ENVIRONMENTAL POLLUTION

TABLE OF CONTENTS

- Description p.1
- Audience p.2
- Impact Factor p.2
- Abstracting and Indexing p.2
- Editorial Board p.2
- Guide for Authors p.8

DESCRIPTION

Environmental Pollution is an international peer-reviewed journal that publishes high quality research papers and review articles about all aspects of environmental pollution and its effects on ecosystems and human health. The journal welcomes high-quality process-oriented and hypothesis-based submissions that report results from original and novel research and contribute new knowledge to help address problems related to environmental pollution at a regional or global scale.

Subject areas include, but are not limited to:

- Sources and occurrences of pollutants that are clearly defined and measured in environmental compartments, food and food-related items, and human bodies;
- Interlinks between contaminant exposure and biological, ecological, and human health effects, including those of climate change;
- Contaminants of emerging concerns (including but not limited to antibiotic resistant microorganisms or genes, microplastics/nanoplastics, electronic wastes, light, and noise) and/or their biological, ecological, or human health effects;
- Laboratory and field studies on the remediation/mitigation of environmental pollution via new techniques and with clear links to biological, ecological, or human health effects;
- Modeling of pollution processes, patterns, or trends that is of clear environmental and/or human health interest;
- New techniques that measure and examine environmental occurrences, transport, behavior, and effects of pollutants within the environment or the laboratory, provided that they can be clearly used to address problems within regional or global environmental compartments.

Papers focusing on the following areas are likely to be returned to the authors without review:

- Routine surveys or monitoring programs primarily of local or regional interest;
- Descriptions of well-known contaminants, such as legacy pollutants, in yet another location;
- Studies relating to waste treatment that do not have specific relevance to pollution within the environment;
- Synthesis/fabrication of new materials solely for remediation and/or mitigation of pollution without any direct environmental relevance;
- Nitrogen or phosphorus deposition or biogeochemical processes with little or no relation to environmental consequences and/or climate change;
- Studies on eutrophication and secondary pollution by eutrophication without illuminating their governing mechanisms and factors;
• Studies within which the concentrations of toxicants used are higher than those that are typically found in an environmental pollution context. Authors of toxicology studies must justify the concentrations that they are using by reference to environmentally relevant concentrations that have been reported in the literature.

Please DO NOT ask the Editors-in-Chief for permission before submitting a manuscript. Kindly check the guidelines to determine whether your manuscript is within the scope of the journal; if yes, please go ahead and submit it.

AUDIENCE

Pollution research workers including chemists, toxicologists, environmentalists, conservationists, botanists, marine scientists, ecologists, biologists.

IMPACT FACTOR

2022: 8.900 © Clarivate Analytics Journal Citation Reports 2023

ABSTRACTING AND INDEXING

PubMed/Medline
Environmental Periodicals Bibliography
Current Contents - Agriculture, Biology & Environmental Sciences
Science Citation Index
AGRICOLA
Energy Information Abstracts
Embase
Air Pollution Control Association Journal
Biological and Agricultural Index
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EDITORIAL BOARD

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Persistent organic pollutants, Bioaccumulation, Human exposure, Health risk assessment, Inter-compartmental diffusion flux, Passive sampling, Wet and dry deposition

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Da Chen, Jinan University, Guangzhou, China
Environmental chemistry, Analytical chemistry, Ecotoxicology, Persistent organic pollutants, Flame retardants, Pesticides, Mass spectrometry, Gas/liquid chromatography

Su Shiung Lam, Universiti Malaysia Terengganu, Kuala Terengganu, Malaysia
Editors

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Heavy metals toxicity and Plant Physiology, Hazardous materials (heavy metals), Trace elements in soil, Bioremediation, Oxidative stress, Microplastics and plant health, Ecotoxicology, Nanoparticles, Biochar, Phytohormones, Plant adaptations

Michael Bank, Institute of Marine Research, Bergen, Norway
Mercury, microplastics, ocean health, seafood safety, ecotoxicology, isotopic niches, Bayesian modeling, contaminants

Amit Bhatnagar, LUT University, Department of Separation Science, Mikkeli, Finland
Adsorption, Biosorption, Wastewater treatment, (Micro)algae biorefinery, Resource recovery, Biomaterials, Nanomaterials, Carbon-based materials, Biochar, Nano-cellulose, Organic pollutants, Metals, Nutrients

Da Chen, Jinan University, Guangzhou, China
Environmental chemistry, Analytical chemistry, Ecotoxicology, Persistent organic pollutants, Flame retardants, Pesticides, Mass spectrometry, Gas/liquid chromatography

Wen Chen, Sun Yat-Sen University School of Public Health, Guangzhou, China
Environmental Toxicology, Chemical Carcinogenesis, Epigenetic Regulation, Biomarkers

Hefa Cheng, Peking University, Beijing, China
Environmental geochemistry, Heavy metals, Environmental monitoring, Health risk assessment, Soil pollution, Environmental transport and fate of pollutants, Waste treatment and disposal

Payam Dadvand, Barcelona Institute for Global Health, Barcelona, Spain
Epidemiological studies on the health effects of environmental factors.

