

[FrB1] Emerging Nitrides

Session Date	July 17 (Fri.), 2026
Session Time	10:20–12:05
Session Room	Room B (Baekrok Hall B, 1F)
Session Chairs	Dr. Ji-Hyeon Park (Korea Institute of Ceramic Engineering and Technology, Korea), Dr. An-Na Cha (Chonnam National University, Korea)

[FrB1–1] [Invited]

10:20–10:50

MOCVD of Novel Nitrides for Sustainable Electronics – AlScN and AlYN

Isabel Streicher¹, Stefano Leone², Huili Grace Xing¹, Debdeep Jena¹, and Hari Nair¹, ¹Cornell University, USA, ²Fraunhofer Institute of Applied Solid State Physics IAF, Germany

[FrB1–2]

10:50–11:05

Growth and Structural Characterization of AlYN/GaN/Sapphire by Metalorganic Chemical-Vapor Deposition

Shun Narita, Yudai Shimizu, Daisuke Iida, Keitaro Ikejiri, and Kazutada Ikenaga, Nippon Sanso Corporation, Japan

[FrB1–3]

11:05–11:20

Evaluation of Vertical B GaN Neutron Detectors Using Free-Standing GaN Substrate for Neutron Imaging

S. Takenaka¹, R. Kudo¹, K. Ando¹, Y. Maeda¹, E. Kokubo², K. Takagi¹, T. Oda³, M. Hino⁴, Y. Honda², H. Amano², Y. Inoue¹, T. Aoki¹, and T. Nakano¹, ¹Shizuoka University, Japan, ²Nagoya University, Japan, ³The University of Tokyo, Japan, ⁴Kyoto University, Japan

[FrB1–4]

11:20–11:35

Thickness Dependence of Structural and Radiation Detection Characteristics of B GaN Neutron Detectors for In-Core Nuclear Instrumentation

R. Kudo¹, E. Kokubo², K. Takagi¹, Y. Sakurai³, H. Yashima³, T. Makino⁴, T. Ohshima⁴, Y. Honda², H. Amano², Y. Inoue¹, T. Aoki^{1,3}, and T. Nakano^{1,3}, ¹Shizuoka University, Japan, ²Nagoya University, Japan, ³Kyoto University, Japan, ⁴National Institutes for Quantum Science and Technology, Japan

[FrB1–5]

11:35–11:50

Fabrication and Evaluation of BAIGaN Neutron Detector Designed for Operation in Harsh Environments

Ryusuke Suzuki¹, Ryohei Kudo¹, Toru Oikawa¹, Hinata Nakanishi¹, Eito Kokubo², Genichiro Wakabayashi³, Yoshio Honda², Hiroshi Amano², Yoku Inoue¹, Toru Aoki¹, and Takayuki Nakano¹,
¹Shizuoka University, Japan, ²Nagoya University, Japan, ³Kindai University, Japan

[FrB1–6]

11:50–12:05

Thickness-Dependent Compensation in Polarization-Doped Graded AlGaIn Grown by MOVPE

Abhishek Chatterjee¹, Z. S. Pehlivan¹, M. Frentrup¹, B. Harding¹, G. Kusch¹, M. J. Kappers¹, D. J. Wallis^{1,2}, and R. A. Oliver¹, ¹University of Cambridge, United Kingdom, ²Cardiff University, United Kingdom