Muhammad Rizwan

List of Publications by Year in Descending Order

385 papers	15,265 citations	66 h-index	108 g-index
405 ext. papers	20,620 ext. citations	5.3 avg, IF	7.27 L-index

#	Paper	IF	Citations
385	S-Fertilizer (Elemental Sulfur) Improves the Phytoextraction of Cadmium through L.. *International Journal of Environmental Research and Public Health*, **2022**, 19,	4.6	1
384	Chromium-resistant Staphylococcus aureus alleviates chromium toxicity by developing synergistic relationships with zinc oxide nanoparticles in wheat.. *Ecotoxicology and Environmental Safety*, **2022**, 230, 113142	7	11
383	Rice straw biochar in combination with farmyard manure mitigates bromoxynil toxicity in wheat (Triticum aestivum L.).. *Chemosphere*, **2022**, 295, 133854	8.4	
382	Zinc fortification and alleviation of cadmium stress by application of lysine chelated zinc on different varieties of wheat and rice in cadmium stressed soil.. *Chemosphere*, **2022**, 295, 133829	8.4	0
381	A new technique for reducing accumulation, transport, and toxicity of heavy metals in wheat (Triticum aestivum L.) by bio-filtration of river wastewater.. *Chemosphere*, **2022**, 294, 133642	8.4	1
380	The comparison of interstitial relative humidity and temperatures of hermetic and polypropylene bag for wheat grain storage under different agro-climatic conditions of rice-wheat ecosystem of Pakistan: Effect on seed quality and protection against insect pests. *Journal of Stored Products Research*, **2022**, 96, 101936	2.5	0
379	Combined application of zinc and iron-lysine and its effects on morpho-physiological traits, antioxidant capacity and chromium uptake in rapeseed (Brassica napus L.).. *PLoS ONE*, **2022**, 17, e0262140	3.7	4
378	Physiological and biochemical characterization of Kalongi (Nigella sativa) against arsenic stress: Implications for human health risk assessment.. *Environmental Pollution*, **2022**, 298, 118829	9.3	0
377	Green molybdenum nanoparticles-mediated bio-stimulation of Bacillus sp. strain ZH16 improved the wheat growth by managing in planta nutrients supply, ionic homeostasis and arsenic accumulation. *Journal of Hazardous Materials*, **2022**, 423, 127024	12.8	7
376	Foliar application of silica sol alleviates boron toxicity in rice (Oryza sativa) seedlings. *Journal of Hazardous Materials*, **2022**, 423, 127175	12.8	2
375	Electroactive polymeric nanocomposite BC-g-(Fe3O4/GO) materials for bone tissue engineering: In-vitro evaluations.. *Journal of Biomaterials Science, Polymer Edition*, **2022**, 1-16	3.5	2
374	Genome-Wide Expression and Physiological Profiling of Pearl Millet Genotype Reveal the Biological Pathways and Various Gene Clusters Underlying Salt Resistance.. *Frontiers in Plant Science*, **2022**, 13, 849618	6.2	0
373	Determining the appropriate level of farmyard manure biochar application in saline soils for three selected farm tree species.. *PLoS ONE*, **2022**, 17, e0265005	3.7	1
372	Microbe-citric acid assisted phytoremediation of chromium by castor bean (Ricinus communis L.).. *Chemosphere*, **2022**, 134065	8.4	1
371	Combined effects of green manure and zinc oxide nanoparticles on cadmium uptake by wheat (Triticum aestivum L.).. *Chemosphere*, **2022**, 298, 134348	8.4	0
370	Green synthesis and characterization of silver nanoparticles from Acacia nilotica and their anticancer, antidiabetic and antioxidant efficacy.. *Environmental Pollution*, **2022**, 304, 119249	9.3	0
369	Wastewater Pollution, Types and Treatment Methods Assisted Different Amendments. A Review **2022**, 293-310		0

368	Efficacy of Various Amendments for the Phytomanagement of Heavy Metal Contaminated Sites and Sustainable Agriculture. A Review **2022**, 239-272		0
