# Fayuan Wang

List of Publications by Year
in descending order



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|---|---|---|---|
| 78 papers | 5,109 citations | 101384 36 h-index | 91712 69 g-index |
| 79 all docs | 79 docs citations | 79 times ranked | 3851 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Adsorption of cadmium (II) ions from aqueous solution by a new low-costadsorbentâ€"Bamboo charcoal. Journal of Hazardous Materials, 2010, 177, 300-306. | 6.5 | 381 |
| 2 | Interactions of microplastics and cadmium on plant growth and arbuscular mycorrhizal fungal communities in an agricultural soil. Chemosphere, 2020, 254, 126791. | 4.2 | 341 |
| 3 | Effects of microplastics on soil properties: Current knowledge and future perspectives. Journal of Hazardous Materials, 2022, 424, 127531. | 6.5 | 294 |
| 4 | Effects of arbuscular mycorrhizal inoculation and biochar amendment on maize growth, cadmium uptake and soil cadmium speciation in Cd-contaminated soil. Chemosphere, 2018, 194, 495-503. | 4.2 | 252 |
| 5 | Foliar application with nano-silicon alleviates Cd toxicity in rice seedlings. Environmental Science and Pollution Research, 2015, 22, 2837-2845. | 2.7 | 234 |
| 6 | Microplastics change soil properties, heavy metal availability and bacterial community in a Pb-Zn-contaminated soil. Journal of Hazardous Materials, 2022, 424, 127364. | 6.5 | 208 |
| 7 | Arbuscular mycorrhizae alleviate negative effects of zinc oxide nanoparticle and zinc accumulation in maize plants â€" A soil microcosm experiment. Chemosphere, 2016, 147, 88-97. | 4.2 | 199 |
| 8 | Microplastics influence the adsorption and desorption characteristics of Cd in an agricultural soil. Journal of Hazardous Materials, 2020, 388, 121775. | 6.5 | 193 |
| 9 | Adsorption characteristics of cadmium onto microplastics from aqueous solutions. Chemosphere, 2019, 235, 1073-1080. | 4.2 | 191 |
| 10 | Uptake and translocation of nano/microplastics by rice seedlings: Evidence from a hydroponic experiment. Journal of Hazardous Materials, 2022, 421, 126700. | 6.5 | 165 |
| 11 | Effects of microplastics on plant growth and arbuscular mycorrhizal fungal communities in a soil spiked with ZnO nanoparticles. Soil Biology and Biochemistry, 2021, 155, 108179. | 4.2 | 144 |
| 12 | Occurrence of arbuscular mycorrhizal fungi in mining-impacted sites and their contribution to ecological restoration: Mechanisms and applications. Critical Reviews in Environmental Science and Technology, 2017, 47, 1901-1957. | 6.6 | 133 |
| 13 | Effects of Co-Contamination of Microplastics and Cd on Plant Growth and Cd Accumulation. Toxics, 2020, 8, 36. | 1.6 | 125 |
| 14 | Simultaneous removal of 2,4-dichlorophenol and Cd from soils by electrokinetic remediation combined with activated bamboo charcoal. Journal of Hazardous Materials, 2010, 176, 715-720. | 6.5 | 116 |
| 15 | Micro(nano)plastics and terrestrial plants: Up-to-date knowledge on uptake, translocation, and phytotoxicity. Resources, Conservation and Recycling, 2022, 185, 106503. | 5.3 | 109 |
| 16 | Interactions between microplastics and soil fauna: A critical review. Critical Reviews in Environmental Science and Technology, 2022, 52, 3211-3243. | 6.6 | 105 |
| 17 | Heavy metal uptake by arbuscular mycorrhizas of Elsholtzia splendens and the potential for phytoremediation of contaminated soil. Plant and Soil, 2005, 269, 225-232. | 1.8 | 104 |
| 18 | Arbuscular mycorrhizal status of wild plants in saline-alkaline soils of the Yellow River Delta. Mycorrhiza, 2004, 14, 133-137. | 1.3 | 102 |

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|---|---|---|---|
