

TENG - from scientific discoveries to technological innovations

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Triboelectric nanogenerator (TENG) was invented by my group in 2012, which is based on coupling of triboelectrification and electrostatic induction effects for converting mechanical energy into electric power. TENG is playing a vitally important role in the distributed energy and self-powered systems, with applications in internet of things, environmental/infrastructural monitoring, medical science, environmental science, and security. There are now over 12,000 scientists distributed in 83 countries and regions around the globe who have published papers on TENG. This presentation will first focus on the advances in fundamental science made due to the discovery of TENG. Then we will focus on the potential industrial impacts that have been made by TENG. We will show how this new field will benefit to the sustainable development of humankind.

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