

## [WeA1] Ultra-Wide Bandgap Gallium Oxide: Growth and Devices

**Date / Time** May 25 (Wed.), 2022 / 10:00–12:00  
**Place** Convention Hall A  
**Session Chair** Ho-Young Cha (Hongik University, Korea)

### [WeA1-1] Invited Talk

**Online** 10:00–10:30

#### $\beta$ -Ga<sub>2</sub>O<sub>3</sub>: Growth, Doping, and Device Design

A. Mauze, T. Itoh, E. Farzana, Y. Zhang, J. Speck  
*University of California, USA*

### [WeA1-2] Invited Talk

**Online** 10:30–11:00

#### NiO/Ga<sub>2</sub>O<sub>3</sub> p-n Heterojunction Based Bipolar Devices

Jiandong Ye, Hehe Gong, Feng Zhou, Hai Lu, Fangfang Ren, Shulin Gu, Rong Zhang  
*Nanjing University, China*

### [WeA1-3] Oral

**Online** 11:00–11:20

#### Heteroepitaxial Growth of (AlGa)<sub>2</sub>O<sub>3</sub> Thin Films on Sapphire Substrates by Plasma-Assisted Pulsed Laser Deposition

Zewei Chen<sup>1</sup>, Makoto Arita<sup>2</sup>, Katsuhiko Saito<sup>1</sup>, Tooru Tanaka<sup>1</sup>, Qixin Guo<sup>1</sup>  
<sup>1</sup>Saga University, Japan, <sup>2</sup>Kyushu University, Japan

### [WeA1-4] Oral

**Offline** 11:20–11:40

#### Enhancement Mode $\beta$ -(Al<sub>0.19</sub>Ga<sub>0.81</sub>)<sub>2</sub>O<sub>3</sub>/Ga<sub>2</sub>O<sub>3</sub> HFETs with Superlattice Back-Barrier: A TCAD Modeling and Comprehensive Investigation

Gokhan Atmaca, Ho-Young Cha  
*Hongik University, Korea*

### [WeA1-5] Oral

**Online** 11:40–12:00

#### Flexible Ga<sub>2</sub>O<sub>3</sub> Electronics: From Vdw Epitaxy to Membrane Exfoliation

Yi Lu, Shibin Krishna, Che-Hao Liao, Alaa Almushaikeh, Xiao Tang, Xiaohang Li  
*King Abdullah University of Science and Technology, Saudi Arabia*