

Call for Papers

Special Section on Dynamics and Mechanism of High Power Electronic Hybrid System with Multi-time Scales

To solve the key scientific problems on dynamic characteristics and operational mechanisms for high power electronic hybrid systems with multiple-time scales, the transient modeling, analysis, and design procedures are being studied, the dynamic boundaries, constraints, and mutual matching principles are being revealed, and the efficient precise control methods of the dynamic behaviors are being established, with the purpose of providing theoretical foundation and technological support for improving the high power electronic apparatus and systems.

This Special Section aims to provide a forum for professionals from both academia and industry all over the world to exchange their experience and achievements within the scope of dynamic characteristics and operational mechanisms for high power electronic hybrid systems with multiple-time scales. Detailed topics include but are not limited to:

- Transient modeling of non-ideal devices
- Non-linear modeling of power switching devices
- Simulation algorithms for power electronics converters
- Multi-time scales simulations for power electronics systems
- Stray parameters extraction and measurement
- Optimal design for high power converters
- Converter topologies for high power and high voltage applications
- Comparison and analysis of signal, drive and energy pulses
- Active control methods for switching transients of devices
- Energy-based control for power electronics systems
- Other control methods for high performance of converters
- Applications and reliability of high power converters

Contact the deputy editor-in-chief if your manuscript is not within the listed topics, as papers within the general topic of electrical machines and systems are all welcome by the CES TEMS.

Brief guideline for authors:

Papers styles:

1. Review articles.
2. Original research.
3. Rapid communications.

All submitted papers must be in English, must not be published by or currently under review for any other journal or conference.

Detailed submission guideline and template are available at the submission website. All manuscripts and any supplementary materials should be submitted via the site <https://mc03.manuscriptcentral.com/tems>, choosing "**SS: Dynamics and Mechanism of High Power Electronic Hybrid System with Multi-time Scales**" as the manuscript type.

About the journal

The CES TEMS is a brand-new quarterly journal published by the China Electrotechnical Society (CES) and the Institute of Electrical Engineering of the Chinese Academy of Sciences, with co-sponsorship of IEEE PELS, starting from March 2017.

Topics of the CES TEMS include but are not limited to electrical machine topologies and designs, field analysis, motor drives, motion control and servo systems, power electronics and power converters, EMI and EMC techniques, renewable energies, xEV and other electrified transportation techniques, applications of new materials, and many others related to the electrical machines and systems.

The CES TEMS is an open-access journal, currently with no publication charge applied to the authors. Published papers will be included in the IEEE Xplore. Inclusion in other globally recognized database such as the Web of Science (SCI) is under arrangement.



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