367	Potential of nanocomposites of zero valent copper and magnetite with Eleocharis dulcis biochar for packed column and batch scale removal of Congo red dye.. *Environmental Pollution*, **2022**, 305, 119291	9.3	0
366	Nickel Toxicity Interferes with NO3/NH4+ Uptake and Nitrogen Metabolic Enzyme Activity in Rice (Oryza sativa L.). *Plants*, **2022**, 11, 1401	4.5	0
365	Environmental and Health Effects of Heavy Metals and Their Treatment Methods. *Emerging Contaminants and Associated Treatment Technologies*, **2022**, 143-175	0.5	
364	nCOV-19 peptides mass fingerprinting identification, binding, and blocking of inhibitors flavonoids and anthraquinone of and hydroxychloroquine. *Journal of Biomolecular Structure and Dynamics*, **2021**, 39, 4089-4099	3.6	17
363	Combined Application of Citric Acid and Cr Resistant Microbes Improved Castor Bean Growth and Photosynthesis while It Alleviated Cr Toxicity by Reducing Cr to Cr.. *Microorganisms*, **2021**, 9,	4.9	2
362	Kinetic model studies of controlled nutrient release and swelling behavior of combo hydrogel using Acer platanoides cellulose. *Journal of the Taiwan Institute of Chemical Engineers*, **2021**, 131, 104137-104137	5.3	0
361	Nondetrimental impact of two concomitant entomopathogenic fungi on life history parameters of a generalist predator, Coccinella septempunctata (Coleoptera: Coccinellidae). *Scientific Reports*, **2021**, 11, 20699	4.9	1
360	Influence of calcium and magnesium elimination on plant biomass and secondary metabolites of Stevia rebaudiana Bertoni. *Biotechnology and Applied Biochemistry*, **2021**,	2.8	2
359	Alleviating lead-induced phytotoxicity and enhancing the phytoremediation of castor bean (L.) by glutathione application: new insights into the mechanisms regulating antioxidants, gas exchange and lead uptake. *International Journal of Phytoremediation*, **2021**, 1-12	3.9	2
358	Current trends and future prospective in nanoremediation of heavy metals contaminated soils: A way forward towards sustainable agriculture. *Ecotoxicology and Environmental Safety*, **2021**, 227, 112888	7	3
357	Edible mushroom (Flammulina velutipes) as biosource for silver nanoparticles: from synthesis to diverse biomedical and environmental applications. *Nanotechnology*, **2021**, 32, 065101	3.4	21
356	Synthesis and Characterization of Na-Zeolites from Textile Waste Ash and Its Application for Removal of Lead (Pb) from Wastewater. *International Journal of Environmental Research and Public Health*, **2021**, 18,	4.6	7
355	Green Synthesis of Zinc Oxide (ZnO) Nanoparticles Using Aqueous Fruit Extracts of : Their Characterizations and Biological and Environmental Applications. *ACS Omega*, **2021**, 6, 9709-9722	3.9	55
354	Menadione sodium bisulfite alleviated chromium effects on wheat by regulating oxidative defense, chromium speciation, and ion homeostasis. *Environmental Science and Pollution Research*, **2021**, 28, 36205-36225	5.1	8
353	Effect of three different types of biochars on eco-physiological response of important agroforestry tree species under salt stress. *International Journal of Phytoremediation*, **2021**, 23, 1412-1422	3.9	1
352	Synthesis, characterization, hydrolytic degradation, mathematical modeling and antibacterial activity of poly[bis((methoxyethoxy)ethoxy)phosphazene] (MEEP). *Polymer Bulletin*, **2021**, 78, 6059-6072	2.4	0
351	Combined Citric Acid and Glutathione Augments Lead (Pb) Stress Tolerance and Phytoremediation of Castorbean through Antioxidant Machinery and Pb Uptake. *Sustainability*, **2021**, 13, 4073	3.6	5

350	TiO nanoparticles dose, application method and phosphorous levels influence genotoxicity in Rice (Oryza sativa L.), soil enzymatic activities and plant growth. *Ecotoxicology and Environmental Safety*, **2021**, 213, 111977	7	14
