

## SCIENTIFIC PROGRAM | WEDNESDAY, JULY 24

9:00-10:00 Chair	<b>Plenary Session III</b> Matias Velazquez (CNRS SIMaP, France)	Aula
	Laser printing metamaterial crystals and atomic crystals Martin Wegener (Karlsruhe Institute of Technology, Germany)	
10:15-14:00 Chairs	<b>Session S2 - Semiconductor Single Crystal and Films</b> Alice Hospodková, Paweł Prystawko	Room 107
10:15-10:45 INVITED TALK	Understanding III-V/Si Heteroepitaxy: Experiments and Theory Charles Cornet (INSA Rennes, France)	
10:45-11:00	Innovative epitaxy of GaN on Si using Sc <sub>2</sub> O <sub>3</sub> interlayer Karolina German (Paul-Drude-Institut für Festkörperelektronik, Germany)	
11:00-11:15	Vacancy complexes and clusters in MOVPE grown nitride layers and heterostructures Alice Hospodková (FZU CAS, Czech Republic)	
----- <b>Coffee Break</b> -----		
11:45-12:00	Bragg diffraction imaging and defect selective etching analysis of crystalline defects in HVPE grown GaN substrates using different seed approaches Lutz Kirste (Fraunhofer Institute for Applied Solid State Physics IAF, Germany)	
12:00-12:15	Diluted AlGaIn growth and defects related to Carbon and Iron Paweł Prystawko (Unipress, Poland)	
12:15-12:30	Growth of AlGaIn layers on GaN substrates using Halide Vapor Phase Epitaxy technology: Road to novel nitride substrates Arianna Jaroszyńska (Unipress, Poland)	
12:30-12:45	Comparison of AlGaIn and InGaIn growth in Metalorganic Vapor Phase Epitaxy Robert Czernecki (Unipress, Poland)	
12:45-13:00	Plastically relaxed (0001)-oriented InGaIn-on-GaN templates for nitride epitaxy Joanna Moneta (Unipress, Poland)	
13:00-13:15	Van der Waals epitaxial high-quality wide bandgap nitride thin film materials and high-performance devices Haidi Wu (Xidian University, China)	
13:15-13:30	Epitaxial growth of single-domain 3C-SiC on a 3-inch C-face 4H-SiC substrate to fabricate a 3C/4H-SiC heterostructure Hiroyuki Sazawa (AIST, Japan)	
13:30-13:45	Fabrication of 3C-SiC layers on Si and SOI substrates by chemical vapor deposition with different carbon precursors at low deposition temperatures Jana Schultheiß (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany)	
13:45-14:00	Multiphysics modeling of the thermal field and crystal growth of SiC in the PVT furnace Zaher Ramadan (Montanuniversität Leoben, Austria)	

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10:15-13:00 Chairs	<b>Session S4 - Crystals for Optics</b> Alexandra Pena Revellez, Dobrosława Kasprowicz,	Room 105
10:15-10:45 INVITED TALK	Low-phonon materials for mid-infrared lasers Robert Kral (Charles University in Prague, Czech Republic)	
10:45-11:15 INVITED TALK	Investigation of YAl <sub>3</sub> (BO <sub>3</sub> ) <sub>4</sub> crystal growth by using lanthanum borate-based flux for nonlinear optical application in the UV range Pascal Loiseau (Institut de Recherche de Chimie Paris, France)	
----- <b>Coffee Break</b> -----		
11:45-12:00	Epitaxial growth and characterization of (100) oriented Potassium Titanyl Arsenate (KTiOAsO <sub>4</sub> ) thin film by Pulsed Laser Deposition Adrien Clavel (Institut Néel, CNRS, France)	
12:00-12:15	Optical quality improvement of ZnGeP <sub>2</sub> crystals Charlotte Vernozy-Trouillet (École Polytechnique, France)	
12:15-12:30	Epitaxial growth and layer transfer for thin-film electro-optic modulator realization Grégoire Larger (Femto-ST/Exail, France)	
12:30-12:45	High efficiency laser emission in the near-infrared range from a new LGYSB:Nd laser crystal Lucian Gheorghe (National Institute for Laser, Plasma and Radiation Physics, Romania)	
12:45-13:00	Surface Mechanics of GaAsP/GaAs Epilayers for NLO Devices Samuel Linser (KBR, Inc., USA)	
10:15-13:00 Chairs	<b>Session S8 - Growth of 2D-materials</b> Raffaella Lo Nigro, Ivan Shteplyuk	Room 106
10:15-10:45 INVITED TALK	All-epitaxial TaC/graphene 2D superconductor for quantum technologies Samuela Lary-Avila (Chalmers University of Technology, Sweden)	
10:45-11:15 INVITED TALK	2D-Materials for electronic devices: Synthesis approaches and integration with dielectrics Salvatore Ethan Panasci (ICNR-IMM, Italy)	
----- <b>Coffee Break</b> -----		
11:45-12:00	Tuning properties of layered hBAIN grown by MOVPE Jakub Iwański (University of Warsaw, Poland)	
12:00-12:15	Tailoring Growth Conditions of Two-Dimensional Boron Nitride for Diverse Applications Aleksandra Dąbrowska (University of Warsaw, Poland)	
12:15-12:30	Formation of one dimensional nanostructures in the molecular beam epitaxy of antimony triselenide Piotr Wojnar (Institute of Physics PAS, Poland)	
12:30-12:45	Optically active indium selenide crystal phase heterostructures grown by molecular beam epitaxy Piotr Wojnar (Institute of Physics PAS, Poland)	
12:45-13:00	Electron Irradiation-Assisted Area-Selective Deposition of Few-Layer MoS <sub>2</sub> Haobo Li (National University of Singapore, Singapore)	