Special Issue

Modeling, Simulation, Analysis, and Design of Linear and/or Nonlinear Electrical Circuits Under Various Operating Conditions

Message from the Guest Editors

The main objective of this Special Issue is to develop accurate and efficient methodologies for representing and analyzing electrical circuits, ultimately contributing to improved circuit performance, reliability, and functionality. Our purpose is not only to understand how circuits operate under ideal conditions but also to predict their responses to disturbances, parameter variations, and nonlinearity.

The scope of this Special Issue has been made intentionally broad to capture the complexity of modern electrical systems. It includes the mathematical modeling of circuit elements, numerical simulation using specialized software, theoretical and empirical analysis, and iterative design processes. Both passive and active components are considered, and the circuits studied may range from simple analog configurations to complex mixed-signal systems. The investigation spans a variety of operating conditions, such as DC, AC, transient, and switching environments, ensuring that the methods developed are applicable to a wide spectrum of technologies, including power electronics, communication systems, and embedded control circuits.

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Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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