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Hydrothermal Synthesis and Application of Nanomaterials

Guest Editor:

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Deadline for manuscript
submissions:

closed (30 June 2022)

Message from the Guest Editor

Dear Colleagues,

There are numerous ways to make nanomaterials, and hydrothermal synthesis is one example. Hydrothermal synthesis is emerging as a very valuable and flexible platform technology from which multiple classes of materials can be manufactured, including metals, oxides, sulfides, carbonates, oxyhydroxides, hydroxides, and even metal–organic frameworks.

The format of welcomed articles includes full papers, communications, and reviews. Potential topics include, but are not limited to:

- Nanomaterials development, synthesis, and fabrication for a specific application.
- Nanoparticles functionalization—where downstream functionalization is carried out on nanomaterials, either inline or offline, to make them usable in an application.
- Innovative nanomaterials, nanocomposites, and nanohybrids for specific applications, all derived from hydrothermal synthesis.
- The scale-up of hydrothermal synthesis from bench scale and beyond.
- Sustainability assessment of the materials from the hydrothermal synthesis, either in their whole life cycle or just in their manufacture, relative to materials from other routes.



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Prof. Dr. Edward H. Lester
Guest Editor

Special Issue



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Editor-in-Chief

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Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal–organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access. We are proud of our increasing impact factor and ability to provide rapid decisions to authors.

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