Special Issue

Innovations in Power Electronics and Control for Sustainable Energy Systems and Electrified Transportation

Message from the Guest Editor

This Special Issue aims to highlight the latest innovations in power electronics and control systems that are driving advancements in sustainable energy solutions and electrified transportation. With the ever-growing demand for greater integration of renewable energy, efficient conversion of energy, and electrification of vehicles, new technologies and strategies are essential if we are to optimize the performance and reliability of our systems. For this Special Issue, we invite you to submit original research and review articles focused on the design, modeling, and control of power electronics systems for applications in renewable energy, electric vehicles, energy storage, and microgrids. This new topic will cover a broad range of research areas, including but not limited to

- Power electronics for renewable energy integration;
- Control strategies for energy systems and electric vehicles;
- Advances in electric machines and drives;
- High-efficiency systems for microgrids and distributed energy resources;
- Technologies for electric vehicle charging infrastructure.

Guest Editor

Dr. Usman Ali Khan
School of Electrical and Electronics Engineering, Yonsei University, Seoul, Republic of Korea

Deadline for manuscript submissions

closed (31 May 2025)

Machines

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 4.7

mdpi.com/si/219435

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

mdpi.com/journal/machines

Machines

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 4.7

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 17.6 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the second half of 2025).