The 23<sup>rd</sup> Korean Conference on Semiconductors (KCS 2016)

제23회 한국반도체학술대회

2016년 2월 22일(월)-24일(수), 강원도 하이원리조트

## G. Device & Process Modeling, Simulation and Reliability 분과

Room D 함백**ㅍ+**ㅍ(5층)

2016년 2월 23일(화) 08:30-10:30

[TD1-G] Device Physics and Characterization 1 : Field-Effect Transistors, Thin-Film Transistors, and 3D Inverter

좌장: 박문수(삼성디스플레이), 이성현(한국외국어대학교)

TD1-G-1	08:30-08:45	Analysis of Root Cause of Subthreshold Hump for 40 nm Mobile DDI High-Voltage MOSFET Kwang-Deok Kim, Sun-Ho Oh, Min-Ki Na, Sung-Gon Choi, Sung-Bo Hwang, and In-Wook Cho System IC Platform Technology Development team, SK hynix Inc.
TD1-G-2	08:45-09:00	Investigation on Effects of Al-Doping in AlZnO Thin Film Transistors using TCAD Simulation Youngjae Cho <sup>1</sup> , Young-Min Kong <sup>2</sup> , Eomji Kim <sup>3</sup> , Sung-Min Yoon <sup>3</sup> , and Yongwoo Kwon <sup>1</sup> <sup>1</sup> Department of Materials Science and Engineering, Hongik University, <sup>2</sup> School of Materials Science and Engineering, University of Ulsan, <sup>3</sup> Department of Advanced Materials Engineering for Information and Electronics, Kyung Hee University
TD1-G-3	09:00-09:15	<b>Low-frequency Noise Behaviors in Dual-gate a-IGZO TFTs</b> Chan-Yong Jeong <sup>1</sup> , Jong In Kim <sup>2</sup> , Jong-Ho Lee <sup>2</sup> , Jae-Gwang Um <sup>3</sup> , Jin Jang <sup>3</sup> , and Hyuck-In Kwon <sup>1</sup> <sup>1</sup> School of Electrical and Electronics Engineering, Chung-Ang University, <sup>2</sup> School of Electrical Engineering and Computer Science, Seoul National University, <sup>3</sup> Department of Information Display, Advanced Display Research Center, Kyung Hee University
TD1-G-4	09:15-09:30	Improved Split C-V Technique for Accurate Extraction of Mobility by Considering Effective Inversion Charges in p-Channel Si <sub>0.8</sub> Ge <sub>0.2</sub> MOSFET Tewook Bang <sup>1</sup> , Hagyoul Bae <sup>1</sup> , Choong-Ki Kim <sup>1</sup> , Jae Hur <sup>1</sup> , Jun-Young Park <sup>1</sup> , Dae-Chul Ahn <sup>1</sup> , Gun-Hee Kim <sup>1</sup> , Yun-Ik Son <sup>2</sup> , Jae-Hoon Lee <sup>2</sup> , Yong-Taik Kim <sup>2</sup> , and Yang-Kyu Choi <sup>1</sup> <sup>1</sup> School of Electrical Engineering, KAIST, <sup>2</sup> SK hynix Inc.
TD1-G-5	09:30-09:45	Separate Extraction of Source and Drain Resistances using Double Sweep Saturation Current-Voltage Characteristic in SiGe pMOSFETs Gun-Hee Kim, Hagyoul Bae, Yong-Yoon Kim, Choong-Ki Kim, Te- Wook Bang, Yoon-Ik Son, and Yang-Kyu Choi <sup>1</sup> School of Electrical Engineering, KAIST, <sup>2</sup> SK hynix Inc.

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TD1-G-6	09:45-10:00	A New Method for Determination of Subgap Density of States in n/p-type LTPS TFTs Injae Lee <sup>1</sup> , Miryeon Kim <sup>1</sup> , Min-Ho Shin <sup>2</sup> , and Hyungsoon Shin <sup>1</sup> <sup>1</sup> Department of Electronics Engineering, Ewha Womans University, <sup>2</sup> R&D Center Paju LCD Industrial Complex
TD1-G-7	10:00-10:15	<b>5 nm 세대 나노 와이어의 기생 커패시턴스 성분 분석 및 추출</b> 김종수, 서영수, 김현수, 신형철 Inter-university Semiconductor Research Center and School of Electrical Engineering and Computer Science, Seoul National University
TD1-G-8	10:15-10:30	SPICE Parameter Extraction in 3D Sequential Inverter Tae Jun Ahn <sup>1</sup> and YunSeop Yu <sup>2</sup> <sup>1</sup> Department of Electronic Engineering, Hankyong National University, <sup>2</sup> Department of Electrical, Electronic and Control Engineering, Hankyong National University