

Program for EMN Spring Meeting		
Tuesday morning, March 8		
Room A		
8:30-8:35AM	Opening Ceremony	
Session: Lithium-ion battery Chair: Hiroyuki Sugimura		
8:35-9:00AM	A01: Borate based cathode materials for lithium-ion batteries	Kyung Yoon Chung Center for Energy Convergence Research, KIST, Korea
9:00-9:25AM	A02: Simple synthesis of graphene based nanocomposites as high performance lithium-ion battery electrodes	Yuanzhe Piao Seoul National University, Korea
9:25-9:50AM	A03: Advances in the characterization of the SEI and binder distribution of lithium-ion battery electrodes by electron microscopy	Frieder Scheiba Karlsruhe Institute of Technology , IAM-ESS, Germany
Session: Gallium Nitride I Chair: Yoshio Masuda		
9:50-10:15AM	A04: Crystallographic orientation and its effects on optical and chemical properties of GaN nanowires	Shaul Aloni Lawrence Berkeley National Laboratory, USA
10:15-10:35AM	Session Break	
10:35-11:00AM	A05: GaN Epitaxy on 200mm silicon for power electronic applications	Yoga Saripalli IMEC, Belgium
11:00-11:25AM	A06: GaN nanowires for Piezoelectric energy harvesting: Towards wireless sensors	Noëlle Gogneau Université Paris-Saclay, France

11:25-11:50AM	A07: Growth of homogenous N-polar InAlN high-electron-mobility transistors by plasma-assisted molecular beam epitaxy	Matthew T. Hardy Naval Research Laboratory, USA
11:50-12:15PM	A08: Electrostatic mechanism of strong enhancement of light emitted by semiconductor quantum wells due to the incorporation of metallic nanocrystals	Sérgio Pereira Universidade de Aveiro, Portugal
12:15-14:00PM	Lunch Break	

Tuesday afternoon, March 8		
Room A		
Session: General I Chair: Ivan Stich		
14:00-14:25PM	A09: Oxygen Trimming From Graphene Oxide with Vacuum Ultra-Violet Irradiation: Recovery of Electrical Conductivity and Micropatterning	Hiroyuki Sugimura Kyoto University, Japan
14:25 -14:50PM	A10: Thermal phonon engineering for thermoelectric materials	Masahiro Nomura The University of Tokyo, Japan
14:50 -15:15PM	A11: Co-evaporation control of organolead halide perovskite solar cells	Tetsuhiko Miyadera National Institute of Advanced Industrial Science and Technology, Japan
15:15-15:35PM	Session Break	
Session: Scanning Probe Microscopy I Chair: Aitor Mugarza		
15:35 -16:00PM	A12: Nanostructures created by AFM manipulation of atoms	Ivan Stich Fyzikálny ústav SAV, Slovakia
16:00-16:25PM	A13: Plasmonic nanoscope with a scanning resonant ridge aperture	Jae W. Hahn Yonsei University, Korea

16:25-16:50PM	A14: Single-molecule chemistry and optical spectroscopy on insulating films with STM	Yusoo Kim Surface and Interface Science Laboratory, RIKEN, Japan
16:50-17:15PM	A15: Real-Space, Atomic-Scale Measurement of Chemical Reactivity on Metal Oxide Surfaces via 3D-SPM	Mehmet Z. Baykara Bilkent University, Turkey
18:00PM	Dinner Social	

Wednesday morning, March 9		
Room A		
Session: Scanning Probe Microscopy II Chair: Jae W. Hahn		
8:35-9:00AM	A16: Real space probe of ultrafast carrier dynamics by laser-combined STM	Hidemi Shigekawa University of Tsukuba, Japan
9:00-9:25AM	A17: Single molecule and nanoparticle analysis by STM/STS	Yutaka Majima Tokyo Institute of Technology, Japan
9:25-9:50AM	A18: Electrons and spins at the metal-organic interface	Aitor Mugarza Atomic Manipulation and Spectroscopy Group, ICN2, Spain
9:50-10:15AM	A19: Real-space imaging of fractional quantum Hall liquids	Go Yusa Tohoku University, Japan
10: 15-10:35AM	Session Break	
Session: Gallium Nitride II Chair: Sérgio Pereira		
10:35-11:00AM	A20: Numerical analysis of natural convection heat transfer in ammonothermal GaN bulk crystal	Yoshio Masuda National Institute of Advanced Industrial Science and Technology, Japan

	growth process	
11:00-11:25AM	A21: Nitridation of GaAs substrates in order to obtain cubic GaN templates.	Arturo Escobosa Echavarria Cinvestav, Mexico
11:25-11:50AM	A22: Evaluation of Dislocations in GaN Films by Means of Synchrotron Radiation X-ray Diffractometry	Miori Hiraiwa Panasonic Corporation, Japan
12:00-14:00 PM	Lunch Break	

