

Meththika Vithanage

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8580866/publications.pdf>

Version: 2024-02-01

240
papers

17,804
citations

17440

63
h-index

16183

124
g-index

253
all docs

253
docs citations

253
times ranked

13098
citing authors

#	ARTICLE	IF	CITATIONS
1	Biochar as a sorbent for contaminant management in soil and water: A review. <i>Chemosphere</i> , 2014, 99, 19-33.	8.2	3,175
2	Engineered/designer biochar for contaminant removal/immobilization from soil and water: Potential and implication of biochar modification. <i>Chemosphere</i> , 2016, 148, 276-291.	8.2	959
3	Biochar based removal of antibiotic sulfonamides and tetracyclines in aquatic environments: A critical review. <i>Bioresource Technology</i> , 2017, 246, 150-159.	9.6	440
4	Antimony as a global dilemma: Geochemistry, mobility, fate and transport. <i>Environmental Pollution</i> , 2017, 223, 545-559.	7.5	331
5	Applications of biochar in redox-mediated reactions. <i>Bioresource Technology</i> , 2017, 246, 271-281.	9.6	322
6	Trichloroethylene adsorption by pine needle biochars produced at various pyrolysis temperatures. <i>Bioresource Technology</i> , 2013, 143, 615-622.	9.6	319
7	Enhanced sulfamethazine removal by steam-activated invasive plant-derived biochar. <i>Journal of Hazardous Materials</i> , 2015, 290, 43-50.	12.4	299
8	Interaction of arsenic with biochar in soil and water: A critical review. <i>Carbon</i> , 2017, 113, 219-230.	10.3	292
9	A critical prospective analysis of the potential toxicity of trace element regulation limits in soils worldwide: Are they protective concerning health risk assessment? - A review. <i>Environment International</i> , 2019, 127, 819-847.	10.0	280
10	Pyrolysis condition affected sulfamethazine sorption by tea waste biochars. <i>Bioresource Technology</i> , 2014, 166, 303-308.	9.6	279
11	Interactions between microplastics, pharmaceuticals and personal care products: Implications for vector transport. <i>Environment International</i> , 2021, 149, 106367.	10.0	276
12	Biochar-based engineered composites for sorptive decontamination of water: A review. <i>Chemical Engineering Journal</i> , 2019, 372, 536-550.	12.7	264
13	Weathering of microplastics and interaction with other coexisting constituents in terrestrial and aquatic environments. <i>Water Research</i> , 2021, 196, 117011.	11.3	253
14	Multifunctional applications of biochar beyond carbon storage. <i>International Materials Reviews</i> , 2022, 67, 150-200.	19.3	245
15	Biochar production from date palm waste: Charring temperature induced changes in composition and surface chemistry. <i>Journal of Analytical and Applied Pyrolysis</i> , 2015, 115, 392-400.	5.5	230
16	Fluoride in the environment: sources, distribution and defluoridation. <i>Environmental Chemistry Letters</i> , 2015, 13, 131-147.	16.2	228
17	Advances and future directions of biochar characterization methods and applications. <i>Critical Reviews in Environmental Science and Technology</i> , 2017, 47, 2275-2330.	12.8	194
18	Natural Arsenic in Global Groundwaters: Distribution and Geochemical Triggers for Mobilization. <i>Current Pollution Reports</i> , 2016, 2, 68-89.	6.6	177

#	ARTICLE	IF	CITATIONS
19	Kinetics, thermodynamics and mechanistic studies of carbofuran removal using biochars from tea waste and rice husks. <i>Chemosphere</i> , 2016, 150, 781-789.	8.2	169
20	Clay-biochar composites for sorptive removal of tetracycline antibiotic in aqueous media. <i>Journal of Environmental Management</i> , 2019, 238, 315-322.	7.8	164
21	Equilibrium and kinetic mechanisms of woody biochar on aqueous glyphosate removal. <i>Chemosphere</i> , 2016, 144, 2516-2521.	8.2	158
22	Arsenic uptake by plants and possible phytoremediation applications: a brief overview. <i>Environmental Chemistry Letters</i> , 2012, 10, 217-224.	16.2	156
23	Remediation of soils and sediments polluted with polycyclic aromatic hydrocarbons: To immobilize, mobilize, or degrade?. <i>Journal of Hazardous Materials</i> , 2021, 420, 126534.	12.4	150
24	Heavy metal-induced oxidative stress on seed germination and seedling development: a critical review. <i>Environmental Geochemistry and Health</i> , 2019, 41, 1813-1831.	3.4	149
25	Sorption and transport of sulfamethazine in agricultural soils amended with invasive-plant-derived biochar. <i>Journal of Environmental Management</i> , 2014, 141, 95-103.	7.8	145
26	Immobilization and phytotoxicity reduction of heavy metals in serpentine soil using biochar. <i>Journal of Soils and Sediments</i> , 2015, 15, 126-138.	3.0	140
27	Progress and prospects in mitigation of landfill leachate pollution: Risk, pollution potential, treatment and challenges. <i>Journal of Hazardous Materials</i> , 2022, 421, 126627.	12.4	138
28	Clay-polymer nanocomposites: Progress and challenges for use in sustainable water treatment. <i>Journal of Hazardous Materials</i> , 2020, 383, 121125.	12.4	132
29	Pharmaceutical and Personal Care Products (PPCPs) in the environment: Plant uptake, translocation, bioaccumulation, and human health risks. <i>Critical Reviews in Environmental Science and Technology</i> , 2021, 51, 1221-1258.	12.8	127
30	Mechanistic modeling of glyphosate interaction with rice husk derived engineered biochar. <i>Microporous and Mesoporous Materials</i> , 2016, 225, 280-288.	4.4	125
31	Antimony contamination and its risk management in complex environmental settings: A review. <i>Environment International</i> , 2022, 158, 106908.	10.0	125
32	Adsorptive interaction of antibiotic ciprofloxacin on polyethylene microplastics: Implications for vector transport in water. <i>Environmental Technology and Innovation</i> , 2020, 19, 100971.	6.1	118
33	Sorption process of municipal solid waste biochar-montmorillonite composite for ciprofloxacin removal in aqueous media. <i>Chemosphere</i> , 2019, 236, 124384.	8.2	117
34	Invasive plant-derived biochar inhibits sulfamethazine uptake by lettuce in soil. <i>Chemosphere</i> , 2014, 111, 500-504.	8.2	116
35	Perchlorate as an emerging contaminant in soil, water and food. <i>Chemosphere</i> , 2016, 150, 667-677.	8.2	114
36	Hexavalent chromium removal from water by microalgal-based materials: Adsorption, desorption and recovery studies. <i>Bioresource Technology</i> , 2019, 293, 122064.	9.6	111

