ICMOVPE XXII July 12-17, 2026 ICC JEJU, Jeju Island, Korea

Session Title:	[MoA1] 2D Materials - I
Session Date:	July 13 (Mon.), 2026
Session Time:	11:15-12:30
Session Room:	Room A (Baekrok Hall B-1, 1F)
Session Chairs	

[MoA1-1] [Invited] **11:15-11:45**

TBA

Xiaotian Xhang, Suzhou Laboratory, China

[MoA1-2] [Invited] **11:45-12:15**

Scalable MOVPE van der Waals Epitaxy of hBN for III-Nitride Devices: From Mixed 2D/3D Heterostructures to RGB Micro-LEDs and Deep-UV LEDs

Abdallah Ougazzaden, Georgia Tech Europe, France

[MoA1-3] **12:15-12:30**

MOCVD Growth of Suspended hBN on GaN Nano-Needles for Analog Memristive Switching via Geometric Filament Confinement

Seokho Moon[1], Jaesub Song[2], Odongo Francis Ngome Okello[1], Adrien Rousseau[3], Semi Im[2], Jawon Kim[2], Inyong Hwang[2], Changuk Jl[2], Jinho Byun[2], Jiye Kim[2], Junyoung Choi[2], Hyunjeong Kwak[2], Seyoung Kim[2], Bernard Gil[3], Guillaume Cassabois[3], Si-Young Choi[2], and Jong Kyu Kim[2], [1] Ajou University, Korea, [2] Pohang University of Science and Technology, Korea, [3] Universite de Montpellier, France

ICMOVPE XXII July 12-17, 2026 ICC JEJU, Jeju Island, Korea

Session Title:	[MoB1] Nitrides for Electronics - I
Session Date:	July 13 (Mon.), 2026
Session Time:	11:15-12:30
Session Room:	Room B (Baekrok Hall B-2, 1F)
Session Chairs	

[MoB1-1] [Invited] **11:15-11:45**

Recent Progress and Device Advantages of N-Polar GaN/AlN HEMTs

N. Okada[1], F. Yamanaka[1], A. H. Zazuli[1], M. Feng[1], T. Kimoto[1], R. Ninoki[1], N. Hirata[1], H. Danbata[1], A. Hayashiuchi[1], K. Sunai[1], H. Tokumoto[1], Y. Kitamura[1], S. Kurai[1], M. Hiroki[2], K. Hirama[2], Y. Taniyasu[2], and Y. Yamada[1], [1] Yamaguchi University, Japan, [2] NTT, Inc., Japan

[MoB1-2] [Invited] **11:45-12:15**

MOCVD Growth of III-Nitride Using New Precursors for HEMT: Challenges and Progress

Byeongchan So, Teresa Duarte, Hanspeter Menner, Jannik Richter, Lutz Kirste, Mario Prescher, Patrik Straňák, Sven Maegdefessel, Felix Hoffmann, Fouad Benkhelifa, Stefano Leone, and Rüdiger Quay, Fraunhofer Institute for Applied Solid State Physics IAF, Germany

[MoB1-3] **12:15-12:30**

Tunable High-Temperature MOCVD Growth for Strain-Controlled AlN-Based RF GaN HEMT Epitaxy

JongJin Jang, SeongCheol Choi, and DongSik Seo, TES. Co. Ltd, Korea

ICMOVPE XXII July 12-17, 2026 ICC JEJU, Jeju Island, Korea

Session Title:	[MoA2] Advanced Growth Techniques - I
Session Date:	July 13 (Mon.), 2026
Session Time:	14:00-15:45
Session Room:	Room A (Baekrok Hall B-1, 1F)
Session Chairs	

[MoA2-1] [Invited] 14:00-14:30

Remote Epitaxy of Deformable and Stacktronic Devices

Young Joon Hong, Sungkyunkwan University, Korea

[MoA2-2] 14:30-14:45

Fabrication of Wafer-Scale Freestanding GaN Membrane Utilizing Transfer-Free Thin Amorphous Carban Layer via MOCVD-Based Remote Epitaxy

Joonghoon Choi, Wonkwang Yang, Chang Soo Kim, Junhyun Bae, and Young Joon Hong, Sungkyunkwan University, Korea

[MoA2-3] 14:45-15:00

Remote Epitaxy of α-Ga_2O_3 via Polycrystalline MoS_2

Gyeong Ryul Lee and Roy. B. Chung, Kyungpook National University, Korea

[MoA2-4] 15:00-15:15

MOCVD of GaN and AlGaN/GaN Heterostructures on Si(001) by Wafer-Scale MoS_2 Templates

Seung Hoon Lee[1], Chen Chen[1], Brian M. Bersch[2], and Joan M. Redwing[1], [1] Pennsylvania State University, USA, [2] Northrop Grumman Mission Systems, USA

[MoA2-5] 15:15-15:30

InGaN Quantum Wells Grown on Spatially Patterned Substrates – Towards the 3D Laser Emitters

Grzanka Ewa, Grzanka Szymon, Robert Czernecki, Mikolaj Grabowski, Roman Hrytsak, Artur Lachowski, Julita Smalc-Koziorowska, and Michal Leszczynski, Institute of High Pressure Physics, Poland

[MoA2-6] 15:30-15:45

Room-Temperature Continuous-Wave III–V/Si PhC Lasers on SOI Using Selective Lateral Heteroepitaxy

Xingyu Yang, Yao Chen, Jinglong Chen, Siyuan Yu, and Yu Han, Sun Yat-sen University, China

ICMOVPE XXII July 12-17, 2026 ICC JEJU, Jeju Island, Korea

Session Title:	[MoB2] Micro-LEDs
Session Date:	July 13 (Mon.), 2026
Session Time:	14:00-15:45
Session Room:	Room B (Baekrok Hall B-2, 1F)
Session Chairs	

[MoB2-1] [Invited] **14:00-14:30**

In Incorporation and Strain Relaxation for Efficient Red InGaN Micro-LEDs: Towards a RGB Monolithic Approach

A. Dussaigne, J. Bosch, F. Barbier, G. Veux, F. Fedeli, B. Aventurier, D. Cooper, F. Rol, and F. Lévy, CEA-Leti, Frane

[MoB2-2] [Invited] **14:30-15:00**

Enhancing Luminous Efficiency: The Breakthrough of PlayNitride's Tantium® MicroLED

Ching-Liang Lin[1], Yi-Ru Huang[2], Chia-Yun Kao[2], and Li-Yu Li[1], [1] Playnitride Inc., Taiwna, [2] Playnitride display Co. Ltd., Taiwan

[MoB2-3] **15:00-15:15**

GaN-on-Si Single-Chip Full-Color Micro-LED Display

Qian Sun[1,2], [1] Suzhou Lekin Semiconductor Co., Ltd., China, [2] Chinese Academy of Sciences, China

