

2026 11th International Conference on Power Electronics Systems and Applications



Important Dates

Submission Deadline	June 25, 2026
Notification Deadline	July 25, 2026
Registration Deadline	August 30, 2026

Special Session 2: Advanced Energy Conversion and Charging Systems for Robotics and Electrified Mobility

The development of advanced power conversion and drive technologies has become a fundamental enabler for the continuous evolution of robotic systems and intelligent mobile platforms. As service robots, industrial robots, electric vehicles, and automated equipment increasingly demand higher efficiency, higher power density, greater intelligence, and deeper system integration, power electronic technologies for robotic joint drives, wireless power delivery, and energy management are playing an increasingly critical role. Whether in robotic motor drive systems, DC–DC energy conversion for vehicular and mobile platforms, or wireless charging and dynamic power supply scenarios, advanced power converters are essential for ensuring reliable operation and performance optimization. In recent years, the rapid advancement of wide-bandgap (WBG) semiconductor devices—such as silicon carbide (SiC) and gallium nitride (GaN)—has significantly accelerated innovation in robotic electric drives and wireless power delivery technologies. These devices exhibit clear advantages in high-frequency operation, high efficiency, and high power density, enabling substantial improvements in the size, efficiency, and thermal management of high-performance DC–DC converters, high-frequency inverters, motor drives, and wireless power transfer systems. Their applications are rapidly expanding to robotic joint actuators, autonomous and electrified transportation systems, mobile robot wireless charging platforms, as well as distributed energy and energy storage systems. This Special Issue aims to highlight recent research advances and engineering practices in advanced power converters within the fields of industrial electronics, robotics, and wireless charging. We welcome original research articles, review papers, and case studies addressing innovative converter topologies, control strategies, system integration techniques, reliability enhancement methods, and application-specific technical challenges. Contributions demonstrating interdisciplinary approaches or real-world deployments are particularly encouraged.



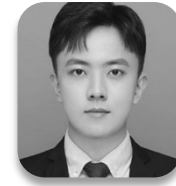
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Co-Chair: Yong Ying
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Publication

Submission Guidelines

IEEE The accepted and presented papers will be published in the **PESA Conference Proceedings**. Conference content will be submitted for inclusion into **IEEE Xplore** and indexed by **Ei Compindex** and **Scopus**, etc.

Submission Link: <https://www.easychair.org/my/conference?conf=pesa2026>

Please select **Special Session 2** after accessing the submission system.

- + PESA 2026 has been included in IEEE event list! (Read More)
- + All past PESA proceedings are archived in IEEE Xplore and indexed by Ei Compindex and Scopus.

Full Paper Template

Abstract Template

Note:

- ~Full Paper (**No less than 4 pages normally, 10 pages maximum. 5-6 pages are recommended**, including all figures, tables, and references)
- ~Abstract (Within 300 words)
- ~Official language is **English** in paper/abstract writing and presenting
- ~Download the Full Paper/Abstract Template for proceedings and read **guidelines**.

Publication History

Contact US

Accepted and presented papers of **10-year PESA** have been successfully published and indexed by **Ei Compindex & Scopus**.

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Conference Website: www.icpesa.net

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