

Special Issue

Phase Change Materials and Triboelectric Sensors

Message from the Guest Editors

Solid–liquid phase change materials (PCMs) are typically employed in latent heat storage systems for heat generation, solar power, and space thermal control. Because of their capacity to melt and harden over a wide range of temperatures, they are suitable for various purposes. The possibilities of dielectric and metal nanostructures that can be switched by PCMs are endless. The rapid development of technology has led to the emergence of various structures with different functions, including filters, lenses, absorbers, and sensors. Over the next few decades, PCMs-based nanophotonic devices will expand on commercial device platforms. This Special Issue is focused on triboelectric sensors, as a continuation of the previous issue titled “Recent advances in triboelectric sensors”. This is a very “cutting-edge” topic that complements the exploration of PCMs. The fact that electrical energy is self-generated by the triboelectric layers makes these sensors operate either as energy harvesters or energy generators in a huge number of fields such as medicine, electronics, communications, energy harvesting, alarms and safety, and signal detection.

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