



**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<sup>1</sup>, Seokho Moon<sup>2</sup>, Semi Im<sup>1</sup>, Jaesub Song<sup>1</sup>, Changuk Ji<sup>1</sup>, Seonghyeon Pak<sup>1</sup>, and Jong Kyu Kim<sup>1</sup>, <sup>1</sup> Pohang University of Science and Technology, Korea, <sup>2</sup> Ajou University, Korea

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

**MOCVD Growth of 2D Post-Transition Metal Chalcogenides**

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



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**[TuA3-7]**

**15:45–16:00**

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

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