



14th International Conference on Synthesis,
Modeling, Analysis and Simulation Methods
and Applications to Circuit Design

12th - 15th of June 2017, Giardini Naxos - Taormina, Italy.

Special Session on “Reliability of electronic devices and circuits”

Call for Papers

The extreme variability exhibited by the electric features of devices manufactured at nanometer scale has become a major challenge for the evolution of nanoelectronics. The source of this variability is the matter and charge discretization, which dramatically affects performance and reliability of electronic circuits and systems. Variability can be time-zero (when related to the fabrication process), or time-dependent (associated to the aging of devices during circuit operation), the last leading to a reduction of the system reliability. Thus, variability (in its most broad sense) has moved from being a problem affecting basically the manufacturing process to become a global concern that demands a new paradigm, a different design process that accounts for variability at all abstraction levels of design and implementation.

The aim of this Special Session is to bring together new research contributions dealing with variability/aging evaluation, modelling and mitigation, spanning from the device technology up to the system level.

Topics include, but are not limited to:

- Characterization of device reliability.
- Modelling and simulation of variations at device and circuit levels.
- Techniques and tools for variability and reliability simulation
- Variability and reliability-aware design methodologies.
- Sensors and circuits for Process-Voltage-Temperature-Aging (PVT-A) variation monitoring.
- Compensation techniques at device, circuit and system levels.

Important dates

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|----------------------|-------------------------------|
| • 17th February 2017 | Paper Submission Deadline |
| • 1st April 2017 | Author Notification |
| • 15th April 2017 | Camera Ready Paper Submission |
| • 15th April 2017 | Early Registration Deadline |



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Submission and paper specifications

- all prospective Authors are invited to electronically submit regular papers of their work (paper length up to 4 proceedings pages) through the website of [SMACD 2017](#) (submissions opening: mid December);
- all prospective Authors should prepare the manuscript according to the IEEE double-column conference paper template [style](#): the working language for the conference will be English, which will be used for all presentations and printed material;
- the papers submission will follow the same calendar of regular papers and will be reviewed as the others: Authors should only indicate the Special Session when submitting their own paper on our submission system (EasyChair).

Organizers

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