# Arsenic in Latin America: New findings on source, mobi
# environments in 20 countries based on decadal research

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| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Selective removal of arsenic in water: A critical review. Environmental Pollution, 2021, 268, 115668. | 7.5 | 117 |
| 2 | Advanced application of nano-technological and biological processes as well as mitigation options for arsenic removal. Journal of Hazardous Materials, 2021, 405, 123885. | 12.4 | 53 |
| 3 | Geochemical mechanisms of natural arsenic mobility in the hydrogeologic system of Lower Katari Basin, Bolivian Altiplano. Journal of Hydrology, 2021, 594, 125778. | 5.4 | 16 |
| 4 | Thiourea supplementation mediated reduction of grain arsenic in rice (Oryza sativa L.) cultivars: A two year field study. Journal of Hazardous Materials, 2021, 407, 124368. | 12.4 | 28 |
| 5 | Surface chemistry of bovine serum albumin with hematite nanoparticles and its effect on arsenate adsorption. Environmental Chemistry, 2021, , . | 1.5 | 1 |
| 6 | Spatial distribution, occurrence, and health risk assessment of nitrate, fluoride, and arsenic in Bam groundwater resource, Iran. Groundwater for Sustainable Development, 2021, 12, 100543. | 4.6 | 51 |
| 7 | Potential modification of groundwater arsenic removal filter commonly used in Nepal: A review. Groundwater for Sustainable Development, 2021, 12, 100549. | 4.6 | 13 |
| 8 | Distribution of Groundwater Arsenic in Uruguay Using Hybrid Machine Learning and Expert System Approaches. Water (Switzerland), 2021, 13, 527. | 2.7 | 10 |
| 9 | Unraveling roles of dissolved organic matter in high arsenic groundwater based on molecular and optical signatures. Journal of Hazardous Materials, 2021, 406, 124702. | 12.4 | 44 |
| 10 | Phytoextraction of arsenic using a weed plant <i>Calotropis procera</i> from contaminated water and soil: growth and biochemical response. International Journal of Phytoremediation, 2021, 23, 1310-1318. | 3.1 | 11 |
| 11 | Small-scale membrane-based arsenic removal for decentralized applicationsâ€“Developing a conceptual approach for future utilization. Water Research, 2021, 196, 116978. | 11.3 | 23 |
| 12 | Assessment of arsenic and its associated health risks due to mining activities in parts of North-central Nigeria: Probabilistic approach using Monte Carlo. Journal of Hazardous Materials, 2021, 412, 125262. | 12.4 | 51 |
| 13 | Fast and effective arsenic removal from aqueous solutions by a novel low-cost eggshell byproduct. Science of the Total Environment, 2021, 783, 147022. | 8.0 | 10 |
| 14 | Seven potential sources of arsenic pollution in Latin America and their environmental and health impacts. Science of the Total Environment, 2021, 780, 146274. | 8.0 | 97 |
| 15 | Naturally occurring potentially toxic elements in groundwater from the volcanic landscape around Mount Meru, Arusha, Tanzania and their potential health hazard. Science of the Total Environment, 2022, 807, 150487. | 8.0 | 22 |
| 16 | Sorption of arsenate(â…) to naturally occurring secondary iron minerals formed at different conditions: The relationship between sorption behavior and surface structure. Chemosphere, 2021, 285, 131525. | 8.2 | 10 |
| 17 | Arsenic contamination, impact and mitigation strategies in rice agro-environment: An inclusive insight. Science of the Total Environment, 2021, 800, 149477. | 8.0 | 47 |
| 18 | ArsÃ©nico y flÃºor en agua subterrÃ¡nea de Chihuahua: su origen, enriquecimiento, y tratamientos posibles. TECNOCIENCIA (MÃ©xico), 2021, 15, 95-108. | 0.2 | 3 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | A Critical Evaluation of the Role of Geotectonics in Groundwater Arsenic Contamination. Springer Natural Hazards, 2021, , 201-222. | 0.3 | 1 |
| 20 | Arsenic and selenium in the plant-soil-human ecosystem: CREST publications during 2018â€“2021. Critical Reviews in Environmental Science and Technology, 2022, 52, 3567-3572. | 12.8 | 6 |
| 21 | The role of various ameliorants on geochemical arsenic distribution and CO2-carbon efflux under paddy soil conditions. Environmental Geochemistry and Health, 2023, 45, 507-523. | 3.4 | 12 |
| 22 | Evaluation of the Acute Effects of Arsenic on Adults of the Neotropical Native Fish <i>Cnesterodon decemmaculatus</i> Using a Set of Biomarkers. Environmental Toxicology and Chemistry, 2022, 41, 1246-1259. | 4.3 | 2 |
