



## Call for Papers

# CMP Chinese Journal of Electrical Engineering

### Special Issue on Smart and High-Efficiency Energy Conversion: Towards Special Applications

**Scheduled Publication Time: March 2025**

The power quality, steadfastness, and dependability of power converters are very important for various specialized applications, including aerospace design, top-tier computing, and wireless communication networks. Ingeniously devised smart and high-efficiency energy conversion technologies meet the sophisticated demands of these unique end-uses, dramatically enhancing energy conversion efficiency, minimizing power consumption, and consequently diminishing carbon emissions. This elevation of equipment operation effectiveness enhances readiness durably, thus facilitating the judicious utilization of available energy and promoting the holistic advancement of sustainability. Furthermore, through ceaseless enhancement of energy conversion proficiency and adaptability, advanced and proficient energy conversion utilities progressively confer more efficient, intelligent, and sustainable energy alternatives to our society. Over the last two decades, this technology has witnessed significant advancements, accumulating an extensive body of scientific and practical expertise. This accumulation has been pivotal in fostering scientific and technological progression, economic prosperity, and tackling global energy and environmental predicaments. These research outcomes are indispensable for fueling technological innovation and economic growth in specialized application sectors, while also offering vital solutions to the formidable issues surrounding energy on a global scale. This special issue intends to collect and report the latest developments in converters for microprocessors, radio frequency (RF), niche industries, plating processes, and more. Topics of interest include, but are not limited to:

- Advances in modeling & analysis of converter controls
- Multi-objective, multi-disciplinary, and multi-physics optimization of energy conversion
- High-power-density and high-efficiency power conversion technologies in the special application fields
- Energy router studies toward the special applications
- WBG devices and applications in the special application
- Advances in materials and manufacturing in special application
- Topologies and control strategies for special applications
- Artificial intelligence applications for the special application
- Converters digitalization technology system research and practice for the special application
- Ultra low-voltage and high-current converters
- Control and modulation for industrial specialty converter
- Other advanced power conversion technologies in the special application fields

All manuscripts must be submitted through Manuscript Central at <https://mc03.manuscriptcentral.com/cjee>. Submissions must be clearly marked “**For Special Issue of Smart and High-Efficiency Energy Conversion: Towards Special Applications**” on the cover page. The information about manuscript preparation and requirements is provided on <http://www.cjeecmp.com/EN/column/column334.shtml>. Manuscripts submitted for the special issue will be reviewed separately and will be handled by the guest editorial board noted below.

### Deadline for Submission of Manuscript: October 31, 2024

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#### Proposed Timeline:

- October 31, 2024-Manuscripts Submission Deadline
- December 31, 2024-Final Acceptance Notification
- January 31, 2025-Manuscripts Forwarded to CJEE for Publication
- March 31, 2025-Special Issue Appears in CJEE