



Molecular Design, Synthesis, and Characterization of Photocatalytic Materials

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Message from the Guest Editors

Sustainable development urges us to focus on the design and engineering of materials that are active under solar light illumination. Photocatalytic activity is highly dependent on the intrinsic electronic and structural properties of photocatalysts, such as the shape, surface area, size of the particles, and exposed facets. The electronic properties can be modified by the interaction of an organic molecule/dye with the photocatalyst. At the same time, the structural properties can be tuned by synthesis methods, for instance using organic molecules and polymers to create a porous structure.

In this Special Issue, we aim to explore the impact of the electronic and structural properties of photocatalysts on the efficiency of these materials in solar-driven processes. The issue focuses on research at the molecular and mechanistic levels. Papers dealing with energy conversion and air/water decontamination are welcome. We invite researchers working in applied and basic sciences to submit their original works, short communications, and review articles to contribute to this Special Issue.





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Message from the Editor-in-Chief

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