Call for Papers

Special Section on Design, Control and Condition Monitoring of High-Performance Electric Machines and Drives

High-performance electric machines and drives (EMDs) have found extensive applications where characteristics, such as high power density, high reliability, high precision, good environmental adaptability, and low emission, are sorely demanded. The design and control of such high-performance EMDs pose some unique challenges due to the increased electromagnetic, thermal, mechanical and computational stresses exerted on different materials and components of the system. Moreover, the condition monitoring becomes a more important aspect for high-performance EMDs because of small design margins and the high values of the applications in general.

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 design, control and condition monitoring of high-performance electric machines and drives. Detailed topics include but are not limited to:

- High-speed electric machines and magnetic bearings
- High-torque-density electric machines
- Multiphase electric machines
- Linear electric machines
- Machine performance analysis
- Multi-physics analysis and design
- Machine modeling and parameter identification
- Fault-tolerant control and performance analysis
- Novel topologies of electric machines and systems
- FOC, DTC or MPC of multiphase machines
- Novel PWM methods for multiphase machines
- Sensorless control of multiphase electric machines
- Condition monitoring of machines and 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All submitted papers must be in English, must not be published by or currently under review for any other journal or conference.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: Design, Control and Condition Monitoring of High-Performance Electric Machines and Drives***" 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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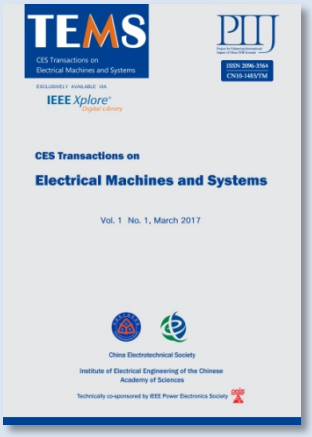

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