Special Issue

Advances in High-Power Converters

Message from the Guest Editor

In recent years, the demand for high-power converters has been constantly increasing. They are widely used in industry, renewable energy generation stations and electrical transportation systems. The main applications include low- and medium-voltage motor drives; propulsion systems for ships, trains and electric vehicles; reactive power compensation systems; PV generation; high-voltage DC systems; and more. The aim of this Special Issue is to bring together original, theoretical and practical ideas, and future trends in the field of high-power converters. The topics include but are not limited to:

- Topologies of high-power converters: design of new or improved topologies of high-power converters, including multilevel and modular converters within power range of KW to MW;
- New design, modelling and analysis methods of highpower converters;
- Advanced control methods of high-power converters, including analog or digital implementations;
- Reliability of high-power converters;
- Medium-voltage drives for AC motors;
- Propulsion systems for ships, trains and electric vehicles;
- High-power converters for renewable energy systems.

Guest Editor

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Deadline for manuscript submissions

closed (31 August 2023)



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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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