

EMN Epitaxy 2016 Budapest Final Program

Sunday Sept. 4 Afternoon	
14:00-17:30PM	Onsite Registration & Sign up

12:00-13:20PM	<i>Lunch (at the hotel)</i>	
Monday Sept. 5 Afternoon Room A (Rakoczi I.)		
13:20-13:30PM	Opening Ceremony	
Session: Epitaxy General I Chair: Philipp Maass		
13:30-13:55PM	A01: Epitaxy for crystalline Si solar cells	Jef Poortmans IMEC, Belgium
13:55-14:20PM	A02: Epitaxial growth of 3-Dimensional Semiconductor Nanostructures	Won Il Park Hanyang University, Korea
14:20-14:45PM	A03: Atomic layer deposition of effectively anion-doped zinc oxides	Hyung-Ho Park Yonsei University, Korea
14:45-15:10PM	A04: Structure and Optical Properties of ZnO/MgxZn1-xO Multiple Quantum Wells Using a Y ₂ O ₃ Buffer Layer on Si (111)	Wei-Rein Liu National Synchrotron Radiation Research Center, Taiwan
15:10-15:35PM	A05: Generation of stacking faults in 4H-SiC epilayer during oxidation	Ryosuke Asafuji Saitama University, Japan
15:35-15:50PM	<i>Session Break</i>	
Session: MOCVD I Chair: Cheng-Wei Cheng		

15:50-16:15PM	A06: The epitaxial growth technologies to improve efficiency of UV-LED	Yoshihiko Muramoto Nitride Semiconductors Co., Ltd, Japan
16:15-16:40PM	A07: Metal Schottky contacts to GaN epilayer grown by MOCVD	Mohammed Mamor Université Cadi Ayyad, Morocco
16:40-17:05PM	A08: Sb-assisted MOVCD growth of InAs/GaAs submonolayers	David Quandt Technische Universität Berlin, Germany
17:05-17:30PM	A09: MOVPE-grown GaN-based vertical cavity surface emitting lasers	Kenjo Matsui Meijo University, Japan
17:45PM	<i>Dinner & Socials</i>	

Tuesday Sept. 6 Room B (Rakoczi II.)		
7:00-8:00AM	<i>Breakfast</i>	
Session: MBE I Chair: Yasushi Nanishi		
8:00-8:25AM	B01: Systematic Study on Dynamic Atomic Layer Epitaxy (D-ALEp) of InN on/in GaN Matrix and Its Application for Fabricating Ordered Alloys in Whole III-N system	Akihiko Yoshikawa Chiba University, Japan
8:25-8:50AM	B02: Combining MBE growth and in-situ photoelectron spectroscopy of group III-nitride films – impact of flux ratio and adsorption processes on surface properties	Marcel Himmerlich Technische Universität Ilmenau, Germany
8:50-9:15AM	B03: InAs Quantum Dot Broadband Swept-Source Laser for Optical Coherent Tomography	Wei Guo (Absence) University of Massachusetts Lowell, USA

9:15-9:40AM	B04: Surfactant in epitaxy revisited	Susumu Fukatsu University of Tokyo, Japan
9:40-10:05AM	B05: Two-dimensional delocalized electronic states of epitaxial N delta-doped layer in GaAs	Yukihiro Harada Imperial College London, UK Kobe University, Japan
10:05-10:20AM	<i>Session Break</i>	
Session: Epitaxy General II Chair: Jef Poortmans		
10:20-10:45AM	B06: Epitaxial thin-film approach to fundamental studies and modeling of cathodes and solid electrolytes of Li-ion and other batteries	Leonid A. Bendersky National Institute of Standards and Technology (NIST), USA
10:45-11:10AM	B07: Low-temperature epitaxial growth by femtosecond pulsed laser deposition	Hani E. Elsayed-Ali Old Dominion University, USA
11:10-11:35AM	B08: Epitaxial ferroelectric thin films grown by pulsed laser deposition (PLD)	Cristina Chirila National Institute of Materials Physics, Romania
11:35-12:00PM	B09: Structural and magnetic properties of pulsed ablated $\text{La}_{0.7}\text{Ca}_{0.3}\text{Mn}_{0.2}\text{Fe}_{0.8}\text{O}_{3+\delta}$ thin films on various substrates	Khalid Bouziane International University of Rabat, Morocco
12:00-13:20PM	<i>Lunch (at the hotel)</i>	
Session: Epitaxy General III Chair: Hani E. Elsayed-Ali		
13:20-13:45PM	B10: Molecular Cluster Formation on Insulating Surfaces	Philipp Maass Universität Osnabrück, Germany
13:45-14:10PM	B11: Epitaxial Growth of Titanium and Vanadium Oxide Thin Films on Ag Surfaces	Kazuyuki Edamoto Rikkyo University, Japan
14:10-14:35PM	B12: A direct observation method of surface morphology from RHEED intensities during growth	Takaaki Kawamura University of Tokyo, Japan

