19th IEEE Mediterranean Electrotechnical Conference

IEEE MELECON'18

MAY 2nd-7th, 2018 MARRAKESH, MOROCCO

CALL FOR PAPERS

TRACK ON RELIABILITY AND FAILURE ANALYSIS OF POWER ELECTRONIC SEMICONDUCTOR DEVICES AND SYSTEMS

Track on "Reliability and failure analysis of power electronic semiconductor devices and systems" will be held on 2-3 May 2018 within IEEE MELECON'18, in **Marrakech, Morocco**.

Description

Nowadays, power electronics play an important role in motor drives, utility interfaces based on renewable energy sources, power converters, power transmission, electric or hybrid vehicles and many other industrial applications. Moreover, the advancements in the power semiconductor technology with the emergence of wide band-gap devices have pushed the conversion efficiency of power electronics to very high levels, where however the reliability of power electronics is becoming more and more vital, and should draw more attention. In this context, the reliability assessment and improvement of power electronic systems should be addressed efficiently. Indeed, it is important to design for reliable power electronic systems to lower the risks of many failures during operation. This track session will focus on fundamental understanding of the physical reliability and mechanisms governing failure in a large variety of advanced semiconductor devices and systems, the electrical - physical failure analysis techniques, the methodologies and tools that could be used to reliably identify the root cause of failure in these devices.

Topics

The TPC is inviting papers related, but not limited to, the following areas:

- **Reliability Tools, Test Methods, and Equipment**
- **Consumer Electronics Reliability**
- **Electronic System Reliability**
- **Thermal Storage and Cycling Tests**
- **Semiconductor Failure Mechanisms & Reliability**
- **Reliability of Microwave wide band-gap Devices**
- **HTRB , HTGB and ESD tests**
- **Circuit Aging Simulation and test**
- **Power Devices Reliability and Failure Analysis**
- **3D Device Failure Analysis**
- **Progress in Failure Analysis**
- **Emerging Failure Analysis Techniques**
- **High Power Devices**
- **Packaging Reliability**
- **Electronics for Harsh Environments**

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Papers submissions

Prospective authors should submit, by using the EDAS online platform, a paper of 6 pages maximum, including references and describing their original work, using the IEEE template.

Publications

Accepted papers will be published in the proceeding in the **IEEE Xplore**.

Deadlines

Paper Submission	November 10, 2017
Acceptance Notification	December 03, 2017
Camera-ready Submission	December 24, 2017
Track Dates	May 2-3, 2018

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