

Special Issue

Thermal and Photocatalytic Analysis of Nanomaterials: 2nd Edition

Message from the Guest Editors

The thermal properties of nanomaterials are important in both their preparation and application. Several nanostructured compounds are prepared by thermal decomposition of their precursors, and detailed knowledge of the decomposition scheme is vital to be able to control the structure, composition, and morphology of the as-prepared nanomaterials. Photocatalytic synthesis is also a major field of green chemistry. It ranges from artificial photosynthesis by converting CO₂ and H₂O into organic raw molecules to producing photocatalytic synthetic versions of more sophisticated organic processes. There are many exciting materials and processes appearing in contemporary photocatalytic research, including photonic bandgap structures and all-organic photocatalysts. Using computation chemistry and applying extreme laser infrastructure to understand photon absorption, excitation, and dissipation processes and the photochemical reactions that occur therewith are also hot topics in this field. The present Special Issue aims to collect studies, and their results, comprising the latest developments on the thermal and photocatalytic properties of nanomaterials.

Guest Editors

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Message from the Editor-in-Chief

As the premier open access journal dedicated to molecular chemistry, now in its 29th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts, and novel materials. Pushing the boundaries of the discipline, we invite papers on all major fields of molecular chemistry and multidisciplinary topics bridging chemistry with biology, physics, and materials science, as well as timely reviews and topical issues on cutting-edge fields in all of these areas.

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