



# 제25회 한국반도체학술대회

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

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

2018년 2월 7일(수), 13:15-14:45

Room D (함백II+III, 5층)

## E. Compound Semiconductors 분과

### [WD3-E] GaN Device

좌장: 김해천 박사(ETRI), 장태훈 교수(전북대학교)

<p>WD3-E-1 13:15-13:30</p>	<p><b>Enhancement of Gate Controllability and Suppression of Current Collapse in AlGaIn/GaN HEMT Fabricated on GaN-Based Cantilever</b> Quan Dai, Dong-Hyeok Son, Ryun-Hwi Kim, Jun-Hyeok Lee, Terirama Thingujam, Jung-Min Ju, and Jung-Hee Lee <i>School of electronics engineering, Kyungpook National University</i></p>
<p>WD3-E-2 13:30-13:45</p>	<p><b>Improvement of Bias-Induced V<sub>th</sub> Stability in Recessed-Gate AlGaIn/GaN MIS-HEMTs with Nitrogen-Incorporated Al<sub>2</sub>O<sub>3</sub> Gate Insulator</b> Myoung-Jin Kang<sup>1</sup>, Cheol-Hee Lee<sup>1</sup>, Su-Keun Eom<sup>1</sup>, Jae-Gil Lee<sup>1</sup>, Ho-Young Cha<sup>2</sup>, and Kwang-Seok Seo<sup>1</sup> <i><sup>1</sup>Department of Electrical and Computer Engineering and Inter-University Semiconductor Research Center, Seoul National University, <sup>2</sup>Department of Electronic and Electrical Engineering, Hongik University</i></p>
<p>WD3-E-3 13:45-14:00</p>	<p><b>Proton Irradiation Effects on AlGaIn/GaN HEMT Isolated by Ion Implantation</b> Dong-Seok Kim<sup>1</sup>, Sun Mog Yeo<sup>1</sup>, Jun-Hyeok Lee<sup>2</sup>, and Jung-Hee Lee<sup>2</sup> <i><sup>1</sup>Korea Multi-Purpose Accelerator Complex, KAERI, <sup>2</sup>School of Electronics Engineering, Kyungpook National University</i></p>
<p>WD3-E-4 14:00-14:15</p>	<p><b>Low Energy Proton Irradiation Effects in AlGaIn/GaN-on-Si HEMTs</b> Dongmin Keum, Geunho Cho, and Hyungtak Kim <i>Department of Electronic and Electrical Engineering, Hongik University</i></p>
<p>WD3-E-5 14:15-14:30</p>	<p><b>The Characteristic of GaN Vertical Nanowire for Low Voltage Application</b> Dong-Hyeok Son, Quan Dai, Ryun-Hwi Kim, Jun-Hyeok Lee, Hyun-Su Lee, and Jung-Hee Lee <i>School of Electronics Engineering, Kyungpook National University</i></p>
<p>WD3-E-6 14:30-14:45</p>	<p><b>Development of 4-Inch AlGaIn/GaN High Electron Mobility Transistors Grown on Semi-Insulating SiC Substrate with High Electron Mobility</b> Chu-Young Cho, Yumin Koh, Hyeong-Ho Park, and Kyung-Ho Park <i>Electronic Devices Laboratory, KANC</i></p>