

Special Issue

Towards Green Metal and Metaloxide Nanostructures: Materials, Synthesis, and Applications

Message from the Guest Editor

Water and natural agents have been used as a green and sustainable alternative for synthesizing low-cost metal and metaloxide nanostructures suitable for a variety of applications including energy storage, carbon capture, printed electronics, and gas purification. The biological approach is raising enthusiasm because it can provide a clean, simple, environmentally benign and economic technology, while avoiding hazardous chemicals, contaminants, and by-products. This Special Issue aims to highlight successes and help underline progresses toward green synthetic methods. The proposed topics include (but are not limited to):

- Novel metaloxides for greener manufacturing
- Nanoparticles isolated using trees, plants, algae, and naturally occurring compounds
- Environmentally-friendly synthesis
- Low-cost low-waste non-toxic chemicals and techniques
- Applications of green-synthesized metaloxides

Guest Editor

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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.

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