

Special Issue

Design and Control of Electrical Drives and Electrical Machines

Message from the Guest Editors

Recently, electric transportation has become one of the most attractive research topics. Better efficiency, a smaller environmental footprint, and the replacement of petroleum or comparable fuels as the primary energy source are the development directions for electric transportation. In this regard, electric vehicles are more energy-efficient than conventional vehicles that use internal combustion engines. This Special Issue will gather and present the latest advances in electric machines and associated drives for the more electric transportation sector. Topics of interest for this Special Issue include, but are not limited to, the following:

- All-electric machines, drives, and converters/inverters;
- Design and control of electric vehicle drives;
- Novel topologies and materials (magnetic, electronic, and structural, e.g., light-weighting, low-cost, non-rare-earth e-machine);
- Drive configurations;
- Component- and system-level optimizations;
- Hybrid hydrogen powertrain;
- Reliability and condition monitoring of electric drive systems.

Guest Editors

Dr. Khoa Dang Hoang

Prof. Dr. Nigel Schofield

Dr. Sid-Ali Amamra

Deadline for manuscript submissions

closed (20 January 2024)



Machines

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 4.7



mdpi.com/si/177267

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

[mdpi.com/journal/
machines](https://mdpi.com/journal/machines)





Machines

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 4.7



[mdpi.com/journal/
machines](https://mdpi.com/journal/machines)



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

Prof. Dr. Antonio J. Marques Cardoso
CISE - Electromechatronic Systems Research Centre, University of
Beira Interior, Calçada Fonte do Lameiro, P-6201-001 Covilhã, Portugal

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Mechanical) / CiteScore - Q1
(Control and Optimization)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.9 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).