Special Issue

Nanomaterials and Nanocomposites Membranes for Water Purification and Assessment of Potential Ecotoxicity

Message from the Guest Editors

Water contamination is one of the most critical environmental issues and is a significant challenge for humanity. In Europe, an estimated 14,000 premature deaths are linked to water pollution, primarily due to pathogens and harmful chemicals. To address these deficiencies, developing advanced nanomaterials alongside nanocomposite membranes for water matrix decontamination is imperative. This Special Issue will focus on the following:

- The novel synthesis and application of nanomaterials and nanocomposite membranes in water matrix decontamination;
- Nanocomposite membranes for filtration, photocatalytic, adsorptive, and filtration applications;
- Multifunctional nanomaterials for water decontamination and disinfection;
- Nanomaterials' and nanocomposite membranes' reusability, recyclability, and second life assessments;
- Ecotoxicity;

Guest Editors

Prof. Dr. Fernanda Cássio

- Centre of Molecular and Environmental Biology (CBMA), Department of Biology, University of Minho, Campus de Gualtar, 4710-057 Braga, Portugal
- 2. IB-Ś-Institute of Research and Innovation on Bio-Sustainability, University of Minho, 4710-057 Braga, Portugal

Dr. Pedro Manuel Martins

- Centre of Molecular and Environmental Biology (CBMA), Department of Biology, University of Minho, Campus de Gualtar, 4710-057 Braga, Portugal
- 2. IB-S-Institute of Research and Innovation on Bio-Sustainability, University of Minho, 4710-057 Braga, Portugal

Deadline for manuscript submissions

closed (1 March 2025)



Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3 CiteScore 9.2 Indexed in PubMed



mdpi.com/si/210181

Nanomaterials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
nanomaterials@mdpi.com

mdpi.com/journal/nanomaterials





Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3 CiteScore 9.2 Indexed in PubMed



About the Journal

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 nanometerscale 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.

Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones

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

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)

