

Groundwater contamination by microbiological and chemical hospital wastewater: Health risk assessment for drinking

Environment International

35, 718-726

DOI: [10.1016/j.envint.2009.01.011](https://doi.org/10.1016/j.envint.2009.01.011)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Presence of Pharmaceuticals and Personal Care Products in the Environment - A Concern for Human Health?. ACS Symposium Series, 2010, , 345-365.	0.5	5
2	Holistic visualisation of the multimodal transport and fate of twelve pharmaceuticals in biosolid enriched topsoils. Analytical and Bioanalytical Chemistry, 2010, 397, 287-296.	1.9	23
3	Multiresidue method for the determination of 32 human and veterinary pharmaceuticals in soil and sediment by pressurized-liquid extraction and LC-MS/MS. Analytical and Bioanalytical Chemistry, 2010, 398, 1173-1184.	1.9	56
4	Microbiological and Physicochemical Quality of Well Water Used as a Source of Public Supply. Air, Soil and Water Research, 2010, 3, ASWR.S4823.	1.2	7
5	Quantification and molecular characterization of enteric viruses detected in effluents from two hospital wastewater treatment plants. Water Research, 2011, 45, 1287-1297.	5.3	106
6	Invisible Pollution. AAOHN Journal, 2011, 59, 525-533.	0.5	1
7	Potentiometric Multisensory Systems with Novel Ion-Exchange Polymer-Based Sensors for Analysis of Drugs. International Journal of Electrochemistry, 2012, 2012, 1-10.	2.4	0
8	Ionic Liquids: Potential Electrolytes for Electrochemical Applications. International Journal of Electrochemistry, 2012, 2012, 1-2.	2.4	4
9	Application of the BRAFO tiered approach for benefitâ€“risk assessment to case studies on dietary interventions. Food and Chemical Toxicology, 2012, 50, S710-S723.	1.8	28
10	A review of legal framework applicable for the management of healthcare waste and current management practices in Ethiopia. Waste Management and Research, 2012, 30, 607-618.	2.2	22
11	Highly Efficient Enzyme-Functionalized Porous Zirconia Microtubes for Bacteria Filtration. Environmental Science & Technology, 2012, 46, 8739-8747.	4.6	63
12	Anticancer drugs in surface waters. Environment International, 2012, 39, 73-86.	4.8	321
13	Salmonella in surface and drinking water: Occurrence and water-mediated transmission. Food Research International, 2012, 45, 587-602.	2.9	138
14	Micro-pollutants in Hospital Effluent: Their Fate, Risk and Treatment Options. Handbook of Environmental Chemistry, 2012, , 139-171.	0.2	6
15	Human Health Risk Assessment for Pharmaceuticals in the Environment: Existing Practice, Uncertainty, and Future Directions. Emerging Topics in Ecotoxicology, 2012, , 167-224.	1.5	9
16	Wastewater irrigation and environmental health: Implications for water governance and public policy. International Journal of Hygiene and Environmental Health, 2012, 215, 255-269.	2.1	241
17	Haiti's food and drinking water: A review of toxicological health risks. Clinical Toxicology, 2013, 51, 828-833.	0.8	20
18	Effects of untreated hospital effluents on the accumulation of toxic metals in sediments of receiving system under tropical conditions: Case of South India and Democratic Republic of Congo. Chemosphere, 2013, 93, 1070-1076.	4.2	55

