



Hybrid Nanomaterials Applied to Photocatalysis

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Message from the Guest Editor

The design and development of hybrid nanostructured photocatalysts have recently been receiving substantial attention, due to their high potential in enhancing the photocatalytic efficiency of semiconductor nanomaterials. These hybrid nanostructured materials include combination with polymers, carbon nanomaterials and other novel 2-dimensional nanosheet materials.

Significant advances have been made when nanomaterials are combined with molecular structures, namely improvement of light harvesting, prolonging charge separation state lifetime, and increase in catalytic activity and selectivity. This Special Issue welcomes contributions devoted to the design, characterization, and application of the abovementioned (but not limited) novel nanostructured photocatalysts. Manuscripts on the structural aspects of nanophotocatalysts, nanostructure formation process, parameters affecting photocatalytic activity, photocatalytic mechanisms, and photocatalytic applications for the efficient degradation of pollutants in water/air are welcome. Furthermore, current research trends and future prospects of high-performance hybrid photocatalytic materials, are also welcome.





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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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