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New Trends in Nanogenerators and Flexible Self-Powered Sensors

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Deadline for manuscript submissions:
closed (10 June 2024)

Message from the Guest Editors

Dear Colleagues,

Since the early 21st century, there has been a remarkable surge in the development of nanogenerators. They are innovative devices designed to harness ambient energies, such as mechanical vibrations, and convert them into electrical power. This transformative trend represents a pivotal shift towards self-sufficient electronics and the reduced dependency on traditional batteries. Additionally, the rise of flexible, self-powered sensors promises innovations in wearables, IoT, and healthcare systems.

This Special Issue of *Nanomaterials* spotlights the current research trends, from the evolution of hybrid nanogenerators to advances in flexible sensors. We invite diverse submissions, from original research to reviews, encompassing topics like novel fabrication techniques, design optimization, system integration, and real-world applications, to enrich our collective understanding of nanogenerators and self-powered sensors.

You can submit your paper at the following link:
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Guest Editors



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Special Issue



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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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