

Special Issue

Impact-driven Broadband Piezoelectric Energy Harvesting: Design and Applications

Message from the Guest Editors

The use of energy harvesting as a power source can dramatically reduce the construction and maintenance costs and enable self-powered electronic devices that operate under vibrations and impacts. The property of frequency up-conversion makes impact-based piezoelectric energy harvesting suitable for low-frequency and broadband applications over vibration-based piezoelectric energy harvesting. There is much demand for high-efficiency impact-driven piezoelectric energy harvesters for versatile applications. In this Special Issue, we aim to showcase the state-of-the-art of impact-driven energy harvesting. Potential topics include, but are not limited to: innovative designs for broadband impact-driven energy harvesting; modeling of and experiments on impact-driven energy harvesting; conditioning circuits for impact-driven energy harvesting; energy storage systems for impact-driven energy harvesting; optimization of impact-driven energy harvesters; efficiency studies of impact-driven energy harvesting; enhancement of the durability of impact-driven energy harvesters; and application-oriented studies on impact-driven energy harvesting.

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