## **Muhammad Imran**

List of Publications by Year in descending order

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82 papers 4,664 citations

35 h-index 64 g-index

82 all docs 82 docs citations

82 times ranked 5247 citing authors

| #  | Article  | IF  | Citations |
|----|--|-----|-----------|
| 1  | Bacterial biofilm and associated infections. Journal of the Chinese Medical Association, 2018, 81, 7-11.   | 0.6 | 973       |
| 2  | Zinc oxide nanoparticles alter the wheat physiological response and reduce the cadmium uptake by plants. Environmental Pollution, 2018, 242, 1518-1526.  | 3.7 | 304       |
| 3  | Alleviation of cadmium accumulation in maize (Zea mays L.) by foliar spray of zinc oxide nanoparticles and biochar to contaminated soil. Environmental Pollution, 2019, 248, 358-367.  | 3.7 | 230       |
| 4  | Solar light driven degradation of norfloxacin using as-synthesized Bi3+ and Fe2+ co-doped ZnO with the addition of HSO5a^': Toxicities and degradation pathways investigation. Chemical Engineering Journal, 2018, 351, 841-855.   | 6.6 | 209       |
| 5  | Hydroxyl and sulfate radical mediated degradation of ciprofloxacin using nano zerovalent manganese catalyzed S2O82â^'. Chemical Engineering Journal, 2019, 356, 199-209.   | 6.6 | 158       |
| 6  | Nano-zerovalent manganese/biochar composite for the adsorptive and oxidative removal of Congo-red dye from aqueous solutions. Journal of Hazardous Materials, 2021, 403, 123854.   | 6.5 | 144       |
| 7  | Greener synthesis of zinc oxide nanoparticles using Trianthema portulacastrum extract and evaluation of its photocatalytic and biological applications. Journal of Photochemistry and Photobiology B: Biology, 2019, 192, 147-157. | 1.7 | 133       |
| 8  | 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. | 6.5 | 112       |
| 9  | Synthesis and characterization of titanium dioxide nanoparticles by chemical and green methods and their antifungal activities against wheat rust. Chemosphere, 2020, 258, 127352.   | 4.2 | 110       |
| 10 | Size dependent catalytic activities of green synthesized gold nanoparticles and electro-catalytic oxidation of catechol on gold nanoparticles modified electrode. RSC Advances, 2015, 5, 99364-99377.                              | 1.7 | 108       |
| 11 | Synergistic effects of activated carbon and nano-zerovalent copper on the performance of hydroxyapatite-alginate beads for the removal of As3+ from aqueous solution. Journal of Cleaner Production, 2019, 235, 875-886.           | 4.6 | 108       |
| 12 | Health risk assessment of drinking arsenic-containing groundwater in Hasilpur, Pakistan: effect of sampling area, depth, and source. Environmental Science and Pollution Research, 2019, 26, 20018-20029.                          | 2.7 | 96        |
| 13 | Effect of biochar modified with magnetite nanoparticles and HNO3 for efficient removal of Cr(VI) from contaminated water: A batch and column scale study. Environmental Pollution, 2020, 261, 114231.                              | 3.7 | 95        |
| 14 | Effect of Silver Nanoparticles on Biofilm Formation and EPS Production of Multidrug-Resistant <i>Klebsiella pneumoniae</i>   | 0.9 | 90        |
| 15 | Arsenic Level and Risk Assessment of Groundwater in Vehari, Punjab Province, Pakistan. Exposure and Health, 2018, 10, 229-239.   | 2.8 | 76        |
| 16 | Batch and Column Scale Removal of Cadmium from Water Using Raw and Acid Activated Wheat Straw Biochar. Water (Switzerland), 2019, 11, 1438.  | 1.2 | 76        |
| 17 | Arsenic Behaviour in Soil-Plant System: Biogeochemical Reactions and Chemical Speciation Influences. , 2017, , 97-140.   |     | 66        |
| 18 | Effect of salinity on physiological, biochemical and photostabilizing attributes of two genotypes of quinoa (Chenopodium quinoa Willd.) exposed to arsenic stress. Ecotoxicology and Environmental Safety, 2020, 187, 109814.      | 2.9 | 63        |

