

[TuB2] Nitrides for Electronics - II

Session Date	July 14 (Tue.), 2026
Session Time	10:35–12:20
Session Room	Room B (Baekrok Hall B, 1F)
Session Chairs	Prof. Narihito Okada (Yamaguchi University, Japan), Dr. Byeongchan So (Fraunhofer Institute for Applied Solid State Physics IAF, Germany)

[TuB2-1] [Invited]

10:35–11:05

AlN-Based Heteroepitaxy and Devices by MOCVD

Xiaohang Li, King Abdullah University of Science and Technology, Saudi Arabia

[TuB2-2]

11:05–11:20

Record-High 2DEG Mobility in GaN HEMTs on an Improved AlN Buffer with a 50-nm GaN Channel

M. Hino, S. Yoshida, I. Makabe, K. Makiyama, J. Kotani, and K. Nakata, Sumitomo Electric Industries, Ltd., Japan

[TuB2-3]

11:20–11:35

Prospects and Challenges for N-Polar AlN-Based GaN Channel HEMTs

Markus Pristovsek¹, Yoann Robin¹, Itsuki Furuhashi¹, Chengzhi Zhang², Martin Kuball², Matthew D. Smith², Sheng Zhang³, Xinhua Wang³, and Xu Yang^{1,3}, ¹Nagoya University, Japan, ²University of Bristol, United Kingdom, ³Chinese Academy of Sciences, China

[TuB2-4]

11:35–11:50

Suppress the Parasitic Leakage Current of Homoepitaxial GaN HEMT Using Self-Organizing Nucleated AlN Isolation Layer

JunShuai Xue, WenBo Sun, GuanLin Wu, Cheng Zhao, ChenKai Zhang, JinCheng Zhang, and Yue Hao, Xidian University, China

[TuB2-5]

11:50-12:05

Homoepitaxial Growth of AlGa_N Drift Layers on Bulk Ammonothermal GaN and AlGa_N Substrates

Pawel Prystawko, Tomasz Sochacki, Robert Kucharski, Piotr Kruszewski, and Marcin Krysko, Institute of High Pressure Physics PAS, Poland

[TuB2-6]

12:05-12:20

GaN-on-GaN Regrowth Interface Optimization in MOVPE for Electronic Device Structures

F. Brunner, A. Bassal, K. Tetzner, O. Hilt, S. Breuer, and M. Weyers, Ferdinand-Braun-Institut, Germany