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Advanced Triboelectric and Piezoelectric Nanogenerator

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Message from the Guest Editors

Dear Colleagues,

As there is an emerging need for energy sources in various application areas, different types of energy harvesting platforms have been studied, including thermally, electromagnetically, chemically, and mechanically driven platforms. This Special Issue will be focused on the use of nanogenerators (NGs) to convert mechanical energy sources into electricity based on the development of advanced piezoelectric and triboelectric effects.

Indeed, as nanoelectronics and bioelectronics continue to be realized, complex device network systems will soon become a cornerstone of human life. Each of these will require an energy source; however, self-powered systems will be the ideal form of such device networks. From this point of view, NGs are a promising type of energy harvesting unit for these systems due to their simple structure, range of material selection options, biocompatibility, facile fabrication, use of universal mechanical energy sources, etc.

We welcome original research articles, reviews, and case and analytical studies that are relevant to advanced piezoelectric and triboelectric NGs and their application to nano-systems.

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Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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