

## Special Issue

# Advances in Nano-Electrochemical Materials and Devices

### Message from the Guest Editors

Electrochemical devices have drawn remarkable interest and elicited spectacular growth over decades for a broad range of applications, including energy storage, sensing, electrochemical processing, etc. The nanotechnology promoted nanomaterials provide high surface area, nanosize-induced physical effects, and controllably three-dimensional structure construction, which lead to prominent properties and thus have great potential applications in electrochemical devices. This Special Issue aims to publish recent advances in the design, manufacture, and applications of nano-electrochemical materials and devices. It is focused on, but not confined to, four main research topics, involving advanced nano-electrochemical devices:

- Advanced nanomaterials and techniques for energy storage devices
- Electrochemical materials and devices for electrocatalysis, electroanalysis, and electrochemical sensing
- New mechanisms and principles in nanotechnology-based electrochemical devices
- Development and application of electrochemical materials and devices for biological application

We look forward to receiving your contributions.

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### Guest Editors

Prof. Dr. Xuyuan Chen

Prof. Dr. Mei Wang

Dr. Nabin Aryal

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### Deadline for manuscript submissions

closed (31 October 2023)



## Nanomaterials

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*Nanomaterials*  
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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## 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 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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