349	Synthesis, characterization and advanced sustainable applications of titanium dioxide nanoparticles: A review. *Ecotoxicology and Environmental Safety*, **2021**, 212, 111978	7	50
348	Appraisal for organic amendments and plant growth-promoting rhizobacteria to enhance crop productivity under drought stress: A review. *Journal of Agronomy and Crop Science*, **2021**, 207, 783-802	3.9	11
347	Menadione sodium bisulphite regulates physiological and biochemical responses to lessen salinity effects on wheat (L.). *Physiology and Molecular Biology of Plants*, **2021**, 27, 1135-1152	2.8	3
346	Phosphate-lanthanum coated sewage sludge biochar improved the soil properties and growth of ryegrass in an alkaline soil. *Ecotoxicology and Environmental Safety*, **2021**, 216, 112173	7	6
345	Multi-element uptake and growth responses of Rice (Oryza sativa L.) to TiO nanoparticles applied in different textured soils. *Ecotoxicology and Environmental Safety*, **2021**, 215, 112149	7	9
344	Combined use of different nanoparticles effectively decreased cadmium (Cd) concentration in grains of wheat grown in a field contaminated with Cd. *Ecotoxicology and Environmental Safety*, **2021**, 215, 112139	7	15
343	Cadmium uptake and translocation: selenium and silicon roles in Cd detoxification for the production of low Cd crops: a critical review. *Chemosphere*, **2021**, 273, 129690	8.4	36
342	Assessment of early physiological and biochemical responses in chia (Salvia hispanica L.) sprouts under salt stress. *Acta Physiologiae Plantarum*, **2021**, 43, 1	2.6	1
341	Beneficial role of Azolla sp. in paddy soils and their use as bioremediators in polluted aqueous environments: implications and future perspectives. *Archives of Agronomy and Soil Science*, **2021**, 67, 1242-1255	2	7
340	Synthesis, characterization and application of novel MnO and CuO impregnated biochar composites to sequester arsenic (As) from water: Modeling, thermodynamics and reusability. *Journal of Hazardous Materials*, **2021**, 401, 123338	12.8	54
339	Synergistic effect of silicon and selenium on the alleviation of cadmium toxicity in rice plants. *Journal of Hazardous Materials*, **2021**, 401, 123393	12.8	43
338	Boron supply alleviates cadmium toxicity in rice (Oryza sativa L.) by enhancing cadmium adsorption on cell wall and triggering antioxidant defense system in roots. *Chemosphere*, **2021**, 266, 128938	8.4	26
337	Enhanced performance of OSR-3 in combination with putrescine ameliorated hydrocarbon stress in. *International Journal of Phytoremediation*, **2021**, 23, 119-129	3.9	10
336	Lead (Pb)-resistant bacteria inhibit Pb accumulation in dill (Anethum graveolens L.) by improving biochemical, physiological, and antioxidant enzyme response of plants. *Environmental Science and Pollution Research*, **2021**, 28, 5704-5713	5.1	3
335	Application of abscisic acid and 6-benzylaminopurine modulated morpho-physiological and antioxidative defense responses of tomato (Solanum lycopersicum L.) by minimizing cobalt uptake. *Chemosphere*, **2021**, 263, 128169	8.4	38
334	Exogenous abscisic acid and jasmonic acid restrain polyethylene glycol-induced drought by improving the growth and antioxidative enzyme activities in pearl millet. *Physiologia Plantarum*, **2021**, 172, 809-819	4.6	23
333	Dopamine Alleviates Hydrocarbon Stress in Brassica oleracea through Modulation of Physio-Biochemical Attributes and Antioxidant Defense Systems. *Chemosphere*, **2021**, 270, 128633	8.4	12

332	Effects of 24-epibrassinolide on plant growth, antioxidants defense system, and endogenous hormones in two wheat varieties under drought stress. *Physiologia Plantarum*, **2021**, 172, 696-706	4.6	37
331	Silicon mediated improvement in the growth and ion homeostasis by decreasing Na uptake in maize (Zea mays L.) cultivars exposed to salinity stress. *Plant Physiology and Biochemistry*, **2021**, 158, 208-218	5.4	32