#	ARTICLE	IF	CITATIONS
37	Surface complexation modeling and spectroscopic evidence of antimony adsorption on iron-oxide-rich red earth soils. <i>Journal of Colloid and Interface Science</i> , 2013, 406, 217-224.	9.4	110
38	Acid-activated biochar increased sulfamethazine retention in soils. <i>Environmental Science and Pollution Research</i> , 2015, 22, 2175-2186.	5.3	107
39	A critical review on biochar-based engineered hierarchical porous carbon for capacitive charge storage. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 145, 111029.	16.4	105
40	Modification of biochar properties using CO ₂ . <i>Chemical Engineering Journal</i> , 2019, 372, 383-389.	12.7	101
41	Biochar versus bone char for a sustainable inorganic arsenic mitigation in water: What needs to be done in future research?. <i>Environment International</i> , 2019, 127, 52-69.	10.0	101
42	Performance of metal-organic frameworks for the adsorptive removal of potentially toxic elements in a water system: a critical review. <i>RSC Advances</i> , 2019, 9, 34359-34376.	3.6	101
43	Mechanistic understanding of crystal violet dye sorption by woody biochar: implications for wastewater treatment. <i>Environmental Geochemistry and Health</i> , 2019, 41, 1647-1661.	3.4	101
44	The role of biochar, natural iron oxides, and nanomaterials as soil amendments for immobilizing metals in shooting range soil. <i>Environmental Geochemistry and Health</i> , 2015, 37, 931-942.	3.4	97
45	Municipal solid waste biochar-bentonite composite for the removal of antibiotic ciprofloxacin from aqueous media. <i>Journal of Environmental Management</i> , 2019, 236, 428-435.	7.8	93
46	Mechanisms of antimony adsorption onto soybean stover-derived biochar in aqueous solutions. <i>Journal of Environmental Management</i> , 2015, 151, 443-449.	7.8	92
47	Medical geology in the framework of the sustainable development goals. <i>Science of the Total Environment</i> , 2017, 581-582, 87-104.	8.0	90
48	Production and use of biochar from buffalo weed (<i>Ambrosia trifida</i> L.) for trichloroethylene removal from water. <i>Journal of Chemical Technology and Biotechnology</i> , 2014, 89, 150-157.	3.2	89
49	The influence of three acid modifications on the physicochemical characteristics of tea-waste biochar pyrolyzed at different temperatures: a comparative study. <i>RSC Advances</i> , 2019, 9, 17612-17622.	3.6	87
50	Cr(VI) Formation Related to Cr(III)-Muscovite and Birnessite Interactions in Ultramafic Environments. <i>Environmental Science & Technology</i> , 2013, 47, 9722-9729.	10.0	86
51	Contrasting effects of engineered carbon nanotubes on plants: a review. <i>Environmental Geochemistry and Health</i> , 2017, 39, 1421-1439.	3.4	85
52	Potential application of selected metal resistant phosphate solubilizing bacteria isolated from the gut of earthworm (<i>Metaphire posthuma</i>) in plant growth promotion. <i>Geoderma</i> , 2018, 330, 117-124.	5.1	82
53	Biochar from municipal solid waste for resource recovery and pollution remediation. <i>Environmental Chemistry Letters</i> , 2019, 17, 1225-1235.	16.2	81
54	Role of woody biochar and fungal-bacterial co-inoculation on enzyme activity and metal immobilization in serpentine soil. <i>Journal of Soils and Sediments</i> , 2017, 17, 665-673.	3.0	80

