

June 28-30, 2021,
in Apulia, Italy (Virtually)

Call for Papers

16th IEEE International Conference on Design & Technology of Integrated Systems in Nanoscale Era



General Chair:

Luigi Dilillo
LIRMM, France

Vice-General Chair:

Daniela De Venuto
Politecnico di Bari, Italy

Program Chair:

Hassen Aziza
Aix-Marseille University
- IM2NP, France

Steering Committee:

M. Renovell, LIRMM, FR
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Key Dates:

Full Paper Submission:
~~April 25th, 2021~~
May 9th, 2021

Notification:

June 01st, 2021

Camera Ready:

June 22nd, 2021

The aim of the conference is to cope with technology scaling limits and the emergence of novel paradigms. The areas of interest include design, technology, test and dependability of electronic products. The proposed work must introduce new concepts concerning methodologies, tools and theoretical approaches for design, verification and validation. Topics of the conference include, but are not limited to:

Integrated Systems Design:

- SOC, SIP design
- Multiprocessor systems
- Embedded systems
- Wireless systems
- Network on Chip
- Neuromorphic computation
- Analog, Mixed Signal and RF systems
- MEMS and MOEMS
- Low Voltage and Low Power systems
- Synthesis (physical, logic)
- Simulation, Validation and Verification
- Hardware Security

Integrated Systems Technology:

- Emerging resistive memories
- Nanoelectronics
- Device Modeling
- Material Characterization
- Failure Analysis
- New Components
- Packaging
- Process Technology
- Reliability Issues
- Innovative technologies

Integrated Systems Testing and Reliability:

- Test and Security Issues
- Defect and Fault Modeling
- Analog and Mixed Signal Testing
- MEMS/MOEMS Testing
- SOC and SIP Testing
- Delay Testing
- Memory Testing
- Single event effect on electronics
- Hardness insurance
- Fault Simulation, ATPG
- DFT, BIST, BISR
- On-line Testing
- Fault Tolerant Systems
- Approximate computing
- Quantum computing
- Alternative Test Strategies

Paper Submission Guidelines: Authors are invited to submit original, unpublished research contributions to DTIS'21. **Regular paper** submissions should be complete manuscripts (between **four and six** pages). **Short paper** submissions (formerly poster papers) are possible and must not exceed **four** pages. The paper must clearly indicate the research area, main results and contributions. The manuscript must follow the instructions included in the author's kit on the conference website. Submitted articles should be in PDF format and uploaded on the on-line submission system. Submissions will be considered as evidence that, upon acceptance, the corresponding author assumes responsibility of preparing the final version in due time and the commitment of registration and presentation of the paper at the conference. Accepted papers will be included in the conference proceedings and in the IEEE Xplore digital library.

The conference will be held virtually: Considering the influence of coronavirus outbreak and travel restrictions, and, with the intent to protect the health and safety to all of the participants, the 16th International Conference on Design & Technology of Integrated Systems in Nanoscale Era, scheduled in June 28th-30th 2021, will be **virtualized** (the participation of all contributors will be by videoconference).

Proposals for Special Sessions: Proposals for original, high-quality Special Sessions addressing innovative research, highlighting significant topics and emerging issues, related to the conference theme, are welcome. Special session proposals should not exceed two pages, should describe the topic and intended audience, and a short bio of organizer(s). All special session proposals should be sent to the special sessions chair within the submission deadline (April 18th, 2021). Check the call for special sessions for further information.

Journal Special Issue: The authors that submitted their work at DTIS 2021 are invited to submit an extended version of their papers to a Special Issue of Microelectronics & Reliability journal, Elsevier.

Questions about the conference can be addressed to:

General Chair

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Vice-General Chair

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Program Chair

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