Special Issue

Advanced Power Electronic Technologies in Electric Drive Systems

Message from the Guest Editor

The power electronic converter is the main part in an electrical drive system that is used in many applications, such as electrical vehicles, hospital and military applications. The type of control method and the switching frequency of the power converter have a great impact on the obtained machine performance. The efficiency and torque density of the drive system are greatly dependent on power converter switching. With the rapid progress of power electronics, this impact could be minimized. This Special Issue will be with a special emphasis on the development and practical concerns for power electronic controlling techniques and their configuration; however, this is not limited to the type of machine, or the type of power converter of the control methods. Both original research and review papers will be considered. The topics of interest include, but are not limited to:

- Power converter topologies and associated control and modulation techniques.
- Modeling and switching enhancement techniques for power converters.
- The design and modeling of the drive system.
- New power electronics technology.
- New technologies in multiphase drives.
- Switching losses in power converters.

Guest Editor

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Deadline for manuscript submissions

closed (31 March 2025)

Machines

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Impact Factor 2.5
CiteScore 4.7

mdpi.com/si/162681

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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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