

EMN Vienna Meeting
June 18 to 22, 2018
ARCOTEL Wimberger Vienna Hotel, Austria

June 18th, Monday At the Hotel	
14:00-17:30	Onsite Registration & Sign up

June 19th, Tuesday Room A		
8:30-8:40	<i>Opening</i>	
Session: Epitaxy General I Chair: Algirdas Sužiedėlis		
8:40-9:10	A01: Epitaxial antimonides and enhanced photodetection (Keynote)	Dao Hua Zhang Nanyang Technological University, Singapore
9:10-9:35	A02: Design and fabrication of MEMS Pirani gauge utilizing the process compatible with CMOS technology	Guohe Zhang Xi'an Jiaotong University, China
9:35-10:00	A03: Magnetoelectric coupling in epitaxial ferromagnetic/ferroelectric interfaces	Piero Torelli Laboratorio TASC, CNR-IOM, Italy
10:00-10:25	A04: Epitaxy of strain engineered ferroelectric $K_xNa_{1-x}NbO_3$ thin films	Jutta Schwarzkopf Leibniz Institute for Crystal Growth, Germany
10:25-10:45	<i>Session Break</i>	
Session: Epitaxy General II Chair: Dao Hua Zhang		
10:45-11:10	A05: Selectively doped 2D semiconductor structures for microwave electronics	Algirdas Sužiedėlis Center for Physical Sciences and Technology, Lithuania

11:10-11:35	A06: Unsupervised Analysis – revealing objects and respective contributions	Jorge Costa Pereira University of Coimbra, Portugal
11:35-12:00	A07: Epitaxial growth of metal-insulator transition materials	Nicolas Emond INRS-EMT, Canada
12:00-12:25	A08: CO ₂ Photocatalytic Reduction over TiO ₂ Nanocrystals with Specific Facet	Yongchun Zhao Huazhong University of Science and Technology, China
12:25-14:25	<i>Lunch Break</i>	
Session: MOCVD Chair: Stéphane Andrieu		
14:25-14:50	A09: Nano-patterned substrates for reduced footprint GaN epitaxy	Guy Feuillet Université Grenoble Alpes, CEA-LETI, France
14:50-15:15	A10: Amorphous thin GeSbTe phase-change films prepared by radical-assisted metal-organic chemical vapor deposition	Yoshihisa Fujisaki YourFriend, Japan
15:15-15:40	A11: Selective area metal organic vapor phase epitaxy and characterization of buried-heterostructure quantum cascade lasers	Rachid Driad Fraunhofer IAF, Germany
15:40-16:05	A12: MOVPE growth of GaInAsP system on directly bonded InP/Si substrate	Gandhi Kallarasan Periyannayagam Sophia University, Japan
16:05-16:30	A13: Intrinsic electronic structure of high-quality CrO ₂ epitaxial film prepared by a closed-system CVD method	Hirokazu Fujiwara Okayama University, Japan
16:30-16:50	<i>Session Break</i>	
Session: Vacuum Electronics Chair: Guohe Zhang		

16:50-17:15	A14: Miniature X-ray Sources for electronic brachytherapy	Mikhail Taubin Academician of the International Academy of science of Higher Education, Russia
17:15-17:40	A15: Resonant MEMS accelerometers	Hideo Muro Chiba Institute of Technology, Japan
17:40-18:05	A16: Compact Setup for Electron Acceleration by Intense THz Pulses	Zoltan Tibai University of Pécs, Hungary
18:05-18:30	A17: Nanomaterials-based Embedded Sensing in Laminated Composites	Latha Nataraj Res Lab, USA