14:35-15:00PM	B13: Relationship between surface stress and reconstruction	Hidehito Asaoka Advanced Science Research Center, JAEA, Japan
15:00-15:25PM	B14: Nucleation and morphological instability in strained films	Jean-Noël Aqua INSP, UPMC, France
15:25-15:40PM	<i>Session Break</i>	
15:40-16:05PM	B15: Heteroepitaxy between Wurtzite and Cubic Structures: Case Study on the Growth of Zinc Oxide based Thin Layers and Multilayers on 001 Strontium Titanate Single Crystals	Aurelian-Catalin Galca National Institute of Materials Physics, Romania
16:05-16:30PM	B16: Epitaxial growth of magnetic thin films and heterostructures for data storage and energy applications	Francesca Casoli IMEM-CNR, Italy
Session: MOCVD II Chair: Takaaki Kawamura		
16:30-16:55PM	B17: Ultrahigh efficiency III-V semiconductor photovoltaic power converting heterostructures by MOCVD with output voltages exceeding 12Volts	Simon Fafard Universite de Sherbrooke & Azastra Opto Inc., Canada
16:55-17:20PM	B18: Heterogeneous Integration of III-V Compound Semiconductors on Silicon	Cheng-Wei Cheng IBM T.J. Watson Research Center, USA
17:20-17:45PM	B19: High-crystallinity AlN film grown on nano-pattern surface sapphire substrate by MOCVD	Akira Yoshikawa Meijo University, Japan
18:00PM	<i>Dinner & Socials</i>	

Wednesday Sept. 7 Room A (Rakoczi I.)	
7:00-8:00AM	<i>Breakfast</i>
Session: MBE II Chair: Akihiko Yoshikawa	

8:00-8:25AM	A10: Recent Advancements and Challenges of Growth of InN and In-rich InGaN by DERI Method	Yasushi Nanishi Ritsumeikan University, Japan
8:25-8:50AM	A11: Growth of Eu doped GaN thin film and nanocolumns grown by molecular beam epitaxy	Hiroto Sekiguchi Toyohashi University of Technology, Japan
8:50-9:15AM	A12: Optical characterization of self-assembled GaN nanostructures grown by RF-MBE	Youngsin Park Ulsan National Institute of Science and Technology (UNIST), Korea
9:15-9:40AM	A13: Molecular Beam Epitaxy of ultra-pure AlGaIn/GaN heterostructures	Felix Schubert NaMLab gGmbH, Germany
9:40-10:05AM	A14: Nonpolar m-plane GaN epitaxy using plasma-assisted MBE for infrared optoelectronics	Caroline Lim University Grenoble-Alpes, CEA, France
10:05-10:20AM	<i>Session Break</i>	
Session: Epitaxy General IV Chair: Masao Sakuraba		
10:20-10:45AM	A15: STM investigation and nanoengineering of single layer MoS ₂ grown on HOPG by van der Waals epitaxy	Laszlo P. Biro Institute of Technical Physics and Materials Science, Hungary
10:45-11:10AM	A16: Electrical properties of epitaxial ferroelectric heterostructures	Andra-Georgia Boni National Institute of Materials Physics, Romania
11:10-11:35AM	A17: Influence of the substrate on the structure of graphene	Francois Bocquet Forschungszentrum Jülich, Germany
11:35-12:00PM	A18: Vertical Carbon Nanowall: Synthesis, Characterization and Potential Applications	Mehrdad Shaygan (Absence) AMO GmbH, Germany
12:00-13:30PM	<i>Lunch (at the hotel)</i>	
Session: Epitaxy General V Chair: Aurelian-Catalin Galca		

13:30-13:55PM	A19: Epitaxy and In-Situ Doping of Group-IV Semiconductors by Low-Energy Plasma CVD for Quantum Heterointegration in Nanoelectronics	Masao Sakuraba Tohoku University, Japan
13:55-14:20PM	A20: Conductivity Control of Sn-Doped Coruncum-Structured Ga ₂ O ₃ Films on Sapphire	Kazuaki Akaiwa Tottori University, Japan
14:20-14:35PM	A21: Properties of high-dose nitrogen implanted epitaxially grown Gd ₂ O ₃ on silicon	Anit Joseph Leibniz Universität Hannover, Germany
14:35-15:00PM	A22: 2D Semiconducting WS ₂ Grown by Sputtering; Properties and Device Applications	Emre Gür (Absence) Atatürk University, Turkey
15:00-15:15PM	<i>Session Break</i>	
Session: ALD I Chair: Kazuyuki Edamoto		
15:15-15:40PM	A23: The Electrochemical Atomic Layer Deposition (EC-ALD) for forming nano films of semiconducting materials	Marie-Christine Record Aix-Marseille University, France
15:40-16:05PM	A24: From The Microscopic Theory of The Electrochemical Atomic Layer Deposition (EC-ALD) to Atomistic Simulations	Pascal Boulet Aix-Marseille University, France
16:05-16:30PM	A25: Selective depositions enabled by surface functionalization and ALD	Silvia Armini IMEC, Belgium
17:00PM	<i>Dinner & Socials</i>	

Thursday Sept. 8

Research Communication and Scientific Visiting of University of Malaya, Malaysia