330	Nanocomposites of sedimentary material with ZnO and magnetite for the effective sequestration of arsenic from aqueous systems: Reusability, modeling and kinetics. *Environmental Technology and Innovation*, **2021**, 21, 101298	7	6
329	Combined effect of Bacillus fortis IAGS 223 and zinc oxide nanoparticles to alleviate cadmium phytotoxicity in Cucumis melo. *Plant Physiology and Biochemistry*, **2021**, 158, 1-12	5.4	19
328	Effect of alkaline and chemically engineered biochar on soil properties and phosphorus bioavailability in maize. *Chemosphere*, **2021**, 266, 128980	8.4	9
327	Silver nanoparticles improved the plant growth and reduced the sodium and chlorine accumulation in pearl millet: a life cycle study. *Environmental Science and Pollution Research*, **2021**, 28, 13712-13724	5.1	17
326	Foliar exposure of zinc oxide nanoparticles improved the growth of wheat (Triticum aestivum L.) and decreased cadmium concentration in grains under simultaneous Cd and water deficient stress. *Ecotoxicology and Environmental Safety*, **2021**, 208, 111627	7	50
325	Foliar application of silicon nanoparticles affected the growth, vitamin C, flavonoid, and antioxidant enzyme activities of coriander (Coriandrum sativum L.) plants grown in lead (Pb)-spiked soil. *Environmental Science and Pollution Research*, **2021**, 28, 1417-1425	5.1	38
324	Effect of biochar and compost on cadmium bioavailability and its uptake by wheat□ice cropping system irrigated with untreated sewage water: a field study. *Arabian Journal of Geosciences*, **2021**, 14, 1	1.8	8
323	A Critical Review on the Synthesis of Natural Sodium Alginate Based Composite Materials: An Innovative Biological Polymer for Biomedical Delivery Applications. *Processes*, **2021**, 9, 137	2.9	26
322	Alteration of plant physiology by the application of biochar for remediation of organic pollutants **2021**, 475-492		2
321	Metals Phytoextraction by Brassica Species **2021**, 361-384		2
320	Heavy Metals Induced Physiological and Biochemical Changes in Fenugreek (Trigonella foenum-graceum L.) **2021**, 239-258		
319	Selective Removal of Hexavalent Chromium from Wastewater by Rice Husk: Kinetic, Isotherm and Spectroscopic Investigation. *Water (Switzerland)*, **2021**, 13, 263	3	11
318	Are Clay Minerals a Significant Source of Si for Crops? A Comparison of Amorphous Silica and the Roles of the Mineral Type and pH. *Silicon*, **2021**, 13, 3611-3618	2.4	4
317	Effects of biochar, farm manure, and pressmud on mineral nutrients and cadmium availability to wheat (Triticum aestivum L.) in Cd-contaminated soil. *Physiologia Plantarum*, **2021**, 173, 191-200	4.6	2
316	Effective sequestration of Congo red dye with ZnO/cotton stalks biochar nanocomposite: MODELING, reusability and stability. *Journal of Saudi Chemical Society*, **2021**, 25, 101176	4.3	22
315	A manipulative interplay between positive and negative regulators of phytohormones: A way forward for improving drought tolerance in plants. *Physiologia Plantarum*, **2021**, 172, 1269-1290	4.6	16

314	The Sewage Sludge Biochar and Its Composts Influence the Phosphate Sorption in an Alkaline Calcareous Soil. *Sustainability*, **2021**, 13, 1779	3.6	0
313	Curcuma longa Mediated Synthesis of Copper Oxide, Nickel Oxide and Cu-Ni Bimetallic Hybrid Nanoparticles: Characterization and Evaluation for Antimicrobial, Anti-Parasitic and Cytotoxic Potentials. *Coatings*, **2021**, 11, 849	2.9	7
312	Effect of green and chemically synthesized titanium dioxide nanoparticles on cadmium accumulation in wheat grains and potential dietary health risk: A field investigation. *Journal of Hazardous Materials*, **2021**, 415, 125585	12.8	11
