Special Issue

Advanced Simulation and Analysis of Smart Grids

Message from the Guest Editors

Smart grids are gaining popularity for theirs cost effectiveness, easier maintenance, better flexibility and safety, and higher automation level. The current energy crisis, unstable weather patterns, and increasing reliance on renewable resources are making grid management more and more demanding. Smart grids are an important element in handling these challenges, especially with the outlook of predicted growth in electricity demands and higher penetration of intermittent renewable sources. Advanced simulation and analysis of smart grids is an important field of research as smart grids not only help to mitigate specific problems but also introduce new challenges, mainly in the security domain. The main aim of this Special Issue is to attract high-quality contributions addressing recent advancements in the field of advanced simulation and analysis of smart grids, including microgrid systems in all its aspects, such as security, privacy, performance, etc.

Guest Editors

Dr. Filip Holik

Prof. Dr. Sule Yildirim Yayilgan

Prof. Dr. Alemayehu Gebremedhin

Deadline for manuscript submissions closed (15 December 2023)



an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 6.1



mdpi.com/si/156926

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

mdpi.com/journal/ electronics





an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 6.1



electronics



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).