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Advances in Smart Materials and Self-Powered Nanogenerators Systems

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Message from the Guest Editor

Energy is a fundamental driving force of the global economy. 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 into nanogenerator systems is beneficial to the enhancement of output performance and efficiency of nanogenerators. The piezoelectric nanogenerator and triboelectric nanogenerator (TENG) were invented by Prof. Zhong Lin Wang in 2006 and 2012, respectively, to convert mechanical energy into electricity. Nanogenerators have found major applications in the fields of micro/nano energy, self-powered systems/sensors, blue energy, and high-voltage power sources. This Special Issue aims to cover recent achievements in the fields of smart materials applications and nanogenerator-based self-powered systems.

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Message from the Editor-in-Chief

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