

[WeA2] Ultra-Wide Bandgap Gallium Oxide: Growth and Properties

Date / Time May 25 (Wed.), 2022 / 13:00–14:40

Place Convention Hall A

Session Chair Si-Young Bae (KICET, Korea)

[WeA2-1] Invited Talk

Online 13:00–13:30

Potentials of Future Ultra-Wide Bandgap Oxide Semiconductors

Shizuo Fujita¹, Kentaro Kaneko¹, Takeyoshi Onuma²

¹Kyoto University, Japan, ²Kogakuin University, Japan

[WeA2-2] Invited Talk

Offline 13:30–14:00

Structural Defects in Monoclinic β -Ga₂O₃

Ngo Si Trong¹, Hyeon Woo Kim², Sung Beom Cho², Young Heon Kim¹, Nguyen Quoc Vuong¹,
Hu Young Jeong³, SoonKu Hong¹

¹Chungnam National University, Korea, ²Korea Institute of Ceramic Engineering and Technology, Korea,
³Ulsan National Institute of Science and Technology, Korea

[WeA2-3] Oral

Online 14:00–14:20

In-Plane Crystalline Anisotropy of β -Ga₂O₃ Bulk

Xiaocui Ma, Rui Xu, Leiying Ying, Yang Mei, Hao Long, Baoping Zhang

Xiamen University, China

[WeA2-4] Oral

Online 14:20–14:40

Electrical Properties of α -Ga₂O₃ Films Grown by HVPE on Sapphire with α -Cr₂O₃ Buffers

Alexander Polyakov¹, Vladimir Nikolaev^{2,3}, Sergey Stepanov³, Alexey Pechnikov³, Alexey Almaev⁴,
Eugene Yakimov^{1,5}, Bohdan Kushnarev⁴, Ivan Shchemerov¹, Mikhail Sheglov², Alexey Chernykh¹,
Anton Vasilev¹, Anastasiya Kochkova¹, Stephen Pearton⁶

¹National University of Science and Technology MISiS, Russia, ²IOFFE Institute, Russia,

³Perfect Crystals LLC, USA, ⁴National Research Tomsk State University, Russia,

⁵Russian Academy of Sciences, Russia, ⁶University of Florida, USA