscopy (2D-COS). 2023 , 30, 46900-46912	0

- | | | |
|----|--|---|
| 13 | Biochar-compost as a new option for soil improvement: Application in various problem soils. 2023 , 870, 162024 | 1 |
| 12 | Applying Amendments for Metal(loid) Phytostabilization: Effects on Soil Biogeochemical and Microbiological Processes. 2023 , 183-207 | 0 |
| 11 | Biochar Addition and the Runoff Quality of Newly Constructed Green Roofs: A Field Study. 2023 , 15, 4081 | 0 |
| 10 | Complementing compost with biochar for agriculture, soil remediation and climate mitigation. 2023 , 1-90 | 0 |
| 9 | Analysis of the Degradation of OCPs Contaminated Soil by the BC/nZVI Combined with Indigenous Microorganisms. 2023 , 20, 4314 | 0 |
| 8 | Research trends on biochar-based smart fertilizers as an option for the sustainable agricultural land management: Bibliometric analysis and review. 3, | 0 |
| 7 | Dose-dependent impact of compost on rhizosphere bacterial community in heavy metal-contaminated paddy soil. 2023 , 33, 642-652 | 0 |
| 6 | Activation of endogenous cadmium from biochar under simulated acid rain enhances the accumulation risk of lettuce (<i>Lactuca sativa</i> L.). 2023 , 255, 114820 | 0 |
| 5 | Fixation Effect of Modified Bamboo Charcoal on Typical Heavy Metals in Sediment. 2023 , 15, 1230 | 0 |
| 4 | Comparison of the Efficiency of Micro- and Nanoparticles of Zero-Valent Iron in the Detoxification of Technogenically Polluted Soil. 2023 , 56, 238-246 | 0 |
| 3 | Effect of Organic Amendments on Cadmium Bioavailability in Soil and its Accumulation in Rice Grain. 2023 , 110, | 0 |
| 2 | Research Progress of Environmental Risk Substances in the Preparation of Biochar. 40, 245-250 | 0 |
| 1 | Biochar Application for Improving the Yield and Quality of Crops Under Climate Change. 2023 , 3-55 | 0 |