Nanoelectronics: How to generate Electricity From Snow With (Triboelectric Nanogenerator)

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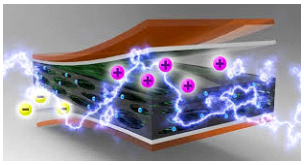
- **Abstract:**

- A triboelectric nanogenerator is a device that can generate electricity through static electricity, which is done by exchanging electrons .

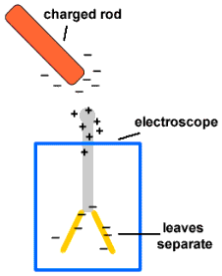
- **Keywords:** Nanogenerator , Nanoelectronic , Snow , Nanoparticles

Introduction •

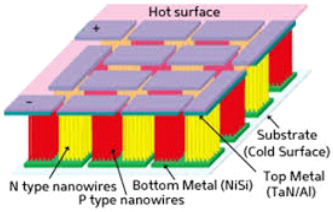
Snow is positively charged and is considered an electron donor. Silicone, a synthetic material similar to rubber, is made up of oxygen and silicon atoms, which are negatively charged. When snow comes into contact with the surface of the silicon, a charge is generated and electricity is created. Static electricity is created by the interaction between an electron donor and an electron acceptor. In this process, you separate the charges and create electricity.



Snow is naturally charged and is used to generate electricity using another material that is negatively charged. When electricity tends to lose electrons, another material takes the charge. Since various materials such as aluminum foil or Teflon are less conductive of electrons than nano-silicon, nano-silicon can generate more electricity than other materials.



30 percent of the Earth's surface is covered in snow, where solar panels cannot work. Using this nanotechnology, snow can be used to generate electricity. (Triboelectric Nano Generator) can be combined with solar panels to create a device that can generate electricity in different weather conditions.



The triboelectric nanogenerator can be installed in remote environments to meet the power needs of the area without the need for batteries. This device is very smart. Like a weather agency, it can tell you how much snow is falling, what the direction of the rain is, and what the wind speed is.

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