

Special Issue

Challenges and New Trends in Power Electronic Devices Reliability

Message from the Guest Editors

The area of interest of this Special Issue includes the following topics:

- Risk analysis of power electronic devices;
- Forecasting system for the reliability of the components;
- Statistical methods for power electronics reliability evaluation (Bayesian inference, statistical modeling, nonparametric approaches, etc.);
- Accelerated testing for the failure rate estimation;
- Dielectric and thermal stress strength models of power electronics devices;
- High reliability power electronics architecture for electric powertrain;
- Risk analysis of battery storage system under critical condition;
- Fault-tolerant control algorithms based on RAMS logic;
- Predictive maintenance for the condition monitoring of power electronic devices;
- Reliability challenges in smart grid installations.

Welcome to contribute!

Guest Editors

Prof. Dr. Elio Chiodo

Dr. Pasquale De Falco

Dr. Luigi Pio Di Noia

Deadline for manuscript submissions

closed (31 January 2021)



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

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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

Prof. Dr. Flavio Canavero

Department of Electronics and Telecommunications, Politecnico di
Torino, 10129 Torino, Italy

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manuscripts are peer-reviewed and a first decision is
provided to authors approximately 16.4 days after
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the second half of 2024).