



## Nanoelectrocatalysts for Energy and Environmental Applications

Guest Editors:

**Dr. Juan Carlos Calderón  
Gómez**

Instituto de Materiales y  
Nanotecnología, Departamento  
de Química, Universidad de La  
Laguna, AP 456, La Laguna, 38206  
Santa Cruz de Tenerife, Spain

**Dr. Alejandro González Orive**

Instituto de Materiales y  
Nanotecnología, Departamento  
de Química, Universidad de La  
Laguna, AP 456, La Laguna, 38206  
Santa Cruz de Tenerife, Spain

Deadline for manuscript  
submissions:

**10 November 2024**

### Message from the Guest Editors

The search for catalysts with outstanding performance in different electrochemical processes related to energy production, storage and other environmental applications has achieved an answer in the tuning of different structures with novel crystalline and morphological properties, which play a key role in the activity of these materials.

The aim of this Special Issue is to present innovative results concerning the design and characterisation of nanostructured materials and their potential applications in different energy production and environmental applications, including proton exchange membrane fuel cells, electrolyzers, ground and water remediation, and CO<sub>2</sub> electrochemical capture, among others, as well as supported and unsupported catalysts with different crystalline shapes, composites and materials grown from novel supports avoiding the use of binders. Therefore, we invite authors to present their novel research through original articles addressing the design and characterisation of catalytic materials with novel properties achieved from their nanostructures.





an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Shirley Chiang**

Department of Physics, University  
of California Davis, One Shields  
Avenue, Davis, CA 95616-5270,  
USA

## 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 (*Chemistry, Multidisciplinary*) / 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](https://x.com/nano_mdpi)