

Special Issue

Nanomaterials for Electrochemistry in Fuel Cells and Batteries

Message from the Guest Editors

The growing consumption of fossil fuels has led to severe global warming and energy crises, motivating the researchers to focus on clean and renewable energy storage and conversion technologies. In this regard, various rechargeable batteries and fuel cells, including lithium/sodium ion batteries, metal batteries, aqueous batteries, and fuel cells, have been developed over the past decades. Although rapid developments and continuous achievements have been made recently, their practical implementations are still limited, requiring more creative work to break these limitations. One of the biggest barriers is due to the lack of suitable electrode materials/catalysts and the related ambiguous working mechanisms. To this end, this Special Issue will mainly cover cutting-edge studies in various electrode materials for batteries and fuel cells, with special emphasis on novel electrode materials and their synthesis/characterizations/electrochemical performance. Research papers, review articles, and communications relating to this topic are welcome.

Guest Editors

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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

Prof. Dr. Eugenia Valsami-Jones

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