9th IEEE Southern Power Electronics Conference (SPEC), Brisbane, QLD, Australia, Dec. 2-5, 2024

Call for Digests: Special Session on

Advanced Wireless Power Transfer Technology

Organized and co-chaired by

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Technical Outline of the Special Session

Power electronic technology has been widely used in new energy systems, energy storage systems, aerospace, and other fields due to its great characteristics, which play a crucial role in the efficient conversion and utilization of electric energy. However, the operation range of the power converter gradually faces the challenge of wide input voltage, wide output voltage and wide output load, and its operating characteristics are greatly affected. In addition, wireless power transfer, as a typical application area of power electronic technology, has attracted a great amount of attention due to its convenience, reliability, and safety. Nevertheless, this technology still faces numerous problems, such as short transmission distance, low efficiency and poor anti-migration ability.

Topics of the Special Session

- High-frequency WPT systems.
- Converter dynamics and control design;
- Capacitive power transfer;
- Ultrasonic power transfer;
- Power and signal parallel transmission for wireless power transfer;
- Foreign object detection for wireless power transfer;
- Electromagnetic shielding;
- Energy harvesting technology.
- Advanced electrical materials in WPT systems, such as metamaterials, superconductors, ferrites, and nanocrystallines.
- Other related fields

Important Dates

- Digest Submission Deadline – 30th of June
- Notification of Acceptance – 18th of August
- Final Paper Submission – 29th of September

Digest Template and Submission Information

https://spec-ieee.org/spec2024/digest-submission/

Digest Submission Link

https://easychair.org/conferences/?conf=ieeespec2024