



## Unconventional and Green Approaches for the Synthesis of Crystalline Inorganic Materials

Guest Editors:

**Dr. Marta M. Natile**

**Prof. Dr. Silvia Gross**

**Prof. Dr. M. Lucia Curri**

Deadline for manuscript  
submissions:

**closed (31 December 2022)**

### Message from the Guest Editors

Recently, the extraordinary advances in the field of materials science have increasingly resulted in a large variety of new, original experimental approaches for the synthesis of inorganic crystals and nanomaterials. The potential of unconventional and sustainable preparative routes has been catching on, envisaging a great development of methods that are suited for a range of materials, with diverse, also size dependent properties, and that can be comprehensively characterized from fundamental point of view and investigated for their technological applications.

This Special Issue aims to collect examples of new and unconventional methods for the preparation of advanced inorganic materials, with special attention to sustainability, low environmental impact.

This Special Issue covers, without being limited to, the following topics: unconventional and green synthesis approaches for (photo)catalysis and energy conversion and storage, for biomedicine and health, inorganic materials synthesis optimization and scale up, innovative experimental characterization and computational approaches.





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.

## 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](http://www.mdpi.com)

[mdpi.com/journal/nanomaterials](http://mdpi.com/journal/nanomaterials)  
[nanomaterials@mdpi.com](mailto:nanomaterials@mdpi.com)  
[X@nano\\_mdpi](#)