#	ARTICLE	IF	CITATIONS
55	Biochar, a potential hydroponic growth substrate, enhances the nutritional status and growth of leafy vegetables. <i>Journal of Cleaner Production</i> , 2017, 156, 581-588.	9.3	79
56	Green synthesis of graphitic nanobiochar for the removal of emerging contaminants in aqueous media. <i>Science of the Total Environment</i> , 2020, 706, 135725.	8.0	76
57	Nickel and manganese release in serpentine soil from the Ussangoda Ultramafic Complex, Sri Lanka. <i>Geoderma</i> , 2012, 189-190, 1-9.	5.1	74
58	Engineered tea-waste biochar for the removal of caffeine, a model compound in pharmaceuticals and personal care products (PPCPs), from aqueous media. <i>Environmental Technology and Innovation</i> , 2020, 19, 100847.	6.1	74
59	Distribution, behaviour, bioavailability and remediation of poly- and per-fluoroalkyl substances (PFAS) in solid biowastes and biowaste-treated soil. <i>Environment International</i> , 2021, 155, 106600.	10.0	74
60	Phytotoxicity attenuation in <i>Vigna radiata</i> under heavy metal stress at the presence of biochar and N fixing bacteria. <i>Journal of Environmental Management</i> , 2017, 186, 293-300.	7.8	73
61	Soil lead immobilization by biochars in short-term laboratory incubation studies. <i>Environment International</i> , 2019, 127, 190-198.	10.0	70
62	Mechanistic modeling of arsenic retention on natural red earth in simulated environmental systems. <i>Journal of Colloid and Interface Science</i> , 2006, 294, 265-272.	9.4	69
63	Mechanistic interaction of ciprofloxacin on zeolite modified seaweed (<i>Sargassum crassifolium</i>) derived biochar: Kinetics, isotherm and thermodynamics. <i>Chemosphere</i> , 2021, 281, 130676.	8.2	69
64	A systematic review on adsorptive removal of hexavalent chromium from aqueous solutions: Recent advances. <i>Science of the Total Environment</i> , 2022, 809, 152055.	8.0	69
65	Metal release from serpentine soils in Sri Lanka. <i>Environmental Monitoring and Assessment</i> , 2014, 186, 3415-3429.	2.7	67
66	Nanobiochar: production, properties, and multifunctional applications. <i>Environmental Science: Nano</i> , 2020, 7, 3279-3302.	4.3	64
67	Sorption Process of Date Palm Biochar for Aqueous Cd (II) Removal: Efficiency and Mechanisms. <i>Water, Air, and Soil Pollution</i> , 2016, 227, 1.	2.4	63
68	Efficacy of woody biomass and biochar for alleviating heavy metal bioavailability in serpentine soil. <i>Environmental Geochemistry and Health</i> , 2017, 39, 391-401.	3.4	63
69	South Asian perspective on temperature and rainfall extremes: A review. <i>Atmospheric Research</i> , 2019, 225, 110-120.	4.1	63
70	Treatment processes to eliminate potential environmental hazards and restore agronomic value of sewage sludge: A review. <i>Environmental Pollution</i> , 2022, 293, 118564.	7.5	63
71	Toxicity of synthetic chelators and metal availability in poultry manure amended Cd, Pb and As contaminated agricultural soil. <i>Journal of Hazardous Materials</i> , 2013, 262, 1022-1030.	12.4	62
72	Trace element dynamics of biosolids-derived microbeads. <i>Chemosphere</i> , 2018, 199, 331-339.	8.2	61

#	ARTICLE	IF	CITATIONS
73	Halloysite nanoclay supported adsorptive removal of oxytetracycline antibiotic from aqueous media. <i>Journal of Hazardous Materials</i> , 2020, 384, 121301.	12.4	60
74	Adsorption of Cd ²⁺ and Pb ²⁺ onto coconut shell biochar and biochar-mixed soil. <i>Environmental Earth Sciences</i> , 2016, 75, 1.	2.7	59
75	Anammox bacteria in treating ammonium rich wastewater: Recent perspective and appraisal. <i>Bioresource Technology</i> , 2021, 334, 125240.	9.6	59
76	From mine to mind and mobiles – Lithium contamination and its risk management. <i>Environmental Pollution</i> , 2021, 290, 118067.	7.5	58
77	Hydrometallurgical processes for heavy metals recovery from industrial sludges. <i>Critical Reviews in Environmental Science and Technology</i> , 2022, 52, 1022-1062.	12.8	57
78	Plant growth promotion by <i>Bradyrhizobium japonicum</i> under heavy metal stress. <i>South African Journal of Botany</i> , 2016, 105, 19-24.	2.5	56
79	Application of graphene for decontamination of water; Implications for sorptive removal. <i>Groundwater for Sustainable Development</i> , 2017, 5, 206-215.	4.6	56
80	Health risk assessment of heavy metals in atmospheric deposition in a congested city environment in a developing country: Kandy City, Sri Lanka. <i>Journal of Environmental Management</i> , 2018, 220, 198-206.	7.8	56
81	Role of chelating agents on release kinetics of metals and their uptake by maize from chromated copper arsenate-contaminated soil. <i>Environmental Technology (United Kingdom)</i> , 2013, 34, 747-755.	2.2	55
82	Effects of carbon nanotube and biochar on bioavailability of Pb, Cu and Sb in multi-metal contaminated soil. <i>Environmental Geochemistry and Health</i> , 2017, 39, 1409-1420.	3.4	53
83	A review on design, material selection, mechanism, and modelling of permeable reactive barrier for community-scale groundwater treatment. <i>Environmental Technology and Innovation</i> , 2020, 19, 100917.	6.1	53
84	Fate and transport of pollutants through a municipal solid waste landfill leachate in Sri Lanka. <i>Environmental Earth Sciences</i> , 2014, 72, 1707.	2.7	51
85	Steam activation of biochars facilitates kinetics and pH-resilience of sulfamethazine sorption. <i>Journal of Soils and Sediments</i> , 2016, 16, 889-895.	3.0	51
86	Microorganisms and heavy metals associated with atmospheric deposition in a congested urban environment of a developing country: Sri Lanka. <i>Science of the Total Environment</i> , 2017, 584-585, 803-812.	8.0	50
87	Sorptive removal of toluene and m-xylene by municipal solid waste biochar: Simultaneous municipal solid waste management and remediation of volatile organic compounds. <i>Journal of Environmental Management</i> , 2019, 238, 323-330.	7.8	50
88	Biochar production with amelioration of microwave-assisted pyrolysis: Current scenario, drawbacks and perspectives. <i>Bioresource Technology</i> , 2022, 355, 127303.	9.6	50
89	Frontier review on the propensity and repercussion of SARS-CoV-2 migration to aquatic environment. <i>Journal of Hazardous Materials Letters</i> , 2020, 1, 100001.	3.6	49
90	Impact of agrochemicals on soil health. , 2020, , 161-187.		49