[MoB2-4] **15:15-15:30**

Wafer Scale Fabrication of Three-Dimensional InGaN/GaN Nanostructured Quantum Wells for Enhanced Color Controllability of Micro-LEDs

Mandar Kulkarni and Sang-Wan Ryu, Chonnam National University, Korea

[MoB2-5] **15:30-15:45**

Ideal Relaxed InGaN Templates Enabling Ultra-Bright RGB-Emitting MicroLEDs

Zhaoxia Bi[1,2,3,4], Magnus Heurlin[3], Martin Berg[3], Hira Usman[1], Nathanael Löfström[1,2,3], Jiawei Sun[1], Anders Gustafsson[1,2], Mikael Björk[3], and Lars Samuelson[1,2,3], [1] Southern University of Science and Technology, China, [2] Lund University, Sweden, [3] Hexagem AB, Sweden, [4] Future Display Institute of Xiamen, China

ICMOVPE XXII July 12-17, 2026 ICC JEJU, Jeju Island, Korea

Session Title:	[MoA3] Arsenides
Session Date:	July 13 (Mon.), 2026
Session Time:	16:05-18:05
Session Room:	Room A (Baekrok Hall B-1, 1F)
Session Chairs	

[MoA3-1] [Invited] 16:05-16:35

An Old Technology Which Still Surprises. III-Vs MOVPE, Precursors, Surface Processes and a Lot of Zinc and Oxygen

Emanuele Pelucchi[1], Camille Barbier[1], Agnieszka Gocalinska[1], Pawel P. Michalowski[2], John O'Hara[1], Luca Colavecchi[1], Gediminas Juska[1], Adrianna Rejmer[2], and Ayse Ozcan-Atar[1], [1] Tyndall National Institute, University College Cork, Ireland, [2] Lukasiewicz Research Network, Poland

[MoA3-2] 16:35-16:50

Accurate Prediction of Intersubband Transitions in MOVPE-Grown III-V Asymmetric Coupled Quantum Wells

K. Pantzas[1], V. Trinité[2], A. Vasanelli[3], C. Sirtori[3], G. Beaudoin[1], J. L. Reverchon[2], G. Patriarche[1], and I. Sagnes[1], [1] Université Paris-Saclay, France, [2] III-V Lab, France, [3] Laboratoire de physique de L'École normale supérieure de Paris, France

[MoA3-3] 16:50-17:05

MOVPE-Grown C-Band Emitting InAs Quantum Dots on a Ge-Buffered Si (001) Substrate

P. Vijayan, M. Jetter, and P. Michler, Universität Stuttgart, Germany

[MoA3-4] 17:05-17:20

Development of AlAsP/GaAs Microcavities with Narrow Linewidth InGaAs QWs

N. J. Bailey, P. M. Walker, S. Lovett, L. Eaton, D. N. Krizhanovskii, and J. Heffernan, University of Sheffield, United Kingdom

[MoA3-5] 17:20-17:35

III–V/Germanium Photovoltaic Cells via MOVPE: Applications in Thermophotovoltaics and Laser Power Converters

I. Rey-Stolle, Pablo Martín, Aitana Cano, Rubén Fortín, Romain Foucher, Lidia Escanciano, and Iván García, Universidad Politécnica de Madrid, Spain

[MoA3-6] 17:35-17:50

MOVPE Growth and Characterization of GaAs-Based PIN Diodes for RF Applications

Simeon N. Vladimirov, Lidia Escanciano, Iván García, and Ignacio Rey-Stolle, Universidad Politécnica de Madrid, Spain

[MoA3-7] 17:50-18:05

Sculpturing Potential of Bound State in the Continuum Exciton-Polariton Condensates based on MOCVD-Grown Multi Quantum Well

Jaewon Kim[1], Daegwang Choi[2], Hyungyu Song[1], and Yong-Hoon Cho[1], [1] Korea Advanced Institute of Science and Technology, Korea, [2] Gachon University, Korea

ICMOVPE XXII July 12-17, 2026 ICC JEJU, Jeju Island, Korea

Session Title:	**[MoB3] Optical Characterization**
Session Date:	**July 13 (Mon.), 2026**
Session Time:	**16:05-17:50**
Session Room:	**Room B (Baekrok Hall B-2, 1F)**
Session Chairs	

[MoB3-1] [Invited] **16:05-16:35**

Optical In-Situ Metrology and MOVPE: Versatile Toolbox for Laser Device Growth

A. Maaβdorf, M. Brendel, S. Breuer, and M. Weyers, Ferdinand-Braun-Institut, Germnay

[MoB3-2] **16:35-16:50**

Composition-Dependent Raman Anisotropy in MOVPE-Grown Non-Polar (11-20) $Al_xGa_{1-x}N$

A Azizur Rahman[1], Eeshika Suresh[1,2], Maheshwar Gokhale[1], Amit P Shah[1], Kailash Rustagi[1], and Arnab Bhattacharya[1], [1] Tata Institute of Fundamental Research, India, [2] Amrita Vishwa Vidyapeetham, India

[MoB3-3] **16:50-17:05**

Optical Response and Anisotropy in MOVPE-Grown Non-Polar $Al_xGa_{1-x}N$: Insights from Mueller Matrix Ellipsometry

A Azizur Rahman[1], Sanchali Datta[1,2], Maheshwar Gokhale[1], Amit P Shah[1], and Arnab Bhattacharya[1], [1] Tata Institute of Fundamental Research, India, [2] Tripura University, India

[MoB3-4] **17:05-17:20**

Design and Evaluation of Hexagonal Silicon Germanium Multi Quantum Wells for Lasing

M.M. Jansen-Zilles, R. Farina, R.S. Tiemeijer, W.H.J. Peeters, M.F. Schouten, V.T. van Lange, M.A. Verheijen, J.E.M. Haverkort, and E.P.A.M. Bakkers, Eindhoven University of Technology, Netherlands

[MoB3-5] **17:20-17:35**

Temperature- and Wavelength-Dependent Photoluminescence Lifetimes in InGaN Quantum Wells with Varying Indium Compositions

Ririka Yamagata[1], Soma Hatanaka[1], Soya Yamagishi[1], Itsuki Shimbo[1], Atsushi A. Yamaguchi[1], Kazunori Iwamitsu[2], and Shigetaka Tomiya[2], [1] Kanazawa Institute of Technology, Japan, [2] Nara Institute of Science and Technology, Japan

[MoB3-6] **17:35-17:50**

Functional-Form Analysis of Photoluminescence Decay in InGaN Quantum Wells

Arata Suzaki[1], Ririka Yamagata[1], Itsuki Shimbo[1], Atsushi A. Yamaguchi[1], Daisuke Iida[2], and Kazuhiro Ohkawa[2], [1] Kanazawa Institute of Technology, Japan, [2] King Abdullah University of Science and Technology, Saudi Arabia

