Second Call for Papers

2014 International Conference on Simulation of Semiconductor Processes and Devices

SISPAD2014

September 9 – 11, 2014
Workshop, September 8
Mielparque Yokohama, Yokohama, JAPAN

Co-sponsored by Japan Society of Applied Physics
Technical co-sponsored by IEEE Electron Devices Society

Scope:

This conference provides an opportunity for the presentation and discussion of the latest advances in modeling and simulation of semiconductor devices, processes, and equipment for integrated circuits.

Topics:

☆ Modeling and simulation of all sorts of semiconductor devices, including FinFETs, ultra-thin SOI devices, emerging memory devices, optoelectronic devices, TFTs, sensors, power electronic device, widegap semiconductor devices, spintronic devices, tunnel FETs, SETs, carbon-based nanodevices, organic electronic devices, and bioelectronic devices
☆ Modeling and simulation of all sorts of semiconductor processes, including first-principles material design and growth simulation of nano-scale f Numerical methods and algorithms, including grid generation, user-interface, and visualization
☆ Metrology for the modeling of semiconductor devices and processes

Plenary Speakers:

★ **Augusto Benvenuti**, *Micron Technology*, "Current status and future prospects of non-volatile memory modeling"
★ **Massimo V. Fischetti**, *University of Texas at Dallas*, "Physics of electronic transport in low-dimensionality materials for future FETs"
★ **Kimimori Hamada**, *Toyota Motor Corporation*, "TCAD challenge on development of power semiconductor devices for automotive applications"

Invited Speakers:

★ **Mario Ancona**, *Naval Research Laboratory*, "Nonlinear thermoelectroelastic simulation of III-N devices"
★ **Asen Asenov**, *University of Glasgow*, "Progress in the simulation of time dependent statistical variability in nano CMOS transistors"
★ **Jean-Pierre Colinge**, *Taiwan Semiconductor Manufacturing Company*, "Nanowire transistors: pushing Moore's law to the limit"
★ **Tibor Grasser**, *Vienna University of Technology*, "Advanced modeling of charge trapping: RTN, 1/f noise, SILC, and BTI"
★ **Kohji Mitsubayashi**, *Tokyo Medical and Dental University*, "Novel biosensing devices for medical applications"
★ **Christian Sandow**, *Infineon Technologies*, "Exploring the limits of the safe operation area of power semiconductor devices"
★ **Mark Stettler**, *Intel Corporation*, "Device and process modeling: 20 years at Intel's other fab"

Workshops:

Two companion workshops will run concurrently prior to the start of the conference on Monday September 8:

★ **Compact Modeling —Enabling Better Insight of Device Features—**
Organizer: Mitiko Miura-Mattausch (Hiroshima University)
★ **Carrier Transport in Nano-Transistors: Theory and Experiments**
Organizer: Hideaki Tsuchiya (Kobe University) and Yoshinari Kamakura (Osaka University)

Abstract Submission:

Authors are invited to submit a two-page abstract (A4 size or 22×28 cm) including figures. Full submission information is available at the following web page.

https://sites.google.com/site/sispad2014/

Authors of accepted papers will be notified by May 15, 2014. Camera-ready copy of a four-page manuscript will be required from the authors for inclusion in the Conference Proceedings by June 30, 2014.

Deadline for submission of abstract: March 31, 2014

YOKOHAMA, JAPAN

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