

Program for EMN and Quantum SUMMIT 2017		
Thursday Oct.12		
Room A		
8:45-9:00AM	Opening Ceremony - General Chair: Zhiming Wang	
Session: EMN Summit Nano I Chair: Hao-chung(Henry) Kuo		
9:00-9:25AM	A01: Convergence of Science and Engineering for Globally Challenging Problems	Sushanta K. Mitra Waterloo Institute for Nanotechnology (WIN), Canada
9:25-9:50AM	A02: Study on the nanostructure and thermoelectric properties of RF-assisted evaporated ZnO:Al films	Guojian Li Northeastern University, China
9:50-10:15AM	A03: Photo-enhanced ferromagnetism in high K ⁺ -containing K-Ni-Cr Prussian blue analogues coated on Rb-Co-Fe nanocubes	Wen-Hsien Li National Central University, Taiwan
10:15-10:45AM	Session Break	
Session: EMN Summit Nano II Chair: Sushanta K. Mitra		
10:45 -11:10AM	A04: Coupled molecular machines	M.A. Van Hove Hong Kong Baptist University, Hong Kong
11:10-11:35AM	A05: Computational Design of Flat-Band Material	Izumi Hase AIST, Japan
Lunch Break		
Session: EMN Summit Nano III Chair: Sergey Kravchenko		
14:00-14:25PM	A06: Stable Emission from All-inorganic CsPbX ₃ Perovskites	Juan Du Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences, China
14:25 -14:50PM	A07: Interaction-induced edge states in anisotropic non-Fermi liquids	Igor Yurkevich Aston University, UK
14:50 -15:15PM	A08: Metal-insulator transition in sliding Luttinger liquid	Victor Kagalovsky Shamoon College of Engineering, Israel
15:40-16:10PM	Session Break	
Session: EMN Summit Nano IV Chair: Victor Kagalovsky		
16:10-16:35PM	A09: Optical simulations on silicon microstructure chips: quantum walk and its applications	Wanhua Zheng/Yufei Wang Institute of Semiconductors, Chinese Academy of Sciences, China

16:35-17:00PM	A10: Optics of Dirac and Weyl fermions in graphene and topological materials	Alexey Belyanin Texas A&M University, USA
17:00-17:25PM	A11: Superconductivity and Magnetism in Nb-doped Bi ₂ Se ₃ Topological Material	Yew San Hor Missouri Univ Sci & Technol, USA
17:25PM	Dinner Social	

Program for EMN and Quantum SUMMIT 2017		
Friday Oct.13		
Room A		
Session: Quantum Summit I: Wen-Hsien Li		
9:00-9:25AM	A01: Quantum Computing: An Emerging Information Technology Revolution	Runyao Duan Centre for Quantum Software and Information, University of Technology Sydney (UTS), Australia
9:25-9:50AM	A02: The problem of almost quantum physics	Miguel Navascues-Cobo Austrian Academy of Sciences, Austria
9:50-10:15AM	A03: Entanglement and Nonlocality in Infinite 1D Systems	Zizhu Wang Austrian Academy of Sciences, Austria
10:15-10:45AM	Session Break	
Session: Quantum Summit II Chair: Alexander Lvovsky		
10:45 -11:10AM	A04: Quantum algorithm for linear differential equations with exponentially improved precision	Dominic William Berry Macquarie University, Australia
11:10-11:35AM	A05: QKD scheme for fast preparation and measurement of polarization qubits	Yury Kurochkin Russian Quantum Center, Russia
11:35-12:00PM	A06: Complexity Science in a Quantum World	Mile Gu Nanyang Technological University, Singapore
12:00-14:00PM	Lunch Break	
Session: EMN Summit Nano V Chair: Agnès Maître		
14:00-14:25PM	A07: Majorana spintronics: When Majorana meets spin	Xin Liu Huazhong University of Science and Technology, China
14:25 -14:50PM	A08: Optical properties of excitons in lead halide perovskite films and nanocrystals	Haiping He Zhejiang University, China
14:50 -15:15PM	A09: sample size effect of nanostructured nickel under micro-compression	Takashi Nagoshi National Institute of Advanced Industrial Science and Technology, Japan
15:15 -15:40PM	A10: Compensation for the phase-type spatial periodic modulation of the near-field beam with an improved iterative weight-based	Yaru Gao Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of