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|----|--|------------|----------------|
| 19 | Nano zerovalent zinc catalyzed peroxymonosulfate based advanced oxidation technologies for treatment of chlorpyrifos in aqueous solution: A semi-pilot scale study. Journal of Cleaner Production, 2020, 246, 119032.  | 4.6        | 62             |
| 20 | Biogeochemical behavior of nickel under different abiotic stresses: toxicity and detoxification mechanisms in plants. Environmental Science and Pollution Research, 2019, 26, 10496-10514.   | 2.7        | 52             |
| 21 | Health risks of arsenic buildup in soil and food crops after wastewater irrigation. Science of the Total Environment, 2021, 772, 145266.   | 3.9        | 52             |
| 22 | Phytosynthesis and Antileishmanial Activity of Gold Nanoparticles by <i>M aytenus Royleanus</i> Journal of Food Biochemistry, 2016, 40, 420-427.   | 1.2        | 51             |
| 23 | Toxicities, kinetics and degradation pathways investigation of ciprofloxacin degradation using iron-mediated H2O2 based advanced oxidation processes. Chemical Engineering Research and Design, 2018, 117, 473-482.  | 2.7        | 51             |
| 24 | Nickel Toxicity Induced Changes in Nutrient Dynamics and Antioxidant Profiling in Two Maize (Zea) Tj ETQq0 0 (   | ) rgBŢ /Ov | erlock 10 Tf 5 |
| 25 | Biomedical and photocatalytic applications of biosynthesized silver nanoparticles: Ecotoxicology study of brilliant green dye and its mechanistic degradation pathways. Journal of Molecular Liquids, 2020, 319, 114114.   | 2.3        | 49             |
| 26 | Arsenic removal from aqueous solutions and groundwater using agricultural biowastes-derived biosorbents and biochar: a column-scale investigation. International Journal of Phytoremediation, 2019, 21, 509-518.   | 1.7        | 48             |
| 27 | Nano-zerovalent copper as a Fenton-like catalyst for the degradation of ciprofloxacin in aqueous solution. Journal of Water Process Engineering, 2020, 37, 101325.   | 2.6        | 48             |
| 28 | A multivariate analysis of physiological and antioxidant responses and health hazards of wheat under cadmium and lead stress. Environmental Science and Pollution Research, 2019, 26, 362-370.   | 2.7        | 46             |
| 29 | Hydrogeochemical and health risk evaluation of arsenic in shallow and deep aquifers along the different floodplains of Punjab, Pakistan. Journal of Hazardous Materials, 2021, 402, 124074.  | 6.5        | 46             |
| 30 | Enhanced antimicrobial, anti-oxidant applications of green synthesized AgNPs- an acute chronic toxicity study of phenolic azo dyes & Description of materials surface using X-ray photoelectron spectroscopy. Journal of Photochemistry and Photobiology B: Biology, 2018, 180, 208-217. | 1.7        | 44             |
| 31 | Effective sequestration of Congo red dye with ZnO/cotton stalks biochar nanocomposite: MODELING, reusability and stability. Journal of Saudi Chemical Society, 2021, 25, 101176.   | 2.4        | 44             |
| 32 | Equilibrium modeling of cadmium biosorption from aqueous solution by compost. Environmental Science and Pollution Research, 2017, 24, 5277-5284.   | 2.7        | 42             |
| 33 | Nutritional Composition, Antioxidant and Antimicrobial Activities of Selected Wild Edible Plants.<br>Journal of Food Biochemistry, 2016, 40, 61-70.  | 1.2        | 40             |
| 34 | Aquatic Biodegradation of Methylene Blue by Copper Oxide Nanoparticles Synthesized from Azadirachta indica Leaves Extract. Journal of Inorganic and Organometallic Polymers and Materials, 2018, 28, 2455-2462.  | 1.9        | 39             |
| 35 | Synergistic effects of bismuth coupling on the reactivity and reusability of zerovalent iron nanoparticles for the removal of cadmium from aqueous solution. Science of the Total Environment, 2019, 669, 333-341.   | 3.9        | 39             |
| 36 | A new biochar from cotton stalks for As (V) removal from aqueous solutions: its improvement with H3PO4 and KOH. Environmental Geochemistry and Health, 2020, 42, 2519-2534.  | 1.8        | 38             |