June 20th, Wednesday		
Room A		
Session: Keynote & MBE I Chair: Masahiko Kondow		
8:30-9:00	A18: Epitaxy at the atomic scale: from core-shell to axial heterojunctions in nanostructures (Keynote)	Jordi Arbiol ICREA and Catalan Institute of Nanoscience and Nanotechnology (ICN2), CSIC and BIST, Catalonia, Spain
9:00-9:30	A19: Rhombohedral Super-Hetero-Epitaxy Technology (Keynote)	Sang H. Choi NASA Langley Research Center, USA
9:30-9:55	A20: Metal droplets behavior during high-temperature annealing of A ^{III} B ^V semiconductors and nanostructures formation	Nataliya Shwartz A.V. Rzhanov Institute of Semiconductor Physics SB RAS, Russia
9:55-10:20	A21: Epitaxial growth of ferroelectric thin films and their potential applications	Cristina Chirila National Institute of Materials Physics, Romania
10:20-10:45	A22: Au nanoparticle assisted MBE growth and thermal annealing of GaAs nanowires	Alexei Bouravleuv St.Petersburg Academic University RAS, Russia
10:45-11:05	<i>Session Break</i>	
Session: MBE II Chair: Jordi Arbiol		
11:05-11:30	A23: Suitable quality (Q) factor for photonic crystal laser grown by MBE	Masahiko Kondow Osaka University, Japan
11:30-11:55	A24: Promising materials for spintronics: Co ₂ MnX (X=Si, Ge, Ga, Al, Sn) Half-Metal Magnetic grown by Molecular Beam Epitaxy	Stéphane Andrieu Institut Jean Lamour, CNRS, Université de Lorraine, France

11:55-12:20	A25: Molecular Beam Epitaxy of β -Ga ₂ O ₃ and β -(Al _x Ga _{1-x}) ₂ O ₃	Elaheh Ahmadi University of Michigan, USA
12:20-14:20	<i>Lunch Break</i>	
Session: Epitaxy Nanomaterials I Chair: Tetyana Torchynska		
14:20-14:45	A26: Electronic structures of vanadium oxide ultrathin films epitaxially grown on Ag(100)	Kazuyuki Edamoto Rikkyo University, Japan
14:45-15:10	A27: Synthesis and physical property investigation of FeSe _{1-x} Te _x and FeSe _{1-x} S _x epitaxial thin films	Atsutaka Maeda University of Tokyo, Japan
15:10-15:35	A28: Epitaxial multifunctional oxide thin films	Seung-Hyub Baek Korea Institute of Science and Technology, Korea
15:35-16:00	A29: Functionalization of 2D materials	Laurent Simon Institut des Sciences de Matériaux de Mulhouse, CNRS, France
16:00-16:40	<i>Poster Session</i>	
Session: Epitaxy Nanomaterials II Chair: Kazuyuki Edamoto		
16:40-17:05	A30: Emission and HR-XRD study in MBE hetero-structures with InAs quantum dots and AlGaInAs strain reduced layers	Tetyana Torchynska ESFM-National Polytechnic Institute, Mexico
17:05-17:30	A31: Characterization of Inhomogeneity in Thermal Oxide Films on 4H-SiC Epitaxial Substrates by a Combination of Infrared, Raman and Cathodoluminescence Spectroscopy	Masanobu Yoshikawa Toray Research Center, Inc., Japan

17:30-17:55	A32: Growth of Epitaxial Vanadium Oxide Thin Film by Pulsed Laser Deposition	Tohru Higuchi Tokyo University of Science, Japan
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June 20th, Wednesday Afternoon 16:00-16:40	
<i>Poster Session</i>	
P01: Comparative Study of Ag_x-Re_{1-x} (Re=Gd, Sm) Systems From first Principles Calculations	Abdelhak Ferroudj Abdelhak Ferroudj Batna 1 University, Algeria
P02: Band gap front graded $Cu_2ZnSn(S, Se)_4$ thin films for low open circuit voltage deficit	Dae-Kue Hwang Daegu Gyeongbuk Institute of Science and Technology (DGIST), Korea
P03: Effect of TiO_2 photoelectrodes with metal nanowires-nanoparticles in Sb_2S_3 hybrid solar cells	Kang-Pil Kim Daegu Gyeongbuk Institute of Science and Technology (DGIST), Korea
P04: Ultrafast photocarrier dynamics in CIGS solar cell with CBD-ZnS buffer layer as a function of thiourea mole concentration measured by optical pump-THz probe spectroscopy	Woo-Jung Lee Electronics and Telecommunications Research Institute, Korea
P05: Thermal impact on emission and structure of MBE GaAs/AlGaAs heterostructures with InAs quantum dots	Georgiy Polupan ESIME- National Polytechnic Institute, Mexico

P06: Characterization of CBD-ZnS films grown by high-deposition rate process for CIGS thin-film solar cell applications

Hye-Jung Yu
Electronics and
Telecommunications Research
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June 21st, Thursday

(We will poster details at the spot)

One-Day Excursion: Nature, Culture, and Collaboration