	method	Sciences, China
15:40-16:10PM	Session Break	
Session: EMN Summit Nano VI Chair: Jiang WU		
16:10-16:35PM	A11: Low-Temperature Growth of Two-Dimensional Layered Materials Toward Phase-Engineered Hybrid Films	Yu-Lun (YL) Chueh National Tsing Hua University, Taiwan
16:35-17:00PM	A12: Thermal energy storage studies on phase change materials microcapsules made by hydrothermal preparation	Xian Wan Beijing Technology and Business University, China
17:00-17:25PM	A13: Zinc fortification offering a new paradigm in biogenic nanoparticle syntheses	Palashpriya Das Adamas University, India
17:25PM	Dinner Social	

Friday Oct.13		
Room B		
Session: EMN Summit Nano XII Chair: Yu-Lun (YL) Chueh		
9:00-9:25AM	B01: Synthesis and application of plasmonic nanomaterials with engineered structure	Tong Zhang Southeast University, China
9:25-9:50AM	B02: Graphene-Periodic Mesoporous Silica Sandwich Nanocomposite with Height and Size Tunable Vertically Aligned Mesochannels	Zheng-Ming Wang National Institute of Advanced Industrial Science and Technology, Japan
9:50-10:15AM	B03: Synthesis of the In ₂ O ₃ -coated TiO ₂ Electrode by PLD for Solar Cell Application	Shukai Duan Southwest University, China
10:15-10:45AM	Session Break	
Session: EMN Summit Semiconductors Chair: Ray-Ming Lin		
10:45 -11:10AM	B04: Improving the Carrier Injection for III-nitride-based Light-emitting Diodes	Wengang Bi Hebei University of Technology, China
11:10-11:35AM	B05: Low-dimensional III-V nanomaterials and optoelectronic devices directly grown on silicon	Jiang Wu University College London, UK
11:35-12:00PM	B06: TBA	Hao-chung(Henry) Kuo

		National Chiao Tung University, Taiwan
12:00-14:00PM	Lunch Break	
Session: EMN Summit MEMS Chair: Swastik Kar		
14:00-14:25PM	B07:The research of MEMS reliability in CAEP	Bin Tang China Academy of Engineering Physics, China
14:25 -14:50PM	B08:Development of high precision MEMS accelerometers	Wei Xu China Academy of Engineering Physics, China
14:50 -15:15PM	B09:A low-g MEMS acceleration switch based on direct contact method	Zhuang Xiong China Academy of Engineering Physics, China
15:15 -15:40PM	B10:TBA	Yu Liu Jiangnan University, China
15:40-16:10PM	Session Break	
Session: EMN Summit Nano XIII Chair: Tong Zhang		
16:10-16:35PM	B11: Breaking through the multi-mesa-channel width limited of normally-off GaN HEMTs through modulation of the via-hole-length	Ray-Ming Lin Chang Gung University, Taiwan
16:35-17:00PM	B12:Strengthening Mechanisms in Nanostructured Copper Solid-solution Alloys	Takahiro KUNIMINE Kanazawa University, Japan
17:00-17:25PM	B13: Ultra-low power wavelength conversion in dispersion engineered silicon nanowaveguides	Hongjun Liu Xi'an Institute of Optics and Precision Mechanics, Chinese Academy of Science, China
17:25PM	Dinner Social	
Program for EMN and Quantum SUMMIT 2017		
Saturday Oct.14		
Room A		
Session: Quantum Summit III: Runyao Duan		
9:00-9:25AM	A01: Light emission and Phonon assisted plasmonically induced transparency in graphene oxide quantum dots	Arup Neogi University of North Texas, USA