Jiayin Dai, Shanghai Jiao Tong University School of Environmental Science and Engineering, Shanghai, China
The distribution, fate, and sources and toxicity of emerging contaminants, especially perfluoroalkyl substances (PFASs).

Alessandra De Marco, ENEA Casaccia Research Centre, Santa Maria di Galeria, Italy
Impacts of air pollution on vegetation, with particular interest on ozone and nitrogen deposition, climate change and air pollution interactions and their synergistic impacts on ecosystems, integrated assessment modelling for evaluating impacts of policies and measures to reduce air pollution, nitrogen cycle and nitrogen budget and their importance in agricultural field

Mingliang Fang, Fudan University, Shanghai, China
Environmental Exposure, Metabolomics, Exposome, Environmental Toxicology, Mixture Effect

Yucheng Feng, Auburn University, Department of Crop Soil and Environmental Sciences, Auburn, Alabama, United States of America
Soil microbiology, Fecal pollution of surface water, Biodegradation and bioavailability of organic pollutants, Pesticides, Plant-soil-microbial interaction

Maria Cristina Fossi, University of Siena, Siena, Italy
Marine Pollution, Persistent Organic Contaminants, Aquatic Toxicology, Microplastic, Plastic, Marine Litter, Ecotoxicological biomarkers, Marine Mammals, Large marine vertebrates, Endocrine disruptors.

Sarah Harmon, University of South Carolina Aiken, Aiken, South Carolina, United States of America
Aquatic toxicology, Water pollution, Heavy metals toxicity, Fecal coliform pollution, Mercury toxicity.

Pavlos Kassomenos, University of Ioannina, Department of Physics, Laboratory of Meteorology, Ioannina, Greece
Air pollution, Meteorology, Environmental health, Climate change, Particulates, Ozone, Bioaerosols, Dust transportation, Vehicle emissions, Noise

Klaus Kümmerrer, Leuphana University of Lüneburg Institute for Sustainable and Environmental Chemistry, Lüneburg, Germany
Environmental chemistry, Aquatic environmental chemistry, Benign by design, Green chemistry, Green pharmacy, Sustainable chemistry, Sustainable pharmacy, Resources (bio and metals)

Su Shiung Lam, Universiti Malaysia Terengganu, Kuala Terengganu, Malaysia

Montse Marquès, Rovira and Virgili University School of Medicine Laboratory of Toxicology and Environmental Health, Reus, Spain
Control, monitoring and prediction of human health effects and environmental impact of chemical contamination, analysis, exposure assessment and risk characterization of heavy metals, persistent organic pollutants (POPs) and emerging pollutants, food toxicity, biomonitoring and ecotoxicology.
Philip Smith, Texas Tech University, Lubbock, Texas, United States of America  
Environmental Toxicology, Ecological Risk Assessment, Wildlife Toxicology, Particulate Matter

Hocheol Song, Hanyang University, Department of Earth Resources and Environmental Engineering, Seoul, South Korea  
Adsorption of pollutants, Environmental redox processes, Soil and groundwater remediation, Biochar synthesis and application, Multi-functional materials

Admir Crésó Targino, Federal Technological University of Parana, Department of Physics, Londrina, Brazil  
Urban air pollution, Urban climate, Personal exposure to air pollutants, Short-lived climate pollutants, Aerosol and meteorological instrumentation

Meththika Vithanage, University of Sri Jayewardenepura, Faculty of Applied Sciences, Nugegoda, Sri Lanka  
Soil Restoration and Remediation, Water Quality and Water Chemistry, Trace Elements, Antibiotics and Pesticides, Atmospheric deposition, Wastewater treatment, Landfill leachate

Wen-Xiong Wang, City University of Hong Kong, Hong Kong, Hong Kong  
Metals, Ecotoxicology, Pollution, Biogeochemistry, Nanotoxicology

Charles Wong, Southern California Coastal Water Research Project, Costa Mesa, California, United States of America  
Environmental organic chemistry, persistent organic chemicals, pharmaceuticals and personal care products, metabolites and transformation products, environmental/analytical chemistry, passive samplers, wastewater, ecotoxicology, bioaccumulation and food web interactions.

