

F. Silicon Device and Integration Technology 분과

Room G  
1F / 109호

2015년 2월 12일(목) 09:00-10:30

[TG1-F] Emerging Devices (1)

좌장: 신동석 (삼성전자), 김소영 (성균관대학교)

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- TG1-F-1 09:00-09:15 Neuromorphic System based on CMOS Analog Neuron Circuit**  
Jungjin Park, Min-Woo Kwon, Hyungjin Kim, and Byung-Gook Park  
Inter University Semiconductor Research Center (ISRC) and Department of Electrical and Computer Engineering, Seoul National University
- TG1-F-2 09:15-09:30 Self-Boosted Tunnel Field-Effect Transistor using Nitride Charge Trapping Layer**  
Hyungjin Kim and Byung-Gook Park  
Inter-university Semiconductor Research Center (ISRC) and Department of Electrical and Computer Engineering, Seoul National University
- TG1-F-3 09:30-09:45 Work-Function Variation and Random Dopant Fluctuation of Tunneling Field-Effect Transistors (TFETs)**  
Kyoung Min Choi, Seung Kyu Kim, and Woo Young Choi  
Department of Electronic Eng., Sogang University
- TG1-F-4 09:45-10:00 Study of Work-function Variation with Various Gate Materials in High-k/Metal (HK/MG) MOSFETs**  
Hyohyun Nam and Changhwan Shin  
School of Electrical and Computer Engineering, University of Seoul
- TG1-F-5 10:00-10:15 Low-Power and High-Speed Optically Readable Charge-Trap Flash Memory with Sub-10-ps Read Time**  
Seongjae Cho<sup>1,2</sup> and Byung-Gook Park<sup>3</sup>  
<sup>1</sup>Department of Electronic Engineering, Gachon University, <sup>2</sup>Department of IT Convergence Engineering, Gachon University, <sup>3</sup>Department of Electrical and Computer Engineering and Inter-university Semiconductor Research Center (ISRC), Seoul National University
- TG1-F-6 10:15-10:30 A Study on Room-Temperature Photoluminescence of RF-Sputtered GaN for Cost-Effective III-V-on-Si Beyond-CMOS Technology**  
Jeongmin Lee<sup>1</sup>, Hong-Seok Kim<sup>2</sup>, Seongmin Lee<sup>1</sup>, Jae-Hee Han<sup>2</sup>, and Seongjae Cho<sup>1,3</sup>  
<sup>1</sup>Department of IT Convergence Engineering, Gachon University, <sup>2</sup>Department of Energy IT, Gachon University, <sup>3</sup>Department of Electronic Engineering, Gachon University