ICMOVPE XXII July 12-17, 2026 ICC JEJU, Jeju Island, Korea

Session Title:	[TuA1] Phosphides
Session Date:	July 14 (Tue.), 2026
Session Time:	08:30-10:15
Session Room:	Room A (Baekrok Hall B-1, 1F)
Session Chairs	

[TuA1-1] [Invited] 08:30-09:00

Growth Management of InP-Based Optoelectronic and Microelectronic Devices on InP-on-Silicon (InPoSi) Wafers

C. Besancon[1], D. Néel[1], N. Vaissière[1], E. Izquierdo[1], A. Elias[1], G. Daccord[1], J.L. Reverchon[1], O. Delorme[1], A. Wilk[1], N. Davy[1], V. Nodjiadjim[1], C. Mismer[1], F. Fortunato[2], J. Bergsten[3], H. Rodilla[2], B. Ghyselen[4], L. Sanchez[5], T. Bria[5], F. Fournel[5], and J. Decobert[1], [1] III-V Lab, France, [2] Chalmers University of Technology, Sweden, [3] Low Noise Factory, Sweden, [4] SOITEC, France, [5]CEA-Leti, France

[TuA1-2] 09:00-09:15

Impact of Growth Parameters on High Quality InP Microridges Grown Directly on On-Axis Si Substrates

T. Meyer[1], A. Baechle[1], M. Prescher[1], L. Kirste[1], R. Keil[1], M. Haertelt[1], P. Merkert[1], S. Messaoudène[2], L. Andreutti[2], M. Doron[2], B. Ben Bakir[2], A. Trampert[3], and R. Aidam[1], [1] Fraunhofer IAF, Germany, [2] CEA-Leti, France, [3] Paul-Drude-Institut für Festkörperelektronik, Germany

[TuA1-3] 09:15-09:30

Orientation Patterned Gallium Phosphide for Integrated Nonlinear Photonics

B. Le Corre[1,2], S. Combrié[3], M. Millotte[1], G. Beaudoin[1], A. Harouri[1], L. Le Gratiet[1], I. Sagnes[1], B. Gérard[4], A. De Rossi[3], A. Grisard[3], G. Patriarche[1], Y. Léger[2], and K. Pantzas[1], [1] Université Paris-Saclay, France, [2] Université de Rennes, France, [3] Thales Research and Technology, France, [4] III-V Lab, France

[TuA1-4] 09:30-09:45

Optimized GaP Nucleation on Silicon for III–V Multi-Junction Solar Cell Integration

J. Ohlmann[1], J. Grutke[1,2], A. Beyer[3], D. Lackner[1], K. Volz[3], T. Hannappel[4], A.W. Bett[1,2], and F. Dimroth[1], [1] Fraunhofer Institute for Solar Energy Systems ISE, Germany, [2] University of Freiburg, Germany, [3] University of Marburg, Germany, [4] TU Ilmenau, Germany

[TuA1-5] 09:45-10:00

Resistive Ru-Doped InP Layers for Improved Semi-Insulating Buried Heterostructures

Gustavo Afonso, Nicolas Vaissiere, Antoine Elias, Cosimo Calo, Vladyslav Vakarin, Giancarlo Cerulo, Mokhtar Korti, Olivier Parillaud, Frederic Pommereau, and Jean Decobert, III-V Lab, France

[TuA1-6] 10:00-10:15

In-Situ Reflectometry and Curvature Monitoring for Process Control of InP-Based Laser Heterostructures Grown by MOVPE

K. Haberland[1], J. Decobert[2], N. Vaissiere[2], V. Bot[2], C. Besancon[2], and F. Weigert[1], [1] LayTec AG, Germany, [2] III-V Lab, France

ICMOVPE XXII July 12-17, 2026 ICC JEJU, Jeju Island, Korea

Session Title:	**[TuB1] Lasers**
Session Date:	**July 14 (Tue.), 2026**
Session Time:	**08:30-10:15**
Session Room:	**Room B (Baekrok Hall B-2, 1F)**
Session Chairs	

[TuB1-1] [Invited] **08:30-09:00**

High Efficiency GaN-Based VCSELs with AlInN/GaN DBRs Grown by MOVPE

Tetsuya Takeuchi, Satoshi Kamiyama, and Motoaki Iwaya, Meijo University, Japan

[TuB1-2] **09:00-09:15**

3.2-W InGaN-Based Photonic Crystal Surface Emitting Laser

Qian Sun, Chinese Academy of Sciences, China

[TuB1-3] **09:15-09:30**

Void-Retaining Epitaxy for Photonic Crystal Surface Emitting Lasers

A. F. McKenzie[1], S. Kumar[1], N. D. Gerrard[1], D. A. MacLaren[1], S. J. Sweeney[1], and R. A. Hogg[2], [1] University of Glasgow, UK, [2] Aston University, United Kingdom

[TuB1-4] **09:30-09:45**

Extending the Concept of Quantum Mechanics to Bottom-Up Semiconductor Lasers

Wei Wen Wong, Xiaoying Huang, Jihua Zhang, Gaurang Garg, Olivier Lee Cheong Lem, Chennupati Jagadish, and Hoe Tan, The Australian National University, Australia

[TuB1-5] **09:45-10:00**

A Novel Monolithic High-Contrast Grating VCSEL Grown by MOVPE for Near-Infrared Emission

Mikołaj Badura[1], Justyna Olejnik[1], Wojciech Dawidowski[1], Jan M. Śmigiel[1], Damian Radziewicz[1], Adriana Łozińska[1], Marcin Gębski[2], Magdalena Marciniak[2], Tomasz Czyszanowski[2], Weronika Gołowadzka[3], Marek Ekielski[3], Iwona Sankowska[3], Anna Szerling[3], and Beata Ściana[1], [1] Wrocław University of Science and Technology, Poland, [2] Lodz University of Technology, Poland, [3] Łukasiewicz Research Network, Poland

[TuB1-6] **10:00-10:15**

Design and Development of InGaN-Based VECSEL Structures for High-Power Single-Mode Green Emission

Lucja Marona, Szymon Grzanka, Agata Bojarska, and Piotr Perlin, Institute of High-Pressure Physics PAS, Poland

ICMOVPE XXII July 12-17, 2026 ICC JEJU, Jeju Island, Korea

Session Title:	[TuA2] Low-Dimensional Materials
Session Date:	July 14 (Tue.), 2026
Session Time:	10:35-12:20
Session Room:	Room A (Baekrok Hall B-1, 1F)
Session Chairs	