Baoshan Xing, University of Massachusetts Amherst Stockbridge School of Agriculture, Amherst, Massachusetts, United States of America  
Engineered Nanoparticles; Organic Contaminants; Biochar; Soil Organic Matter; Sorption Of Organic Chemicals; nano/microplastic particles

Editorial Board

Daniel S. Alessi, University of Alberta, Edmonton, Alberta, Canada  
Surface chemistry, Surface complexation modeling, Contaminant transport, Geomicrobiology, Hydraulic fracturing, Acid mine drainage, biochar / black carbon, Lithium extraction, Water treatment

Dula Amarasiriwardena, Hampshire College, Amherst, Massachusetts, United States of America  
Metal Pollution, environmental trace metal determination (ICP-MS, LA-ICP-MS), metal chemical speciation, toxic metals in soils, tissue level, elemental bioimaging, nanoparticles in environment, environmental remediation-metals, humic substances in the environment.

Lian-Jun Bao, Jinan University, Guangzhou, China  
E-waste, flame retardants, organic chemicals, PAHs, microplastics.

Allen Barker, University of Massachusetts Amherst, Department of Plant Soil and Insect Sciences, Amherst, Massachusetts, United States of America  
Effects of air pollution on managed and natural ecosystems; radioecology; waste management.

Man Yu Bon, The Education University of Hong Kong, Hong Kong, Hong Kong  
Persistent toxic substances; Soil contamination; Environmental pollution of electronic waste; Health risk assessments; Recycling of food waste

Juergen Burkhardt, University of Bonn, Bonn, Germany  
Trace metal geochemistry, Rare earth element, Colloids, Plastics, Organic matter, Solid/water interface, geochemical modelling, Synchrotron techniques

Marisa Domingos, Brazilian Association of Environmental Mutagenesis and Genomics, Monte Alegre, Ribeirão Preto, Brazil  
Environmental pollution and climatic change effects on natural vegetation, particularly in the tropics and subtropics, air-plant-soil interactions in polluted terrestrial ecosystems, physiologic, metabolic, structural/ultrastructural markers of increased plant tolerance against air pollutants and other environmental stressors, disturbances on nutrient dynamics in polluted terrestrial ecosystems, physiognomic/landscape disturbances in polluted terrestrial ecosystems, the search of innovative biomonitoring technics for evaluating risks posed by air pollutant, ozone, nitrogen and sulfur oxides, particulate matter, fluorine, trace metals, polycyclic aromatic hydrocarbons

Zafar Fatmi, The Aga Khan University, Karachi, Pakistan  
Environmental epidemiology; air pollution; cognitive effects of air pollution; risk assessment, health effects of heavy metals

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Microplastics, persistent organic pollutants (POPs), analytical method development of environmental microplastics, sorption of organic chemicals, effects of microplastics, fate and transport of microplastics in aquatic environments

Melissa A. McKinney, McGill University, Department of Natural Resource Sciences, Sainte-Anne-de-Bellevue, Quebec, Canada

Ecological change, environmental stressors, wildlife toxicology, fish, land and marine mammals

Denise Mitrano, Eawag Swiss Federal Institute of Aquatic Science and Technology, Dübendorf, Switzerland

Water quality analysis, analytical method development, nanomaterials, microplastics (including nanoplastic, microplastic fibers), life cycle thinking

Amitava Mukherjee, VIT University Centre for NanoBiototechnology, Vellore, India

Photo catalytic Nanomaterials, Nano-remediation of Emerging Pollutants, Nano-biosensors for Environmental Contaminants, Protein-Nanomaterials Interactions, Green synthesis of Nanomaterials, Nanotoxicology, Safe and Secure Design nanomaterials

Kunihiko Nakai, Tohoku University, Sendai, Japan

Heavy metals, persistent organic pollutants, epidemiology, birth cohort studies, risk assessment/analysis, methylmercury, Minamata convention

Bernd Nowack, EMPA Swiss Federal Laboratories for Materials Science and Technology, DUEBENDORF, Switzerland

Nanomaterials, micro- and nanoplastics, advanced materials, environmental risk assessment, release assessment, exposure, hazard and risk modeling, Safe and Sustainable by Design (SSbD)

Yong Sik Ok, Korea University, Seongbuk-gu, South Korea

Environment and Ecology, Cross Field, Engineering

Elijah J. Petersen, National Institute of Standards and Technology, Cell Systems Science Group, Gaithersburg, Maryland, United States of America

Nanomaterials, carbon nanomaterials, standardization, nanocotoxicity, carbon nanotubes

Stergios Pirintosos, University of Crete Voutes Campus, Iraklion, Crete, Greece

Biomonitoring of air pollution, trace elements and nitrogen using lichens, climate change issues and lichens, lichens and hydrogen production, lichen physiology and pollution, sensitivity issues of lichens, lichen diversity and vegetation in Mediterranean ecosystems.