| 23 | Arsenic contamination, induced symptoms, and health risk assessment in groundwater of Lahore, Pakistan. Environmental Science and Pollution Research, 2022, 29, 49796-49807. | 5.3 | 11 |
| 24 | The moral economy of defence of territory and the political economy of extractivism in the Polochic valley, Guatemala. Journal of Agrarian Change, 2022, 22, 740-765. | 1.8 | 0 |
| 25 | Humic substances stimulate initial growth and reduce arsenic stress in <i>Corymbia citriodora</i> seedlings. Bioremediation Journal, 2023, 27, 273-280. | 2.0 | 2 |
| 26 | Exogenously-applied L-glutamic acid protects photosynthetic functions and enhances arsenic tolerance through increased nitrogen assimilation and antioxidant capacity in rice (Oryza sativa L.). Environmental Pollution, 2022, 301, 119008. | 7.5 | 20 |
| 27 | Arsenic(III) and Arsenic(V) Removal from Water Sources by Molecularly Imprinted Polymers (MIPs): A Mini Review of Recent Developments. Sustainability, 2022, 14, 5222. | 3.2 | 14 |
| 28 | A Participatory Science Approach to Evaluating Factors Associated with the Occurrence of Metals and PFAS in Guatemala City Tap Water. International Journal of Environmental Research and Public Health, 2022, 19, 6004. | 2.6 | 1 |
| 29 | Occurrence and behavior of arsenic in groundwater-aquifer system of irrigated areas. Science of the Total Environment, 2022, 838, 155991. | 8.0 | 5 |
| 30 | Nrf2/Keap1 pathway in countering arsenic-induced oxidative stress in mice after chronic exposure at environmentally-relevant concentrations. Chemosphere, 2022, 303, 135256. | 8.2 | 11 |
| 31 | Arsenic Exposure via Contaminated Water and Food Sources. Water (Switzerland), 2022, 14, 1884. | 2.7 | 19 |
| 32 | Arsenic contents, speciation and bioaccessibility in rice grains from China: Regional and variety differences. Journal of Hazardous Materials, 2022, 437, 129431. | 12.4 | 14 |
| 33 | Concentrations of arsenic, cadmium, and lead in herbal infusion tea bags marketed in Tacna, Peru. Environmental Monitoring and Assessment, 2022, 194, . | 2.7 | 2 |
| 34 | The Enhanced Stability of Arsenic Coprecipitated with Magnetite during Aging: An XAS Investigation. Industrial & Engineering Chemistry Research, 2022, 61, 13154-13167. | 3.7 | 5 |
| 35 | Impact of socioeconomic factors on householdsâ€™ willingness to pay for arsenic-free safe drinking water - A case study of Bihar, India. Groundwater for Sustainable Development, 2022, 19, 100837. | 4.6 | 3 |
| 36 | Role of tectonics and climate on elevated arsenic in fluvial systems: Insights from surface water and sediments along regional transects of Chile. Environmental Pollution, 2022, 314, 120151. | 7.5 | 8 |

| # | Article | IF | Citations |
|---|---|---|---|
| 38 | Arsenic removal from water and soils using pristine and modified biochars. Biochar, 2022, 4, . | 12.6 | 30 |
| 39 | Selenium Increased Arsenic Accumulation by Upregulating the Expression of Genes Responsible for Arsenic Reduction, Translocation, and Sequestration in Arsenic Hyperaccumulator <i>Pteris vittata</i>. Environmental Science & Technology, 2022, 56, 14146-14153. | 10.0 | 6 |
| 40 | Using fuzzy cognitive maps to promote nature-based solutions for water quality improvement in developing-country communities. Journal of Cleaner Production, 2022, 377, 134246. | 9.3 | 13 |
| 41 | Evaluation of surface water quality in basins of the Chilean Altiplano-Puna and implications for water treatment and monitoring. Environmental Monitoring and Assessment, 2022, 194, . | 2.7 | 1 |
| 42 | Ca Minerals and Oral Bioavailability of Pb, Cd, and As from Indoor Dust in Mice: Mechanisms and Health Implications. Environmental Health Perspectives, 2022, 130, . | 6.0 | 8 |
| 43 | Spatial distribution and source identification of metal contaminants in the surface soil of Matehuala, Mexico based on positive matrix factorization model and GIS techniques. Frontiers in Soil Science, 0, 2, . | 2.2 | 7 |
| 44 | A Comprehensive Review of the Latest Advancements in Controlling Arsenic Contaminants in Groundwater. Water (Switzerland), 2023, 15, 478. | 2.7 | 26 |
| 45 | Heavy metal removal by the photosynthetic microbial biomat found within shallow unit process open water constructed wetlands. Science of the Total Environment, 2023, 876, 162478. | 8.0 | 6 |
| 46 | Assessing and Understanding Arsenic Contamination in Agricultural Soils and Lake Sediments from Papallacta Rural Parish, Northeastern Ecuador, via Ecotoxicology Factors, for Environmental Embasement. Sustainability, 2023, 15, 3951. | 3.2 | 7 |
