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!