



A Special Issue on

Flexible and Smart Electronics for Sensors 4.0

Call for Papers

The evolution of information technology has driven the development of sensors into the new era - Sensors 4.0, featuring the advancement of Internet of Things (IoT), Industry 4.0, big data, artificial intelligence (AI), robotics, and digital health, and requiring sensors to become more connected and intelligent. The vision of “everything is connected” requires sensors to perform new and diverse tasks, which are difficult to be met by conventional bulky devices. Apart from chasing the ultimately high sensitivity and large bandwidth as in “more Moore” that struggles in squeezing the last few nanometers out of the process node, “more than and beyond Moore” offers new opportunities in the era Sensors 4.0. A device that can flex adds new mechanical dimension to its original form factor, paving way for next generation distributed sensory applications that are deformable, miniaturized, lightweight, etc. Moreover, the recent progress in multimodal, biomimetic, AI-enhanced, all-in-one sensing materials and devices are advancing the frontiers in smart electronics, aiming at ultimately low power consumption and superior functionality. Therefore, flexibility and intelligence are two critical features that drives the development of new and attractive electronic sensory applications in Sensors 4.0.

In light of the importance of flexible and smart electronic devices in Sensors 4.0 and their rapid advances, we would like to organize this special issue on the Journal of Semiconductors. Both review papers and research articles are welcome.

This special issue focuses but not limited to the following topics:

1. Flexible electronic devices and systems
2. Flexible optical and optoelectronic devices and systems
3. AI incorporated/enhanced devices and systems for multimodal sensors

4. E-skins and OE-skins
5. Neuromorphic devices and brain-inspired sensors
6. Advanced manufacturing technologies for flexible and smart electronics

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Manuscript Submission:

Manuscripts must be prepared according to the Journal's guidelines, available at http://www.jos.ac.cn/news/Preparing_Your_Manuscript.htm. Submit your manuscripts via the online submission address at <https://mc03.manuscriptcentral.com/jos-iop>. Or directly submit to the listing guest editors via the e-mail addresses above.

Please notify well in advance for your intention to submit a research paper.

Key Timetable Dates:

Manuscript Submission Deadline: **Aug 25, 2024**

Manuscript Acceptance Date: **Sep 25, 2024**

Publication Date: **Nov 25, 2024**



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