Hakan Pleijel, University of Gothenburg, Göteborg, Sweden

Ozone (effects on vegetation), carbon dioxide (effects on vegetation), urban ecology (especially air pollution in relation to vegetation), temporal and spatial variation in air pollution exposure, crops (especially effects of air pollutants on growth and nutrient content), deposition of air pollutants, weather and climate dependence of air pollution, climate change effects on crops.

Binoy Sarkar, University of South Australia - Mawson Lakes Campus, Mawson Lakes, South Australia, Australia

Biochar, Carbon capture and sequestration, Clay minerals, Emerging contaminants, Nanoparticles, Microplastics, Soil biogeochemical processes, Soil and water contaminants removal

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Heavy metals, Trace elements, Soil and environmental science, Waste management, Risk assessment

John Ssempebwa, Makerere University, Kampala, Uganda

Environmental pollution, PAHs, water and sanitation, occupational health

Durgesh Kumar Tripathi, Amity University, Amity Institute of Organic Agriculture, Noida, India

Crop Nano Biology, Environmental Nano Biology, Plant nutrition and nano-nutrient delivery in plants, Molecular biology and biotechnology and Molecular stress physiology.

Dan Tsang, The Hong Kong University of Science and Technology, Hong Kong, Hong Kong


Jason Unrine, University of Kentucky, Lexington, Kentucky, United States of America

Nanomaterials, metals, soils, contaminant fate, bioavailability, agriculture, ecosystem services, radionuclides, synchrotron methods

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Pollution Ecology, Environmental Pollution, Marine pollution and toxicology

Xiangke Wang, North China Electric Power University College of Environmental Science and Engineering, Beijing, China

Nanomaterials, Sorption, Photocatalysis, Radionuclides, Heavy metal ions, Organic pollutants, Environmental pollutant management

Courtney Waugh, Norwegian University of Science and Technology, Trondheim, Norway

Toxicology, disease and immunology of wild, captive and domestic animals

Yanhong Wei, Sun Yat-Sen University, Guangzhou, China
Persistent organic pollutants, zebrafish, cardiovascular toxicology, developmental toxicology, toxicity pathways

Jason White, Connecticut Agricultural Experiment Station, New Haven, Connecticut, United States of America

Nanotoxicology, food safety, bioremediation and phytoremediation.

Paul Williams, Chinese Academy of Sciences, Beijing, China

Toxic trace elements, 2D high-resolution chemical imaging, rhizosphere chemistry, soil-plant interactions, diffusive gradients in thin films (DGT), arsenic/selenium biogeochemistry, bioavailability of metals, human health impacts of arsenic, cadmium and lead, urban & sustainable agriculture, advanced analytical approaches for contaminant quantification, soil & water pollution.

Lingtian Xie, South China Normal University, School of Environment, Environmental Research Institute, Guangzhou, China

The impacts of temperature and pollutants on the functional integrity of the aquatic ecosystems, Trophic transfer of pollutants in aquatic ecosystems, The effects of emerging contaminants in aquatic organisms, Endocrine disruption chemicals, The evolution of resistance to contaminants

Scott Young, University of Nottingham, Nottingham, United Kingdom

Bioavailability, speciation and mobility of trace metals and radioisotopes in the environment and specifically with the geochemical controls over trace element deficiency and toxicity.

