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Nanomaterials towards Electrocatalysis

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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.
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Dr. Xiaoqian Wang
Guest Editor



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Special Issue



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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. We are proud of our increasing impact factor and ability to provide rapid decisions to authors.

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