Special Issue

Piezoelectric Nanogenerators and Sensors

Message from the Guest Editors

Significant recent progress in the field of nanotechnology has made it possible to effectively convert various types of energy into electrical output. One of many physical phenomena that can be used is piezoelectricity, where the deformation of the crystal structure leads to the accumulation of electrical energy. Piezoelectric nanogenerators and sensors are important components used in many technologies. Moreover, piezoelectric nanogenerators based on various advanced materials may generate electrical energy by harvesting human motion energy and may thus support or even replace the traditional battery charging of mobiles. Piezoelectric materials are also widely used in sensing technology. They are used to measure pressure, strain, and many other physical quantities based on charge generation via material deformation. The current Special Issue invites the submission of research that investigates the presentations of new nanomaterials and nanocomposites, new fabrication methods, and applications of piezoelectrics. Furthermore, the Special Issue addresses the innovative design, fabrication, and end-of-use application of piezoelectric nanogenerators and sensors.

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Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

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