

SISC 2011

42nd IEEE Semiconductor Interface Specialists Conference



Key Bridge Marriott Hotel, Arlington, VA
near downtown Washington, DC

December 1–3, 2011 (Tutorial: November 30)
www.ieeesisc.org



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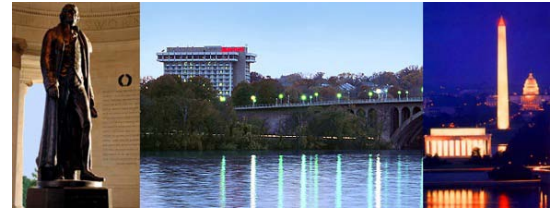
Y.C. Yeo
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Call For Papers

The SISC is a workshop-style conference that provides a forum for device engineers, solid state physicists, and materials scientists to discuss topics of common interest, formally through invited and contributed presentations, and informally during various events including a poster presentation session. The SISC is sponsored by the IEEE Electron Devices Society, and will be held immediately prior to the IEEE IEDM.

The program includes talks from all areas of MOS science and technology, including but not limited to

- **SiO₂ and high-k gate dielectrics** on Si and their interfaces
- **Insulators on high-mobility and alternative substrates** (SiGe, Ge, III-V, SiC, etc.)
- MOS gate stacks with **metal gate electrodes**
- Stacked dielectric layers for **non-volatile memory**
- **Oxide and interface structure**, chemistry, defects, and passivation: Theory and experiment
- **Electrical characterization, performance and reliability** of MOS-based devices
- **Surface cleaning technology** and impact on dielectrics and interfaces
- Dielectrics on **nanowires/-tubes and graphene**
- **Oxide electronics and multiferroics**
- **Interfaces in photovoltaics**, e.g. Si passivation



Invited speakers

- **Dr. Supratik Guha**, IBM Thomas J. Watson Research Center, USA
Scaling beyond conventional Si and materials challenges
- **Prof. Minghwei Hong**, National Tsing Hua University, Taiwan
III-V/high-k gate stacks
- **Prof. Cheol Seong Hwang**, Seoul National University, Korea
Resistive RAM
- **Dr. Lars-Ake Ragnarsson**, IMEC, Belgium
Ultrathin EOT scaling of high-k/metal gate stacks
- **Prof. Darrell Schlom**, Cornell University, USA
Oxide-based heterostructures
- **Prof. Shinichi Takagi**, Tokyo University, Japan
Ge gate stacks and devices
- **Prof. Iain Thayne**, University of Glasgow, Scotland
III-V MOSFETs
- **Prof. Peide Ye**, Purdue University, USA
InGaAs/high-k gate stacks and devices

Wednesday evening Tutorial – free to all registered SISC attendees

- **Prof. Mark Lundstrom**, Purdue University, USA
Simple theory of the nanoscale MOSFET

A **Best Student Presentation Award** will be given in memory of E.H. Nicollian.

Deadline for Receipt of Extended Abstracts: **July 29, 2011**

Abstract submission, previous technical programs, contact information, etc.: <http://www.ieeesisc.org>

