



Robust Control of Permanent Magnet Synchronous Motors (PMSM) and Induction Motors (IM)

Guest Editor:

Dr. Juan Carlos Travieso-Torres

Department of Industrial Technologies, Universidad de Santiago de Chile, Santiago, Chile

juancarlos.travieso@usach.cl

Deadline for manuscript submissions:

31 October 2023

Message from the Guest Editor

Dear Colleagues,

Machines opened this Special Issue which covers the novel methods and technologies of the Robust Control of Permanent Magnet Synchronous Motors (PMSM) and Induction Motors (IM), and we invite you to contribute.

Proposals are expected to deal with the characteristics of these motors, their drives, and moved mechanisms, which have nonlinear behavior, uncertainties, and disturbances.

This Special Issue covers, but is not limited to, the following:

- Nonlinear control, variable observers, and parameter estimators applied to the PMSM and IM, including their drivers and applications.
- Monitoring and controlling these electrical machines for energy saving, operation supervision, maintenance planning, position tracking, and speed regulation.

All of these topics may consider different techniques, such as predictive control, H-infinite control, sliding mode control (SMC), passivity-based control, adaptive systems, predictive control, and artificial neural networks.





an Open Access Journal by MDPI

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

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.

Author Benefits

Open Access:— free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

High Visibility: indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [Inspec](#), and other databases.

Journal Rank: [JCR - Q2 \(Engineering, Mechanical\)](#) / [CiteScore - Q2 \(Control and Optimization\)](#)

Contact Us

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

Tel: +41 61 683 77 34
www.mdpi.com

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