

## Special Issue

# Catalytic Nanomaterials for Environmental Protection and Sustainable Development

### Message from the Guest Editors

Industrial development is constantly improving, but the resulting problem of environmental pollution is serious. New pollutants such as industrial wastes, agricultural residues, and domestic pollutants have polluted the living environment and affected humans' sustainable development. The main traditional pollution treatment methods are air separation and carbon adsorption. Since pollutants cannot be fully treated, developing new approaches to sustainable energy production to address climate change, water resource regulation, and industrial wastewater reduction represents an important research challenge. We welcome research on the design, synthesis, theory, structure, and characterization of various catalytic nanomaterials, including graphene, metal-based nanoparticles, transition metal dichalcogenides, and metal-organic frameworks (MOFs). Potential topics include, but are not limited to:

- Nanocatalysts for soil/groundwater remediation.
- Nanocatalysts for wastewater treatment.
- Nanocatalysts for organic pollutant removal.
- Coupled techniques for environmental remediation mediated by nanocatalysts.

### Guest Editors

Prof. Dr. Jinhua Zhan

Key Laboratory of Colloid and Interface Chemistry, Ministry of Education, School of Chemistry and Chemical Engineering, Shandong University, Jinan, China

Dr. Lingshuai Kong

Institute of Eco-Environmental Forensics, School of Environmental Science and Engineering, Shandong University, Qingdao 266237, China

### Deadline for manuscript submissions

closed (10 April 2024)



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Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[nanomaterials@mdpi.com](mailto:nanomaterials@mdpi.com)

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### Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal–organic frameworks, membranes, nano–alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

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### Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones

School of Geography, Earth and Environmental Science, University of  
Birmingham, Birmingham B15 2TT, UK

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