Call for Papers

Special Section on High Efficient, Energy-saving and Intelligent Motor Systems

With the demand of energy saving and emission reduction and the guidance of related policies such as "carbon peaking and carbon neutral", efficient energy-saving motor has been obtained great development. The high-efficiency and energy-saving of motor systems involves all aspects of motor design, drive control, materials, manufacturing, and testing, and is an important research branch in the motor field. At present, the measures to achieve high-efficiency and energy-saving motors in engineering often lead to the increase of the volume and weight of the motor, the increase of material consumption and other problems. Therefore, how to achieve energy saving and emission reduction through advanced motor technology such as new topological structures, new material applications, optimal design methods and new control strategies has become a new challenge faced by motor researchers.

Also, with the continuous development of industrial automation, the degree of informatization and automation of industrial production is getting higher, and the traditional motor control center can no longer meet the users' requirements for motor control and protection. At the same time, if cloud computing technology, big data technology and motor system are combined, it can further realize the prediction of motor failure and life and the adaptive management of motor energy efficiency, so as to promote the better development of smart motors and realize "Mechatronics". The high efficiency, miniaturization, integration and drive integration of the motor industry have become the current irreversible trend. Therefore, on the premise of safe operation of the motor, the realization of intelligent and automated operations such as self-diagnosis, self-protection, self-regulation, and remote control of the motor system, etc., have put forward new and multiple challenges to the control ability and learning ability of the motor system, as well as the fault-tolerant operation of the motor.

In order to further strengthen academic exchanges, and promote the exchange of experiences and achievements of researchers and experts from both academia and industry all over the world in the field of optimized design of motor, application of new materials, new topological structure and intelligent control, the editorial department of "Transactions of China Electrotechnical Society" and "CES TEMS" specially invited Professor Ronghai Qu from Huazhong University of Science and Technology as the Deputy Editor in Chief organizing the topic of "High Efficient, Energy-saving and Intelligent Motor Systems". Detailed topics include but are not limited to:

- Modeling, simulation and design method of motor systems
- New principles, new structures, and new topologies of motor systems
- ➤ High-performance intelligent control strategy of motor system
- Multi-physics coupling and intelligent analysis of electric, magnetic, thermal and mechanical fields in motor system
- New energy-saving materials and processing technologies for motor systems;
- > Electromagnetic compatibility technology of motor system
- Fault Diagnosis and Reliability Evaluation of Motor System
- Sensorless Control Technology of Motor System
- Intelligent fuzzy control technologies of motor system
- > Integrated control technology of smart motor system
- ➤ Intelligent motor system and other applications
- > Other related topics

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 and Transactions of China Electrotechnical Society.

Brief guideline for authors:

Papers styles:

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

All manuscripts must be submitted through Manuscript Central at http://www.cestransaction.com/(Transactions of China Electrotechnical Society),





Editor-in-Chief Professor Weiming MA

Deputy Editor-in-Chief Prof. Ronghai Qu

Huazhong University of Science and Technology, China ronghaiqu@hust.edu.cn



Guest Editors

Prof. Shoudao Huang hsd1962@hnu.edu.cn **Prof. Jianxin Shen** J_X_Shen@zju.edu.cn **Prof. Fengge Zhang** zhangfg@sut.edu.cn **Prof. Xiuhe Wang** wangxh@sdu.edu.cn Prof. Metin Aydin metin.aydin@kocaeli.edu.tr Prof. Xiaoyong Zhu zxyff@ujs.edu.cn Prof. Yongxiang Xu xuyx@hit.edu.cn Prof. Zhuoran Zhang, apsc-zzr@nuaa.edu.cn Prof. Gaolin Wang WGL818@hit.edu.cn

and https://mc03.manuscriptcentral.com/tems (CES TEMS), Submissions must be clearly marked "High Efficient, Energy-saving and Intelligent Motor Systems" on the cover page. When uploading your paper, please select your manuscript type "Special Issue." Refer to http://www.ces-transaction.com/ and http://www.cestems.org for general information about electronic submission through Manuscript Central. Manuscripts submitted for the special issue will be reviewed separately and will be handled by the guest editorial board noted below.

Prof. Pinjia Zhang pinjia.zhang@tsinghua.edu.cn Prof. Hong Li, hli@bjtu.edu.cn Prof. Dawei Li daweili@hust.edu.cn

Important Dates

Transactions of China Electrotechnical Society

Full paper submission: 10 October, 2021

Publication:

January/February, 2022

CES TEMS

Full paper submission: **10 October, 2021**

Final decision notification: 20 November, 2021

Publication:

20 December, 2021

In Vol. 5, No. 4, 2021

About the journal

Transactions of China Electrotechnical Society

"Transactions of China Electrotechnical Society" was founded in 1986. "Journal" is a comprehensive academic journal in the field of electrical engineering hosted by China Electrotechnical Society.

"Journal" is the core journal of many principal retrieval systems such as Engineering Index (EI), Chinese core journals, The key magazine of China technology as well as other related databases.

"Journal" comprehensively reports high-level academic and scientific research achievements in basic theory research and engineering application in the field of electrical engineering. The publication covers various disciplines in the field of electrical engineering, mainly related to electrical appliances, power electronics, power systems, industrial automation, electrical theory, electrical insulation, materials, information technology, and new energy technologies.

www.ces-transaction.com



CES TEMS

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.

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. Also, CES TEMS has been Indexed by CSCD. Inclusion in other globally recognized data base such as the Web of Science (SCI) is under arrangement.

www.cestems.org