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|----|---|-----|-----------|
| 37 | Acid treated biochar enhances cadmium tolerance by restricting its uptake and improving physio-chemical attributes in quinoa (Chenopodium quinoa Willd.). Ecotoxicology and Environmental Safety, 2020, 191, 110218.                        | 2.9 | 38        |
| 38 | 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.              | 3.7 | 37        |
| 39 | Biosorption of Pb(II) from contaminated water onto <i>Moringa oleifera</i> biomass: kinetics and equilibrium studies. International Journal of Phytoremediation, 2019, 21, 777-789.   | 1.7 | 35        |
| 40 | Amelioration of saline–sodic soil with gypsum can increase yield and nitrogen use efficiency in rice–wheat cropping system. Archives of Agronomy and Soil Science, 2017, 63, 1267-1280.   | 1.3 | 33        |
| 41 | Synthesis of magnetite-based nanocomposites for effective removal of brilliant green dye from wastewater. Environmental Science and Pollution Research, 2019, 26, 24489-24502.  | 2.7 | 31        |
| 42 | Assessment and public perception of drinking water quality and safety in district Vehari, Punjab, Pakistan. Journal of Cleaner Production, 2018, 181, 224-234.  | 4.6 | 30        |
| 43 | 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.                                    | 3.7 | 29        |
| 44 | Assessment of noise pollution and its effects on human health in industrial hub of Pakistan. Environmental Science and Pollution Research, 2020, 27, 2819-2828.   | 2.7 | 28        |
| 45 | 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.                         | 2.7 | 27        |
| 46 | Arsenic Environmental Contamination Status in South Asia., 2020,, 13-39.  |     | 25        |
| 47 | Compositional and health risk assessment of drinking water from health facilities of District Vehari, Pakistan. Environmental Geochemistry and Health, 2020, 42, 2425-2437.   | 1.8 | 25        |
| 48 | Biosorption potential of natural, pyrolysed and acid-assisted pyrolysed sugarcane bagasse for the removal of lead from contaminated water. PeerJ, 2018, 6, e5672.   | 0.9 | 19        |
| 49 | Biosorption of lead by cotton shells powder: Characterization and equilibrium modeling study. International Journal of Phytoremediation, 2019, 21, 138-144.   | 1.7 | 18        |
| 50 | Investigation on Cadmium Ions Removal from Water by a Nanomagnetite Based Biochar Derived from Eleocharis Dulcis. Journal of Inorganic and Organometallic Polymers and Materials, 2021, 31, 415-425.  | 1.9 | 18        |
| 51 | Adsorptive Mechanism of Chromium Adsorption on Siltstone–Nanomagnetite–Biochar Composite.<br>Journal of Inorganic and Organometallic Polymers and Materials, 2021, 31, 1608-1620.   | 1.9 | 17        |
| 52 | Municipal Solid Waste Compost Improves Crop Productivity in Saline-Sodic Soil: A Multivariate Analysis of Soil Chemical Properties and Yield Response. Communications in Soil Science and Plant Analysis, 2019, 50, 1013-1029.              | 0.6 | 16        |
| 53 | Hydrogeochemical investigation of arsenic in drinking water of schools and age dependent risk assessment in Vehari District, Punjab Pakistan: a multivariate analysis. Environmental Science and Pollution Research, 2020, 27, 30530-30541. | 2.7 | 16        |
| 54 | 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.               | 3.0 | 16        |

