Special Issue

Synthesis, Characterization, and Applications of Nanomaterials for Energy Conversion and Storage

Message from the Guest Editors

Energy nanomaterials are materials that have been engineered to exhibit special electrical, optical, and electrochemical, mechanical, thermal properties at the nanoscale to convert and store / release energy. The most common forms of energy nanomaterials are single-atoms, nanoparticles, nanowires, nanotubes, nanosheets, and porous film/bulks. This Special Issue aims to publish papers related to synthesis and novel process methods, structures and properties, development and applications, and the improvement of energy nanomaterials in terms of energy conversion and storage.

Researchers are invited to submit papers on the synthesis, characterization, and application of energy nanomaterials, covering aspects of materials, engineering, chemistry, physics, and biology relevant to sustainable applications in energy conversion, storage, and release; as well as energy-related research on topics such as photovoltaics, batteries, supercapacitors, fuel cells, hydrogen technologies, thermoelectrics, electrocatalysis, photocatalysis, solar power technologies, magnetic refrigeration, and piezoelectric materials.

Guest Editors

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Deadline for manuscript submissions

closed (31 August 2023)



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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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