311	Combined use of zinc nanoparticles and co-composted biochar enhanced wheat growth and decreased Cd concentration in grains under Cd and drought stress: A field study. *Environmental Technology and Innovation*, **2021**, 23, 101518	7	6
310	Effect of gibberellic acid and titanium dioxide nanoparticles on growth, antioxidant defense system and mineral nutrient uptake in wheat. *Ecotoxicology and Environmental Safety*, **2021**, 221, 112436	7	8
309	Recent progress on the heavy metals ameliorating potential of engineered nanomaterials in rice paddy: a comprehensive outlook on global food safety with nanotoxicitiy issues. *Critical Reviews in Food Science and Nutrition*, **2021**, 1-15	11.5	4
308	Effects of nanoparticles on trace element uptake and toxicity in plants: A review. *Ecotoxicology and Environmental Safety*, **2021**, 221, 112437	7	14
307	Salinity mitigates cadmium-induced phytotoxicity in quinoa (Chenopodium quinoa Willd.) by limiting the Cd uptake and improved responses to oxidative stress: implications for phytoremediation. *Environmental Geochemistry and Health*, **2021**, 1	4.7	3
306	Silicon elevated cadmium tolerance in wheat (Triticum aestivum L.) by endorsing nutrients uptake and antioxidative defense mechanisms in the leaves. *Plant Physiology and Biochemistry*, **2021**, 166, 148-159	5.4	7
305	Cellulose supported magnetic nanohybrids: Synthesis, physicomagnetic properties and biomedical applications-A review. *Carbohydrate Polymers*, **2021**, 267, 118136	10.3	4
304	Biochar composite with microbes enhanced arsenic biosorption and phytoextraction by Typha latifolia in hybrid vertical subsurface flow constructed wetland. *Environmental Pollution*, **2021**, 291, 118269	9.3	4
303	Biochar mitigates arsenic-induced human health risks and phytotoxicity in quinoa under saline conditions by modulating ionic and oxidative stress responses. *Environmental Pollution*, **2021**, 287, 117348	9.3	10
302	Biogenic and characterizations of new silver nanoparticles stabilized with indole acetic acid derived from Azospirillum brasilense MMGH-SADAT1, their bioactivity, and histopathological assessment in rats. *Ecotoxicology and Environmental Safety*, **2021**, 222, 112521	7	1
301	Recent advances in nanoparticles associated ecological harms and their biodegradation: Global environmental safety from nano-invaders. *Journal of Environmental Chemical Engineering*, **2021**, 9, 106093	6.8	3
300	Arsenic behavior in soil-plant system and its detoxification mechanisms in plants: A review. *Environmental Pollution*, **2021**, 286, 117389	9.3	13
299	Effects of silicon on heavy metal uptake at the soil-plant interphase: A review. *Ecotoxicology and Environmental Safety*, **2021**, 222, 112510	7	27
298	Boron application mitigates Cd toxicity in leaves of rice by subcellular distribution, cell wall adsorption and antioxidant system. *Ecotoxicology and Environmental Safety*, **2021**, 222, 112540	7	4
297	Biological synthesis, characterization of three metal-based nanoparticles and their anticancer activities against hepatocellular carcinoma HepG2 cells. *Ecotoxicology and Environmental Safety*, **2021**, 223, 112575	7	4

296	Host-pathogen interaction between Asian citrus psyllid and entomopathogenic fungus (Cordyceps fumosorosea) is regulated by modulations in gene expression, enzymatic activity and HLB-bacterial population of the host. *Comparative Biochemistry and Physiology Part - C: Toxicology and Pharmacology*, **2021**, 248, 109112	3.2	8
295	Abscisic acid signaling reduced transpiration flow, regulated Na+ ion homeostasis and antioxidant enzyme activities to induce salinity tolerance in wheat (Triticum aestivum L.) seedlings. *Environmental Technology and Innovation*, **2021**, 24, 101808	7	7
