



Toxicity of Nanoparticles to Humans and the Environment

Guest Editors:

Prof. Dr. Eugenia Valsami-Jones

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

Dr. Sophie Marie Briffa

Department of Metallurgy and Materials Engineering, University of Malta, Msida, Malta

Deadline for manuscript submissions:
closed (15 October 2024)

Message from the Guest Editors

Concerns have been raised about the influences of nanomaterials and their potential risks to both human well-being and the surrounding environment, leading to discussions about nanotoxicology and the safety of nanoparticles.

This Special Issue aims to discuss methods for evaluating nanotoxicity (e.g., in vitro cell models, animal models, and computational models) to understand the distribution, transformation, bio–nano interactions, and metabolism of nanoparticles. Furthermore, it also focuses on predicting, detecting, treating, and assessing the risk of using toxic nanoparticles. We are pleased to invite authors to contribute original research or review articles regarding (but not limited to) the following aspects:

- factors affecting the toxicity of nanoparticles;
- different analytical techniques, experimental and theoretical approaches, and methods to evaluate the toxicity mechanisms of nanoparticles;
- ecotoxicity evaluation;
- neurotoxicity, immunotoxicity, genotoxicity, cytotoxicity etc.;
- environmental and risk assessment;
- safer guidance for the design and fabrication of nanoparticles.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones

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

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. We are proud of our increasing impact factor and ability to provide rapid decisions to authors.

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, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank: JCR - Q2 (Physics, Applied) / CiteScore - Q1 (General Chemical Engineering)

Contact Us

Nanomaterials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/nanomaterials
nanomaterials@mdpi.com
[X@nano_mdpi](https://twitter.com/nano_mdpi)