| 19 | Effects of arbuscular mycorrhizal inoculation on the growth of Elsholtzia splendens and Zea mays and the activities of phosphatase and urease in a multi-metal-contaminated soil under unsterilized conditions. Applied Soil Ecology, 2006, 31, 110-119. | 2.1 | 96 |
| 20 | Heavy Metal Accumulation in Different Rice Cultivars as Influenced by Foliar Application of Nano-silicon. Water, Air, and Soil Pollution, 2016, 227, 1. | 1.1 | 86 |
| 21 | Role of microbial inoculation and chitosan in phytoextraction of Cu, Zn, Pb and Cd by Elsholtzia splendens â€" a field case. Environmental Pollution, 2007, 147, 248-255. | 3.7 | 83 |
| 22 | Bioavailability of Zn in ZnO nanoparticle-spiked soil and the implications to maize plants. Journal of Nanoparticle Research, 2015, 17, 1. | 0.8 | 81 |
| 23 | Effects of microplastics and carbon nanotubes on soil geochemical properties and bacterial communities. Journal of Hazardous Materials, 2022, 433, 128826. | 6.5 | 79 |
| 24 | Inoculation with arbuscular mycorrhizal fungus Acaulospora mellea decreases Cu phytoextraction by maize from Cu-contaminated soil. Pedobiologia, 2007, 51, 99-109. | 0.5 | 66 |
| 25 | Effect of Arbuscular Mycorrhizal Fungal Inoculation on Heavy Metal Accumulation of Maize Grown in a Naturally Contaminated Soil. International Journal of Phytoremediation, 2007, 9, 345-353. | 1.7 | 64 |
| 26 | Effect of eco-remediation using planted floating bed system on nutrients and heavy metals in urban river water and sediment: A field study in China. Science of the Total Environment, 2014, 485-486, 596-603. | 3.9 | 59 |
| 27 | Effects of AM Inoculation and Organic Amendment, Alone or in Combination, on Growth, P Nutrition, and Heavy-Metal Uptake of Tobacco in Pb-Cd-Contaminated Soil. Journal of Plant Growth Regulation, 2012, 31, 549-559. | 2.8 | 56 |
| 28 | Selection of appropriate host plants used in trap culture of arbuscular mycorrhizal fungi. Mycorrhiza, 2003, 13, 123-127. | 1.3 | 55 |
| 29 | An improved preparation of graphene supported ultrafine ruthenium (0) NPs: Very active and durable catalysts for H2 generation from methanolysis of ammonia borane. International Journal of Hydrogen Energy, 2015, 40, 10856-10866. | 3.8 | 52 |
| 30 | Combined effects of ZnO NPs and Cd on sweet sorghum as influenced by an arbuscular mycorrhizal fungus. Chemosphere, 2018, 209, 421-429. | 4.2 | 51 |
| 31 | Evaluating phytotoxicity of bare and starch-stabilized zero-valent iron nanoparticles in mung bean. Chemosphere, 2019, 236, 124336. | 4.2 | 46 |
| 32 | Effects of Soil Amendments on Heavy Metal Immobilization and Accumulation by Maize Grown in a Multiple-Metal-Contaminated Soil and Their Potential for Safe Crop Production. Toxics, 2020, 8, 102. | 1.6 | 45 |
| 33 | A highly efficient heterogeneous catalyst of Ru/MMT: Preparation, characterization, and evaluation of catalytic effect. Applied Catalysis B: Environmental, 2013, 140-141, 115-124. | 10.8 | 42 |
| 34 | Decreased ZnO nanoparticle phytotoxicity to maize by arbuscular mycorrhizal fungus and organic phosphorus. Environmental Science and Pollution Research, 2018, 25, 23736-23747. | 2.7 | 41 |
| 35 | Adsorption of 2,4-dichlorophenol from Aqueous Solution by a New Low-Cost Adsorbent â€" Activated Bamboo Charcoal. Separation Science and Technology, 2010, 45, 2329-2336. | 1.3 | 40 |
| 36 | Inoculations with Arbuscular Mycorrhizal Fungi Increase Vegetable Yields and Decrease Phoxim Concentrations in Carrot and Green Onion and Their Soils. PLoS ONE, 2011, 6, e16949. | 1.1 | 40 |

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|---|---|---|---|
| 37 | $H_2O_2$ Is Involved in the Metallothionein-Mediated Rice Tolerance to Copper and Cadmium Toxicity. International Journal of Molecular Sciences, 2017, 18, 2083. | 1.8 | 40 |