294	Cellulose extraction of Alstonia scholaris: A comparative study on efficiency of different bleaching reagents for its isolation and characterization. *International Journal of Biological Macromolecules*, **2021**, 191, 964-972	7.9	3
293	Efficacy of Lemna minor and Typha latifolia for the treatment of textile industry wastewater in a constructed wetland under citric acid amendment: A lab scale study. *Chemosphere*, **2021**, 283, 131107	8.4	2
292	Green magnesium oxide nanoparticles-based modulation of cellular oxidative repair mechanisms to reduce arsenic uptake and translocation in rice (Oryza sativa L.) plants. *Environmental Pollution*, **2021**, 288, 117785	9.3	18
291	Comparative efficacy of raw and HNO-modified biochar derived from rice straw on vanadium transformation and its uptake by rice (Oryza sativa L.): Insights from photosynthesis, antioxidative response, and gene-expression profile. *Environmental Pollution*, **2021**, 289, 117916	9.3	4
290	Interactions of nanoparticles and salinity stress at physiological, biochemical and molecular levels in plants: A review. *Ecotoxicology and Environmental Safety*, **2021**, 225, 112769	7	8
289	Research advances and applications of biosensing technology for the diagnosis of pathogens in sustainable agriculture. *Environmental Science and Pollution Research*, **2021**, 28, 9002-9019	5.1	21
288	Surface water quality assessment of Skardu springs using Water Quality Index. *Environmental Science and Pollution Research*, **2021**, 28, 20537-20548	5.1	10
287	Remediation of organic pollutants by Brassica species **2021**, 689-700		1
286	Heavy Metals-Induced Morphophysiological and Biochemical Changes in Mentha piperita L. **2021**, 223-237		
285	Hydrogen sulfide alleviates chromium stress on cauliflower by restricting its uptake and enhancing antioxidative system. *Physiologia Plantarum*, **2020**, 168, 289-300	4.6	48
284	Straw-based biochar mediated potassium availability and increased growth and yield of cotton (Gossypium hirsutum L.). *Journal of Saudi Chemical Society*, **2020**, 24, 963-973	4.3	5
283	Effect of biochar and phosphate solubilizing bacteria on growth and phosphorus uptake by maize in an Aridisol. *Arabian Journal of Geosciences*, **2020**, 13, 1	1.8	5
282	Effect of biochars, biogenic, and inorganic amendments on dissolution and kinetic release of phytoavailable silicon in texturally different soils under submerged conditions. *Arabian Journal of Geosciences*, **2020**, 13, 1	1.8	3
281	Citric acid enhanced phytoextraction of nickel (Ni) and alleviate Mentha piperita (L.) from Ni-induced physiological and biochemical damages. *Environmental Science and Pollution Research*, **2020**, 27, 27010-27022	5.1	16
280	Role of Nitric Oxide and Calcium Signaling in Abiotic Stress Tolerance in Plants **2020**, 563-581		2
279	Accumulation potential and tolerance response of Typha latifolia L. under citric acid assisted phytoextraction of lead and mercury. *Chemosphere*, **2020**, 257, 127247	8.4	19

278	Effective sequestration of Cr (VI) from wastewater using nanocomposite of ZnO with cotton stalks biochar: modeling, kinetics, and reusability. *Environmental Science and Pollution Research*, **2020**, 27, 33821-33834	5.1	12
277	Effect of gibberellic acid on growth, biomass, and antioxidant defense system of wheat (Triticum aestivum L.) under cerium oxide nanoparticle stress. *Environmental Science and Pollution Research*, **2020**, 27, 33809-33820	5.1	7
276	Green remediation of salineodic Pb-factored soil by growing salt-tolerant rice cultivar along with soil applied inorganic amendments. *Paddy and Water Environment*, **2020**, 18, 637-649	1.6	3
275	Physicochemical and Bacteriological Characterization of Industrial Wastewater Being Discharged to Surface Water Bodies: Significant Threat to Environmental Pollution and Human Health. *Journal of Chemistry*, **2020**, 2020, 1-10	2.3	5
