Symposium on

Technology, Systems and Applications

April 22-25, 2024 Hsinchu, Taiwan

ITRI

IEEE

TSA Call for Papers

The 2024 International VLSI Symposium on Technology Systems and Applications (VLSI TSA) will be held on April 22-25, 2024 at the Ambassador Hotel Hsinchu, Taiwan. Original and unpublished papers on all aspects of advanced VLSI technology and applications are solicited.

SCOPE

- Front-end CMOS and foundry technology
- Standalone memory: DRAM, FLASH, emerging memory technology

2024 International

- Ultra-low power CMOS and embedded memory
- Advanced process modules: e.g. gate stack, junction, strain/channel engineering, low-R contact, low-C spacer/ILD, interconnect technology, ALE and selective deposition, etc.
- Nano-patterning: multiple patterning, directed self-assembly, EUV, etc.
- Advanced CMOS process and devices: Ge, SiGe, III-V, FinFET, GAAFET, low-dimensional materials and devices, 2D and nanowire devices
- BEOL compatible devices for 3D integration
- Material, process and device modeling
- Reliability physics, characterization and measurements

- Advanced packaging and 2.5D/3D integration
 TFT and organic electronics
- MEMS, imagers and sensors
- Power and analog IC devices and technology
- Photonics and beyond CMOS technology
- RF & THz process, device and integration technology
- Energy harvesting technology
- Wearable and IoE enabling technologies
- · Quantum phenomena and information technologies
- Neuromorphic devices and materials for brain-inspired computing
- Device/circuit technologies for AI deep learning applications
- Advanced manufacturing technology, metrology and yield
- Emerging Materials and Devices

PAPER SUBMISSION GUIDELINES

- 1. Camera-ready manuscript (**2 pages** including figures and tables) should be submitted electronically in PDF format through the symposium website at https://expo.itri.org.tw/2024TSA/Submission.
- 2. Accepted papers **MUST** be presented by one of the authors **in person** at the symposium to guarantee publication in the symposium proceedings. Presentations will be in English and will be limited to 15 minutes, with an additional 5 minutes for discussion.
- 3. Any changes on the title or author list or withdrawal after acceptance must be approved by Mentors or TSA Program Chairs.
- 4. All papers presented at the symposium will be published in the proceedings as submitted without revisions. Authors of accepted papers must transfer copyright to IEEE by utilizing the electronic IEEE Copyright Form (eCF) for inclusion in the IEEE Xplore database.
- 5. All paper presenters are required to register for the symposium.
- 6. No-show papers will not be included in the symposium proceedings, nor will they be submitted to the IEEE Xplore database.

STUDENT SUBSIDY

Student Travel Financial support for attending 2024 VLSI TSA is available for full-time student presenters living outside of Taiwan.

BEST STUDENT PAPER AWARD

The selection will be based on the paper quality evaluated by technical committee members, as well as the presentation of the paper at the symposium. The paper should be presented by the key author who is a full-time student at the time of paper presentation. The Best Student Paper Award will be presented to the winning student at the next year's symposium.

LATE NEWS PAPERS

A very limited number of high quality Late News Papers will be accepted. Note that Late News Papers are not eligible for the best student paper award.

IMPORTANT DATES (Note: All are based on Taiwan time, which is eight hours ahead of Greenwich Mean Time (GMT+8).)

Paper Submission Deadline	Extended to Dec. 20, 2023
Notification of Acceptance	Jan. 31, 2024
Late News Paper Submission Deadline	Feb. 15, 2024
Final Paper Submission	Feb. 28, 2024
Author Registration Deadline	Feb. 28, 2024

TSA Program Chairs:

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