Special Issue

Fault-Tolerant Design and Applications of Electronic Circuits and Systems

Message from the Guest Editor

Electronic circuits and systems used in many real-world safety-critical applications such as space, aerospace, defense, nuclear power plants, electric power transmission and distribution, industrial control and automation, and banking and finance etc. usually involve fault-tolerant design at the hardware and/or software level for enhanced reliability. Fault-tolerant design is essential to cope with the faults or failures of circuits and systems. Fault-tolerant design involves some form of redundancy which may be static or dynamic or a mix of both. This special issue aims to deal with recent advances in fault-tolerant design at the hardware and software levels. Given this, we invite high quality academic and industrial research work on all aspects of fault-tolerant design and reliability. The topics of interest include but are not limited to:

- Methods for assessing reliability of devices, circuits and systems
- Fault tolerance in low power electronics: microelectronics, nanoelectronics and optoelectronics
- Fault tolerance in renewable energy systems including solar, wind, wave, geothermal etc.

Guest Editor

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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).

