Special Issue

Digital Control of Power Electronics

Message from the Guest Editors

In recent years, model predictive control has been a powerful advanced digital control technology due to its superior control performance and excellent dynamic response. Nevertheless, this control technique suffers from excessive tuning and computational requirements, as well as high model/parameters dependence. At present, great effort is being focused on development in the digital control of power electronics, which presents critical features such as high control performance and fast dynamic response, robustness against noise/variation of parameters/faults etc., low tuning/computational requirements, simple implementation and model/parameters independence. We invite submissions on the topics include, but are not limited to, the following research areas:

- New digital control techniques for power electronics;
- Stability and robustness of digital control;
- Low-complexity digital algorithms:
- Model-free digital control approaches;
- Implementation issues of digital algorithms;
- Artificial intelligence and data-driven approaches in digital control.

Guest Editors

Dr. Imed Jlassi

CISE - Electromechatronic Systems Research Centre, University of Beira Interior, Calçada Fonte do Lameiro, P-6201-001 Covilhã, Portugal

Prof. Dr. Antonio J. Marques Cardoso

CISE - Electromechatronic Systems Research Centre, University of Beira Interior, Calçada Fonte do Lameiro, P-6201-001 Covilhã, Portugal

Deadline for manuscript submissions

closed (20 May 2024)



Electronics

an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 6.1



mdpi.com/si/145506

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

mdpi.com/journal/electronics





Electronics

an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 6.1



About the Journal

Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

Editor-in-Chief

Prof. Dr. Flavio Canavero

Department of Electronics and Telecommunications, Politecnico di Torino, 10129 Torino, Italy

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), CAPlus / SciFinder, Inspec, Ei Compendex and other databases.

Journal Rank:

JCR - Q2 (Engineering, Electrical and Electronic) / CiteScore - Q1 (Electrical and Electronic Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 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).