[TuA2-1] [Invited] 10:35-11:05

Telecom C-Band InAs Quantum Dots on GaAs for Quantum Technological Application

Michael Jetter, Ponraj Vijayan, Stephanie Bauer, Robert Sittig, Raphael Joos, Nam Tran, Cornelius Nawrath, Sascha Kolatschek, Simone Luca Portalupi, and Peter Michler, University of Stuttgart, Germany

[TuA2-2] 11:05-11:20

Interlayer-Free Self-Assembled Growth of GaN Nanorods on Si Substrate for White Light-Emitting Diode

Ameer Abdullah[1], Jeong Ho[1], Sang-Wan Ryu[2], and Yong Hoon Cho[1], [1] Korea Advanced Institute of Science and Technology, Korea, [2] Chonnam National University, Korea

[TuA2-3] 11:20-11:35

Exploring the MOVPE Growth of Droplet Epitaxy InAs/InP Quantum Dots for Quantum Photonic Applications

Elisa M. Sala[1], Young In Na[1], Raja S.R. Gajjela[2], Edoardo G. Banfi[2], Guoliang Zhou[1], Paul M. Koenraad[2], and Jon Heffernan[1], [1] The University of Sheffield, United Kingdom, [2] Eindhoven University of Technology, The Netherlands

[TuA2-4] 11:35-11:50

Growth of InGaAs Quantum Dots on GaAs with Emission at C-Band Wavelengths

Juwana Jose, David Nguyen, Christoph Berger, Jürgen Bläsing, Armin Dadgar, and André Strittmatter, Otto von Guericke University, Germany

[TuA2-5] 11:50-12:05

Robust GaAs/SiO_2/Si Wafer-Bonded Templates for Monolithic Telecom C-Band InAs Quantum Dot Single-Photon Sources on Silicon

P. Vijayan, M. Seidel, M. Jetter, and P. Michler, Universität Stuttgart, Germany

[TuA2-6] 12:05-12:20

MOVPE of Ga(Sb,Bi)/GaSb Heterostructures on GaSb Nano-Ridges

Marcel Kröner[1], Michiel de Maeyer[2,3], Johannes Haust[1], Andreas Beyer[1], Bernardette Kunert[2], and Kerstin Volz[1], [1] Philipps-Universität Marburg, Germany, [2] imec, Belgium, [3] Ghent University, Belgium

ICMOVPE XXII July 12-17, 2026 ICC JEJU, Jeju Island, Korea

Session Title:	[TuB2] Nitrides for Electronics - II
Session Date:	July 14 (Tue.), 2026
Session Time:	10:35-12:20
Session Room:	Room B (Baekrok Hall B-2, 1F)
Session Chairs	

[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 Pristovsek[1], Yoann Robin[1], Itsuki Furuhashi[1], Chengzhi Zhang[2], Martin Kuball[2], Matthew D. Smith[2], Sheng Zhang[3], Xinhua Wang[3], and Xu Yang[1,3], [1] Nagoya University, Japan, [2] University of Bristol, United Kingdom, [3] Chinese 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 AlGaN Drift Layers on Bulk Ammonothermal GaN and AlGaN 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

ICMOVPE XXII July 12-17, 2026 ICC JEJU, Jeju Island, Korea

Session Title:	**[TuA3] 2D Materials - II**
Session Date:	**July 14 (Tue.), 2026**
Session Time:	**14:00-16:00**
Session Room:	**Room A (Baekrok Hall B-1, 1F)**
Session Chairs	

[TuA3-1] [Invited] **14:00-14:30**

TBA

Benjamin Groven, IMEC, Belgium

[TuA3-2] **14:30-14:45**

Electrically Driven Ultraviolet Emission from Carbon-Incorporated h-BN Films Grown by MOCVD

Semi Im, Seokho Moon, Jawon Kim, Jaesub Song, Changuk Ji, Seonghyeon Pak, and Jong Kyu Kim, Pohang University of Science and Technology, Korea

[TuA3-3] **14:45-15:00**

Role of h-BN Thickness in MOVPE-Grown III-Nitride Heterostructures: Enabling Detachment and Preserving Material Quality

T. M. Tran, P. Vuong, V. Ottapilakkal, M. Bourras, P.L. Voss, S. Sundaram, J.P. Salvestrini, and A. Ougazzaden, Georgia Institute of Technology, France

[TuA3-4] **15:00-15:15**

Hexagonal Boron Nitride/Aluminium Gallium Nitride Heterojunction for High-Performance Deep Ultraviolet Photodetection

Jawon Kim[1], Seokho Moon[2], Semi Im[1], Jaesub Song[1], Changuk Ji[1], Seonghyeon Pak[1], and Jong Kyu Kim[1], [1] Pohang University of Science and Technology, Korea, [2] Ajou University, Korea

[TuA3-5] **15:15-15:30**

MOCVD Growth of 2D Post-Transition Metal Chalcogenides

Robin Günkel, Nils Langlotz, Samane Badrosadat Ojaghi, Max Bergmann, Jürgen Belz, and Kerstin Volz, Philipps-Universität Marburg, Germany

[TuA3-6] **15:30-15:45**

Scalable Hexagonal Boron Nitride-Based Memristors with Reliable Analog Switching Behavior

Jaesub Song[1], Jungho Lee[2], Seokho Moon[3], Seonghyeon Pak[1], Semi Im[1], Jawon Kim[1], Changuk Ji[1], Jiye Kim[1], Hyeonwoo Lee[2], Beomjin Park[2], Dong-Seok Kim[4], Changwook Jeong[2], and Jong Kyu Kim[1], [1] Pohang University of Science and Technology, Korea, [2] Ulsan National Institute of Science and Technology, Korea, [3] Ajou University, Korea, [4] Korea Atomic Energy Research Institute, Korea

ICMOVPE XXII July 12-17, 2026 ICC JEJU, Jeju Island, Korea

[TuA3-7] **15:45-16:00**

Influence of Pre-Growth Treatment on the Homoepitaxial Growth of MOVPE BN on ^{10}BN Flakes

A. K. Dąbrowska[1], I. Nowik[1], R. Bożek[1], M. Tokarczyk[1], K. Ludwiczak[1], B. Furtak[1], P. Tatarczak[1], P. Maksymiuk[1], J. Iwański[1], G. Cassabois[2], B. Gil[2], T. Poirier[3], J.Li[3], J.H. Edgar[3], J. Binder[1], and A. Wysmo ł ek[1],
[1] University of Warsaw, Poland, [2] Université de Montpellier, France, [3] Kansas State University, USA

ICMOVPE XXII July 12-17, 2026 ICC JEJU, Jeju Island, Korea

Session Title:	[TuB3] Optical Devices
Session Date:	July 14 (Tue.), 2026
Session Time:	14:00-15:45
Session Room:	Room B (Baekrok Hall B-2, 1F)
Session Chairs	

