



Advances in High-Power Converters

Guest Editor:

Dr. Dmitry Baimel

Department of Electrical and
Electronics Engineering,
Shamoon College of Engineering,
Beer Sheva, Israel

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Message from the Guest Editor

Dear Colleagues,

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 high-power 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.





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CISE—Electromechatronic
Systems Research Centre,
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Calçada Fonte do Lameiro, P-
6201-001 Covilhã, Portugal

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.

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Rapid Publication: manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.6 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2023).

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Machines Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
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