#	ARTICLE	IF	CITATIONS
19	Drinking water quality and human health risk in Charsadda district, Pakistan. <i>Journal of Cleaner Production</i> , 2013, 60, 93-101.	4.6	256
20	Glutaraldehyde degradation in hospital wastewater by photoozonation. <i>Environmental Technology (United Kingdom)</i> , 2013, 34, 2579-2586.	1.2	13
21	Assessing the Mobility of Lead, Copper and Cadmium in a Calcareous Soil of Port-au-Prince, Haiti. <i>International Journal of Environmental Research and Public Health</i> , 2013, 10, 5830-5843.	1.2	37
22	Using Statistical and Probabilistic Methods to Evaluate Health Risk Assessment: A Case Study. <i>Toxics</i> , 2014, 2, 291-306.	1.6	3
23	F-Hydra Index for Evaluating Groundwater Vulnerability in Data Scarce Regions. <i>Journal of Environment and Ecology</i> , 2014, 5, 1.	0.2	2
24	Civil Engineering Grand Challenges: Opportunities for Data Sensing, Information Analysis, and Knowledge Discovery. <i>Journal of Computing in Civil Engineering</i> , 2014, 28, .	2.5	51
25	Contamination and spatial distribution of heavy metals in topsoil surrounding a mega cement factory. <i>Atmospheric Pollution Research</i> , 2014, 5, 270-282.	1.8	67
26	Hazard assessment of metals in invasive fish species of the Yamuna River, India in relation to bioaccumulation factor and exposure concentration for human health implications. <i>Environmental Monitoring and Assessment</i> , 2014, 186, 3823-3836.	1.3	31
27	Microbial contamination of drinking water in Pakistan—a review. <i>Environmental Science and Pollution Research</i> , 2014, 21, 13929-13942.	2.7	69
28	Electrochemical advanced oxidation and biological processes for wastewater treatment: a review of the combined approaches. <i>Environmental Science and Pollution Research</i> , 2014, 21, 8493-8524.	2.7	227
29	Assessment of microbiological safety of ground water used in rainbow trout farms. <i>LWT - Food Science and Technology</i> , 2014, 58, 360-363.	2.5	3
30	Analysis of physico-chemical and bacteriological quality of drinking water in Mafikeng, South Africa. <i>Journal of Water and Health</i> , 2015, 13, 1143-1152.	1.1	21
31	Critical review of methodology and application of risk ranking for prioritisation of food and feed related issues, on the basis of the size of anticipated health impact. <i>EFSA Supporting Publications</i> , 2015, 12, 710E.	0.3	9
32	Assessment of drinking water quality and its potential health impacts in academic institutions of Abbottabad (Pakistan). <i>Desalination and Water Treatment</i> , 2015, 54, 1819-1828.	1.0	23
33	Nivel en alimentos y factores influyentes en sus niveles, ingesta, biodisponibilidad y toxicidad: una revisión. <i>CYTA - Journal of Food</i> , 2015, 13, 87-101.	0.9	10
34	Risk of diarrhoea from shallow groundwater contaminated with enteropathogens in the Kathmandu Valley, Nepal. <i>Journal of Water and Health</i> , 2015, 13, 259-269.	1.1	20
35	Pharmaceuticals and iodinated contrast media in a hospital wastewater: A case study to analyse their presence and characterise their environmental risk and hazard. <i>Environmental Research</i> , 2015, 140, 225-241.	3.7	155
36	Co-occurrence of arsenic and fluoride in the groundwater of Punjab, Pakistan: source discrimination and health risk assessment. <i>Environmental Science and Pollution Research</i> , 2015, 22, 19729-19746.	2.7	66