[TuB3-1] [Invited] 14:00-14:30

Polarization Manipulation in III-Nitride Light Emitting Devices

Fang Liu[1], Yucheng Guo[1], Zexing Yuan[1], Xin Gao[2], Zhaoying Chen[1], Ping Wang[1], Hailin Peng[2], Bo Shen[1], Zhongfan Liu[2], and Xinqiang Wang[1], [1] Peking University, China, [2] Great Bay University, China

[TuB3-2] 14:30-14:45

Impact of Thermal Budget and Carrier Gas Switching on the Performance of Multi-Color Cascaded LEDs

Christoph Berger, Armin Dadgar, Florian Hörich, and André Strittmatter, Otto-von-Guericke-University Magdeburg, Germany

[TuB3-3] 14:45-15:00

MOVPE Growth of Monolithic Multi-Band SWIR–MWIR InAsSb/InAsPSb MQW Heterostructures on InP Enabled by Strain Engineering

Dongwan Kim[1], Thuy Thi Nguyen[1], Minkyeong Kim[2], Jungwon Yoon[2], Thu Trang Thi Bui[1,3], Dayoung Kim[1,3], Changsug Lee[2], Byong Sun Chun[1,3], and Sang Jun Lee[1,2,3], [1] Korea Research Institute of Standards and Science, Korea, [2] IRSpectra co., LTD., Korea, [3] Korea Research Institute of Standards and Science, Korea

[TuB3-4] 15:00-15:15

Investigating Surface Treatments on GaN p-i-n Avalanche Photodiodes with Shallow Beveled Edge Termination

Alexandra Dolgashev[1], Davide Balzerani[1], A. Nepomuk Otte[1], Theeradetch Detchprohm[1], Dhrubes Biswas[2], Subhra Chowdhury[2], and Russell D. Dupuis[1], [1] Georgia Institute of Technology, USA, [2] Magnolia Optical Technologies, USA

[TuB3-5] 15:15-15:30

Efficiency Optimization of 222 nm AlGaN-Based Far-UVC LEDs

Kexin Ren, Zhiyuan Liu, Haicheng Cao, Tingang Liu, Zixian Jiang, and Xiaohang Li, King Abdullah University of Science and Technology , Saudi Arabia

[TuB3-6] 15:30-15:45

Fast MOVPE Growth of AlGaAs/GaAs Dual-Junction Solar Cells

D. Lackner[1], C. Klein[1], M. Klitzke[1], J. Schön[1,2], J. Ohlmann[1], and F. Dimroth[1], [1] Fraunhofer Institute for Solar Energy Systems ISE, Germany, [2] University of Freiburg, Germany

ICMOVPE XXII July 12-17, 2026 ICC JEJU, Jeju Island, Korea

Session Title:	[WeA1] Gallium Oxides
Session Date:	July 15 (Wed.), 2026
Session Time:	10:25-12:10
Session Room:	Room A (Baekrok Hall B-1, 1F)
Session Chairs	

[WeA1-1] [Invited] 10:25-10:55

TBA

Vanya Darakchieva, Lund University, Sweden

[WeA1-2] 10:55-11:10

Effects and Applications of Nuclear Radiation in Ga2O3

Yoonho Choi, Jaeheon Jung, Hae Seong Hwang, and Roy B.Chung, Kyungpook National University, Korea

[WeA1-3] 11:10-11:25

AlN Mesa Sidewall Passivation Enables Thermally Stable Reverse Blocking in Vertical β-Ga_2O_3 Power Diodes

Ganesh Mainali, Nuzhat Yousf, Dhanu Chettri, Haicheng Cao, Leo Raj Solay, and Xiaohang Li, King Abdullah University of Science and Technology, Kingdom of Sudi Arabia

[WeA1-4] 11:25-11:40

High Efficiency Growth of (001) β-Ga_2O_3 Films by Cold-Wall MOCVD

Shun Ukita and Hironori Okumura, University of Tsukuba, Japan

[WeA1-5] 11:40-11:55

Heteroepitaxial Growth of β-Ga_2O_3 on High-Angle Off-Cut Sapphire via MOCVD

Ji-Hyeon Park, Hyeong-Yun Kim, JungHun Choi, and Dae-Woo Jeon, Korea Institute of Ceramic Engineering and Technology, Korea

[WeA1-6] 11:55-12:10

Influence of Substrate Atomic Symmetry on the Epitaxy and Rotational Domain Formation of κ-Ga_2O_3

Ha Young Kang, Jaeheon Jung, Young Soo Hwang, and Roy B. Chung, Kyungpook National University, Korea

ICMOVPE XXII July 12-17, 2026 ICC JEJU, Jeju Island, Korea

Session Title:	[WeB1] UV Devices
Session Date:	July 15 (Wed.), 2026
Session Time:	10:25-12:10
Session Room:	Room B (Baekrok Hall B-2, 1F)
Session Chairs	

[WeB1-1] [Invited] 10:25-10:55

TBA

Tim Wernicke, Technische Universität Berlin, Germany

[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 AlGaN Windows for Improved Responsivity

Davide Balzerani[1], Alexandra V. Dolgashev[1], A. Nepomuk Otte[1], Theeradetch Detchprohm[1], Subhra Chowdhury[2], Dhrubes Biswas[2], and Russell D. Dupuis[1], [1] Georgia Institute of Technology, USA, [2] Magnolia Optical Technologies, USA

[WeB1-4] 11:40-11:55

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

Hongyu Liu[1], Li Chen[2], Jichun Ye[1], and Wei Guo[1], [1] Ningbo Institute of Materials Technology and Engineering, Chines Academy of Science, China, [2] Yongjiang Laboratory, China

[WeB1-5] 11:55-12:10

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

Frank Bertram[1], Gordon Schmidt[1], Niklas Dreyer[1], Peter Veit[1], Jürgen Christen[1], M. Ajmal Khan[2], Kohei Fujimoto[2,3], M. Nawaz Sharif[2,3], Hiroyuki Yaguchi[3], and Hideki Hirayama[2], [1] Otto-von-Guericke University Magdeburg, Germany, [2] RIKEN Cluster for Pioneering Research, Japan, [3] Saitama University, Japan

ICMOVPE XXII July 12-17, 2026 ICC JEJU, Jeju Island, Korea

Session Title:	**[WeA2] Polarity-Engineered Epitaxy**
Session Date:	**July 15 (Wed.), 2026**
Session Time:	**13:30-15:15**
Session Room:	**Room A (Baekrok Hall B-1, 1F)**
Session Chairs	

[WeA2-1] [Invited] **13:30-14:00**

AlN-based Field-Effect Transistors Enabled by Polarization-Engineered Structures

Masanobu Hiroki, NTT, inc.