| 38 | Contribution of AM inoculation and cattle manure to lead and cadmium phytoremediation by tobacco plants. Environmental Sciences: Processes and Impacts, 2013, 15, 794. | 1.7 | 37 |
| 39 | Arbuscular Mycorrhiza Enhances Biomass Production and Salt Tolerance of Sweet Sorghum. Microorganisms, 2019, 7, 289. | 1.6 | 37 |
| 40 | Ecotoxicological effects of polyethylene microplastics and ZnO nanoparticles on earthworm Eisenia fetida. Applied Soil Ecology, 2022, 176, 104469. | 2.1 | 37 |
| 41 | Arbuscular mycorrhizal fungal community structure and diversity in response to long-term fertilization: a field case from China. World Journal of Microbiology and Biotechnology, 2011, 27, 67-74. | 1.7 | 36 |
| 42 | Benefits of arbuscular mycorrhizal fungi in reducing organic contaminant residues in crops: Implications for cleaner agricultural production. Critical Reviews in Environmental Science and Technology, 2020, 50, 1580-1612. | 6.6 | 36 |
| 43 | Removal of Chromium from a Contaminated Soil Using Oxalic Acid, Citric Acid, and Hydrochloric Acid: Dynamics, Mechanisms, and Concomitant Removal of Non-Targeted Metals. International Journal of Environmental Research and Public Health, 2019, 16, 2771. | 1.2 | 35 |
| 44 | Remediation of Cr(VI)-Contaminated Soil by Nano-Zero-Valent Iron in Combination with Biochar or Humic Acid and the Consequences for Plant Performance. Toxics, 2020, 8, 26. | 1.6 | 33 |
| 45 | Diversity and distribution of arbuscular mycorrhizal fungi along altitudinal gradients in Mount Taibai of the Qinling Mountains. Canadian Journal of Microbiology, 2014, 60, 811-818. | 0.8 | 30 |
| 46 | The worldwide leaf economic spectrum traits are closely linked with mycorrhizal traits. Fungal Ecology, 2020, 43, 100877. | 0.7 | 30 |
| 47 | Arbuscular Mycorrhizal Fungi Improve the Performance of Sweet Sorghum Grown in a Mo-Contaminated Soil. Journal of Fungi (Basel, Switzerland), 2020, 6, 44. | 1.5 | 29 |
| 48 | Contribution of Nano-Zero-Valent Iron and Arbuscular Mycorrhizal Fungi to Phytoremediation of Heavy Metal-Contaminated Soil. Nanomaterials, 2021, 11, 1264. | 1.9 | 27 |
| 49 | Removal of Cr (VI) from Simulated and Leachate Wastewaters by Bentonite-Supported Zero-Valent Iron Nanoparticles. International Journal of Environmental Research and Public Health, 2018, 15, 2162. | 1.2 | 23 |
| 50 | Contribution of arbuscular mycorrhizal fungi and soil amendments to remediation of a heavy metal-contaminated soil using sweet sorghum. Pedosphere, 2022, 32, 844-855. | 2.1 | 22 |
| 51 | Phytotoxicity of iron-based materials in mung bean: Seed germination tests. Chemosphere, 2020, 251, 126432. | 4.2 | 18 |
| 52 | Arbuscular mycorrhizal inoculation increases molybdenum accumulation but decreases molybdenum toxicity in maize plants grown in polluted soil. RSC Advances, 2018, 8, 37069-37076. | 1.7 | 17 |
| 53 | Phosphorus fertilization and mycorrhizal colonization change silver nanoparticle impacts on maize. Ecotoxicology, 2021, 30, 118-129. | 1.1 | 17 |
| 54 | Photocatalytic strategy to mitigate microplastic pollution in aquatic environments: Promising catalysts, efficiencies, mechanisms, and ecological risks. Critical Reviews in Environmental Science and Technology, 2023, 53, 504-526. | 6.6 | 16 |

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|---|---|---|---|
| 55 | Arbuscular mycorrhizal fungi associated with tree peony in 3 geographic locations in China. Turk Tarim Ve Ormancilik Dergisi/Turkish Journal of Agriculture and Forestry, 2013, 37, 726-733. | 0.8 | 14 |
| 56 | Dynamics of phoxim residues in green onion and soil as influenced by arbuscular mycorrhizal fungi. Journal of Hazardous Materials, 2011, 185, 112-116. | 6.5 | 13 |
