Special Issue

Semiconductor-Based Nanomaterials for Photocatalytic Applications—2nd Edition

Message from the Guest Editor

In recent years, semiconductor-based nanomaterials have been the object of extensive research. These types of nanomaterials can be employed as catalysts in a number of applications of heterogeneous photocatalysis, such as air and water treatment, the synthesis of organic compounds in mild conditions, hydrogen production from water splitting, and CO2 transformation. This Special Issue is devoted to the formulation of new semiconductor-based nanomaterials, their chemical–physical characterization via traditional and innovative experimental techniques, and their performances in photocatalytic reactions. Research and review papers related to the preparation and characterization of nanomaterials with semiconductor properties and their application in UV or visible (or solar light)-driven photocatalytic reactions are welcome in this Special Issue. See more information at https://mdpi.com/si/183613

Guest Editor

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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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