[WeA2-2] **14:00-14:15**

Suppression of Mn Segregation in N-Polar GaN on Mn-Doped GaN Substrates

Shigeki Yoshida, Maui Hino, Isao Makabe, Kozo Makiyama, Junji Kotani, and Ken Nakata, Sumitomo Electric Industries, Ltd., Japan

[WeA2-3] **14:15-14:30**

Metalorganic Vapor Phase Epitaxy of N-Polar GaN on Ga-Polar GaN

Kazuhisa Ikeda[1], Masahiro Uemukai[2], Tomoyuki Tanikawa[2], Ryuji Katayama[2], and Atsushi Kobayashi[1], [1] Tokyo University of Science, Japan, [2] The University of Osaka, Japan

[WeA2-4] **14:30-14:45**

Polarity-Guided Epitaxy of h-BN on AlN Using MOVPE for 2D-3D Integration

Yuning Wang[1], Ryota Akaike[1], Kosuke Takagi[1], Tomohiro Tamano[1], Hiroki Yasunaga[1], Wentao Zhang[2,3], Ke Xu[2,4,5], and Hideto Miyake[1], [1] Mie University, Japan, [2] Chinese Academy of Sciences, China, [3] University of Science and Technology of China, [4] Suzhou Nanowin Science and Technology Co., Ltd., China, [5] Jiangsu Institute of Advanced Semiconductors, China,

[WeA2-5] **14:45-15:00**

Fabrication of Polarity-Inverted AlN Structure Using Oxidation Processes

Tomohiro Tamano[1], Ryota Akaike[1], Hiroki Yasunaga[1], Zentaro Akase[2], Shigetaka Tomiya[2], and Hideto Miyake[1], [1] Mie University, Japan, [2] Nara Institute of Science and Technology, Japan

[WeA2-6] **15:00-15:15**

High-Quality N-Polar GaN Growth on Silicon for Fully-Vertical GaN-on-Si Power Devices

Pineda Padilla, A., Veux, G., Barbier, F., Guy, K., Plaza Argüello, D., Vergnaud, C., Dussaigne, A., Dupont, F., and Charles, M., CEA-Leti, France

ICMOVPE XXII July 12-17, 2026 ICC JEJU, Jeju Island, Korea

Session Title:	**[WeB2] Visible LEDs**
Session Date:	**July 15 (Wed.), 2026**
Session Time:	**13:30-15:15**
Session Room:	**Room B (Baekrok Hall B-2, 1F)**
Session Chairs	

[WeB2-1] [Invited] **13:30-14:00**

3D MOVPE Enabling Lateral Integration of InGaN-Based RGB Micro-LEDs

Mitsuru Funato and Yoshinobu Matsuda, Kyoto University, Japan

[WeB2-2] **14:00-14:15**

Vertical GaN-on-Si LEDs on Conducting TiAlN/TiN Buffer Layers

Armin Dadgar, Fabian Grossmann, Emine Kaynar, Christoph Berger, Jürgen Bläsing, and André Strittmatter, Otto-von-Guericke-Universität Magdeburg, Germany

[WeB2-3] **14:15-14:30**

From Relaxed InGaN Pseudo-Substrate to Red Emitting Quantum Wells (QWs)

H. Damen[1], D. P. Fowan[3], M. Nemoz[3], S. Vézian[3], B. Damilano[3], A. Trassoudaine[2], and A. Dussaigne[1], [1] Université Grenoble Alpes, France, [2] Université Clermont Auvergne, France, [3] Université Côte d'Azur, France

[WeB2-4] **14:30-14:45**

Enhanced Light Output in Nanorod Micro-LEDs through Optical Feedback and Structural Engineering

Min-Seok Lee[1], Sung-Un Kim[1], Jeong-Kyun Oh[1], Geon-Yeong Kim[1], Dae-Young Um[2], Cheul-Ro Lee[1], and Yong-Ho Ra[1], [1] Jeonbuk National University, Korea, [2] Kumoh National Institute of Technology, Korea

[WeB2-5] **14:45-15:00**

Modeling of Efficient Dual-Wavelength Blue–Green InGaN LEDs

Hao Lee[1], You-Jia Chen[2], Huai-Chin Huang[1], Li-Sheng Hu[2], Hsing-Ting Hung[3], Chuang-Yu Hsieh[3], Tien-Chang Lu[2], Chia-Yen Huang[2], and Yuh-Renn Wu[1], [1] National Taiwan University, Taiwan, [2] National Yang Ming Chiao Tung University, Taiwan, [3] Advanced Optoelectronic Technology Inc., Taiwan

[WeB2-6] **15:00-15:15**

Impact of V-Defect Geometry and Random Alloy Fluctuations in Cylindrical Simulations of Low-Bias Leakage in Red InGaN LEDs

Pei-Shan Hsieh and Yuh-Renn Wu, National Taiwan University, Taiwan

ICMOVPE XXII July 12-17, 2026 ICC JEJU, Jeju Island, Korea

Session Title:	[WeA3] Advanced Growth Techniques - II
Session Date:	July 15 (Wed.), 2026
Session Time:	15:35-17:05
Session Room:	Room A (Baekrok Hall B-1, 1F)
Session Chairs	

[WeA3-1] [Invited] **15:35-16:05**

Epitaxial Growth of III-Nitride Semiconductors and Their LED Structures

Zhe Zhuang, Yimeng Sang, and Bin Liu, Nanjing University, China

[WeA3-2] **16:05-16:20**

Applications of Mist Chemical Vapor Deposition in the Deposition of Inorganic Functional Thin Films

Zaichun Sun and Bingchu Mei, Wuhan University of Technology, China

[WeA3-3] **16:20-16:35**

Hybrid 3D/2D Growth Mode for High-Quality AlN on Si(111) by MOCVD

Mingtao Nong[1], Haicheng Cao[1], Tingang Liu[1], Patsy A Miranda Cortez[1], Glen Isaac Maciel García[1], Xiao Tang[2], Che-Hao Liao[3], Kexin Ren[1], Zixian Jiang[1], and Xiaohang Li[1], [1] King Abdullah University of Science and Technology, Saudi Arabia, [2] University of Bristol, United Kingdom, [3] National Yunlin University of Science and Technology, Taiwan

[WeA3-4] **16:35-16:50**

Novel MOCVD Selective Area Growth of InGaAs/GaAs/AlGaAs Using SOI Shadow Mask and Its Application to COMD Free 980nm Laser

Akihiko Kasukawa[1], I. Novitasari[1], Z-J. Sun[1], A. Albert[1], S. L. Lee[1], and M. Arai[2], [1] National Taiwan University of Science and Technology, Taiwan, [2] University of Miyazaki, Japan

[WeA3-5] **16:50-17:05**

Formation Mechanisms of Cubic GaN Grown in Si Inverted Pyramids by Selective Area OMVPE

