

November 11-13, 2022 | Shenzhen, China

## CONFERENCE INTRODUCTION

<http://www.apccas2022.org/cfss.html>

The IEEE Asia Pacific Conference on Circuits and Systems (APCCAS) is the regional flagship conference of the IEEE Circuits and Systems Society in Asia. APCCAS 2022 will be held in Shenzhen, China during November 11-13, 2022. Shenzhen is the electronics R&D world center with more than 300 global or regional centers from Fortune Global 500 companies. Besides, Shenzhen is also suitable for tourism, which is ranked No. 2 in the list of best cities for travel by Lonely Planet.

## SPECIAL SESSION ON

Session Title

**Devices, Circuits and Systems Beyond Moore's Law**

Special Session Organizer

**Wang Bi, Beihang University**

### ABSTRACT

This special session focuses on the novel microelectronic devices, circuits and systems beyond Moore's law. Integrated circuits are developing towards the target of high speed, high precision and low energy consumption. With process node scaling, there are many issues including of threshold voltage fluctuations, gate oxide reliability, soft errors, hot carrier degradation and so on. To address those problems, novel devices, new computing architectures and advanced packaging technologies are proposed. On the other hand, to enhance the reliability of integrated circuits, it is necessary to adopt a series of approaches focusing on the degradation caused by the environment and the failure of devices, circuits and systems.

Advances in devices, circuits and systems need to be researched, especially for new processes and new memory technology based on magnetics (e.g., STT, SOT, VCMA), resistive (e.g., selector, memory element) RAM, ferroelectrics, phase-change memory, etc. Papers are intended to provide reliability physics, failure analysis, aging modeling and designs. Papers are also welcome that describe the simulation and mitigation techniques for soft errors in device, circuit, system and application levels. Challenges and solutions beyond Moore's Law will be discussed first.

## IMPORTANT DATES

Submission of Special Session Full Papers

August 6, 2022

## PUBLICATION

Accepted papers will be submitted for inclusion into IEEE Xplore subject to meeting IEEE Xplore's scope and quality requirements. Selected papers will be invited to submit extended full papers to IEEE Transaction on Circuits and Systems I (TCAS-I), IEEE Transaction on Circuits and Systems II (TCAS-II) and IEEE Open Journal of Circuits and Systems (OJCAS).

## SUBMISSION METHOD



WORD

Papers for publication must be submitted in full paper electronically. All edition and update must be done up until the submission deadline. Papers submitted to APCCAS Conference will undergo a double-blind review process. Submissions must have all details identifying the author(s) removed from the original manuscript (including authors' names, affiliations, acknowledgments and other related personal information).

Please make sure to use the standard IEEE conference templates to prepare your final manuscript, which can be found through link:

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LATEX



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CONTACT

Tel.: +86-28-87555888

Mob.: +86-13688349945

Email: [info@apccas2022.org](mailto:info@apccas2022.org)