

# 제22회 한국반도체학술대회

2015년 2월 10일(화) - 12일(목), 인천 송도컨벤시아

## I. MEMS & Sensor Systems 분과

Room H  
1F / 110호

2015년 2월 11일(수) 13:00-14:30

[WH2-I] Chemical-Bio Sensor System

좌장: 이정수 (포항공과대학교)

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WH2-I-1	13:00-13:15	<b>Probabilistic Detection Sensitivity of Localized Surface Plasmon Resonance Biosensing</b> Heejin Yang, Wonju Lee, Kiheung Kim, Taewon Hwang, and Donghyun Kim School of Electrical and Electronic Engineering, Yonsei University
WH2-I-2	13:15-13:30	<b>Ultrasensitive Protein Detection using Biologically-Sensitive Field-Effect Transistors (BioFETs) with Multiple Si-Nanowires</b> Kihyun Kim <sup>1</sup> , Chanoh Park <sup>2</sup> , Donghoon Kim <sup>1</sup> , Nanki Hong <sup>1</sup> , Minjae Kang <sup>3</sup> , M. Meyyappan <sup>4,5</sup> , and Jeong-Soo Lee <sup>1,2</sup> <sup>1</sup> Department of Electrical Engineering, POSTECH, <sup>2</sup> Division of IT-Convergence Engineering, POSTECH, <sup>3</sup> National Institute for Nanomaterials Technology, POSTECH, <sup>4</sup> Department of Creative IT Engineering, POSTECH, <sup>5</sup> NASA Ames Research Center, USA
WH2-I-3	13:30-13:45	<b>Design and Fabrication of Vertical Nanoslit Fluid Channel Array for High Volume Flow Application</b> Yul Koh, Min-Hye Oh, Yeong-Tai Seo, and Yong-Kweon Kim School of Electrical Engineering & Computer Science, Seoul National University
WH2-I-4	13:45-14:00	<b>Influence of Buffer Dilution on the Sensing Performances of the Silicon Nanowire Field-Effect Transistor Sensors</b> ChanOh Park <sup>1</sup> , Kihyun Kim <sup>2</sup> , Donghoon Kim <sup>2</sup> , Nanki Hong <sup>2</sup> , Minjae Kang <sup>3</sup> , M. Meyyappan <sup>4,5</sup> , and Jeong Soo Lee <sup>1,2</sup> <sup>1</sup> Division of IT-Convergence Engineering, POSTECH, <sup>2</sup> Department of Electrical Engineering, POSTECH, <sup>3</sup> National Institute for Nanomaterials Technology, POSTECH, <sup>4</sup> Department of Creative IT Engineering, POSTECH, <sup>5</sup> NASA Ames Research Center, USA
WH2-I-5	14:00-14:15	<b>Biosensing Comparison Between Dry and Wet Environment in Silicon Nanowire Transistor</b> Hyoun Mo Choi, Jisun Park, Dong Jae Shin, Bongsik Choi, Seungguk Kim, Hyunsun Mo, Dong Myong Kim, Sung-Jin Choi, and Dae Hwan Kim School of Electrical Engineering, Kookmin University
WH2-I-6	14:15-14:30	<b>Sensing Property of FET-type Gas Sensor Having a Sensing Material of</b>

The 22<sup>nd</sup> Korean Conference on Semiconductors (KCS 2015)

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## ZnO Film Prepared by ALD

Chang-Hee Kim<sup>1</sup>, Soohyun Kim<sup>1</sup>, Yoonki Hong<sup>1</sup>, Jongmin Shin<sup>1</sup>, In-Tak Cho<sup>1</sup>,  
Un Ki Kim<sup>2</sup>, Cheol Seong Hwang<sup>2</sup>, and, Jong-Ho Lee<sup>1</sup>

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