

Sensors and Materials
**Special Issue on Advanced Materials and Technologies for Sensor
and Artificial Intelligence of Things Applications
(Selected Papers from ICASI 2026)**

Call for Papers

Special Issue Information

The 12th IEEE International Conference on Applied System Innovation 2026 (IEEE ICASI 2026, <https://2026.icasi-conf.net/>) will be held in Kyoto, Japan, on April 14–17, 2026. The conference will provide a unified communication platform for a wide range of topics in electrical engineering, material science, and related fields.

Novel materials, various sensors and flexible optoelectronics have attracted a great deal of attention in recent years because of their potential applications in healthcare monitoring, biomedicine, electronic skin, wearable sensing technology, soft robotics, flat-panel displays, safety equipment, smart systems, and future space applications. Additionally, artificial intelligence (AI) refers to intelligence exhibited by machines, particularly computer systems. The Artificial Intelligence of Things (AIoT) integrates AI with the IoT infrastructure to enhance efficiency, human–machine interactions, and data management.

The aim of the special issue "Advanced Materials and Technologies for Sensor and Artificial Intelligence of Things Applications" is to publish high-quality research in AIoT-related fields to foster interdisciplinary collaboration between academia and industry worldwide. It covers fundamental and advanced sensors, materials, and technologies in electronic, mechanical, and electrical engineering. Topics include material synthesis, device design, sensing technologies, performance evaluation, and broad industrial applications such as environmental control and materials analysis.

We welcome original research and review articles that contribute to the development of electronic, mechanical, and optical sensors. Potential topics include, but are not limited to the following.

- Design, synthesis, and characterization of functional micro/nanomaterials for sensing applications and electronic devices
- Electronic Devices and Sensors for AIoT Applications
- Sensing Technologies for AIoT
- Novel Materials for AIoT
- Thin Films and Coating Technologies for AIoT
- Mechatronics and Engineering of Novel Materials for AIoT
- Advanced Sensors for AIoT
- Medical and Health Applications of AIoT Sensors
- AIoT Sensors in Robotics and Remote Sensing

Schedule

Manuscript Due: September 30, 2026

First Round of Reviews: October 31, 2026

Second Round of Reviews: November 30, 2026

Acceptance of Final papers: January 31, 2027

Publication (planned): February 28, 2027

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(Attention)

As stated in Instructions to Authors in the Guidelines, the author(s) will be obliged to pay the publication fee upon the acceptance of the manuscript for publication (for example, JPY178200 for 10 pages in Sensors and Materials format). If the quality of the English of your manuscript does not satisfy the journal standards, the authors will bear the proofreading fee (JPY 11000–44000), which will be charged with the publication fee.

<https://sensors.myu-group.co.jp/permanent/Instructions%20to%20authors2019%20EN.pdf>

If you have any questions, please feel free to contact the editorial staff at the address below.

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