274	Effect of acidified biochar on bioaccumulation of cadmium (Cd) and rice growth in contaminated soil. *Environmental Technology and Innovation*, **2020**, 19, 101015	7	20
273	Ethylenediaminetetraacetic Acid (EDTA) Mitigates the Toxic Effect of Excessive Copper Concentrations on Growth, Gaseous Exchange and Chloroplast Ultrastructure of L. and Improves Copper Accumulation Capabilities. *Plants*, **2020**, 9,	4.5	32
272	N-Fertilizer (Urea) Enhances the Phytoextraction of Cadmium through L. *International Journal of Environmental Research and Public Health*, **2020**, 17,	4.6	7
271	Synthesis and characterization of titanium dioxide nanoparticles by chemical and green methods and their antifungal activities against wheat rust. *Chemosphere*, **2020**, 258, 127352	8.4	49
270	Efficacy of fenugreek plant for ascorbic acid assisted phytoextraction of copper (Cu); A detailed study of Cu induced morpho-physiological and biochemical alterations. *Chemosphere*, **2020**, 251, 126424	8.4	14
269	Engineered ZnO and CuO Nanoparticles Ameliorate Morphological and Biochemical Response in Tissue Culture Regenerants of Candyleaf (). *Molecules*, **2020**, 25,	4.8	29
268	Citric Acid Assisted Phytoremediation of Chromium through Sunflower Plants Irrigated with Tannery Wastewater. *Plants*, **2020**, 9,	4.5	9
267	Application of Floating Aquatic Plants in Phytoremediation of Heavy Metals Polluted Water: A Review. *Sustainability*, **2020**, 12, 1927	3.6	107
266	Comparative evaluation of wheat straw and press mud biochars for Cr(VI) elimination from contaminated aqueous solution. *Environmental Technology and Innovation*, **2020**, 19, 101017	7	13
265	Isolation and characterization of lead (Pb) resistant microbes and their combined use with silicon nanoparticles improved the growth, photosynthesis and antioxidant capacity of coriander (Coriandrum sativum L.) under Pb stress. *Environmental Pollution*, **2020**, 266, 114982	9.3	31
264	Use of Nitric Oxide and Hydrogen Peroxide for Better Yield of Wheat (L.) under Water Deficit Conditions: Growth, Osmoregulation, and Antioxidative Defense Mechanism. *Plants*, **2020**, 9,	4.5	44
263	Jute: A Potential Candidate for Phytoremediation of Metals-A Review. *Plants*, **2020**, 9,	4.5	60
262	Chromium resistant microbes and melatonin reduced Cr uptake and toxicity, improved physio-biochemical traits and yield of wheat in contaminated soil. *Chemosphere*, **2020**, 250, 126239	8.4	39
261	Effect of biochar modified with magnetite nanoparticles and HNO for efficient removal of Cr(VI) from contaminated water: A batch and column scale study. *Environmental Pollution*, **2020**, 261, 114231	9.3	58

260	Influence of phosphorus on copper phytoextraction via modulating cellular organelles in two jute (Corchorus capsularis L.) varieties grown in a copper mining soil of Hubei Province, China. *Chemosphere*, **2020**, 248, 126032	8.4	82
259	Dynamics of AB-DTPA-extractable Zn in high and low limed calcareous soils amended with biochar and farmyard and poultry manures. *Arabian Journal of Geosciences*, **2020**, 13, 1	1.8	
258	Flax L.): A Potential Candidate for Phytoremediation? Biological and Economical Points of View. *Plants*, **2020**, 9,	4.5	48
257	Existence of the solution to second order differential equation through fixed point results for nonlinear F-contractions involving w0-distance. *Filomat*, **2020**, 34, 4079-4094	0.7	
256	Influence of Metals and Metalloids on Microbial Diversity of Soil and Ecosystem **2020**, 95-111		
255	Bacterial Augmented Floating Treatment Wetlands for Efficient Treatment of Synthetic Textile Dye Wastewater. *Sustainability*, **2020**, 12, 3731	3.6	21
254	Iron□lysine Mediated Alleviation of Chromium Toxicity in Spinach (Spinacia oleracea L.) Plants in Relation to Morpho-Physiological Traits and Iron Uptake When Irrigated with Tannery Wastewater. *Sustainability*, **2020**, 12, 6690	3.6	23
