



## Phase Change Materials and Triboelectric Sensors

Guest Editors:

### Dr. Jose Sanchez del Rio Saez

1. Departamento de Ingeniería Eléctrica, Electrónica Automática y Física Aplicada, ETSIDI, Universidad Politécnica de Madrid, Madrid, Spain  
2. IMDEA Materials Institute, Madrid, Spain

### Dr. Carolina Hermida Merino

Departamento de Ingeniería Eléctrica, Electrónica Automática y Física Aplicada, ETSIDI, Universidad Politécnica de Madrid, Madrid, Spain

Deadline for manuscript submissions:

**20 April 2025**

### 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.





*sensors*



an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Vittorio M. N. Passaro**

Dipartimento di Ingegneria  
Elettrica e dell'Informazione  
(Department of Electrical and  
Information Engineering),  
Politecnico di Bari, Via Edoardo  
Orabona n. 4, 70125 Bari, Italy

## Message from the Editor-in-Chief

*Sensors* is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. *Sensors* organizes Special Issues devoted to specific sensing areas and applications each year.

## Author Benefits

**Open Access** : free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

**High Visibility**: indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [PubMed](#), [MEDLINE](#), [PMC](#), [Ei Compendex](#), [Inspec](#), [Astrophysics Data System](#), and [other databases](#).

**Journal Rank**: JCR - Q2 (*Instruments & Instrumentation*) / CiteScore - Q1 (*Instrumentation*)

## Contact Us

---

*Sensors* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/sensors](http://mdpi.com/journal/sensors)  
[sensors@mdpi.com](mailto:sensors@mdpi.com)  
[X@Sensors\\_MDPI](#)