#	ARTICLE	IF	CITATIONS
91	Caffeine removal by Gliricidia sepium biochar: Influence of pyrolysis temperature and physicochemical properties. <i>Environmental Research</i> , 2020, 189, 109865.	7.5	48
92	Distribution, transformation and remediation of poly- and per-fluoroalkyl substances (PFAS) in wastewater sources. <i>Chemical Engineering Research and Design</i> , 2022, 164, 91-108.	5.6	48
93	Implications of layered double hydroxides assembled biochar composite in adsorptive removal of contaminants: Current status and future perspectives. <i>Science of the Total Environment</i> , 2020, 737, 139718.	8.0	47
94	Adsorptive removal of fluoride using biochar – A potential application in drinking water treatment. <i>Separation and Purification Technology</i> , 2021, 278, 119106.	7.9	47
95	Microbe mediated immobilization of arsenic in the rice rhizosphere after incorporation of silica impregnated biochar composites. <i>Journal of Hazardous Materials</i> , 2020, 398, 123096.	12.4	46
96	Mitigation of petroleum-hydrocarbon-contaminated hazardous soils using organic amendments: A review. <i>Journal of Hazardous Materials</i> , 2021, 416, 125702.	12.4	46
97	Insights into aqueous carbofuran removal by modified and non-modified rice husk biochars. <i>Environmental Science and Pollution Research</i> , 2017, 24, 22755-22763.	5.3	45
98	Thiolated arsenic in natural systems: What is current, what is new and what needs to be known. <i>Environment International</i> , 2018, 115, 370-386.	10.0	45
99	Efficacy of agricultural waste derived biochar for arsenic removal: Tackling water quality in the Indo-Gangetic plain. <i>Journal of Environmental Management</i> , 2021, 281, 111814.	7.8	45
100	Potential of biochar and organic amendments for reclamation of coastal acidic-salt affected soil. <i>Biochar</i> , 2020, 2, 107-120.	12.6	44
101	Carbon-based adsorbents for fluoroquinolone removal from water and wastewater: A critical review. <i>Environmental Research</i> , 2021, 197, 111091.	7.5	44
102	Occurrence and cycling of trace elements in ultramafic soils and their impacts on human health: A critical review. <i>Environment International</i> , 2019, 131, 104974.	10.0	43
103	Biofilm formation and its implications on the properties and fate of microplastics in aquatic environments: A review. <i>Journal of Hazardous Materials Advances</i> , 2022, 6, 100077.	3.0	43
104	Inhibitory Effect of Veterinary Antibiotics on Denitrification in Groundwater: A Microcosm Approach. <i>Scientific World Journal</i> , The, 2014, 2014, 1-7.	2.1	42
105	The impact of biosolids application on organic carbon and carbon dioxide fluxes in soil. <i>Chemosphere</i> , 2017, 189, 565-573.	8.2	41
106	Lead time of early warning by wastewater surveillance for COVID-19: Geographical variations and impacting factors. <i>Chemical Engineering Journal</i> , 2022, 441, 135936.	12.7	40
107	Interface interactions between insecticide carbofuran and tea waste biochars produced at different pyrolysis temperatures. <i>Chemical Speciation and Bioavailability</i> , 2016, 28, 110-118.	2.0	39
108	Drought in South Asia: A Review of Drought Assessment and Prediction in South Asian Countries. <i>Atmosphere</i> , 2021, 12, 369.	2.3	39

