

4th International Conference on Microelectronic Devices and Technologies (MicDAT '2022)

<https://www.micdat-conference.com/>



15-17 June 2022 • Corfu, Holiday Palace Hotel, Greece

The conference is the fourth of a series of annual International Conferences on Microelectronic Devices and Technologies (MicDAT) held in Barcelona (Spain), 2018, in Amsterdam (The Netherlands), 2019 and in virtual format, 2020 organized by IFSA. The MicDAT' 2022 conference is intended to create awareness of the huge potential of modern microelectronic technologies and to improve understanding on the recent challenges in a wide range of applications. The many different technological bases for the fabrication of microelectronic devices, SoC, SiP, MEMS and NEMS will be outlined in this 3-day conference.

A number of recognized experts from both: academy and industry in the field of microelectronic design will be invited to give their view in selected application areas. Featuring strong participation of industry and academia, the MicDAT' 2022 conference will provide an excellent opportunity to exchange ideas and present latest advancements in these areas.

The aim of MicDAT series of conference is to provide an annual world forum for the presentation and discussion of recent advances in microelectronics, and bring together leading international researchers, engineers and practitioners interested on any of the microelectronics related technologies.

Topics of interests:

- Analog, digital, mixed, and RF circuits and related design methodologies
- Analog-to-Digital Converters (ADC)
- Voltage-to-Frequency Converts (VFC)
- Frequency-to-Digital Converters (FDC)
- Time-to-Digital Converters (TDC)
- Logic, architectural, and system level synthesis
- Nonlinear circuits
- Microprocessors, microcontrollers and DSPs
- Testing, design for testability, built-in self-test
- Area, power, and thermal analysis and design
- Mixed-domain simulation and design
- Embedded systems, low-power designs
- VLSI systems circuit and design
- Non-von Neumann computing and related technologies and circuits
- Design and test of high complexity systems integration
- SoC, MPSoC, NoC, SiP, and NIP design and test
- Process technologies, CMOS, BJT, BiCMOS, GaAs
- 3-D integration design and analysis
- Emerging device technologies and circuits, such as FinFETs, SETs, spintronics, SFQ, MTJ, etc.
- Design for Manufacturability/Technology
- Microelectronics processing and materials
- Semiconductor processing
- Solid-state electronics
- Quantum electronics
- Thin solid films
- Nanoprocessing, nanotechnology and nanofabrication
- Flexible and stretchable electronics
- MEMS and NEMS
- CAD tools for microelectronics
- Hardware/software co-design
- Algorithms, methods and tools for modeling, simulation, synthesis and verification of ICs
- Electronic materials science and technology
- Organic electronic materials and devices
- Microelectronics reliability and qualification
- Assembly and Packaging

Contribution Types:

- Keynote presentations
- Invited talks
- Regular sessions
- Poster sessions
- Special sessions
- Industrial sessions
- Panel Discussions and Round Tables
- Exhibition

Special Sessions:

Participants are welcome to organize and manage special sessions during the conference. Each session will contain 4-6 papers in a related field as specified above.

Session organizers will get:

- Certificate of Appreciation
- Free Registration for the Event
- Special Publishing Theme within Conference Proceedings
- Free article and book chapter post conference publications in appropriate open access journals and 'Advances in Microelectronics: Reviews', Book Series, Vol. 3



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Deadlines:

Submission (2-page extended abstracts): **5 April 2022**
Notification of acceptance: **20 April 2022**
Registration: **5 May 2022**
Camera ready (4-6 pages full papers): **15 May 2022**

One event - three publications !

- 1) All registered abstracts will be published in the conference proceedings (USB flash drive edition of published Proceedings with the ISBN), distributed during the conference and submitted for indexing to the Web of Science.
- 2) Authors will be invited to submit full-page extended papers to the special issue of Sensors & Transducers open access journal (ISSN 2306-8515, e-ISSN 1726-5479) for free of charge.
- 3) The limited number of full-page papers published in the journal will be selected by the Editorial Board to extend for book chapters for the open access Book Series on 'Advances in Microelectryonics: Reviews', Vol. 3.

Organising Committee

Chairman:

Prof., Dr. Sergey Y. Yurish (*IFSA, Spain*)

Advisory Chairman:

Prof. Dr. Edward Hrynkievicz (*Silesian University of Technology, Poland*)
Prof. Petrosyants K.O. (*Moscow Institute of Electronics and Mathematics, Russia*)
Dr. Josef Huran (*Slovak Academy of Science, Slovakia*)

Industry Advisory Chairman:

Dr. Rozalia Beica (*The Dow Chemical Company, USA*)

Conference and Publication Manager:

Mrs. Tetyana Zakharchenko (*IFSA Publishing, S.L., Spain*)



Gala Dinner and Social Programme

Welcome Cocktail: 14 June 2022. The Welcome Cocktail will take place in the Corfu Holiday Palace Hotel. Do not miss this opportunity to say the first "hello" to attendees and committee members.

Gala Dinner: 16 June 2022. The Gala Dinner will take place in the Corfu Holiday Palace event hotel, Nausica Ballroom.

