

Special Issue

Eco-Friendly Nanomaterials: Structure–Property Relationships in Photocatalysis

Message from the Guest Editor

This Special Issue aims to examine the fundamental structure–property relationships that govern the photocatalytic performance of nanomaterials synthesized via eco-friendly, green, or sustainable methods. We will focus on how structural, morphological, compositional, defective, and contaminant-induced features influence light absorption, charge separation, reactivity, and stability in photocatalytic processes. Understanding these relationships is crucial for optimizing the performance of nanomaterials while adhering to green chemistry principles. The Special Issue will bridge the gap between green synthesis and functional performance, and thus welcomes the submission of detailed characterization and mechanistic studies of eco-friendly photocatalysts.

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. We are proud of our increasing impact factor and ability to provide rapid decisions to authors.

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