#	ARTICLE	IF	CITATIONS
109	Computational and experimental assessment of pH and specific ions on the solute solvent interactions of clay-biochar composites towards tetracycline adsorption: Implications on wastewater treatment. <i>Journal of Environmental Management</i> , 2021, 283, 111989.	7.8	39
110	Propensity and appraisal of biochar performance in removal of oil spills: A comprehensive review. <i>Environmental Pollution</i> , 2021, 288, 117676.	7.5	39
111	Modeling sorption of fluoride on to iron rich laterite. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2012, 398, 69-75.	4.7	38
112	Bioenergy-derived waste biochar for reducing mobility, bioavailability, and phytotoxicity of chromium in anthropized tannery soil. <i>Journal of Soils and Sediments</i> , 2017, 17, 731-740.	3.0	38
113	Aging Effects of Organic and Inorganic Fertilizers on Phosphorus Fractionation in a Calcareous Sandy Loam Soil. <i>Pedosphere</i> , 2018, 28, 873-883.	4.0	38
114	Floating duckweed mitigated ammonia volatilization and increased grain yield and nitrogen use efficiency of rice in biochar amended paddy soils. <i>Chemosphere</i> , 2019, 237, 124532.	8.2	38
115	Municipal solid waste-derived biochar for the removal of benzene from landfill leachate. <i>Environmental Geochemistry and Health</i> , 2019, 41, 1739-1753.	3.4	38
116	Exploration of an Extracellular Polymeric Substance from Earthworm Gut Bacterium (<i>Bacillus</i>) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 467 (Switzerland), 2020, 10, 349.	2.5	38
117	Co-hydrothermal carbonization of swine and chicken manure: Influence of cross-interaction on hydrochar and liquid characteristics. <i>Science of the Total Environment</i> , 2021, 786, 147381.	8.0	38
118	Hydrometallurgical Recovery of Metals From E-waste. , 2019, , 225-246.		37
119	Alloying effect on superconductivity in amorphous lanthanum-based alloys. <i>Physical Review B</i> , 1979, 19, 193-198.	3.2	36
120	Compost as a carrier for microplastics and plastic-bound toxic metals into agroecosystems. <i>Current Opinion in Environmental Science and Health</i> , 2021, 24, 100297.	4.1	36
121	Deposition of trace metals associated with atmospheric particulate matter: Environmental fate and health risk assessment. <i>Chemosphere</i> , 2022, 303, 135051.	8.2	35
122	Utilization of Biowaste for Mine Spoil Rehabilitation. <i>Advances in Agronomy</i> , 2016, 138, 97-173.	5.2	34
123	Biochar based sorptive remediation of steroidal estrogen contaminated aqueous systems: A critical review. <i>Environmental Research</i> , 2020, 191, 110183.	7.5	34
124	Natural Red Earth as a low cost material for arsenic removal: Kinetics and the effect of competing ions. <i>Applied Geochemistry</i> , 2011, 26, 648-654.	3.0	33
125	Five Decadal Trends in Averages and Extremes of Rainfall and Temperature in Sri Lanka. <i>Advances in Meteorology</i> , 2018, 2018, 1-13.	1.6	32
126	Arsenic binding mechanisms on natural red earth: A potential substrate for pollution control. <i>Science of the Total Environment</i> , 2007, 379, 244-248.	8.0	31

#	ARTICLE	IF	CITATIONS
127	Natural and synthesised iron-rich amendments for As and Pb immobilisation in agricultural soil. <i>Chemistry and Ecology</i> , 2014, 30, 267-279.	1.6	30
128	Water Resources Management: Innovation and Challenges in a Changing World. <i>Water</i> (Switzerland), 2017, 9, 281.	2.7	30
129	Amino-functionalized biochars for the detoxification and removal of hexavalent chromium in aqueous media. <i>Environmental Research</i> , 2022, 211, 113073.	7.5	30
130	Laboratory investigations of the effects of geologic heterogeneity on groundwater salinization and flush-out times from a tsunami-like event. <i>Journal of Contaminant Hydrology</i> , 2012, 136-137, 10-24.	3.3	29
131	Application of Geospatial Techniques for Groundwater Quality and Availability Assessment: A Case Study in Jaffna Peninsula, Sri Lanka. <i>ISPRS International Journal of Geo-Information</i> , 2018, 7, 20.	2.9	29
132	Indoor Particulate Matter in Urban Households: Sources, Pathways, Characteristics, Health Effects, and Exposure Mitigation. <i>International Journal of Environmental Research and Public Health</i> , 2021, 18, 11055.	2.6	29
133	Surface complexation of fluoride at the activated nano-gibbsite water interface. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2014, 462, 124-130.	4.7	28
134	Generating alternative fuel and bioplastics from medical plastic waste and waste frying oil using microwave co-pyrolysis combined with microbial fermentation. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 153, 111790.	16.4	28
135	Developed fungal-bacterial biofilms as a novel tool for bioremoval of hexavalent chromium from wastewater. <i>Chemistry and Ecology</i> , 2014, 30, 418-427.	1.6	27
136	Exploring potential applications of a novel extracellular polymeric substance synthesizing bacterium (<i>Bacillus licheniformis</i>) isolated from gut contents of earthworm (<i>Metaphire posthuma</i>) in environmental remediation. <i>Biodegradation</i> , 2018, 29, 323-337.	3.0	27
137	Functionalizing non-smectic clay via methoxy-modification for enhanced removal and recovery of oxytetracycline from aqueous media. <i>Chemosphere</i> , 2021, 276, 130079.	8.2	27
138	Macro, colloidal and nanobiochar for oxytetracycline removal in synthetic hydrolyzed human urine. <i>Environmental Pollution</i> , 2020, 267, 115683.	7.5	26
139	Anammox, biochar column and subsurface constructed wetland as an integrated system for treating municipal solid waste derived landfill leachate from an open dumpsite. <i>Environmental Research</i> , 2020, 189, 109880.	7.5	26
140	Unprecedented marine microplastic contamination from the X-Press Pearl container vessel disaster. <i>Science of the Total Environment</i> , 2022, 828, 154374.	8.0	26
141	Influence of bioenergy waste biochar on proton- and ligand-promoted release of Pb and Cu in a shooting range soil. <i>Science of the Total Environment</i> , 2018, 625, 547-554.	8.0	25
142	Risk factors for endemic chronic kidney disease of unknown etiology in Sri Lanka: Retrospect of water security in the dry zone. <i>Science of the Total Environment</i> , 2021, 795, 148839.	8.0	25
143	Transgenic Plants. , 2019, , 89-102.		24
144	Potential toxicity of trace elements and nanomaterials to Chinese cabbage in arsenic- and lead-contaminated soil amended with biochars. <i>Environmental Geochemistry and Health</i> , 2019, 41, 1777-1791.	3.4	24

