

2012 IEEE International SOI Conference

1 - 4 October, 2012

The Meritage Resort and Spa, Napa, California



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Call for Papers

The IEEE Electron Devices Society will sponsor the
38th IEEE International SOI Conference

1-4 October, 2012 at the Meritage Resort and Spa in Napa, California.

The technical sessions will be preceded by a one-day Tutorial Short Course addressing the design enablement for fully-depleted technologies on October 1st.

The purpose of the Conference is to provide a forum for an open discussion in all areas of **semiconductor-on-insulator (SOI) and fully-depleted/thin-body technology** including devices, circuits, applications and the related infrastructure.

A Fundamentals Class on Wednesday afternoon will allow participants to review and understand the basics of state-of-the-art FinFET processing and device physics. A Rump Session on Wednesday evening will encourage attendees to share their opinions and technical expertise on a chosen topic.

A Best Paper Award and a Best Student Paper Award will be presented at the conclusion of the Conference.

Previously unpublished papers are solicited in all areas of SOI technology and related devices, circuits and applications, including:

- **SOI DEVICE PHYSICS AND MODELING**
- **SUBSTRATE ENGINEERING** (IV and III-V advanced substrates, hybrid Si and III-V integration, GaN on Si)
- **NEW DEVICES / PHYSICS USING ADVANCED SUBSTRATES** (III-V & IV CMOS, hybrid Si, Beyond-CMOS, heterojunctions, graphene, nanowires, etc...)
- **FULLY-DEPLETED/THIN-BODY DEVICES** (BULK & SOI FinFET, multi-gate, tunnel FET, others)
- **HIGH-VOLTAGE DEVICES** (SOI, GaN, SiC, IGBT, HEMT, new devices)
- **MANUFACTURABILITY AND PROCESS INTEGRATION OF SOI & FULLY-DEPLETED DEVICES**
- **LOW-POWER/LOW-VDD/SUB-VT SOI & FULLY-DEPLETED TECHNOLOGY AND CIRCUIT DESIGN INFRASTRUCTURE**
- **SOI CIRCUIT APPLICATIONS**
(high performance & low-power MPU, SRAM, ASIC, high-voltage, RF, analog, mixed mode, FPGA, etc.)
- **NEW SOI STRUCTURES, CIRCUITS, AND APPLICATIONS** (displays, microactuators, novel memories, optics, etc.)
- **SOI RELIABILITY ISSUES** (hot-carrier effects, radiation effects, high-temperature effects, NBTI/PBTI, etc.)
- **SOI SENSORS, NEMS, MEMS, AND RFID TECHNOLOGY AND APPLICATIONS**
- **3D INTEGRATION** (imagers, power devices, wafer-to-wafer and die-to-wafer 3D integration)
- **SOI PHOTONICS**

SUBMISSION INFORMATION

Prospective authors should prepare a 2-page abstract of their work including illustrations and indicate a preference for poster or oral presentation.

Submissions will be accepted for review in PDF format only and should be e-mailed to papers@soiconference.org.

If the PDF requirement presents a problem, please contact the conference manager for assistance at manager@soiconference.org or call (818)795-3768 between the hours of 8:30 am and 4:30 pm Pacific Time.

DEADLINE INFORMATION

Papers should be submitted no later than 14 May, 2012. Notice of acceptance will be forwarded by 25 June, 2012. Late papers with exceptional merit will be considered for the Late News Session if submitted on or before **24 August, 2012.**

For further information, please visit our website at www.soiconference.org or contact the conference manager:

Joyce Hooper • 6930 De Celis Pl., #36 • Van Nuys, CA 91406
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**Preparation of the 2-page abstract (Title – Initial Caps,
1-inch from the top of the page)**

J.P. Author and G.E. Co-author (Author(s) – Initial Caps)
ACME Corp., First City, NY (Company information)
Email: Name@workplace.com, Tel: (xxx) xxx-xxxx

This set of instructions is given in the style and format to be used by authors in preparing abstracts for the 2012 IEEE International SOI Conference.

Please follow the instructions listed below.

Note: A two column format must be used, and a template may be downloaded from <http://www.soiconference.org>

SIZE

The total length of the submitted abstract including all text, graphs, tables, charts, drawings and pictures, is two pages. Accepted abstracts are published in the conference proceedings as received.

The abstracts must be typed within the frame shown (2 columns of 3.16" wide and 0.17" spacing by 9" tall) which may be used as a template; **the frame must not appear on the summary.**

Margins are 1" from the top of the page to the Title, 1" from the bottom of the page, and 1" left and right margins, for 8.5"x11" paper. The title should be bold if possible, centered at the top of the page, and followed by the name(s) of the author(s) and their affiliation(s).

The font size/pitch used in the manuscript should be no smaller than 10 point/12 characters per inch. Tables, graphs and figures may be smaller if legible.

COVER LETTER

Please submit an electronic copy of your 2-page abstract with a cover email identifying the following:

- Designated contact author: Name, mailing address, telephone number and email.
Note: All conference correspondence will be sent to the designated contact author. Name of the presenting author (even if the same as the contact author).
- Preference for either oral or poster presentation.

The conference will accept submissions only in electronic form and only in PDF format. The PDF file must be emailed as an attachment to the cover email and sent to the conference manager at papers@soiconference.org.

For additional information on PDF requirements (fonts, password, compression, etc.), please refer to the IEEE guidelines located on the conference website in the download section.

CRITERIA FOR SELECTION

Abstract review will be based on QUALITY, ORIGINALITY, and SIGNIFICANCE, and hence the summary should clearly reveal these attributes of the work described.

NOTIFICATION

Please submit your summary early, but no later than 14 May, 2012. You will be notified of the receipt of your summary. You will also be notified by 25 June, 2012 whether your paper is accepted for the conference. If your paper is accepted, you will be required to complete an IEEE copyright form. Please be sure to have sponsor approval if needed for the copyright assignment.

Authors of papers accepted for oral presentation should submit either a PowerPoint or PDF version of their presentation no later than one week before the conference. A confirmation email will be sent to acknowledge receipt of the file.

BEST PAPER & BEST STUDENT PAPER AWARDS

A Best Paper Award and a Best Student Paper Award *will be given based on the summary submitted* as well as the presentation at the conference. Late News papers will not be eligible for awards consideration.