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Advances in Nanomaterials for Application in Electrochemical Devices

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Deadline for manuscript submissions:

closed (30 April 2023)

Message from the Guest Editors

Dear Colleagues,

We are pleased to invite you to contribute to a special issue focused on 'Advances in Nanomaterials for Application in Electrochemical Devices'. Advanced materials manufacturing endeavors to deliver innovative solutions such as secure communications, lighter devices and energy efficient systems based on the fundamental principles of nanotechnology and electrochemistry. The continuous development and optimization of these high-performance materials is driven by the need for improved productivity, connectivity and sustainability delivered at low-cost. An understanding of the correlation between the physicochemical properties and electrochemical activity of the material can not only elucidate attendant surface reaction mechanisms and deactivation pathways but inform the rational design of the next generation of high-performance nanomaterials.

In this Special Issue, original research articles and reviews are welcome. Research areas may include (but not limited to) contributions at the interface of functional nanomaterials and electrochemistry to enable the deployment of the next generation of advanced, high-performance electrochemical devices.



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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.

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