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|----|---|-----|-----------|
| 55 | Growth, yield and arsenic accumulation by wheat grown in a pressmud amended salt-affected soil irrigated with arsenic contaminated water. Ecotoxicology and Environmental Safety, 2021, 224, 112692.                            | 2.9 | 15        |
| 56 | Photocatalytic and biomedical investigation of green synthesized NiONPs: Toxicities and degradation pathways of Congo red dye. Surfaces and Interfaces, 2021, 23, 100944.   | 1.5 | 14        |
| 57 | Quantitative determination of creatinine from serum of prostate cancer patients by N-doped porous carbon antimony (Sb/NPC) nanoparticles. Bioelectrochemistry, 2021, 140, 107815.   | 2.4 | 13        |
| 58 | Iron oxide nanoparticles doped biochar ameliorates trace elements induced phytotoxicity in tomato by modulation of physiological and biochemical responses: Implications for human health risk. Chemosphere, 2022, 289, 133203. | 4.2 | 13        |
| 59 | Hydrogeochemical and health risk investigation of potentially toxic elements in groundwater along<br>River Sutlej floodplain in Punjab, Pakistan. Environmental Geochemistry and Health, 2021, 43, 5195-5209.                   | 1.8 | 12        |
| 60 | Phytochemical composition, biological potential and enzyme inhibition activity of Scandix pecten-veneris L Journal of Zhejiang University: Science B, 2018, 19, 120-129.  | 1.3 | 11        |
| 61 | Use of agricultural bio-wastes to remove arsenic from contaminated water. Environmental Geochemistry and Health, 2020, , 1.   | 1.8 | 11        |
| 62 | Associations of transcription factor 7-Like 2 (TCF7L2) gene polymorphism in patients of type 2 diabetes mellitus from Khyber Pakhtunkhwa population of Pakistan. African Health Sciences, 2021, 21, 15-22.                      | 0.3 | 11        |
| 63 | Distribution and health risk assessment of trace elements in ground/surface water of Kot Addu, Punjab, Pakistan: a multivariate analysis. Environmental Monitoring and Assessment, 2021, 193, 351.                              | 1.3 | 11        |
| 64 | 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.                          | 3.7 | 11        |
| 65 | Preparation and characterization of a green nano-support for the covalent immobilization of glucoamylase from Neurospora sitophila. Journal of Photochemistry and Photobiology B: Biology, 2016, 162, 309-317.                  | 1.7 | 10        |
| 66 | Stimulation of $\hat{l}^2$ -adrenergic receptors plays a protective role via increased expression of RAF-1 and PDX-1 in hyperglycemic rat pancreatic islet (RIN-m5F) cells. Archives of Medical Science, 2017, 2, 470-480.      | 0.4 | 9         |
| 67 | Biosorption and health risk assessment of arsenic contaminated water through cotton stalk biochar. Surfaces and Interfaces, 2022, 29, 101806.   | 1.5 | 9         |
| 68 | Phytochemical composition, antioxidant and antimicrobial activities of leaves of Olea europaea wild variety. Journal of Food Measurement and Characterization, 2020, 14, 640-648.   | 1.6 | 8         |
| 69 | Efficient sequestration of lead from aqueous systems by peanut shells and compost: evidence from fixed bed column and batch scale studies. PeerJ Physical Chemistry, 0, 4, e21.   | 0.0 | 7         |
| 70 | Starch composition, antioxidant potential, and glycemic indices of various varieties of <i>Triticum aesitivum</i> L. and <i>Zea mays</i> L. available in Pakistan. Journal of Food Biochemistry, 2019, 43, e12943.              | 1.2 | 6         |
| 71 | Utilization of Bio-Municipal Solid Waste Improves Saline-Sodic Soils and Crop Productivity in Rice-Wheat. Compost Science and Utilization, 2020, 28, 16-27.   | 1.2 | 6         |
| 72 | Exploring the potential of nano-zerovalent copper modified biochar for the removal of ciprofloxacin from water. Environmental Nanotechnology, Monitoring and Management, 2021, 16, 100604.                                      | 1.7 | 6         |

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| 73 | Spatial distribution, health risk assessment, and public perception of groundwater in Bahawalnagar, Punjab, Pakistan: a multivariate analysis. Environmental Geochemistry and Health, 2023, 45, 381-391.                                   | 1.8 | 6         |
| 74 | Anaerobic degradation of municipal organic waste among others composting techniques improves N cycling through waste-soil-plant continuum. Journal of Soil Science and Plant Nutrition, 2017, , 0-0.                                       | 1.7 | 5         |
| 75 | Stress-induced NF-κB activation differentiates promyelocytic leukemia cells to macrophages in response to all-trans-retinoic acid. Cellular Signalling, 2015, 27, 694-706.   | 1.7 | 4         |
| 76 | Multivariate analysis of accumulation and critical risk analysis of potentially hazardous elements in forage crops. Environmental Monitoring and Assessment, 2022, 194, 139.   | 1.3 | 4         |
| 77 | Urban noise assessment and its nonauditory health effects on the residents of Chiniot and Jhang, Punjab, Pakistan. Environmental Science and Pollution Research, 2021, 28, 54909-54921.  | 2.7 | 3         |
| 78 | Potential of Fish Scale Biochar Nanocomposite with ZnO for Effective Sequestration of Cr (VI) from Water: Modeling and Kinetics. International Journal of Environmental Research, 2022, $16$ , .   | 1.1 | 3         |
| 79 | A Comparative Analysis of Salinity and Nickel Tolerance of Tomato ( <i>Solanum lycopersicum</i> L.). Communications in Soil Science and Plant Analysis, 2019, 50, 2294-2308.   | 0.6 | 2         |
| 80 | Tin derived antimony/nitrogen-doped porous carbon (Sb/NPC) composite for electrochemical sensing of albumin from hepatocellular carcinoma patients. Mikrochimica Acta, 2021, 188, 338.   | 2.5 | 1         |
| 81 | Association of GSTM1 and GSTT1 genes insertion/deletion polymorphism with colorectal cancer risk: a case-control study of Khyber Pakhtunkhwa population Pakistan. JPMA the Journal of the Pakistan Medical Association, 2022, 72, 457-463. | 0.1 | 1         |
| 82 | Akt Downregulates B-Cell Translocation Gene-2 Expression Via $Erk1/2$ Inhibition for Proliferation of Cancer Cells. Annals of Clinical and Laboratory Science, 2020, 50, 711-716.  | 0.2 | 1         |