Special Issue

Piezoelectric Nanofibers: Recent Development, Challenges, and Applications

Message from the Guest Editors

Piezoelectric membranes have been investigated over the last two decades in applications of energy harvesting, efficient lighting, and wearable electronics. Polymeric nanofibers membranes have sparked an increased interest in both research and applications. However, due to their limited transducing efficiency compared to bulky ceramics and relatively lower-scale production, there are various challenges to using such nanocomposites on a wide range of applications. Therefore, the goal of this Special Issue is to attract the most prestigious research publications on recent techniques for improving the mechanical-to-electrical transducing efficiency of nanofiber membranes. These techniques include, but are not limited to, the use of higher-performance polarized polymers, promising additives to enhance polarizability, fabrication techniques to improve the piezoelectric performance, along with different applications of developed nanofibers mats in sensors, transducers, vibration detection, acoustic harvesting, wearable electronics, and more. Review articles are also welcome, but should focus on recent trends in the field's literature.

Guest Editors

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Deadline for manuscript submissions

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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