David A. Lister, Cyan Kim, Melissa Radford, Sarah Fortin, Karen L. Kavanagh, and Simon Watkins, Simon Fraser University, Canda

ICMOVPE XXII July 12-17, 2026 ICC JEJU, Jeju Island, Korea

Session Title:	[WeB3] Nitrides for Electronics - III
Session Date:	July 15 (Wed.), 2026
Session Time:	15:35-17:05
Session Room:	Room B (Baekrok Hall B-2, 1F)
Session Chairs	

[WeB3-1] 15:35-15:50

In-Depth Study of Localised Growth of GaN on Silicon Leading to 1 kV, 5 mOhm.cm^2 Vertical Diodes

M. Charles[1], D. Plaza-Arguello[1], M. El Amrani[1], T. Kaltsounis[1], H. El Rammouz[1], Z. M'Qaddem[1], T. Guillemin[2], S. Torrengo[1], M. Lafossas[1], N. Rochat[1], Y. Cordier[2], and J. Buckley[1], [1] CEA Leti, France, [2] Univ. Côte d'Azur, France

[WeB3-2] 15:50-16:05

Investigating the Impact of High-Temperature Ohmic Contact Annealing on AlN Schottky Barrier Diodes

Haicheng Cao[1], Mingtao Nong[1], Tingang Liu[1], Zixian Jiang[1], Zhiyuan Liu[1], Saravanan Yuvaraja[1], Xiao Tang[2], Biplab Sarkar[3], Ying Wu[1], and Xiaohang Li[1], [1] King Abdullah University of Science and Technology, Saudi Arabia, [2] University of Bristol, United Kingdom, [3] Indian Institute of Technology, India

[WeB3-3] 16:05-16:20

Submicron Ultrafast Raman Thermography System for Power Semiconductor Devices and Next Generation Semiconductors.

Jung-Hoon Song[1,2], Youngboo Moon[1,3], Seungyoung Lim[1], Gye Eun Choi[1], and Jaesun Kim[1], [1] AccuOptotec Co., Korea, [2] Kongju National University, Korea, [3] UJL Co., Korea

[WeB3-4] 16:20-16:35

Understanding the Impact of n-Type GaN Drift Layer Growth Conditions on 300 mm Wafer Bow for GaN-on-Si Vertical Devices

G. Bouhet, F. Barbier, C. Vergnaud, H. El Rammouz, A. Chaumont, M. Lafossas, P. Valentin, V. Balan, A. Olivier, J. Buckley, C. Masante, M. Charles, and S. Torrengo, CEA-Leti, France

[WeB3-5] 16:35-16:50

SiOx Interlayer for Reverse Current Suppression in p-GaN Diodes

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

[WeB3-6] 16:50-17:05

Crack-Free Si-Doped AlN on Si(111) for Fully Vertical AlN Schottky Barrier Diodes

Haicheng Cao[1], Mingtao Nong[1], Xiao Tang[2], Biplab Sarkar[3], Ying Wu[1], and Xiaohang Li[1], [1] King Abdullah University of Science and Technology, Saudi Arabia, [2] University of Bristol, United Kingdom, [3] Indian Institute of Technology, India

ICMOVPE XXII July 12-17, 2026 ICC JEJU, Jeju Island, Korea

Session Title:	[ThA1] Al-rich AlGaN
Session Date:	July 16 (Thu.), 2026
Session Time:	08:30-09:45
Session Room:	Room A (Baekrok Hall B-1, 1F)
Session Chairs	

[ThA1-1] **08:30-08:45**

Interface Engineering on Enhancement-Mode Al-Rich $Al_{0.8}Ga_{0.2}N$ MOSFET Enabled by Atomic Layer Etching

Tingang Liu, Haicheng Cao, Mingtao Nong, and Xiaohang Li, King Abdullah University of Science and Technology, Saudi Arabia

[ThA1-2] **08:45-09:00**

Impact of AlN/AlGaN Superlattice Structure on Proton-Induced Transport in Al-Rich AlGaN Channel HEMTs from Room Temperature to 500 ºC

Shyam Mohan, Joocheol Jeong, Jaejin Heo, Hyogeun Cho, Mingoo Jo, Minyeong Kim, and Okhyun Nam, Tech University of Korea, Korea

[ThA1-3] **09:00-09:15**

Formation of Low-Resistance Ohmic Contacts to Al-Rich AlGaN Using Compositionally Graded n-AlGaN

Riku Ando, Ryota Akaike, Shozabro Tanaka, Hiroki Yasunaga, Takao Nakamura, and Hideto Miyake, Mie University, Japan

[ThA1-4] **09:15-09:30**

Investigation of Low-Resistivity Au-Free Metal Contact on n-Type AlxGa1-xN (x ≥ 0.8)

Tingang Liu, Haicheng Cao, Mingtao Nong, and Xiaohang Li, King Abdullah University of Science and Technology, Saudi Arabia

[ThA1-5] **09:30-09:45**

High-Temperature and Radiation Responses of Al-Rich AlGaN Channel HEMTs Employing Various Gate Metals

Mingoo Jo[1], Joocheol Jeong[1], Shyam Mohan[1], Jaejin Heo[1], Hyogeun Cho[1], Minyeong Kim[1], Dongseok Kim[2], Jiun Oh[3], Minji Kim[3], and Okhyun Nam[1], [1] Tech University of Korea , Korea, [2] Korea Atomic Energy Research Institute, Korea, [3] Korea Institute of Energy Technology, Korea

ICMOVPE XXII July 12-17, 2026 ICC JEJU, Jeju Island, Korea

Session Title:	[ThB1] Structural Analysis
Session Date:	July 16 (Thu.), 2026
Session Time:	08:30-10:15
Session Room:	Room B (Baekrok Hall B-2, 1F)
Session Chairs	

[ThB1-1] [Invited] 08:30-09:00

MOVPE Growth of AlGaN with Step-and-Terrace Structures on AlN Templates

Ryota Akaike, Hiroki Yasunaga, Takao Nakamura, and Hideto Miyake, Mie University, Japan

[ThB1-2] 09:00-09:15

Atomic Structure of Antiphase Domain Boundaries in III-V Semiconductor Layers Epitaxially Grown on Silicon (100) or Obtained by Direct Wafer Bonding

Gilles Patriarche[1], Konstantinos Pantzas[1], Alexandre Beck[2], Laurent Pedesseau[2], Rozenn Gautheron-Bernard[2], Nathaniel Findling[1], Ludovic Largeau[1], Grégoire Beaudoin[1], Jean-Baptiste Rodriguez[3], Eric Tournié[3], Isabelle Sagnes[1], and Charles Cornet[2], [1] Centre national de la recherche scientifique, France, [2] Institut National des Sciences Appliquées de Rennes , France, [3] Université de Montpellier, France