9:25-9:50AM	A02: Nanocavity Plasmon: Quantifying Light-matter Interaction	Shunping Zhang Wuhan University, China
9:50-10:15AM	A03: Modulation of ultrasonic signal and logic gates using defect states in phononic crystals	Delfino Reyes Universidad Autonoma del Estado de Mexico, Mexico
10:15-10:45AM	Session Break	
Session: Quantum Summit IV Chair: Miguel Navascues-Cobo		
10:45 -11:10AM	A04: Entanglement between polarization and wave-like optical qubits and its applications	Alexander Lvovsky University of Calgary, Canada
11:10-11:35AM	A05: Quantum-secured blockchain	Aleksey Fedorov Russian Quantum Center, Russia
11:35-12:00PM	A06: Non-equilibrium Quantum Annealing Framework for Temperature based Restricted Boltzmann Machines	Ravi C. Venkatesan Systems Research Corporation, India
12:00-14:00PM	Lunch Break	
Session: Quantum Summit V Chair: Shengyong Xu		
14:00-14:25PM	A07: Multiexcitonic emission in a ultra bright plasmonic nanoantenna	Agnès Maître Institut des NanoSciences de Paris, Université Pierre et Marie Curie, France
14:25 -14:50PM	A08: Optical identification using imperfect quantum materials	Robert J. Young Lancaster University, UK
14:50 -15:15PM	A09: Levitons: a single electron source for electron quantum optics	D. Christian GLATTLI CEA Saclay, Université Paris-Saclay, France
15:15 -15:40PM	A10: Quantum light sources based on atomic ensembles and its applicaiotns	Jietai Jing East China Normal University, China
15:40-16:10PM	Session Break	
Session: Quantum Summit VI Chair: Zizhu Wang		
16:10-16:35PM	A11: Quantum phase transitions in spin-orbit free quasi-1D semiconductors	Jean-Pierre Leburton Beckman Institute for Advanced Science& Technology, USA
16:35-17:00PM	A12: Localization and Delocalization in Two-Dimensional Quantum World	Sergey Kravchenko Northeastern University, USA
17:00-17:25PM	A13: Waveguide QED toolboxes for synthetic quantum matter	Ying Dong University of Waterloo, Canada

17:25PM	Dinner Social	
Saturday Oct.14		
Room B		
Session: EMN Summit Nano IX Chair: Koichi Yamashita		
9:00-9:25AM	B01:Electroless deposition of metal nanoparticles on silicon and its application for microstructure production	Shinji YAE University of Hyogo, Japan
9:25-9:50AM	B02: Engineering Geometry of Silicon Nanowires by Metal-Assisted Chemical Etching Method	Yun Chen Guangdong University of Technology, China
9:50-10:15AM	B03: Atomic and Electronic Reconstruction of Grain Boundaries in Titania	Zhongchang Wang International Iberian Nanotechnology Laboratory (INL), Portugal
10:15-10:45AM	Session Break	
Session: EMN Summit Nano X Chair: Zhongchang Wang		
10:45 -11:10AM	B04:Fabrication and electrochemical performance of core-shell structured composites	Yan Wang University of Electronic Science and Technology of China, China
11:10-11:35AM	B05: Preparation and application of Nano-PAA-ZnCl ₂ with controllable morphology	Kaige Wang Northwest University, China
11:35-12:00AM	B06: Thermal Effect on the Morphology and Performance of Organic Photovoltaics	Koichi Yamashita The University of Tokyo, Japan
12:00-14:00PM	Lunch Break	
Session: EMN Summit Fiber Chair: Wengang Bi		
14:00-14:25PM	B07: Optical trapping and optical manipulation using fiber probes	Baojun Li Jinan University, Guangzhou, China
14:25 -14:50PM	B08: A linewidth controllable single-frequency fiber laser by optical feedback	Shanhui Xu South China University of Technology, China
14:50 -15:15PM	B09: Electronic and superconducting properties of MX ₂ and boron nanostructures	Jun Ni Tsinghua University, China
15:15 -15:40PM	B10: Fiber Bragg Grating Sensing Technologies for Mechanical Vibration Measurement	Tianliang Li/Kai Zheng Nanyang Technological University, singapore/Chongqing University of Posts and Telecommunications, China
15:40-16:10PM	Session Break	