#	ARTICLE	IF	CITATIONS
37	Ecotoxicological and Genotoxic Assessment of Hospital Laundry Wastewaters. Archives of Environmental Contamination and Toxicology, 2015, 68, 64-73.	2.1	18
38	Technical Performance and Environmental Effects of the Treated Effluent of Wastewater Treatment Plants in the Shenzhen Bay Catchment, China. Sustainability, 2016, 8, 984.	1.6	2
39	Hospital Effluents Are One of Several Sources of Metal, Antibiotic Resistance Genes, and Bacterial Markers Disseminated in Sub-Saharan Urban Rivers. Frontiers in Microbiology, 2016, 7, 1128.	1.5	99
40	Depth and Well Type Related to Groundwater Microbiological Contamination. International Journal of Environmental Research and Public Health, 2016, 13, 1036.	1.2	17
41	Impact of Different Irrigation Systems on Water Quality in Peri-Urban Areas of Gujarat, India. SSRN Electronic Journal, 0, , .	0.4	1
42	Sorption of paracetamol onto biomaterials. Water Science and Technology, 2016, 74, 287-294.	1.2	14
43	Evaluation of potential human health risk and investigation of drinking water quality in Isparta city center (Turkey). Journal of Water and Health, 2016, 14, 471-488.	1.1	33
44	Health risk assessment of heavy metals in groundwater of coal mining area: A case study in Dingji coal mine, Huainan coalfield, China. Human and Ecological Risk Assessment (HERA), 2016, 22, 1469-1479.	1.7	45
45	Supermacroporous hybrid polymeric cryogels for efficient removal of metallic contaminants and microbes from water. International Journal of Polymeric Materials and Polymeric Biomaterials, 2016, 65, 636-645.	1.8	16
46	Overview of Known Organohalide-Respiring Bacteriaâ€™ Phylogenetic Diversity and Environmental Distribution. , 2016, , 63-105.		45
47	Application of intensified Fenton oxidation to the treatment of hospital wastewater: Kinetics, ecotoxicity and disinfection. Journal of Environmental Chemical Engineering, 2016, 4, 4107-4112.	3.3	45
48	Competitive removal of heavy metals from spiked hospital wastewater on acidic and chelating dehydrated carbons. Separation Science and Technology, 2016, 51, 2348-2359.	1.3	1
49	Waste management of health services: a study on the situation in the Brazilian hospital sector. International Journal of Business Innovation and Research, 2016, 11, 295.	0.1	1
50	Sorption and biodegradation characteristics of the selected pharmaceuticals and personal care products onto tropical soil. Water Science and Technology, 2016, 73, 51-59.	1.2	15
51	Sanitary impact evaluation of drinking water in storage reservoirs in Moroccan rural area. Saudi Journal of Biological Sciences, 2017, 24, 767-777.	1.8	9
52	Potentially Toxic Metals and Biological Contamination in Drinking Water Sources in Chromite Mining-Impacted Areas of Pakistan: A Comparative Study. Exposure and Health, 2017, 9, 275-287.	2.8	23
53	Investigation of potential accumulation and spatial distribution of heavy metals in topsoil surrounding the cement plant of Meftah (southeastern Algiers region, Algeria). Arabian Journal of Geosciences, 2017, 10, 1.	0.6	3
54	Health risks associated with the pharmaceuticals in wastewater. DARU, Journal of Pharmaceutical Sciences, 2017, 25, 9.	0.9	62

#	ARTICLE	IF	CITATIONS
55	Consumption-based approach for pharmaceutical compounds in a large hospital. <i>Environmental Technology (United Kingdom)</i> , 2017, 38, 2217-2223.	1.2	8
56	Human Health Risk Assessment Applied to Rural Populations Dependent on Unregulated Drinking Water Sources: A Scoping Review. <i>International Journal of Environmental Research and Public Health</i> , 2017, 14, 846.	1.2	13
57	ED-XRF analysis of wet deposition around metal recycling plant. <i>Ife Journal of Science</i> , 2017, 19, 315.	0.1	2
58	High Content of Lead Is Associated with the Softness of Drinking Water and Raised Cardiovascular Morbidity: A Review. <i>Biological Trace Element Research</i> , 2018, 186, 384-394.	1.9	12
59	The fate and risk assessment of psychiatric pharmaceuticals from psychiatric hospital effluent. <i>Ecotoxicology and Environmental Safety</i> , 2018, 150, 289-296.	2.9	50
60	A case study to identify priority cytostatic contaminants in hospital effluents. <i>Chemosphere</i> , 2018, 190, 417-430.	4.2	65
61	Risk assessment of nitrate transport through subsurface layers and groundwater using experimental and modeling approach. <i>Environmental Technology (United Kingdom)</i> , 2018, 39, 2691-2702.	1.2	11
62	Water electrode plasma discharge to enhance the bacterial inactivation in water. <i>Biotechnology and Biotechnological Equipment</i> , 2018, 32, 530-534.	0.5	9
63	An AlN Based SAW Device for Detection of Impurities in Water Based on Measuring the Signal-to-Noise Ratio. , 2018, , .		3
64	Towards Adaptive Deep Brain Stimulation in Parkinson'S Disease: Lfp-Based Feature Analysis and Classification. , 2018, , .		3
65	Emerging pollutants removal through advanced drinking water treatment: A review on processes and environmental performances assessment. <i>Journal of Cleaner Production</i> , 2018, 197, 1210-1221.	4.6	279
66	Virological and bacteriological quality of drinking water in Ethiopia. <i>Applied Water Science</i> , 2018, 8, 1.	2.8	3
67	Water metal contaminants in a potentially mineral-deficient population of Haiti. <i>International Journal of Environmental Health Research</i> , 2018, 28, 626-634.	1.3	5
68	Application of the Riskâ€Based Early Warning Method in a Fractureâ€Karst Water Source, North China. <i>Water Environment Research</i> , 2018, 90, 206-219.	1.3	8
69	Application of heterogeneous nano-semiconductors for photocatalytic advanced oxidation of organic compounds: A review. <i>Journal of Environmental Chemical Engineering</i> , 2019, 7, 103283.	3.3	157
70	A Whole Systems Approach to Hospital Waste Management in Rural Uganda. <i>Frontiers in Public Health</i> , 2019, 7, 136.	1.3	23
71	Metals and emerging contaminants in groundwater and human health risk assessment. <i>Environmental Science and Pollution Research</i> , 2019, 26, 24581-24594.	2.7	22
72	Removal of heavy metals from water sources in the developing world using low-cost materials: A review. <i>Chemosphere</i> , 2019, 229, 142-159.	4.2	579

