제20회 한국반도체학술대회

2013년 2월 4일(월)~6일(수) / 웰리힐리파크 (구, 성우리조트)

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I. MEMS & Sensors 분과

Room G

국실 (본관, 5층)

2013년 2월 6일(수) 12:45-14:00 [WG2-I] MEMS & Sensors II

좌장: 조원주(광운대학교), 한상욱(KIST)

WG2-I-1	12:45-13:00	Characterization of Subthreshold Slope Degradation in CMOS-Based
		Silicon Nanowire Biosensors
		Won Hee Lee ¹ Jin-Moo Lee ² Mihee J.hm ¹ Jieun Lee ¹ Jung Han Lee ³

Won Hee Lee¹, Jin-Moo Lee², Mihee Uhm¹, Jieun Lee¹, Jung Han Lee³, Hagyoul Bae¹, Euiyoun Hong¹, Seonwook Hwang¹, Yun Hyeok Kim¹, Bong Sik Choi¹, Byung-Gook Park³, Dong Myong Kim¹, Yong-Joo Jeong², and Dae Hwan Kim¹

¹School of Electrical Engineering, Kookmin University, ²Department of Bio and Nanochemistry, Kookmin University, ³School of Electrical Engineering and Computer Science, Seoul National University

WG2-I-2 13:00-13:15 Implementation and Characterization of Gate-Induced Drain Leakage Current-Based Multiplexed SiNW Biosensor

Jieun Lee¹, Jung Han Lee², Mihee Uhm¹, Won Hee Lee¹, Seonwook Hwang¹, Bong Sik Choi¹, Byung-Gook Park², Dong Myong Kim¹, and Dae Hwan Kim¹

¹School of Electrical Engineering, Kookmin University, ²School of Electrical Engineering and Computer Science, Seoul National University

WG2-I-3 13:15-13:30 Detection of a Specific Target DNA through the Threshold Voltage Shift in Silicon Nanowire FET-Based Biosensors

Seonwook Hwang¹, Jieun Lee¹, Won Hee Lee¹, Mihee Uhm¹, Bong Sik Choi¹, Hagyoul Bae¹, Sewook Oh², Yejin Kim², Hyun Ho Lee², Dong Myong Kim¹, and Dae Hwan Kim¹

¹School of Electrical Engineering, Kookmin University, ²Department of Chemical Engineering, Myongji University

WG2-I-4 13:30-13:45 Microfluidic Dielectrophoresis Chip to Study the Dielectric Properties of the Primo Cell

Seung Hyun Lee¹, Yul Koh¹, Yeong Tai Seo¹, Kyoung Hee Bae², Hee Min Kwon³, and Yong Kweon Kim¹

¹School of Electrical Engineering and Computer Science, Seoul National University, ²Nano Primo Research Center, Advanced Institutes of Convergence Technology, ³Yonsei Institute of Convergence Technology

WG2-I-5 13:45-14:00 Low Noise Single Photon Detection System with InGaAs/InP APD Integrated TEC Device and Analog Integrator Readout Scheme

이민수^{1,2}, 한상욱¹, 문성욱¹

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