Special Issue

Permanent Magnet Motors: State of the Art

Message from the Guest Editor

The permanent magnet synchronous motor (PMSM) has received great favor in applications such as wind energy generation, electrical vehicles, aerospace, etc. The advanced design of the PMSM structure, the material development of the permanent flux, and new control schemes are key approaches to improving the PMSM's efficiency and reliability. This Special Issue serves this purpose with the objective to collect the latest innovations in PMSM design, operation, and control methodologies. Topics of interest include, but are not limited to, the following:

- Systematic physical structure design and development for the PMSM;
- Multi-physics analysis, modeling, and design for the integrated inverter-fed PMSM;
- Optimized control strategies for various inverter topologies for PMSM applications;
- Application of wide-bandgap devices with inverters for PMSM applications;
- Optimal design and system-level integration of PMSM operations, etc.;
- Resilient control and fault-tolerant operation of the PMSM.

Guest Editor

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Deadline for manuscript submissions

closed (20 February 2024)

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About the Journal

Message from the Editor-in-Chief

Machines is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications.
Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided.
There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

Editor-in-Chief

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