



# 제25회 한국반도체학술대회

The 25<sup>th</sup> Korean Conference on Semiconductors

2018년 2월 5일(월)-7일(수), 강원도 하이원리조트 컨벤션 호텔

2018년 2월 6일(화), 09:00-10:45

Room B (태백II+III, 5층)

## I. MEMS & Sensor Systems 분과

### [TB1-I] Gas/Chemical Sensors

TB1-I-1 09:00-09:15	<b>Optimization of the Performance in Humidity Sensor based on Pre-Separated 99% Metallic Single-Walled Carbon Nanotube</b> Yeamin Kim, Bongsik Choi, Jinsu Yoon, Yongwoo Lee, Jungmin Han, Jieun Lee, Jinhee Park, Dong Myong Kim, Dae Hwan Kim, and Sung-Jin Choi <i>School of Electrical Engineering, Kookmin University</i>
TB1-I-2 09:15-09:30	<b>Gas Sensing Characteristics of the FET-Type Gas Sensor Having Inkjet-Printed WS<sub>2</sub> Sensing Layer</b> Yujeong Jeong, Jongmin Shin, Yoonki Hong, Meile Wu, Seongbin Hong, and Jong-Ho Lee <i>Department of Electrical Eng., Seoul National University</i>
TB1-I-3 09:30-09:45	<b>Electrical Characteristics of Parylene Gate Dielectric in Silicon Nanowire Based Ion-Sensitive Field-Effect Transistors</b> Wonyeong Choi <sup>1</sup> , Bo Jin <sup>1</sup> , ChanOh Park <sup>2</sup> , Donghoon Kim <sup>1</sup> , Ga-Yeon Lee <sup>3</sup> , Jae-Chul Pyun <sup>3</sup> , and Jeong-Soo Lee <sup>1,2</sup> <i><sup>1</sup>Department of Electrical Engineering, POSTECH, <sup>2</sup>Division of IT-Convergence Engineering, POSTECH, <sup>3</sup>Department of Materials Science and Engineering, Yonsei University</i>
TB1-I-4 09:45-10:00	<b>Humidity-Sensitive Field Effect Transistor with In<sub>2</sub>O<sub>3</sub> Nanoparticles as a Sensing Layer</b> Seongbin Hong, Jongmin Shin, Yoonki Hong, Meile Wu, Dongkyu Jang, Yujeong Jeong, and Jong-Ho Lee <i>Department of ECE and ISRC, Seoul National University</i>
TB1-I-5 10:00-10:15	<b>EIS Sensor for Fluoride Ion Detection based on LaF<sub>3</sub> Film</b> Hyeonsu Cho <sup>1</sup> , Kihyun Kim <sup>2</sup> , and Chang-Ki Baek <sup>1</sup> <i><sup>1</sup>Department of Creative IT Engineering, POSTECH, <sup>2</sup>Department of Future IT Innovation Lab., POSTECH</i>
TB1-I-6 10:15-10:30	<b>Enhanced pH Sensitivity Using Capacitive Coupling in Extended Gate FET Sensor with Various High-K Sensing Films</b> Joo-Won Kang and Won-Ju Cho <i>Department of Electronic Materials Engineering, Kwangwoon University</i>
TB1-I-7 10:30-10:45	<b>Calibrated Environmental Sensor based on Resistive Sensing for Sub-ppm Level VOC Gas Detection</b> Ho Yong Seong, Hung Phan Dang, Hyunwoo Park, and Minkyu Je <i>School of Electrical Engineering, KAIST</i>