253	Fertigation of Ajwain (Trachyspermum ammi L.) with Fe-Glutamate Confers Better Plant Performance and Drought Tolerance in Comparison with FeSO4. *Sustainability*, **2020**, 12, 7119	3.6	5
252	In Situ Phytoremediation of Metals. *Concepts and Strategies in Plant Sciences*, **2020**, 103-121	0.5	2
251	Effect of Nanoparticles on Plant Growth and Physiology and on Soil Microbes. *Nanotechnology in the Life Sciences*, **2020**, 65-85	1.1	2
250	Restoration of Degraded Soil for Sustainable Agriculture **2020**, 31-81		9
249	Rice Production, Augmentation, Escalation, and Yield Under Water Stress **2020**, 117-128		2
248	Individual and combined application of EDTA and citric acid assisted phytoextraction of copper using jute (Corchorus capsularis L.) seedlings. *Environmental Technology and Innovation*, **2020**, 19, 100895	7	26
247	Residual effects of biochar and phosphorus on growth and nutrient accumulation by maize (Zea mays L.) amended with microbes in texturally different soils. *Chemosphere*, **2020**, 238, 124710	8.4	34
246	Loading of Cefixime to pH sensitive chitosan based hydrogel and investigation of controlled release kinetics. *International Journal of Biological Macromolecules*, **2020**, 155, 1236-1244	7.9	36
245	High sorption efficiency for As(III) and As(V) from aqueous solutions using novel almond shell biochar. *Chemosphere*, **2020**, 243, 125330	8.4	48
244	A review of biochar-based sorbents for separation of heavy metals from water. *International Journal of Phytoremediation*, **2020**, 22, 111-126	3.9	57
243	Efficacy of Entomopathogenic Fungi Against Brown Planthopper Nilaparvata Lugens (Stl) (Homoptera: Delphacidae) Under Controlled Conditions. *Gesunde Pflanzen*, **2020**, 72, 101-112	1.9	5

242	Comparing the performance of four macrophytes in bacterial assisted floating treatment wetlands for the removal of trace metals (Fe, Mn, Ni, Pb, and Cr) from polluted river water. *Chemosphere*, **2020**, 243, 125353	8.4	28
241	Biomass for renewable energy production in Pakistan: current state and prospects. *Arabian Journal of Geosciences*, **2020**, 13, 1	1.8	9
240	Kinetics and controlled release of lidocaine from novel carrageenan and alginate-based blend hydrogels. *International Journal of Biological Macromolecules*, **2020**, 147, 67-78	7.9	19
239	Potential of siltstone and its composites with biochar and magnetite nanoparticles for the removal of cadmium from contaminated aqueous solutions: Batch and column scale studies. *Environmental Pollution*, **2020**, 259, 113938	9.3	25
238	Biochar-induced immobilization and transformation of silver-nanoparticles affect growth, intracellular-radicles generation and nutrients assimilation by reducing oxidative stress in maize. *Journal of Hazardous Materials*, **2020**, 390, 121976	12.8	17
237	Green synthesized silver nanoparticles induced cytogenotoxic and genotoxic changes in Allium cepa L. varies with nanoparticles doses and duration of exposure. *Chemosphere*, **2020**, 243, 125430	8.4	28
236	Assessment of grain yield indices in response to drought stress in wheat (L.). *Saudi Journal of Biological Sciences*, **2020**, 27, 1818-1823	4	20
235	Surface characterizations of membranes and electrospun chitosan derivatives by optical speckle analysis. *Surface and Interface Analysis*, **2020**, 52, 132-139	1.5	1
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233	Glycinebetaine alleviates the chromium toxicity in Brassica oleracea L. by suppressing oxidative stress and modulating the plant morphology and photosynthetic attributes. *Environmental Science and Pollution Research*, **2020**, 27, 1101-1111	5.1	32
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