Special Issue

Catalytic Nanomaterials: Energy and Environment

Message from the Guest Editors

A fast-growing industry and the rising global population in recent years have been the key factors contributing to the energy shortage and environmental pollution. As a green and sustainable technology, semiconductor-based heterogeneous photocatalysis has attracted wide attention in the past few decades because of its potential to solve both energy and environmental problems. We invite the submission of original research, reviews, and perspective articles on themes including, but not limited to:

- Scientific aspects of photocatalytic processes and basic understanding of photocatalysts as applied to environmental and human health problems;
- Nanophotocatalysts with novel morphology, porous structure, nanohybrids, and exposed active sites;
- Synthesis and characterization of nanostructural photocatalysts;
- Photocatalytic pollutant degradation, water splitting, CO2 reduction, and nitrogen reduction using nanostructural materials;
- Theoretical calculations of photocatalysts and photocatalytic processes;
- Photocatalytic reaction mechanism.

Guest Editors

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Deadline for manuscript submissions

closed (31 March 2023)

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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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