Special Issue

Nanomaterials for Photochemical/Photoelectrochen Application

Message from the Guest Editors

Photo- or photoelectro-catalysis can turn unlimited solar energy into chemical energy that can be stored indefinitely. Due to its minimal energy intake and carbon impact, it is an ecologically friendly and promising technique. It has particular promise in water splitting, as well as carbon dioxide or nitrogen reduction. Furthermore, it has considerable potential in the breakdown of dyes and volatile organic compounds (VOCs), the disinfection of microorganisms, the selective synthesis of organic molecules, and so on. This Special Issue, entitled "Nanomaterials for Photochemical/Photoelectrochemical Application", seeks to provide a comprehensive description of recent discoveries in creative nanomaterials that impact significant advancements in the photo- or photoelectro-chemical performance of catalysts. The focus of this Special Issue includes unique material designs, novel materials synthesis and processing, enhanced material characterisation, and photo- or photoelectrochemical evaluation data for the current state of the art in photochemical/photoelectrochemical applications.

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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