#	ARTICLE	IF	CITATIONS
145	Surface complexation of nickel on iron and aluminum oxides: A comparative study with single and dual site clays. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2012, 405, 79-87.	4.7	23
146	Soil Enzyme Activities in Waste Biochar Amended Multi-Metal Contaminated Soil; Effect of Different Pyrolysis Temperatures and Application Rates. <i>Communications in Soil Science and Plant Analysis</i> , 2018, 49, 635-643.	1.4	23
147	Effect of well cleaning and pumping on groundwater quality of a tsunami-affected coastal aquifer in eastern Sri Lanka. <i>Water Resources Research</i> , 2009, 45, .	4.2	22
148	Making Waves Perspectives of Modelling and Monitoring of SARS-CoV-2 in Aquatic Environment for COVID-19 Pandemic. <i>Current Pollution Reports</i> , 2020, 6, 468-479.	6.6	22
149	Characterizing Time-Dependent Contact Angles for Sands Hydrophobized with Oleic and Stearic Acids. <i>Vadose Zone Journal</i> , 2012, 11, .	2.2	22
150	A preliminary study of the role of bacterial-fungal co-inoculation on heavy metal phytotoxicity in serpentine soil. <i>Australian Journal of Botany</i> , 2015, 63, 261.	0.6	21
151	Phytoremediation in Constructed Wetlands. , 2015, , 243-263.		21
152	Effects of soil type and fertilizer on As speciation in rice paddy contaminated with As-containing pesticide. <i>Environmental Earth Sciences</i> , 2014, 71, 837-847.	2.7	20
153	Organic-coated nanoparticulate zero valent iron for remediation of chemical oxygen demand (COD) and dissolved metals from tropical landfill leachate. <i>Environmental Science and Pollution Research</i> , 2014, 21, 7075-7087.	5.3	20
154	Insights into Starch Coated Nanozero Valent Iron-Graphene Composite for Cr(VI) Removal from Aqueous Medium. <i>Journal of Nanomaterials</i> , 2016, 2016, 1-10.	2.7	20
155	Colloidal biochar for enhanced adsorption of antibiotic ciprofloxacin in aqueous and synthetic hydrolyzed human urine matrices. <i>Chemosphere</i> , 2022, 297, 133984.	8.2	20
156	Phytoremediation prospects of per- and polyfluoroalkyl substances: A review. <i>Environmental Research</i> , 2022, 212, 113311.	7.5	20
157	Role of Rhizospheric Microbes in Heavy Metal Uptake by Plants. , 2017, , 147-163.		19
158	Phytoremediation of fluoride from the environmental matrices: A review on its application strategies. <i>Groundwater for Sustainable Development</i> , 2020, 10, 100349.	4.6	19
159	The Effects of the 2004 Tsunami on a Coastal Aquifer in Sri Lanka. <i>Ground Water</i> , 2012, 50, 704-714.	1.3	18
160	Assessment of nitrate-N contamination in the Chunnakam aquifer system, Jaffna Peninsula, Sri Lanka. <i>SpringerPlus</i> , 2014, 3, 271.	1.2	18
161	Sorptive removal of pharmaceutical and personal care products from water and wastewater. , 2019, , 213-238.		18
162	Microwave and open vessel digestion methods for biochar. <i>Chemosphere</i> , 2020, 239, 124788.	8.2	18

#	ARTICLE	IF	CITATIONS
163	Carbon sequestration value of biosolids applied to soil: A global meta-analysis. Journal of Environmental Management, 2021, 284, 112008.	7.8	18
164	Fabrication of succinic acid- Fe_3O_4 nano core-shell. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2012, 403, 96-102.	4.7	17
165	Immobilization and retention of caffeine in soil amended with <i>Ulva reticulata</i> biochar. Journal of Environmental Management, 2021, 281, 111852.	7.8	17
166	Adsorption of Cd(II) and Pb(II) onto Humic Acid-Treated Coconut (<i>Cocos nucifera</i>) Husk. Journal of Hazardous, Toxic, and Radioactive Waste, 2014, 18, .	2.0	16
167	Characterizing volatile organic compounds in leachate from Gohagoda municipal solid waste dumpsite, Sri Lanka. Groundwater for Sustainable Development, 2016, 2-3, 1-6.	4.6	16
168	Heavy metal dissolution mechanisms from electrical industrial sludge. Science of the Total Environment, 2019, 696, 133922.	8.0	16
169	Urban mining of E-waste: treasure hunting for precious nanometals. , 2020, , 19-54.		16
170	Sorption and desorption of agro-pesticides in soils. , 2020, , 189-205.		16
171	Abstraction of nitrates and phosphates from water by sawdust- and rice husk-derived biochars: Their potential as N- and P-loaded fertilizer for plant productivity in nutrient deficient soil. Journal of Analytical and Applied Pyrolysis, 2021, 155, 105073.	5.5	16
172	Ethylbenzene and toluene interactions with biochar from municipal solid waste in single and dual systems. Environmental Research, 2021, 197, 111102.	7.5	16
173	Cyanotoxins uptake and accumulation in crops: Phytotoxicity and implications on human health. Toxicon, 2022, 211, 21-35.	1.6	16
174	Natural and Anthropogenic Disasters. , 2010, , .		15
175	Influence of <i>Gliricidia sepium</i> Biochar on Attenuate Perchlorate-Induced Heavy Metal Release in Serpentine Soil. Journal of Chemistry, 2017, 2017, 1-8.	1.9	14
176	Adsorptive removal of cadmium by natural red earth: equilibrium and kinetic studies. Environmental Technology (United Kingdom), 2012, 33, 597-606.	2.2	13
177	Biomass valorization and phytoremediation as integrated Technology for Municipal Solid Waste Management for developing economic context. Biomass Conversion and Biorefinery, 2021, 11, 363-382.	4.6	13
178	Effect of acid modified tea-waste biochar on crop productivity of red onion (<i>Allium cepa</i> L.). Chemosphere, 2022, 288, 132551.	8.2	13
179	Sustainable sludge management by removing emerging contaminants from urban wastewater using carbon nanotubes. , 2019, , 553-571.		12
180	Recognizing the groundwater related to chronic kidney disease of unknown etiology by humic-like organic matter. Npj Clean Water, 2022, 5, .	8.0	12

