

4th International SiGe Technology and Device Meeting

May 11-14, 2008

Ambassador Hotel Hsinchu, Hsinchu, Taiwan, R.O.C.

<http://istdm2008.ndl.org.tw>

Second call for papers

Organizers

W.-X. Ni, General Chair (NDL, Taiwan)
S.-J. Chang, General Co-Chair (NCKU, Taiwan)
Y.-H. Wang, General Co-Chair (NARL, Taiwan)
C.-W. Liu (NTU, Taiwan)
D. Paul (Univ. of Glasgow, UK)

Late News

**Abstract Submission Deadline:
March 10, 2008**

Committees

Advisory Committee:

M.R. Caymax (IMEC, Belgium)
S.-J. Chang (National Cheng Kung Univ., Taiwan)
J. Derrien (Univ. Mediterranean, France)
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E. Kasper (Stuttgart Univ., Germany)
T.-J. King (UC Berkeley, USA)
S.J. Koester (IBM, USA)
J. Murota (Tohoku Univ., Japan)
W.-X. Ni (NDL, Taiwan)
Y. Shiraki (Musashi Inst. of Tech., Japan)
J.C. Sturm (Princeton Univ., USA)
B. Tillack (IHP, Germany)
Y. Yasuda (Kochi Univ. of Tech., Japan)
S. Zaima (Nagoya Univ., Japan)
M. Östling (KTH, Sweden)

Technical Program Chairs:

C.-W. Liu (NTU, Taiwan)
E.A. Fitzgerald (MIT, USA)
J. Murota (Tohoku Univ. Japan)
B. Tillack (IHP, Germany)

Publications:

D. Paul (Univ. of Glasgow, UK)

Local Arrangement:

J.-H. Tsai (NDL, Taiwan)

Scope / Topics

Contributed papers are solicited in the following technical areas:

1. Device-related materials:

Wafer fabrication (virtual substrates, SOI, SGOI, GOI, etc.), strain adjustment and strain relaxation methods, defect engineering and characterization, layer transfer, selective growth, novel group-IV alloys and heterostructures.

2. Process Technology:

Cleaning and treatment of SiGe(C) surfaces, epitaxy, elevated S/D contacts, SiGe gate materials, gate dielectrics on SiGe and Ge, dopant diffusion and point defects, dry etching, contact technology, process and impurity control, tooling, economics of manufacturing, process integration, local and global strain, TCAD.

3. Devices:

Hetero-CMOS, strained MOS, HBTs, BiCMOS, MODFETs, photonics devices, IR devices, tunneling, coherent and quantum devices, high-speed and THz devices, germanium devices, MEMS, thermo-electric devices, novel devices, device modeling.

4. Circuits / Applications:

Digital logic, VLSI, MMICs, SOCs, amplifiers, mixers, wireless and fiber-optic interfaces, analog / mixed signal systems and subsystems, communications systems, components for optical communication, imaging, sensing and radar systems, emerging and novel applications.

Secretary:

Joanne Chou

Conference Secretariat:

Elite Professional Conference Organizer / Chloe Chiu
Tel:+886-2-2504-4338 ext.14
E-mail: istdm2008@elitepco.com.tw

Partial List of Invited Speakers

Alexandra Abbadie (SOITEC, France)
Francois Andrieu (CEA LETI-MIATEC, France)
Stephen Bedell (IBM Research, USA)
Alain Chantre (STMicroelectronics, France)
Allen Chiang (Richwave Technology, Taiwan)
Johan Donkers (NXP, Netherlands)
Lisa Edge (IBM at Albany Nano Tech , USA)
Judy Hoyt (MIT, USA)
Frederik Leys (IMEC, Leuven, Belgium)
Koen Martens (IMEC, Belgium)
Hiroshi Nakashima (Kyushu University, Japan)
Ji-Soo Park (AmberWave Systems Corp., USA)
Thomas Schröder (IHP, Germany)
Hans Sigg (PSI, Switzerland)
Richard Soref (Air Force Research Laboratory, USA)
Tatsuya Tominari (Hitachi Ltd., Japan)
N. Yasutake (Toshiba, Japan)
Yee-Chia Yeo (National University of Singapore, Singapore)

Tutorial Short Course Information

- **Date and Time:** 14:00 - 17:30 May 11, 2008
- **Course A:** Erich Kasper (University of Stuttgart, Germany) /
High Germanium Content Devices: Structure, Physics, Applications
- **Course B:** Jianlin Liu (University of California, USA) / Self-assembled Si/Ge quantum dots and their devices
Frederik Leys (IMEC, Leuven, Belgium) / Ge MOSFET Devices

Other Events

- Banquet / Ceremony of Student and Poster Paper Award
19:30 - 21:00 May 13, 2008
- Tour in Hsinchu Science Park (TSMC, MXIC, etc.)
10:00 - 14:00 May 15, 2008

About Taiwan - a Beautiful Island

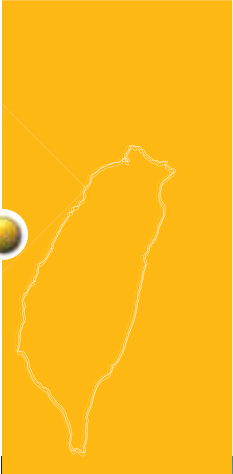
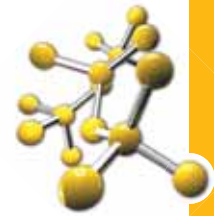
- **Area:** 36,000 km² ■ **Population:** 23 Million ■ **Capital:** Taipei City
- **Weather in May:** 22~28°C (71~82°F); 80% relative humidity on average
- **Features of Taiwan:**
 - Taipei 101, the world highest building (101 floors, 508 m) as the landmark of Taipei city
 - Beautiful landscape
 - Rich in food culture
 - 7 National Parks around the island (Kenting, Yangmingshan, Yushan, Shei-pa, Taroko, Kinmen, and Dongsha Marine.)

Hsinchu - a Si Valley in Taiwan

- 70 km from Taipei (easily connected by highway and high speed rail) / 40 km from the Taoyuan International Airport
- Hsinchu Science Park (HSP)
 - 6.32 km² of area
 - 382 high-tech companies on semiconductor including TSMC, UMC, MXIC, PSC etc.
 - Working People: 115,000 people
 - Revenues: ~34 Billion US dollars
 - 2 national universities and 6 research institutes including NDL in /around HSP

National Nano Device Labs (NDL)

- Main site in Hsinchu Science Park & a branch in Tainan Science Park
- Clean Room: 3,500 m²
- Process Capability: 10nm line, 25nm FinFET



On-line Abstract Submission:

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