#	ARTICLE	IF	CITATIONS
73	Emerging contaminants in wastewater, stormwater runoff, and surface water: Application as chemical markers for diffuse sources. <i>Science of the Total Environment</i> , 2019, 676, 252-267.	3.9	143
74	A surface acoustic wave device for water impurity levels monitoring by measuring signal-to-perturbation ratios. <i>Japanese Journal of Applied Physics</i> , 2019, 58, 061002.	0.8	3
75	Spatial analysis of chromium in southwestern part of Iran: probabilistic health risk and multivariate global sensitivity analysis. <i>Environmental Geochemistry and Health</i> , 2019, 41, 2023-2038.	1.8	7
76	Health cost of salinity contamination in drinking water: evidence from Bangladesh. <i>Environmental Economics and Policy Studies</i> , 2019, 21, 371-397.	0.8	6
77	Elevated Blood Lead Levels in Infants and Children in Haiti, 2015. <i>Public Health Reports</i> , 2019, 134, 47-56.	1.3	8
78	Health risk assessment of nitrate using a probabilistic approach in groundwater resources of western part of Iran. <i>Environmental Earth Sciences</i> , 2020, 79, 1.	1.3	11
79	Performance of <i>Moringa oleifera</i> seeds protein and <i>Moringa oleifera</i> seeds protein-polyaluminum chloride composite coagulant in removing organic matter and antibiotic resistant bacteria from hospital wastewater. <i>Journal of Water Process Engineering</i> , 2020, 33, 101103.	2.6	41
80	Ultrasonic assisted fabrication of silver tungstate encrusted polypyrrole nanocomposite for effective photocatalytic and electrocatalytic applications. <i>Ultrasonics Sonochemistry</i> , 2020, 64, 104913.	3.8	30
81	Evaluation of Drinking Water Quality in Schools in a District Area in Hanoi, Vietnam. <i>Environmental Health Insights</i> , 2020, 14, 117863022095967.	0.6	8
82	Water Scarcity and Wastewater Reuse in Crop Irrigation. <i>Sustainability</i> , 2020, 12, 9055.	1.6	148
83	Occurrence of CTX-M, SHV and TEM β -lactamase genes in Extended Spectrum Beta-Lactamase (ESBL)-producing bacteria recovered from wastewater of a privately-owned hospital in Nigeria and a hand-dug well within its vicinity. <i>Gene Reports</i> , 2020, 21, 100970.	0.4	3
84	Treatment of hospital wastewater by supercritical water oxidation process. <i>Water Research</i> , 2020, 185, 116279.	5.3	69
85	Hospital wastewater treatment scenario around the globe. , 2020, , 549-570.		34
86	Monitoring hospital wastewaters for their probable genotoxicity. <i>Journal of Water and Health</i> , 2020, 18, 1-7.	1.1	4
87	Enhanced Microbial Chromate Reduction Using Hydrogen and Methane as Joint Electron Donors. <i>Journal of Hazardous Materials</i> , 2020, 395, 122684.	6.5	20
88	A review on hospital wastewater treatment: A special emphasis on occurrence and removal of pharmaceutically active compounds, resistant microorganisms, and SARS-CoV-2. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 104812.	3.3	139
89	The Challenge of Water in the Sanitary Conditions of the Populations Living in the Slums of Port-au-Prince: The Case of Canaan. , 0, , .		0
91	Geochemical characterization and health risk assessment in two diversified environmental settings (Southern Italy). <i>Environmental Geochemistry and Health</i> , 2022, 44, 2083-2099.	1.8	10

