



Development of Advanced Materials and Technology for Green and Sustainable Environmental Remediation

Guest Editors:

Dr. Hao Qiu

School of Environmental Science
and Engineering, Shanghai Jiao
Tong University, Shanghai
200240, China

Dr. Erkai He

School of Geographic Sciences,
East China Normal University,
Shanghai 200241, China

Dr. Xing Li

School of Environmental Science
and Engineering, Shanghai Jiao
Tong University, Shanghai
200240, China

Deadline for manuscript
submissions:

closed (20 December 2025)

Message from the Guest Editors

This Special Issue aims to compile recent research studies on the application of advanced materials and technologies to remediate or restore soil, water, and air environments contaminated with heavy metals, persistent organic pollutants, as well as other emerging pollutants. The articles presented in this Special Issue may also cover topics such as the optimization of sustainable and green remediation tools; key factors (e.g., environmental matrix, global climate change) affecting the effect of remediation; risk assessment; etc. Authors are invited to submit original research papers and reviews that address the following topics:

1. The development of advanced, green, and eco-friendly materials for the decontamination of pollutants;
2. Application of chemical, biological, and physical technologies to reduce the bioavailability and toxicity of contaminants;
3. The potential synergistic effects of combining functional materials (e.g., carbon-, phosphorus-, and iron-based materials) with other remediation methods for ecosystem restoration;





an Open Access Journal by MDPI

Editors-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Prof. Dr. Yuguang Ma

State Key Laboratory of Luminescent Materials and Devices, South China University of Technology, Guangzhou 510640, China

Message from the Editorial Board

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank: JCR - Q2 (Materials Science, Multidisciplinary) / CiteScore - Q1 (Condensed Matter Physics)

Contact Us

Materials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/materials
materials@mdpi.com
[X@Materials_Mdpi](https://twitter.com/Materials_Mdpi)