

Special Issue

Bio-Based Nanomaterials: Structure, Functions and Durability

Message from the Guest Editor

This Special Issue is devoted to collate cutting-edge research that highlight recent advancements in bio-based nanomaterials, explore their prospects and address current challenges. Topics of interest include, but are not limited to, the following:

- Novel preparation strategies of Bio-NMs, including alkaline oxidation, electrochemically assisted oxidation and deep eutectic solvent technologies.
- Advanced characterization of physicochemical, mechanical, electrochemical and biological properties.
- Applications of Bio-NMs in flexible lithium-ion batteries, electrochemical supercapacitors and emerging energy storage devices.
- Applications of Bio-NMs in water purification, adsorption and catalysis.
- Applications of Bio-NMs in drug delivery, wound healing and tissue engineering scaffolds.
- Bio-NMs reinforced composite materials.
- Smart and stimuli-responsive Bio-NMs, including pH-, temperature- and light-responsive systems.
- Applications of Bio-NMs in agriculture, including soil amendments and controlled-release systems.
- Techno-economic analysis (TEA), life cycle assessment (LCA) and toxicological studies of Bio-NMs.

Guest Editor

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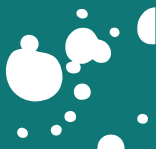
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About the Journal

Message from the Editor-in-Chief

Gels (ISSN 2310-2861) is recently established international, open access journal on physical and chemical gel-based materials. The journal aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. General topics include but not limited to synthesis, characterization and applications of new organogels, hydrogels and ionic gels made either from low molecular weight compounds or polymers, composite and hybrid materials where a metal is by some means incorporated into the gel network, and computational studies of these materials in order to provide a better understanding of gelation mechanism. We cordially invite you to consider publishing with us and contribute with your own grain of sand to the advance in this fascinating field.

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