Special Issue

Advanced Nanomaterials and Nanotechnology for Green Energy Harvesting, Storage, and Application

Message from the Guest Editors

Customized electronics with a decent flexibility. miniaturization, and intellectualization have strong potential to improve one's quality of life. With the rapid advancement in nanoscience and nanotechnology, the power consumption of micro-/nano-electronics are continuously being shrunk from a mW to µW/nW scale, enabling the conversion of ubiguitous, but usually unexploited, ambient green energy as a promising power solution for small electronics. Harvesting, storing, and managing these energies, including, for example, mechanical, thermal, and light, may overcome the limitation of massive batteries, as well as extend sustainability. This Special Issue of Nanomaterials aims to publish original research and review articles focusing on advanced nanomaterials and nanotechnology for effective harvesting, storage, and utilization of ambient green energy.

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Deadline for manuscript submissions

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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 nanometerscale 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.

Editor-in-Chief

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