Special Issue

High Performance Permanent Magnet Synchronous Motor Drives

Message from the Guest Editors

Permanent magnet (PM) synchronous motor drives are widely used in industrial applications, electric vehicles, and electrical devices, thanks to their high torque density, fast dynamic response, and good overload capability. New challenges are appearing in the design of synchronous motors due to the appearance of new technical and socio-economic requirements. Moreover, recent applications require an extended sensorless capability, an outstanding flux-weaking capability, and a wide constant-power region. This Special Issue aims to collect original research and review articles on different design methodologies or solutions for PM motors and PM-assisted synchronous reluctance motors, suited for meeting the demanding specifications of the emerging applications. Since the price of PMs is continuously increasing, special solutions and experience in reducing rare-earth materials are welcome.

Guest Editors

Prof. Dr. Nicola Bianchi

Department of Industrial Engineering, University of Padova, 35131 Padova, Italy

Dr. Ludovico Ortombina

Department of Engineering and Management, University of Padova, Padua, Italy

Deadline for manuscript submissions

closed (20 July 2022)

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/si/93339

Energies
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
energies@mdpi.com

mdpi.com/journal/energies

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/journal/energies

About the Journal

Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

Editor-in-Chief

Prof. Dr. Enrico Sciubba
Department of Mechanical and Industrial Engineering, University Niccolò Cusano, 00166 Roma, Italy

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), Ei Compendex, RePEc, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

CiteScore - Q1 (Control and Optimization)