Special Issue

Green Catalysis in Nanomaterials—Photocatalysis and Electrocatalysis

Message from the Guest Editors

Energy shortage and environmental pollution have become two serious problems in the process of sustainable development. Developing green catalysis in nanomaterials with distinctive properties is an effective method of relieving environmental pressure. The current Research Topic aims to cover: (1) developing new methods for the synthesis of functional inorganic and inorganic–organic nanomaterials with novel structures; (2) advanced novel functional materials such as low-dimensional hybrid and/or multi-junction assemblies for utilizing renewable energy resources, energy conversion, hydrogen and green fuel production; and (3) catalytic remediation of pollutants in wastewater using advanced oxidation processes (e.g., photocatalysis, photo-electrocatalysis, sonocatalysis and electrocatalysis) and heterogeneous catalysis strategies. The present Special Issue of Nanomaterials aims to present the current state of the art regarding Green Catalysis in Nanomaterials—Photocatalysis and Electrocatalysis. We invite contributions from leading groups in the field with the aim of providing a balanced view of the current state of the art in this discipline.

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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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