Special Issue

Recent Advances in Nanofunctional Materials for Electrochemical Transformations

Message from the Guest Editors

Electrochemical transformations have been broadly applied in various fields during the past decades. Nanostructures with unique surfaces where the reaction process happens directly govern the overall sensing performance from the perspective of the atomic level. Recently, various newly developed nano functional materials provide great opportunities to significantly enhance the electrocatalytic performances of nanomaterials toward various chemical transformations due to their excellent conductivity, efficient charge transfer, large specific surface area, flexible structure and composition, and so on. This Special Issue aims at presenting comprehensive research on the use of nanostructures in electrocatalysis, outlining progress on the application of nanostructures to improve the performance of electrocatalysts. We invite authors to contribute original research articles and review articles covering the current progress on electrochemical transformations through heterogeneous catalysis. Potential topics include, but are not limited to heterogeneous electrocatalysis, electrochemical sensors, biosensors, and so on.

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

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