| 47 | Arsenic Contamination in Groundwater: Geochemical Basis of Treatment Technologies. ACS Environmental Au, 2023, 3, 135-152. | 7.0 | 8 |
| 48 | Potentially Toxic Elements in Pharmaceutical Industrial Effluents: A Review on Risk Assessment, Treatment, and Management for Human Health. Sustainability, 2023, 15, 6974. | 3.2 | 5 |
| 49 | Biological and green remediation of heavy metal contaminated water and soils: A state-of-the-art review. Chemosphere, 2023, 332, 138861. | 8.2 | 34 |
| 50 | Increased mobilization of geogenic arsenic by anthropogenic activities: The Brazilian experience in mining and agricultural areas. Current Opinion in Environmental Science and Health, 2023, 33, 100472. | 4.1 | 2 |
| 51 | Environmental fate and ecological impact of the potentially toxic elements from the geothermal springs. Environmental Geochemistry and Health, 2023, 45, 6287-6303. | 3.4 | 1 |
| 52 | A mini-review on arsenic remediation techniques from water and future trends. Water Science and Technology, 2023, 87, 3108-3123. | 2.5 | 2 |
| 53 | Organic matter degradation and arsenic enrichment in different floodplain aquifer systems along the middle reaches of Yangtze River: A thermodynamic analysis. Water Research, 2023, 239, 120072. | 11.3 | 3 |
| 54 | Genotoxicity and mutagenicity in blood and drinking water induced by arsenic in an impacted gold mining region in Colombia. Environmental Research, 2023, 233, 116229. | 7.5 | 2 |
| 55 | Mitigating effect of various phosphorus sources on arsenic toxicity in anaerobic conditions for rice and aerobic conditions for sunflower and maize plants. Pedosphere, 2023, , . | 4.0 | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 56 | An appraisal of the principal concerns and controlling factors for Arsenic contamination in Chile. Scientific Reports, 2023, 13, . | 3.3 | 4 |
| 57 | A preliminary discussion on aÂframework for health geological survey and evaluation. Applied Geochemistry, 2023, 155, 105738. | 3.0 | 1 |
| 58 | Magnesium/Silica/Lanthanum@Activated Carbon for the Remediation of As(III) from Water. Environments - MDPI, 2023, 10, 171. | 3.3 | 1 |
| 59 | Development of methylene blue imprinted silica for detecting arsenic ions in aqueous solution. Environmental Engineering Research, 0, , . | 2.5 | 0 |
| 60 | Review and Analysis: Fate of Arsenic Applied to Canal Shipping Lane Vegetation and United States Military Base Grounds in the Panama Canal Zone. Open Journal of Soil Science, 2023, 13, 391-413. | 0.8 | 0 |
| 61 | Environmental study of the potentially harmful elements (PHEs) in talaga bodas geothermal field, Indonesia. AIP Conference Proceedings, 2023, , . | 0.4 | 0 |
| 62 | Photo driven homogeneous advanced oxidation coupled to adsorption process for an effective arsenic removal from drinking water. Journal of Environmental Management, 2024, 349, 119568. | 7.8 | 0 |
| 63 | Endophytic Enterobacter sp. YG-14 mediated arsenic mobilization through siderophore and its role in enhancing phytostabilization. Journal of Hazardous Materials, 2024, 465, 133206. | 12.4 | 0 |
| 64 | Arsenic and adipose tissue: an unexplored pathway for toxicity and metabolic dysfunction. Environmental Science and Pollution Research, 2024, 31, 8291-8311. | 5.3 | 0 |
| 65 | Microbial consortia-mediated arsenic bioremediation in agricultural soils: Current status, challenges, and solutions. Science of the Total Environment, 2024, 917, 170297. | 8.0 | 0 |
| 66 | Sustainable water management in rice cultivation reduces arsenic contamination, increases productivity, microbial molecular response, and profitability. Journal of Hazardous Materials, 2024, 466, 133610. | 12.4 | 2 |
| 67 | Worldwide Distribution, Health Risk, Treatment Technology, and Development Tendency of Geogenic High-Arsenic Groundwater. Water (Switzerland), 2024, 16, 478. | 2.7 | 0 |
| 68 | Adsorption methods for arsenic removal in water bodies: a critical evaluation of effectiveness and limitations. Frontiers in Water, 0, 6, . | 2.3 | 0 |
| 69 | Arsenic in a Karstic Paddy Soil with a High Geochemical Background in Guangxi, China: Its Bioavailability and Controlling Factors. Applied Sciences (Switzerland), 2024, 14, 1400. | 2.5 | 0 |
| 70 | Simultaneous removal of fluoride and arsenic from drinking groundwater using limestones from BajÃo Guanajuatense, Mexico. Arabian Journal of Geosciences, 2024, 17, . | 1.3 | 0 |