| 57 | EXPLOITATION OF PHOSPHORUS PATCHES WITH DIFFERENT PHOSPHORUS ENRICHMENT BY THREE ARBUSCULAR MYCORRHIZAL FUNGI. Journal of Plant Nutrition, 2011, 34, 1096-1106. | 0.9 | 12 |
| 58 | Alterations of Arbuscular Mycorrhizal Fungal Diversity in Soil with Elevation in Tropical Forests of China. Diversity, 2019, 11, 181. | 0.7 | 12 |
| 59 | Foliar stoichiometry under different mycorrhizal types in relation to temperature and precipitation in grassland. Journal of Plant Ecology, 2013, 6, 270-276. | 1.2 | 9 |
| 60 | Mycorrhizal relationship in lupines: a review. Legume Research, 2017, 40, . | 0.0 | 7 |
| 61 | Quinone profiles of microbial communities in sediments of Haihe Riverâ€“Bohai Bay as influenced by heavy metals and environmental factors. Environmental Monitoring and Assessment, 2011, 176, 157-167. | 1.3 | 6 |
| 62 | Arbuscular Mycorrhizal Fungi Enhance Plant Diversity, Density and Productivity of Spring Ephemeral Community in Desert Ecosystem. Notulae Botanicae Horti Agrobotanici Cluj-Napoca, 2017, 45, 301-307. | 0.5 | 6 |
| 63 | Hexavalent chromium removal by a resistant strain <i>Bacillus cereus</i> ZY-2009. Environmental Technology (United Kingdom), 2023, 44, 1926-1935. | 1.2 | 6 |
| 64 | Arbuscular Mycorrhizas and Ecosystem Restoration. , 2017, , 245-292. | | 4 |
| 65 | Identification of Cu-binding proteins in embryos of germinating rice in response to Cu toxicity. Acta Physiologiae Plantarum, 2018, 40, 1. | 1.0 | 4 |
| 66 | Influence of mycorrhizal strategy on the foliar traits of the plants on the Tibetan Plateau in response to precipitation and temperature. Turkish Journal of Botany, 0, , . | 0.5 | 4 |
| 67 | Spatial variation of arbuscular mycorrhizal fungi in two vegetation types in Gurbantonggut Desert. Contemporary Problems of Ecology, 2013, 6, 455-464. | 0.3 | 3 |
| 68 | Response of Arbuscular Mycorrhizal Fungi to Simulated Climate Changes by Reciprocal Translocation in Tibetan Plateau. Notulae Botanicae Horti Agrobotanici Cluj-Napoca, 2015, 43, . | 0.5 | 3 |
| 69 | Response of soil respiration under different mycorrhizal strategies to precipitation and temperature. Journal of Soil Science and Plant Nutrition, 2012, , 0-0. | 1.7 | 2 |
| 70 | Glomus caledonium spores can be occupied byGlomus microaggregatum spores. Annals of Microbiology, 2009, 59, 693-697. | 1.1 | 1 |
| 71 | Forest soil autotrophic and heterotrophic respiration under different mycorrhizal strategies and their responses to temperature and precipitation. Contemporary Problems of Ecology, 2014, 7, 32-38. | 0.3 | 1 |
| 72 | Response of Arbuscular Mycorrhizal Fungi to Simulated Climate Changes by Reciprocal Translocation in Tibetan Plateau. Notulae Botanicae Horti Agrobotanici Cluj-Napoca, 2015, 43, 488-493. | 0.5 | 1 |

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|---|---|---|---|
| 73 | Effect of ZnO nanoparticles and inoculation with arbuscular mycorrhizal fungus on growth and nutrient uptake of soybean. Acta Ecologica Sinica, 2015, 35, . | 0.0 | 1 |
| 74 | Activated red mud loaded porcelain sand for the adsorption of As(V) from aqueous system. , 0, 180, 328-335. | | 1 |
| 75 | Role of microbial inoculation in phytoremediation of heavy metals by Elsholtzia splendens. , 2011, , . | | 0 |
| 76 | Effects of Arbuscular Mycorrhizal Inoculation and Cattle Manure on Cadmium Uptake by Tobacco. , 2012, , . | | 0 |
| 77 | Research on the Correlation between Performance and Compensation of Executive and Staff in Agricultural Enterprises. Communications in Computer and Information Science, 2011, , 209-214. | 0.4 | 0 |
| 78 | Editorial: Microbial Interactions With Nanomaterials in the Environment and Their Application. Frontiers in Microbiology, 2022, 13, 850141. | 1.5 | 0 |