[ThB1-3] 09:15-09:30

Interplay of Carrier Recombination and Separation in an InGaN MQW LED Investigated by Nano-STEM-EBIC and -STEM-CL

Niklas Dreyer, Frank Bertram, Gordon Schmidt, Luca Greczmiel, Christoph Berger, Armin Dadgar, André Strittmatter, and Jürgen Christen, Otto-von-Guericke-University Magdeburg, Germany

[ThB1-4] 09:30-09:45

Vacancy Properties and Their Clustering in GaN MOVPE Epitaxial Layers and Heterostructures

Alice Hospodková[1], Jakub Čížek[2], František Hájek[1], Karla Kuldová[1], Tomáš Hubáček[1], Jiří Pangrác[1], Maciej Oskar Liedke[3], Eric Hirschmann[3], Maik Butterling[3], and Andreas Wagner[3], [1] Institute of Physics of the Czech Academy of Sciences, Czech Republic, [2] Charles University, Czech Republic, [3] Helmholtz-Zentrum Dresden-Rossendorf, Germany

[ThB1-5] 09:45-10:00

Revisiting the Stacking Faults in 4H-SiC

Soon-Ku Hong[1], Moonkyong Na[2], Hyundon Jung[3], and Wook Bahng[2], [1] Chungnam National University, Korea, [2] Korea Electrotechnology Research Institute, Korea, [3] Horiba STEC Korea, Korea

[ThB1-6] 10:00-10:15

Analytical X-Ray Solutions for Thin Film and Wafer Analysis

Andrey Zameshin[1], Alexey Pustovarenko[1], Amardeep Bharti[1], Choong Ki (Daniel) Lee[2], and Shuji Kusano[3], [1] Malvern Panalytical, Netherlands, [2] Spectris Korea Ltd, Korea, [3] Spectris Co. Ltd, Japan

ICMOVPE XXII July 12-17, 2026 ICC JEJU, Jeju Island, Korea

Session Title:	[FrA1] Nanowires
Session Date:	July 17 (Fri.), 2026
Session Time:	10:20-12:05
Session Room:	Room A (Baekrok Hall B-1, 1F)
Session Chairs	

[FrA1-1] [Invited] 10:20-10:50

Growth of Core-Shell Microwire UV Emitters: From UV-A Toward UV-C

Houssein Mohaidly, Lucie Valéra, Vincent Grenier, Lucas Jaloustre, Saron R.S. De Mello, C. Petit-Etienne, E. Pargon, Gwénolé Jacopin, and Christophe Durand, Université Grenoble Alpes, France

[FrA1-2] 10:50-11:05

Facile Electrochemically Driven Defect Passivation of MOCVD-Grown GaN Nanowires Toward Durable and High-Performance Photoelectrodes

Fawad Tariq and Sang-Wan Ryu, Chonnam National University, Korea

[FrA1-3] 11:05-11:20

Interface Engineering of MOVPE-Grown GaN Nanowire Photoanodes with FeOOH/NiO Layers for Durable Alkaline Water Oxidation

Khaled Abdelkarem and Sang-Wan Ryu, Chonnam National University, Korea

[FrA1-4] 11:20-11:35

Tailoring Cu-Pd Nanoclusters on GaN Nanowires for Efficient CO_2-to-C_2H_4 Photoelectrochemical Conversion

Sneha S Lavate, In-Seo Na, Jeong-Kyun Oh, Sung-Un Kim, Min-Seok Lee, and Yong-Ho Ra, Jeonbuk National University, Korea

[FrA1-5] 11:35-11:50

Interfacial Engineering of $Ni(OH)_2$ Decorated GaN Nanorods for Enhanced Photoelectrochemical Formate Production.

Shivraj Mahadik, Jeong-Kyun Oh, Sung-Un Kim, Min-Seok Lee, Hussain Musharrof, and Yong-Ho Ra, Jeonbuk National University, Korea

[FrA1-6] 11:50-12:05

Selective-Area Growth of Vertical InP Nanowires on Si(111) Substrate

Yuki Azuma[1], Keita Taniyama[1], Wei Wen Wong[2], Junichi Motohisa[1], Hark Hoe Tan[2], and Katsuhiro Tomioka[1], [1] Hokkaido University, Japan, [2] The Australian National University, Australia

ICMOVPE XXII July 12-17, 2026 ICC JEJU, Jeju Island, Korea

Session Title:	[FrB1] Emerging Nitrides
Session Date:	July 17 (Fri.), 2026
Session Time:	10:20-12:05
Session Room:	Room B (Baekrok Hall B-2, 1F)
Session Chairs	

[FrB1-1] [Invited] 10:20-10:50

MOCVD of Novel Nitrides for Sustainable Electronics – AlScN and AlYN

Isabel Streicher[1], Stefano Leone[2], Huili Grace Xing[1], Debdeep Jena[1], and Hari Nair[1], [1] Cornell University, USA, [2] Fraunhofer 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, Taiyo Nippon Sanso Corporation, Japan

[FrB1-3] 11:05-11:20

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

S. Takenaka[1], R. Kudo[1], K. Ando[1], Y. Maeda[1], E. Kokubo[2], K. Takagi[1], T. Oda[3], M. Hino[4], Y. Honda[2], H. Amano[2], Y. Inoue[1], T. Aoki[1], and T. Nakano[1], [1] Shizuoka University, Japan, [2] Nagoya University, Japan, [3] The University of Tokyo, Japan, [4] Kyoto University, Japan

[FrB1-4] 11:20-11:35

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

R. Kudo[1], E. Kokubo[2], K. Takagi[1], Y. Sakurai[3], H. Yashima[3], T. Makino[4], T. Ohshima[4], Y. Honda[2], H. Amano[2], Y. Inoue[1], T. Aoki[1,3], and T. Nakano[1,3], [1] Shizuoka University, Japan, [2] Nagoya University, Japan, [3] Kyoto University, Japan, [4] National Institutes for Quantum Science and Technology, Japan

[FrB1-5] 11:35-11:50

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

Ryusuke Suzuki[1], Ryohei Kudo[1], Toru Oikawa[1], Hinata Nakanishi[1], Eito Kokubo[2], Genichiro Wakabayashi[3], Yoshio Honda[2], Hiroshi Amano[2], Yoku Inoue[1], Toru Aoki[1], and Takayuki Nakano[1], [1] Shizuoka University, Japan, [2] Nagoya University, Japan, [3] Kindai University, Japan

[FrB1-6] 11:50-12:05

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

Abhishek Chatterjee[1], Z. S. Pehlivan[1], M. Frentrup[1], B. Harding[1], G. Kusch[1], M. J. Kappers[1], D. J. Wallis[1,2], and R. A. Oliver[1], [1] University of Cambridge, United Kingdom, [2] Cardiff University, United Kingdom