F. Silicon and Group-IV Devices and Integration Technology 분과

Room G
봉래Ⅱ+Ⅲ(6층)

2016년 2월 23일(화) 10:40-12:40
[TG2-F] Novel Si Devices and Integrated Circuits (2)
좌장 : 정성웅(SK 하이닉스), 조성재(가천대학교)

TG2-F-1 **10:40-11:10** **[초청] Recent Trends in Silicon Photonics and Perspectives of Its Future Advances**
Donghwan Ahn
School of Advanced Materials Engineering, Kookmin University

TG2-F-2 **11:10-11:25** **Step-Up Voltage Amplification by Negative Capacitance in Organic/Ferroelectric Material P(VDF-TrFE)**
Youngtaek Lee, Jaesung Jo and, Changhwan Shin
School of Electrical and Computer Engineering, University of Seoul

TG2-F-3 **11:25-11:40** **Si CMOS Extension and Ge Technology Perspectives Forecast through Metal-oxide-semiconductor Junctionless Field-effect Transistor**
Youngmin Kim[1] and Seongjae Cho[1,2]
[1]Department of Electronic Engineering, Gachon University, [2]Graduate School of IT Convergence Engineering, Gachon University

TG2-F-4 **11:40-11:55** **Novel Degradation of Vertical NAND (VNAND) Flash Memory Cells**
Hyung Su Kwon[1], Hyunseung Yoo[2], Gyu-Seong Cho[2], Sung-Kye Park[2], and Woo Young Choi[1]
[1] Department of Electronic Engineering, Sogang University, [2]Flash Device Technology Team, SK hynix Inc.

TG2-F-5 **11:55-12:10** **Circuit-level Simulation of RRAM Cross-point Array based on a Reliable Device-level Compact Modeling**
Min-Hwi Kim[1], Sungjun Kim[1], Sunghun Jung[1], Seongjae Cho[2], and Byung-Gook Park[1]
[1]Inter-university Semiconductor Research Center and Department of Electrical and Computer Engineering, Seoul National University, [2]Department of Electronic Engineering, Gachon University

TG2-F-6 **12:10-12:25** **Synaptic Device Based on Gated-Diode Memory String using GIDL Current for Neuromorphic System**
Sung Yun Woo, Chul-Heung Kim, Jaeha Kim, and Jong-Ho Lee
Department of Electrical and Computer Engineering, Seoul National University

TG2-F-7 **12:25-12:40** **Compact CMOS-based Multi-valued Literal Gate as a Building Block for Multi Valued Logic and Memory Applications**

E-San Jang, Sunhae Shin, Jae Won Jeong, and Kyung Rok Kim
School of Electrical and Computer Engineering, Ulsan National Institute of Science and Technology