Wednesday afternoon, March 9		
Room A		
Session: General II Chair: Xiaorong Qin		
14:00-14:25PM	A23: Oxygen Ion Conducting Materials for Energy Conversion	Manfred Martin RWTH Aachen University, Germany
14:25 -14:50PM	A24: Porous Carbonaceous Materials for Hydrogen Storage Applications	Nicholas Musyoka Council for Scientific and Industrial Research, South Africa
14:50 -15:15PM	A25: Materials-Device Correlations for Enhanced Performance and Reliability of Wide Bandgap Devices	Tsvetanka Zheleva U.S. Army Research Laboratory, USA
15:15-15:30PM	Session Break	
Session: Poster		
15:30 -16:00PM	P1: Nanoporous carbon nanosheets for energy storage	Hyoung-Joon Jin Inha University, Korea

	P2: In-situ synthesis of Co ₂ CuS ₄ nanoparticles on graphene by solvothermal method: Application in high-performance supercapacitors electrode	Meng Guo Chonbuk National University, Korea
	P3: Ethylenediamine Functionalized Graphene oxide/Polyurethane Nanocomposite Coated Nylon Film for Improved Hydrogen Gas Barrier Performance	Joong Hee Lee Chonbuk National University, Korea
	P4: Chemical Treatment of Cellulose Fibers Reinforced by Graphene Oxide for High Mechanical Properties	Jisu Ryu Chonbuk National University, Korea
Session: Scanning Probe Microscopy III		Chair: Yousoo Kim
16:00-16:25PM	A26: Scanning probe microscopy of organic thin films for organic electronics	Xiaorong Qin University of Guelph, Canada
16:25-16:50PM	A27: Harsh Condition Scanning Probe Microscopes and Their Multidisciplinary Applications	Qingyou Lu High Magnetic Field Laboratory, CAS, China
16:50 -17:15PM	A28: Development of Novel Functional Conductive Polymers and its Industrial Applications	Umesh Waware Qatar University, Qatar
18:00PM	Dinner Social	

Thursday morning, March 10

Room A

Session: Single-Photon Chair: Hai-Zhi Song

9:00-9:25AM	A29: Microcavities for quantum-dot single-photon sources at 1.55-um telecommunication band	Hai-Zhi Song Southwest Institute of Technical Physics, China
9:25-9:50AM	A30: Heralded optical quantum states and their storage in optical cavities	Jun-ichi Yoshikawa The University of Tokyo, Japan
9:50-10:15AM	A31: Towards a Graphene-Based Low Intensity Photon Counting Photodetector	Jon Lapington Department of Physics & Astronomy, University of Leicester, UK
10: 15-10:35AM	Session Break	
10:35-11:00AM	A32: High-purity single-photon source and its application in quantum information	Ruibo Jin Quantum ICT laboratory, NICT, Japan
11:00-11:25AM	A33: Time Correlated Single Photon Spectroscopy on InGaN Pyramidal Quantum Dots.	Tomas Jemsson Linköping University, Sweden
11:25-14:00 PM	Lunch Break	

Thursday afternoon, March 10

Room A

Session: Gallium Nitride III Chair: Yoshio Masuda

14:00-14:25PM	A34: Light Emitters Based on Elongated InGaN/GaN Pyramidal Quantum Dots for Efficient Generation of Linearly Polarised Light	Fredrik Karlsson Linköping University, Sweden
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14:25 -14:50PM	A35: Growth of GaN microstructure and its application to light-emitting diodes	Ikai Lo National Sun Yet-Sen University, Taiwan
14:50 -15:15PM	A36: Emerging LED technology for lighting : 8" GaN on Si & chip scale package	Jun-youn Kim Samsung elec. co., Korea
15:15-15:35PM	Session Break	
Session: Scanning Probe Microscopy IV Chair: Aitor Mugarza		
15:35 -16:00PM	A37: Probing fullerene embedded Si substrate using scanning probe microscopy and molecular dynamics	Mon-Shu Ho National Chung Hsing University, Taiwan
16:00-16:25PM	A38: Designer Cellulosomes by AFM-Based Single Molecule Cut & Paste	Hermann Gaub Ludwig-Maximilians-Universität, Germany
16:25-16:50PM	A39: Solid-state quantum defects and scanning probe microscopy	Donghun Lee Korea University, Korea
16:50-17:15PM	A40: Adsorbate-induced quantum Hall system probed by scanning tunneling spectroscopy combined with transport measurements	Ryuichi Masutomi The University of Tokyo, Japan
18:00PM	Dinner Social	