Special Issue

Multilevel Power Conversion: Analysis, Control Strategies and Applications

Message from the Guest Editors

Due to the current global energy crisis and the growing need for an energy source conducive to social and industrial development, energy-efficient power converters are crucially important. Both academia and the industry have focused their attention on developing converters that are very efficient in terms of topology, control, environmental disturbances and fault tolerance. Thus, we are inviting papers for this Special Issue that focus on related topics to advance and further inform the scientific knowledge base of energy-efficient converters. Topics of interest include, but are not limited to:

- New multilevel converter topologies;
- Multilevel converters for adjustable speed drives;
- Multilevel converters for grid-connected utilities, such as active filter, AC and DC microgrids, STATCOM, FACTS, HVDC, etc.;
- Multilevel converters for renewable energy applications;
- Multilevel rectifiers and applications in regenerative systems;
- Modulation strategies for multilevel converters;
- Control methods for multilevel converters:
- Fault-tolerant capability of multilevel converters;
- High-efficiency multilevel converters.

Guest Editors

Dr. Ounejjar Youssef

Prof. Dr. Kamal Al-Haddad

Prof. Dr. Noel Rodriguez

Prof. Dr. Diego P. Morales

Deadline for manuscript submissions

closed (30 June 2023)



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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

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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).

