ECS Transactions, Volume 33, Issue 6
SiGe, Ge, and Related Compounds 4: Materials, Processing, and Devices

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Chapter 3
Beyond CMOS

Monday PM
Session Co-Chairs: T. Krishnamohan and E. Tutuc

4:25 – 7:00 PM
ECS Plenary and Dinner Break

Chapter 4
Posters – Short Presentations

Monday PM
Session Chair: D. Harame

NOTE:
The following presentations will also be presented as poster displays on Tuesday, October 12, 2010 in the Evening Poster Session

Chapter 5
SiGe BiPolar and BiCMOS Technology

Tuesday AM
Session Co-Chairs: M. Östling and G. Niu

Chapter 7
Processing I: SiGe, Ge, and C Processing

Tuesday PM
Session Co-Chairs: J. Fiorenza and Y.-H. Xie

3:10 – 3:25 PM
Coffee Break

Chapter 8
Surfaces and Interfaces I: Surface Passivation and High-K Dielectric Interfaces

Tuesday PM
Session Co-Chairs: S. Miyazaki and S. Zaima

Chapter 9
Strain Engineering in Advanced Device Structures

Wednesday AM
Session Co-Chairs: S. Bedell and Y. C. Yeo

Chapter 10
Optoelectronics I: Light Emission and Novel Heterostructures

Wednesday AM
Session Co-Chairs: G. Masini and Y. Kang

(11.4) 2:35 – 3:05 PM

(Invited) Si-Ge-Sn Technologies: From Molecules to Materials to Prototype Devices 615
J. Kouvetakis, J. Tolle, J. Mathews, R. Roucka, and J. Menéndéz
(Arizona State University, USA)

(11.5) 3:05 – 3:35 PM

(Invited) Selective Epitaxial Growth (SEG) of Highly Doped Si:P on Source/Drain Areas of NMOS Devices Using $Si_3H_8/PH_3/Cl_2$ Chemistry 629
M. Bauer and S. Thomas (ASM America, USA)

3:35 – 3:50 PM

Coffee Break

Chapter 12
Quantum Dots

Wednesday PM (Concurrent Session)

Session Chair: M. Eriksson

(12.1) 1:25 – 1:55 PM

(Invited) Toward Si/SiGe Quantum Dot Spin Qubits: Gated Si/SiGe Single and Double Quantum Dots 639
C. Simmons, J. Prance, M. Thalakulam, B. Rosemeyer, B. Van Bael, D. E. Savage, M. G. Lagally, R. Joynt, M. Friesen, S. Coppersmith, and M. Eriksson
(University of Wisconsin-Madison, USA)

(12.2) 1:55 – 2:15 PM

Surface Orientation Effects on SiGe Quantum Dots and Nanorings Formation 649
C. Lee, W. Tu, C. Lin (National Taiwan University, Taiwan), H. Chang, S. Lee (National Central University, Taiwan), and C. Liu (National Taiwan University and National Nano Device Laboratories, Taiwan)

(12.3) 2:15 – 2:35 PM

Self-Align Formation of Si Quantum Dots 661
K. Makihara, M. Ikeda (Hiroshima University, Japan), H. Deki (Hiroshima Kokusai Gakuin University, Japan), A. Ohta (Hiroshima University, Japan), and S. Miyazaki (Nagoya University, Japan)

2:35 PM

Break of Concurrent Session

Chapter 13
Nanowire Growth, Processing, and Devices

Wednesday PM
Session Co-Chairs: N. D. Nguyen and B. Tillack

5:40 – 7:25 PM
Dinner Break

Chapter 14
Workshop: Group-IV Lasers - Can They Ever Compete With III-Vs?

Wednesday PM
Session Chair: S. Koester

7:25 – 7:55 PM
Workshop Mixer

8:40 – 9:40 PM
Workshop Panel Discussion

Chapter 15
Optoelectronics II: Photodetectors

Thursday AM
Session Co-Chairs: J. Liu and G. Masini

Chapter 16
Nano Membranes and MEMs

Thursday AM (Concurrent Session)
Session Chair: T. Krishnamohan

Chapter 17
Epitaxy II: Epitaxy of Alternative Semiconductors on Si Substrates

Thursday AM (Concurrent Session)
Session Chair: M. Caymax

Chapter 18
Surfaces and Interfaces II: Interface Physics, Characterization, and Device Application

Thursday PM (Concurrent Session)
Session Co-Chairs: S. Miyazaki and S. Zaima

3:20 – 3:35 PM
Coffee Break

Chapter 19
Related Compounds I

Thursday PM (Concurrent Session)
Session Chair: A. Reznicek

3:10 – 3:35 PM
Coffee Break

Chapter 20
Processing II: Advances in Structures, Doping, and Annealing

Thursday PM (Concurrent Session)
Session Co-Chairs: J.-M. Hartmann and T. Sadoh

Chapter 21
Related Compounds II

Thursday PM (Concurrent Session)
Session Chair: A. Reznicek