Special Issue

Innovative Nanostructures for Energy and Environmental Applications

Message from the Guest Editor

Nanostructured materials have revolutionized the fields of energy conversion, storage, and environmental remediation due to their unique physicochemical properties. This Special Issue, “Innovative Nanostructures for Energy and Environmental Applications”, focuses on recent advances in the design, synthesis, and application of nanomaterials for sustainable technologies. Topics of interest include nanostructured catalysts for clean energy generation, nanomaterials for high-performance energy storage devices (e.g., batteries and supercapacitors), and novel adsorbents for environmental remediation (adsorption, membrane separation, photocatalysis, and sensors). Additionally, the issue explores multifunctional nanostructures with enhanced stability, selectivity, and efficiency in diverse applications, including photocatalysis, electrocatalysis, and water purification. Special emphasis is placed on emerging materials such as MXenes, quantum dots, and hybrid nanostructures, as well as innovative fabrication techniques that improve material performance.

Guest Editor

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Message from the Editor-in-Chief

As the premier open access journal dedicated to experimental organic chemistry, and now in its 25th 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 multidisciplinary topics bridging biochemistry, biophysics and materials science, as well as timely reviews and topical issues on cutting edge fields in all these areas.

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