#	ARTICLE	IF	CITATIONS
181	Characterization of Aqueous Pb(II) and Cd(II) Biosorption on Native and Chemically Modified <i>Alstonia macrophylla</i> Saw Dust. <i>Bioremediation Journal</i> , 2012, 16, 113-124.	2.0	11
182	Adsorptive Removal of Trichloroethylene in Water by Crop Residue Biochars Pyrolyzed at Contrasting Temperatures: Continuous Fixed-Bed Experiments. <i>Journal of Chemistry</i> , 2015, 2015, 1-6.	1.9	11
183	Enhanced removal of ammonium from water using sulfonated reed waste biochar-A lab-scale investigation. <i>Environmental Pollution</i> , 2022, 292, 118412.	7.5	11
184	Modeling of Pb(II) adsorption by a fixed-bed column. <i>Bioremediation Journal</i> , 2016, 20, 194-208.	2.0	10
185	Biochar-based constructed wetlands to treat reverse osmosis rejected concentrates in chronic kidney disease endemic areas in Sri Lanka. <i>Environmental Geochemistry and Health</i> , 2017, 39, 1397-1407.	3.4	10
186	Perchlorate mobilization of metals in serpentine soils. <i>Applied Geochemistry</i> , 2016, 74, 203-209.	3.0	9
187	Phytoremediation for E-waste contaminated sites. , 2020, , 141-170.		9
188	A review on water governance in Sri Lanka: the lessons learnt for future water policy formulation. <i>Water Policy</i> , 2021, 23, 255-273.	1.5	9
189	Tackling water security: A global need of cross-cutting approaches. <i>Journal of Environmental Management</i> , 2022, 306, 114447.	7.8	9
190	Leachate plume delineation and lithologic profiling using surface resistivity in an open municipal solid waste dumpsite, Sri Lanka. <i>Environmental Technology (United Kingdom)</i> , 2015, 36, 2936-2943.	2.2	8
191	Iodine in commercial edible iodized salts and assessment of iodine exposure in Sri Lanka. <i>Archives of Public Health</i> , 2016, 74, 21.	2.4	8
192	Isolation, purification and analysis of dissolved organic carbon from Gohagoda uncontrolled open dumpsite leachate, Sri Lanka. <i>Environmental Technology (United Kingdom)</i> , 2017, 38, 1610-1618.	2.2	8
193	Municipal Waste Biochar for Energy and Pollution Remediation. <i>Environmental Chemistry for A Sustainable World</i> , 2018, , 227-252.	0.5	8
194	Management of Municipal Solid Waste Landfill Leachate: A Global Environmental Issue. , 2014, , 263-288.		8
195	Retention of sulfamethoxazole by cinnamon wood biochar and its efficacy of reducing bioavailability and plant uptake in soil. <i>Chemosphere</i> , 2022, 297, 134073.	8.2	8
196	Phytoremediation of Shooting Range Soils. , 2016, , 469-488.		7
197	Influence of soil water content and soil amendments on trace metal release and seedling growth in serpentine soil. <i>Journal of Soils and Sediments</i> , 2019, 19, 3908-3921.	3.0	7
198	Biochar for Sustainable Agriculture. , 2019, , 211-224.		7

