Special Issue

Nanomaterials and Nanotechnology for Electrocatalytic Applications

Message from the Guest Editors

The subject of nanomaterials and nanotechnology is of significant interest because of their profound electrocatalytic applications in energy conversion and storage. Their application has significantly improved the electrocatalytic activity of numerous electrocatalytic reactions. During the past few years, there has been an increasing amount of research dedicated to designing nanomaterials with intriguing and specific properties to develop highly efficient electrocatalysts with superior stability for various electrocatalytic applications. The performance of supported nanoparticles-based electrocatalysts, is severely influenced by a number of different parameters. These parameters include the size and shape of nanoparticles, defect sites, step sites, metal–support interface, etc. Moreover, the use of nanomaterials is significantly enhancing our knowledge to understanding correlations between size/shape and electrochemical reactivity at the nanoscale. This Special Issue of Nanomaterials is dedicated to collecting reviews and recent papers in electrocatalysis for energy and storage applications.

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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.

Editor-in-Chief

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