

Title: Solar Cell Nanogenerator

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Here, an energy harvesting structure that integrates a solar cell and a triboelectric nanogenerator (TENG) device is built to realize power generation from both sunlight and raindrops.

As such, we report a hybrid energy harvester (HEH) combining a piezoelectric nanogenerator and a perovskite solar cell to simultaneously harvest mechanical and solar energy.

Here, an energy harvesting structure that integrates a solar cell and a triboelectric nanogenerator (TENG) device is built to realize power generation from both sunlight and raindrop.

The design and analysis of the optical performance of a contact-separation triboelectric nanogenerator integrated hybrid PV cell that can scavenge energy from rain without interfering with ...

The harvester consists of electromagnetic-triboelectric nanogenerator units for collecting rotational energy and a commercial water-proof flexible solar cell. At a rotation rate of 500 rpm, the output ...

We review the development of hybridized nanogenerators, including the working mechanism of solar and mechanical energies. Moreover, the classification of nanogenerators for ...

Herein, monolithic hybrid devices are developed via rational integration of high-performance semitransparent polymer solar cells (ST-PSCs) and liquid-solid triboelectric ...

This may include the development of more efficient TENG materials, advanced solar cell technologies like perovskite solar cells, and innovative designs that effectively combine these technologies.

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