Special Issue

Advances of Triboelectric Nanogenerators for Energy Harvesting and Sensors Applications

Message from the Guest Editor

This Special Issue is enthusiastic about the application of the triboelectric nanogenerators (TENGs) for energy harvesting and self-powered sensors. TENGs are innovative energy-harvesting and active sensing technologies that show a notable capability for extracting biomechanical and environmental energy. For energy harvesting, the output electrical energy of the TENG is supplied to wearable/portable electronic devices and wireless sensors in the era of the Internet of Things (IoT). Various input mechanical energy sources, including human-body-induced motion, magnetic-fieldinduced motion, water, sound, and wind to be harvested by the TENG. The generated output electrical signal of the TENG is a sensing signal itself when an external mechanical energy source (pressing, touching, and moving of an object) is induced. The TENG-based sensor has flexibility, stretchability, excellent material compatibility, and low cost which is a unique applicant technology for AI (Artificial Intelligence). Also, it can easily be fabricated without the use of any expensive material or complex fabrication method.

Guest Editor

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