

SISPAD 2024

2024 International Conference on Simulation of Semiconductor Processes and Devices

September 25-27, 2024 (Workshop: September 24)

The Westin San Jose, USA

Call For Papers

General Chair:

El Mehdi Bazizi (Applied Materials)

Co-Chair/Technical Program Chair:

Hui Yung Wong (San Jose State Univ.)

Conference Organizer:

Pratik B. Vyas (Applied Materials)

Santosh KC (San Jose State Univ.)

Program Committee:

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Scope:

The SISPAD Conference provides an open forum for showcasing the latest advances in modeling & simulation of semiconductor devices & process

Topics:

Original contributions are solicited on topics that include but are not limited to:

- Modeling and simulation of established semiconductor devices, including FinFETs, GAA FETs, ultra-thin SOI devices, optoelectronic devices, TFTs, sensors, power electronic devices, and organic electronic devices.
- Modeling and simulation of emerging devices including tunnel FETs, SETs, spintronic devices, straintronic devices, bio-electronic devices, quantum computing devices, and new material-based devices for various applications
- Modeling and simulation of all sorts of semiconductor processes, including first principles material design, and growth simulation of nano-scale fabrication
- Advances in fundamental aspects of device modeling and simulation, including of charge, spin, and thermal transport, of collective states including spin/magnetic and charge, and of fluctuation, noise, and reliability.
- Numerical methods and algorithms, including grid generation, user-interface, and visualization
- Compact modeling for circuit simulation, including low-power, high frequency, and power electronics applications
- Process/device/circuit co-simulation in context with system design and verification, including for emerging devices
- Modeling and simulation of equipment, topography, lithography
- Thermal/mechanical simulation & characterization at component, board, and system levels for all packaging technologies
- Modeling and simulation of interconnects for chiplets, heterogenous integration, hybrid bonding, 2.5D/3D & other advanced packaging schemes

Abstract submission:

Authors are invited to submit a two-page abstract including figures by April 7, 2024 at midnight PDT. Details can be found in the following website:

<https://www.sispad2024.org/>

Deadline for submission of abstracts: April 23, 2024

Authors of accepted papers will be notified by May 31, 2024. A camera-ready 4-page manuscript will be required from the authors for inclusion in the Conference Proceedings by June 30, 2024.

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