#	ARTICLE	IF	CITATIONS
92	Source characterization of trace elements and assessment of heavy metal contamination in the soil around Tarabalo geothermal field, Odisha, India. <i>Arabian Journal of Geosciences</i> , 2021, 14, 1.	0.6	6
93	Comprehensive review on iodinated X-ray contrast media: Complete fate, occurrence, and formation of disinfection byproducts. <i>Science of the Total Environment</i> , 2021, 769, 144846.	3.9	47
94	Chemical Pollution of Drinking Water in Haiti: An Important Threat to Public Health. , 0, , .		1
95	Hospital wastewater as a source of environmental contamination: An overview of management practices, environmental risks, and treatment processes. <i>Journal of Water Process Engineering</i> , 2021, 41, 101990.	2.6	73
97	A comprehensive review on magnetic carbon nanotubes and carbon nanotube-based buckypaper for removal of heavy metals and dyes. <i>Journal of Hazardous Materials</i> , 2021, 413, 125375.	6.5	223
98	Use of Electrocoagulation for Treatment of Pharmaceutical Compounds in Water/Wastewater: A Review Exploring Opportunities and Challenges. <i>Water (Switzerland)</i> , 2021, 13, 2105.	1.2	25
99	Assessment of <i>Casuarina glauca</i> as biofiltration model of secondary treated urban wastewater: effect on growth performances and heavy metals tolerance. <i>Environmental Monitoring and Assessment</i> , 2021, 193, 653.	1.3	2
100	Decontamination of toxic Malathion pesticide in aqueous solutions by Fenton-based processes: Degradation pathway, toxicity assessment and health risk assessment. <i>Journal of Hazardous Materials</i> , 2022, 423, 127016.	6.5	59
101	Microbiology of hospital wastewater. , 2020, , 103-148.		18
102	Impact of surface runoff on the aquifers of Port-au-Prince, Haiti. , 2010, , 128-138.		3
103	Tratamento de efluentes de lavanderia hospitalar por processo oxidativo avançado: UV/H2O2. <i>Engenharia Sanitaria E Ambiental</i> , 2019, 24, 601-611.	0.1	7
104	Microbiological and Physicochemical Evaluation of Groundwater in Egypt. <i>International Journal of Environment and Sustainability</i> , 2014, 2, .	0.3	16
106	Invisible Pollution: The Impact of Pharmaceuticals in the Water Supply. <i>AAOHN Journal</i> , 2011, 59, 525-532.	0.5	20
107	Contaminant Properties of Hospital Clinical Laboratory Wastewater: A Physicochemical and Microbiological Assessment. <i>Journal of Environmental Protection</i> , 2016, 07, 635-642.	0.3	26
108	Classification and Health Risk Assessment for Borehole Water Contaminated by Metals in Selected Households in Southwest Nigeria. <i>Journal of Water Resource and Protection</i> , 2016, 08, 459-471.	0.3	9
109	Groundwater Pollution and Remediation. <i>Journal of Water Resource and Protection</i> , 2019, 11, 1-19.	0.3	52
110	Assessment of the pollution incident performance of water and sewerage companies in England. <i>PLoS ONE</i> , 2021, 16, e0251104.	1.1	1
111	Molecular profiling of culturable bacteria from portable drinking water filtration systems and tap water in three cities of Metro Manila, Philippines. <i>International Journal of Philippine Science and Technology</i> , 2015, 8, 24-30.	0.2	1

