



제25회 한국반도체학술대회

The 25th 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

좌장: 김정현 교수(광운대학교)

TB1-I-1 09:00-09:15	Optimization of the Performance in Humidity Sensor based on Pre-Separated 99% Metallic Single-Walled Carbon Nanotube 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	Gas Sensing Characteristics of the FET-Type Gas Sensor Having Inkjet-Printed WS₂ Sensing Layer 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	Electrical Characteristics of Parylene Gate Dielectric in Silicon Nanowire Based Ion-Sensitive Field-Effect Transistors Wonyeong Choi ¹ , Bo Jin ¹ , ChanOh Park ² , Donghoon Kim ¹ , Ga-Yeon Lee ³ , Jae-Chul Pyun ³ , and Jeong-Soo Lee ^{1,2} ¹ <i>Department of Electrical Engineering, POSTECH</i> , ² <i>Division of IT-Convergence Engineering, POSTECH</i> , ³ <i>Department of Materials Science and Engineering, Yonsei University</i>
TB1-I-4 09:45-10:00	Humidity-Sensitive Field Effect Transistor with In₂O₃ Nanoparticles as a Sensing Layer 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	EIS Sensor for Fluoride Ion Detection based on LaF₃ Film Hyeonsu Cho ¹ , Kihyun Kim ² , and Chang-Ki Baek ¹ ¹ <i>Department of Creative IT Engineering, POSTECH</i> , ² <i>Department of Future IT Innovation Lab., POSTECH</i>
TB1-I-6 10:15-10:30	Enhanced pH Sensitivity Using Capacitive Coupling in Extended Gate FET Sensor with Various High-K Sensing Films Joo-Won Kang and Won-Ju Cho <i>Department of Electronic Materials Engineering, Kwangwoon University</i>
TB1-I-7 10:30-10:45	Calibrated Environmental Sensor based on Resistive Sensing for Sub-ppm Level VOC Gas Detection Ho Yong Seong, Hung Phan Dang, Hyunwoo Park, and Minkyu Je <i>School of Electrical Engineering., KAIST</i>