



Advances in Control for Permanent Magnet Synchronous Motor (PMSM)

Guest Editors:

Dr. Yuefei Zuo

Department of Aeronautical and
Automotive Engineering,
Loughborough University,
Loughborough LE11 3TU, UK

Dr. Xiaogang Lin

Quanzhou Center of Equipment
Manufacturing, Haixi Institute,
Chinese Academy of Sciences,
Jinjiang 362216, China

Deadline for manuscript
submissions:

15 August 2024

Message from the Guest Editors

A Permanent Magnet Synchronous Motor (PMSM) has been widely used in various applications, such as robotics, machine tools, actuators, servo systems, transportation electrification, wind power generation, etc. Control techniques play a key role in the PMSM drive systems. Current vector control (CVC) is suitable for surface-mounted PMSM (SPMSM) since flux-weakening is merely required and the electrical parameters of PMSM are nearly constant or slow-varying so that the torque and flux can be well-controlled using the current model.

This Special Issue is dedicated to collecting and sharing the latest research and the newest ideas from both industry and academia about the advanced control strategies for PMSM in different applications. Topic of interest include, but are not limited to:

- o Torque and flux control;
- o Speed and position control;
- o Sensorless control;
- o Information reconstruction;
- o Fault diagnosis and fault-tolerant control;
- o Model-free adaptive control;
- o Artificial intelligence and data-driven.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Flavio Canavero

Department of Electronics and
Telecommunications,
Politecnico di Torino, 10129
Torino, Italy

Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), CAPlus / SciFinder, Inspec, Ei Compendex and other databases.

Journal Rank: JCR - Q2 (*Physics, Applied*) / CiteScore - Q2 (*Control and Systems Engineering*)

Contact Us

Electronics Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/electronics
electronics@mdpi.com
[X@electronicsMDPI](https://x.com/electronicsMDPI)