#	ARTICLE	IF	CITATIONS
113	Ecotoxicity of Wastewater from Medical Facilities: A Review. <i>Scientia Agriculturae Bohemica</i> , 2018, 49, 26-31.	0.3	2
114	Medical hydrogeology is an independent interdisciplinary branch of the science about groundwater. <i>Gigiena I Sanitariia</i> , 2019, 95, 800-805.	0.1	1
115	Health Risk Assessment of Dermal Exposure to Heavy Metals Content of Chemical Hair Dyes. <i>Iranian Journal of Public Health</i> , 0, , .	0.3	7
116	Experience on the environmental and hygienic assessment of water pollution in the territories referred to oil refining and petrochemical complexes. <i>Gigiena I Sanitariia</i> , 2020, 99, 886-893.	0.1	1
117	Health Risk Assessment of Dermal Exposure to Heavy Metals Content of Chemical Hair Dyes. <i>Iranian Journal of Public Health</i> , 2019, 48, 902-911.	0.3	11
118	Source, Pollution and Remediation of Carcinogenic Hexavalent Chromium from Industrial, Mining Effluents. <i>Environmental Chemistry for A Sustainable World</i> , 2021, , 305-320.	0.3	0
119	Wastewater irrigation in India: Current status, impacts and response options. <i>Science of the Total Environment</i> , 2022, 808, 152001.	3.9	62
120	Water Treatment Using Plasma Generated by High Voltage Tesla Transformer to Eliminate Escherichia Coli Bacteria. , 2021, , .		0
121	Geopolymer beads and 3D printed lattices containing activated carbon and hydrotalcite for anionic dye removal. <i>Catalysis Today</i> , 2022, 390-391, 57-68.	2.2	19
122	An analysis of drinking water quality parameters to achieve sustainable development goals in rural and urban areas of Besisahar, Lamjung, Nepal. , 2024, 10, 297-323.		0
125	The use of water stable isotopes for a better understanding of hydrogeological processes in Haiti: overview of existing $\delta^{18}O$ and δ^2H data. <i>Hydrogeology Journal</i> , 2022, 30, 1387-1397.	0.9	9
126	Effect of Cu^{2+}/SO_4^{2-} ions concentration on the adsorption capacity of synthetic mayenite, its application for secondary adsorption process and utilization in cement samples. <i>Ceramics International</i> , 2022, , .	2.3	1
127	Unravelling the emerging carcinogenic contaminants from industrial waste water for prospective remediation by electrocoagulation – A review. <i>Chemosphere</i> , 2022, 307, 136017.	4.2	24
128	Drinking Water Quality Assessment of Government, Non-Government and Self-Based Schemes in the Disaster Affected Areas of Khyber Pakhtunkhwa, Pakistan. <i>Exposure and Health</i> , 2023, 15, 567-583.	2.8	10
129	Peculiarities of adsorption of Cr (VI) ions on the surface of <i>Chlorella vulgaris</i> ZBS1 algae cells. <i>Heliyon</i> , 2022, 8, e10468.	1.4	15
130	Use of Natural Coagulants in Removing Organic Matter, Turbidity and Fecal Bacteria from Hospital Wastewater by Coagulation-Flocculation Process. <i>Journal of Water Resource and Protection</i> , 2022, 14, 719-730.	0.3	2
132	Antibacterial silver-loaded TiO_2 ceramic photocatalyst for water purification. <i>Journal of Water Process Engineering</i> , 2022, 50, 103225.	2.6	3
133	Quality Characterization of Groundwater for Drinking Purposes and Its Network Distribution to Assure Sustainability in Southern Region of Saudi Arabia. <i>Water (Switzerland)</i> , 2022, 14, 3565.	1.2	4

#	ARTICLE	IF	CITATIONS
134	In-situ drain treatment types and technologies for flowing wastewater: A comprehensive review. Chemical Engineering Research and Design, 2023, 170, 449-463.	2.7	2
135	Advances in biomedical waste management technologies. , 2023, , 543-573.		1
136	Intelligent soft computational models integrated for the prediction of potentially toxic elements and groundwater quality indicators: a case study. Journal of Sedimentary Environments, 2023, 8, 57-79.	0.7	11
137	Nâ€Doped Porous Carbon with Outstanding Pb²⁺ Adsorption Capacity in Wastewater. Chemical Engineering and Technology, 2023, 46, 1868-1875.	0.9	2
138	Using geochemical models to delineate the relationship between the Pleistocene aquifer groundwater and the oxidation ponds at El-Sadat city, Egypt. Physics and Chemistry of the Earth, 2023, 130, 103403.	1.2	0