Special Issue

Circuit Analysis and Simulation of Modern Electric Systems

Message from the Guest Editor

The main objective of this Special Issue is to focus on the most recent achievements in the theory and practice of circuit analysis and the simulation of modern electric systems and wireless power transfer, especially for transportation, consumer electronics, smart grids, biomedical purposes, and other applications. The topics of interest include, but are not limited to:

- Analysis and simulation of the nonlinear electric circuits
- Modeling and simulation of large-scale networks
- Computer-aided analysis of electrical circuits
- Decomposition techniques for large scale circuit analysis and simulation
- Symbolic analysis of the electrical circuits
- Modeling and computation of ventilation systems and heating systems of electrical machines
- Numerical methods in electrical engineering
- Generation of the behavior macro models (reduced order models)
- Analysis of the RF circuits
- Piecewise linear analysis and simulation
- Graph theory and circuit topology
- Wireless transfer electromagnetic power (Witricity)
- Parameter extraction for magnetic coupled resonators
- Near electromagnetic field numerical computation

Guest Editor

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Deadline for manuscript submissions

closed (10 May 2022)



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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).

