



an Open Access Journal by MDPI

Nanomaterials towards Electrocatalysis

Guest Editor:

Dr. Xiaoqian Wang

Physical Science and Engineering
Division, King Abdullah University
of Science and Technology,
Thuwal, Makkah, Saudi Arabia

Deadline for manuscript
submissions:

closed (30 June 2023)

Message from the Guest Editor

Dear Colleagues,

The rapid consumption of fossil fuels has caused increasing instances of climatic issues and energy crises, which leads to the urgent demand for developing sustainable and clean energies. The development of advanced electrocatalyst technology is based on the exploration of many scientific problems, including in-depth understanding of electrocatalytic mechanisms, design and synthesis of advanced catalysts, design of electrolytic cells, exploration of catalytic reaction possibilities, and advanced characterization techniques. The scope of this Special Issue is to offer latest cutting-edge research and developments of electrocatalysis for energy conversion. Research areas may include (but are not limited to) the following:

Electrocatalysts for fuel cells and water electrolysis;
Electrochemical conversion of CO₂, N₂, CH₄ and other small molecules;
Electrocatalysis mechanistic studies;
Electrolyzer reactor design;
Advanced characterization techniques for electrocatalysis.
See more information in:

<https://www.mdpi.com/si/145360>

Dr. Xiaoqian Wang
Guest Editor



[mdpi.com/si/145360](https://www.mdpi.com/si/145360)

Special Issue



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

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