

[WeB1] UV Devices

Session Date	July 15 (Wed.), 2026
Session Time	10:25–12:10
Session Room	Room B (Baekrok Hall B, 1F)
Session Chairs	Prof. Young Joon Hong (Sungkyunkwan University, Korea) Prof. JunShuai Xue (Xidian University, China)

[WeB1–1] [Invited]

10:25–10:55

The Role of Point Defects in AlGaIn-Based Far-UVC LEDs

T. Wernicke¹, J. Höpfner¹, M. Schilling¹, I. Prozeev², K. Loeto³, J. Ruschel⁴, D. Cameron^{5,6}, T. Kolbe⁴, J. Pacuk⁷, M. Guttman⁴, J. Rass⁴, G. Kusch⁷, Z.S. Pehlivan⁷, H.K. Cho⁴, S. Hagedorn⁴, N. Roccato⁷, N. Susilo¹, P. Edwards⁵, A. Muhin¹, F. Piva⁷, G. Cardinali¹, C. De Santi⁷, M. Buffolo⁷, N. Trivellin⁷, Marco Pilati⁷, M.R. Wagner³, M. Weyers⁴, S. Einfeldt⁴, G. Meneghesso⁷, E. Zanoni⁷, R.W. Martin⁵, R.A. Oliver⁸, J. Lähnemann³, F. Tuomisto², M. Meneghini⁷, M. Kneissl^{1,4}, ¹Technische Universität Berlin, Germany, ²University of Helsinki, Helsinki, Finland, ³Paul-Drude-Institut, Berlin, Germany, ⁴Ferdinand-Braun-Institut, Germany, ⁵University of Strathclyde, United Kingdom, ⁶Gatan, Inc., Pleasanton, United States, ⁷University of Padua, Italy, ⁸University of Cambridge, United Kingdom

[WeB1–2] [Invited]

10:55–11:25

MOVPE Growth of UV-B Laser Diodes on Sapphire Substrate and Realization of Room-Temperature Continuous-Wave Operation

Motoaki Iwaya, Takumu Saito, Rintaro Miyake, Sho Iwayama, Tetsuya Takeuchi, Satoshi Kamiyama, and Hideto Miyake, Meijo University, Japan

[WeB1–3]

11:25–11:40

Low-Leakage Shallow-Beveled Mesa GaN Ultraviolet Avalanche Photodiodes with AlGaIn Windows for Improved Responsivity

Davide Balzerani¹, Alexandra V. Dolgashev¹, A. Nepomuk Otte¹, Theeradetch Detchprohm¹, Subhra Chowdhury², Dhruvas Biswas², and Russell D. Dupuis¹, ¹Georgia Institute of Technology, USA, ²Magnolia Optical Technologies, USA

[WeB1-4]

11:40-11:55

MOVPE-Grown p-AlGaIn with Coupled Polarization and Impurity Doping Achieving 12% EQE in Deep-Ultraviolet LEDs

Hongyu Liu¹, Li Chen², Jichun Ye¹, and Wei Guo¹, ¹Ningbo Institute of Materials Technology and Engineering, Chinese Academy of Sciences, ²Yongjiang Laboratory, China

[WeB1-5]

11:55-12:10

Nanoscale Characterization of Carrier Capture into the Active Region of Far-UVC LEDs

Frank Bertram¹, Gordon Schmidt¹, Niklas Dreyer¹, Peter Veit¹, Jürgen Christen¹, M. Ajmal Khan², Kohei Fujimoto^{2,3}, M. Nawaz Sharif^{2,3}, Hiroyuki Yaguchi³, and Hideki Hirayama², ¹Otto-von-Guericke University Magdeburg, Germany, ²RIKEN Cluster for Pioneering Research, Japan, ³Saitama University, Japan