Special Issue

Research on Smart Materials and Self-Powered Nanogenerators Systems

Message from the Guest Editor

Energy is a fundamental driving force of the global economy, and today, the world energy supply mainly relies on fossil fuels. However, due to the depletion of fossil fuels and the problems of environmental pollution and climate change, the sustainable development of human civilization faces a huge challenge. Therefore, harvesting renewable energies from our ambient environment through the development of micro/nanoscale energy technologies is of great practical value. Nanogenerators, as an effective mechanical energy harvesting technology, provide a promising route to sustainable energy. Developing new smart materials with new nanostructures to be applied in nanogenerator systems is beneficial to the enhancement of the output performance and efficiency of nanogenerators. Nanogenerators have found major applications in the fields of micro/nanoscale energy, self-powered systems/sensors, blue energy, and high-voltage power sources. This Special Issue on “Advances in Smart Materials and Self-Powered Nanogenerator Systems” aims to cover recent achievements in the fields of smart material applications and nanogenerator-based self-powered systems.

Guest Editor

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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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