#	ARTICLE	IF	CITATIONS
199	Multiphase Volatilization of Halogens at the Soil–Atmosphere Interface on Mars. <i>Journal of Geophysical Research E: Planets</i> , 2021, 126, e2021JE006929.	3.6	7
200	Role of natural red earth in arsenic removal in drinking water – comparison with synthetic gibbsite and goethite. <i>Trace Metals and Other Contaminants in the Environment</i> , 2007, , 587-601.	0.1	6
201	Surface interactions of oxytetracycline on municipal solid waste-derived biochar–montmorillonite composite. <i>Sustainable Environment</i> , 2022, 8, .	2.4	6
202	Biochar for Waste Management and Environmental Sustainability. , 2016, , 273-291.		5
203	Biochar’s Influence as a Soil Amendment for Essential Plant Nutrient Uptake. , 2017, , 47-67.		5
204	Electrochemical enhanced metal extraction from E-waste. , 2020, , 119-139.		5
205	Tsunami Impacts and Rehabilitation of Groundwater Supply: Lessons Learned from Eastern Sri Lanka. , 2010, , 82-99.		5
206	Overview Scheme for Nickel Removal and Recovery from Wastes. , 2018, , 319-340.		5
207	A facile synthesis of MgAl/layered double hydroxides from aluminum wastes. <i>Materials Letters</i> , 2022, 324, 132624.	2.6	5
208	Phytoremediation of Landfill Leachates. , 2017, , 439-467.		4
209	Technological innovation for soil/sediment remediation. <i>Journal of Soils and Sediments</i> , 2019, 19, 3881-3882.	3.0	4
210	E-waste as a challenge for public and ecosystem health. , 2020, , 101-117.		4
211	Enhance Oil & Gas Exploration with Data-Driven Geophysical and Petrophysical Models. , 2017, , .		4
212	Vulnerability Analysis of the Coastal Sandy Aquifers in the East Coast of Sri Lanka with Recharge Change Consideration. <i>The Open Hydrology Journal</i> , 2010, 4, 173-183.	0.4	4
213	A Novel Microbial Biofilm for Bioremoval of Nickel from Aqueous Media. <i>Bioremediation Journal</i> , 2015, 19, 239-248.	2.0	3
214	Bioremediation of Arsenic in Contaminated Terrestrial and Aquatic Environments. <i>Environmental Chemistry for A Sustainable World</i> , 2012, , 475-509.	0.5	3
215	Nitrogen transformation in slightly polluted surface water by a novel biofilm reactor: Long-term performance and microbial population characteristics. <i>Science of the Total Environment</i> , 2022, 829, 154623.	8.0	3
216	Animal carcass burial management: implications for sustainable biochar use. <i>Applied Biological Chemistry</i> , 2021, 64, 91.	1.9	3

#	ARTICLE	IF	CITATIONS
217	Bio-retention Systems for Storm Water Treatment and Management in Urban Systems. , 2016, , 175-200.		2
218	Development and optimization of Ti/Cu cathode and Ti/IrO ₂ anode for electrochemical denitrification. Desalination and Water Treatment, 2016, 57, 19025-19037.	1.0	2
219	Role of Biosurfactants on Microbial Degradation of Oil-Contaminated Soils. , 2017, , 165-181.		2
220	Medical geology of endemic goiter in Kalutara, Sri Lanka; distribution and possible causes. Environmental Geochemistry and Health, 2017, 39, 1501-1511.	3.4	2
221	Biochar-mediated soils for efficient use of agrochemicals. , 2020, , 621-645.		2
222	Effect of traffic congestion and vegetation on airborne bacteria in a city of a developing country. Air Quality, Atmosphere and Health, 2021, 14, 1103-1116.	3.3	2
223	Influence of biochar on soil biology in the charosphere. , 2022, , 273-291.		2
224	Clay-biochar composite for arsenic removal from aqueous media. , 2019, , 437-438.		1
225	Fate and Behavior of Microplastics in Freshwater Systems. , 2020, , 1-31.		1
226	Status of Particulate Marine Plastics in Sri Lanka. , 2020, , 297-326.		1
227	Harnessing biofertilizer from human urine via chemogenic and biogenic routes: Synthesis, characterization and agronomic application. Environmental Technology and Innovation, 2021, 25, 102152.	6.1	1
228	Biochar amalgamation with clay: Enhanced performance for environmental remediation. Advances in Chemical Pollution, Environmental Management and Protection, 2021, 7, 1-37.	0.5	1
229	Fate and Behavior of Microplastics in Freshwater Systems. , 2022, , 781-811.		1
230	Design and robust scheduling of nano-satellite swarm for synthetic aperture radar applications. , 2014, , .		0
231	Trace Metals in the Atmospheric Deposition and Gaseous Emissions around Karadiyana Municipal Solid Waste Dumpsite, Sri Lanka. , 2021, , .		0
232	Biochar-based Barricade and Wetland as an Integrated Landfill Leachate Treatment System. , 2021, , .		0
233	Lablity and Bioavailability of Toxic Heavy Metals in Ratnapura District Gem Sediments, Sri Lanka. , 2021, , .		0
234	Heavy Metal Uptake and Tolerance Mechanisms of Serpentine Flora: Implications for Phytoremediation. , 2016, , 439-452.		0

#	ARTICLE	IF	CITATIONS
235	Phytoremediation of Polycyclic Aromatic Hydrocarbons (PAHs) in Urban Atmospheric Deposition Using Bio-retention Systems. , 2016, , 91-115.		0
236	Interaction of arsenic with biochar in soil. Arsenic in the Environment Proceedings, 2016, , 596-598.	0.0	0
237	Geochemical processes for mobilization of arsenic in groundwater. Arsenic in the Environment Proceedings, 2016, , 23-24.	0.0	0
238	Assessment of Atmospheric Deposition and Spatial Variability of Trace Metals in Kandy City and Suburbs using Bio-monitoring Technique in Mosses. Vidyodaya Journal of Science, 2019, 21, 1.	0.1	0
239	Ecological Effects of Chemical Contaminants Adsorbed to Microplastics. , 2020, , 1-31.		0
240	Ecological Effects of Chemical Contaminants Adsorbed to Microplastics. , 2022, , 1019-1048.		0