



# 제 29회 한국반도체학술대회

The 29th Korean Conference on Semiconductors

2022년 1월 24일(월) ~ 26일(수) | 강원도 하이원 그랜드호텔(컨벤션타워)

2022년 1월 26일(수), 14:00-15:30

Room A (에메랄드 I, 5층)

## D. Thin Film Process Technology 분과

### [WA3-D] Device Fabrication

좌장: 김성근 책임(KIST), 이용규 교수(명지대학교)

<p><b>WA3-D-1</b> 14:00-14:15</p>	<p><b>Buffer-free Mechanical Separation Technique Enabling Atomically Flat and Uniform Release of Target Epitaxial Layers in III-V Heterostructure</b> Honghwi Park and Hongsik Park <i>School of Electronic and Electrical Engineering, Kyungpook National University</i></p>
<p><b>WA3-D-2</b> 14:15-14:30</p>	<p><b>Seamless Gap-filling in 3D Nanostructure Pattern Using Gradient Area Selective Deposition</b> Chi Thang Nguyen<sup>1</sup>, Eun-Hyoung Cho<sup>2</sup>, Jeongwoo Park<sup>3</sup>, Mingyu Lee<sup>1</sup>, Bonwook Gu<sup>1</sup>, Bonggeun Shong<sup>3</sup>, and Han-Bo-Ram Lee<sup>1</sup> <sup>1</sup><i>Department of Materials Science and Engineering, Incheon National University,</i> <sup>2</sup><i>Nano Electronics Lab, Samsung Advanced Institute of Technology,</i> <sup>3</sup><i>Department of Chemical Engineering, Hongik University</i></p>
<p><b>WA3-D-3</b> 14:30-14:45</p>	<p><b>Improved Hydrogen Sensing Window Using ZnO-decorated Pt/AlGaIn/GaN HEMT Devices</b> Se Eun Kim<sup>1,2</sup>, Seo Young Jang<sup>1,2</sup>, Hye Min Lee<sup>1,2</sup>, and Sang Woon Lee<sup>1,2</sup> <sup>1</sup><i>Department of Energy Systems Research, Ajou University,</i> <sup>2</sup><i>Department of Physics, Ajou University</i></p>
<p><b>WA3-D-4</b> 14:45-15:00</p>	<p><b>Monolithic 3D 향 SOI 웨이퍼 제작을 위한 새로운 제조 공정 개발: Epitaxial Si/SiGe Bilayer 를 이용한 접합과 분리</b> 류화연<sup>1</sup>, 윤동민<sup>1</sup>, 최용준<sup>1</sup>, 조충희<sup>1</sup>, 신혜린<sup>1</sup>, 강주성<sup>1</sup>, 문진우<sup>1</sup>, 박흥수<sup>2</sup>, 고대홍<sup>1</sup> <sup>1</sup><i>Department of Materials Science and Engineering, Yonsei University,</i> <sup>2</sup><i>BIO-IT Micro Fab Center, Yonsei University</i></p>
<p><b>WA3-D-5</b> 15:00-15:15</p>	<p><b>Selective Etching of Si<sub>1-x</sub>Ge<sub>x</sub> versus Si in Multi-layer Using Wet Chemical and Inductively Coupled Plasma – Reactive Ion Etching (ICP-RIE)</b> Yongjoon Choi<sup>1</sup>, Choonghee Jo<sup>1</sup>, Dongmin Yoon<sup>1</sup>, So Young Kim<sup>1</sup>, Hyerin Shin<sup>1</sup>, Dong Chan Suh<sup>2</sup>, Heungsoo Park<sup>2</sup>, and Dae-Hong Ko<sup>1</sup> <sup>1</sup><i>Department of Materials Science and Engineering, Yonsei University,</i> <sup>2</sup><i>BIO-IT Micro Fab Center, Yonsei University</i></p>
<p><b>WA3-D-6</b> 15:15-15:30</p>	<p><b>Influence of Hydrochloric Acid Incorporation on Electrical Properties of Solution-Processed Hafnium-Aluminum Oxide Gate Insulator</b> Jeong Hyun Ahn, Tae Eun Ha, Eun Kyung Jo, Hwarim Im, and Yong-Sang Kim <i>Department of Electrical and Computer Engineering, Sungkyunkwan University</i></p>