Yunjiang Yu, South China Institute of Environmental Science, Guangzhou, China

Environmental chemicals and health, Environmental and human monitoring, Exposure risk assessment and management, Environmental toxicology, Biomarkers

Shuzhen Zhang, Chinese Academy of Sciences, Beijing, China

soil contamination, Sorption/desorption of organic contaminants, Bioaccumulation and transformation of organic contaminants in the terrestrial environment, Applications of synchrotron-based spectroscopy techniques in environmental chemistry, NOM analysis and effects on contaminant behaviors

Fang-Jie Zhao, Nanjing Agricultural University, Nanjing, China

Heavy metals, trace elements, soil contamination, phytoremediation, food safety, biogeochemistry

Jian Zhao, Ocean University of China, Qingdao, China

Microplastics, Engineered nanoparticles, Nanoplastics, Toxicity, Environmental Behaviors

Qing Zhao, Chinese Academy of Sciences, Beijing, China
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INTRODUCTION

*Environmental Pollution* is an international peer-reviewed journal that publishes high quality research papers and review articles about all aspects of environmental pollution and its effects on ecosystems and human health. The journal welcomes high-quality *process-oriented and hypothesis-based* submissions that report results from original and novel research and contribute new knowledge to help address problems related to environmental pollution at a regional or global scale.

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Papers focusing on the following areas are likely to be returned to the authors without review:
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- Studies on eutrophication and secondary pollution by eutrophication without illuminating their governing mechanisms and factors;
- Studies within which the concentrations of toxicants used are higher than those that are typically found in an environmental pollution context. Authors of toxicology studies must justify the concentrations that they are using by reference to environmentally relevant concentrations that have been reported in the literature.

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A covering letter is required for all article types. This must explicitly express how the submission fits the Aims and Scope of *Environmental Pollution*, and should establish the ramifications of the research findings with regards to environmental quality, ecological health, and/or human health. Failure to include such justifications in the cover letter may result in returning the paper to the author.
**Research Papers:** Full Research Papers should not exceed 8000 words (including abstract, figures, and tables but excluding references). Please note that small tables and figures each count as 300 words, and large tables or figures with multiple panels may count for 600 or more words. There should be no more than nine figures and tables (e.g., 5 figures and 4 tables maximum) in the main text. Any additional figures and tables should be placed in Supplementary Material.

The abstract (up to 300 words), highlights and conclusions of papers in this journal must contain clear and concise statements. A graphical abstract is mandatory.

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- Ensure all figure and table citations in the text match the files provided
• Indicate clearly if color should be used for any figures in print
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Further considerations
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• Journal policies detailed in this guide have been reviewed
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Finally...
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• The name and e-mail address [institutional email addresses ONLY] of the corresponding author.
• The resubmission of manuscripts previously rejected by the journal is by invitation only.

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Authors should include a statement in the manuscript that informed consent was obtained for experimentation with human subjects. The privacy rights of human subjects must always be observed.

All animal experiments should comply with the ARRIVE guidelines and should be carried out in accordance with the U.K. Animals (Scientific Procedures) Act, 1986 and associated guidelines, EU Directive 2010/63/EU for animal experiments, or the National Research Council’s Guide for the Care and Use of Laboratory Animals and the authors should clearly indicate in the manuscript that such guidelines have been followed. The sex of animals must be indicated, and where appropriate, the influence (or association) of sex on the results of the study.

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Statement: During the preparation of this work the author(s) used [NAME TOOL / SERVICE] in order to [REASON]. After using this tool/service, the author(s) reviewed and edited the content as needed and take(s) full responsibility for the content of the publication.

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Submission of an article implies that the work described has not been published previously (except in the form of an abstract, a published lecture or academic thesis, see ‘Multiple, redundant or concurrent publication’ for more information), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, including electronically without the written consent of the copyright-holder. To verify compliance, your article may be checked by Crossref Similarity Check and other originality or duplicate checking software.

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Inclusive language acknowledges diversity, conveys respect to all people, is sensitive to differences, and promotes equal opportunities. Content should make no assumptions about the beliefs or commitments of any reader; contain nothing which might imply that one individual is superior to another on the grounds of age, gender, race, ethnicity, culture, sexual orientation, disability or health
condition; and use inclusive language throughout. Authors should ensure that writing is free from bias, stereotypes, slang, reference to dominant culture and/or cultural assumptions. We advise to seek gender neutrality by using plural nouns ("clinicians, patients/clients") as default/wherever possible to avoid using "he, she," or "he/she." We recommend avoiding the use of descriptors that refer to personal attributes such as age, gender, race, ethnicity, culture, sexual orientation, disability or health condition unless they are relevant and valid. When coding terminology is used, we recommend to avoid offensive or exclusionary terms such as "master", "slave", "blacklist" and "whitelist". We suggest using alternatives that are more appropriate and (self-) explanatory such as "primary", "secondary", "blocklist" and "allowlist". These guidelines are meant as a point of reference to help identify appropriate language but are by no means exhaustive or definitive.

**Reporting sex- and gender-based analyses**

**Reporting guidance**

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