Session: EMN Summit Nano XI Chair: Robert J. Young		
16:10-16:35PM	B11: 2D Materials and the hetero-structures: Science and applications	Swastik Kar Northeastern University, USA
16:35-17:00PM	B12: Nanoarchitectures of Abundant Materials for Solar Energy Conversion Technologies	Oomman K Varghese Univ Houston, USA
17:00-17:25PM	B13: Plasma-induced, nitrogen-doped graphene-based aerogels for high-performance supercapacitors	Wei LV Changchun University of Technology, China
17:25PM	Dinner Social	
Program for EMN and Quantum SUMMIT 2017		
Sunday Oct.15		
Room A		
Session: EMN Summit Nano XII Chair: Jun Ni		
9:00-9:25AM	A01: InAsSb nanowire based quantum materials efficient photodetection	Qiandong Zhuang Lancaster University, UK
9:25-9:50AM	A02: Elastic and anelastic properties related to phase transitions in functional materials	Zhiying Zhang Wuhan University of Technology, China
9:50-10:15AM	A03: Electronic states and atomic arrangements of functional nanoparticles obtained from synchrotron-based x-ray characterization	Osami Sakata National Institute for Materials Science, Japan
10:15-10:45AM	Session Break	
Session: EMN Summit Emerging Technologies Chair: Qiandong Zhuang		
10:45 -11:10AM	A04: Multifunctional materials for emerging technologies	Federico Rosei INRS-EMT, Univ. du Quebec, Canada
11:10-11:35AM	A05: To map the local temperature distribution of a single live cell	Shengyong Xu Peking University, China
11:35-12:00PM	A06: 2D fillers for polymeric membranes for advanced water treatment	Maria Giovanna Buonomenna Consiglio nazionale dei Chimici (CNC), Italy
12:00-14:00PM	Lunch Break	
Session: EMN Summit Nano XIII Chair: Bin Tang		

14:00-14:25PM	A07: Visible-Light Photoactivity of Bi-Pyrochlores	Matjaz Valant University of Nova Gorica, Slovenia
14:25 -14:40PM	A08:Size effects on Rhodium nanoparticles related to hydrogen-storage ability	Chulho Song National Institute for Materials Science, Japan
14:40 -14:55PM	A09:Stacking fault density and bond orientational order of fcc ruthenium nanoparticles	Okkyun Seoh National Institute for Materials Science, Japan
14:55 -15:10PM	A10:Synchrotron X-ray characterization of Mg _x Ni _{1-x} O epitaxial thin films	Yanna Chen National Institute for Materials Science, Japan
15:10 -15:35PM	A11:Grafted L-Proline on Nanomagnetic Materials: Syntheses and Catalytic Applications	Ali Ramazani University of Zanjan, Iran
15:35-16:10PM	Session Break with Poster Display	
Session: EMN Summit Nano XIV Chair: Shukai Duan		
16:10-16:35PM	A12: Functional Micro/Nano Structures Achieved by Multiphoton Process	Meiling Zheng Technical Institute of Physics and Chemistry, Chinese Academy of Sciences, China
16:35-17:00PM	A13: Wetting behaviors of liquid metal drops on polycrystalline alumina substrates under high magnetic fields	Qiang Wang NEU Northeastern University, China
17:00-17:25PM	A14: Pillar-layered MOFs; functionality, interpenetration, flexibility and applications	Ali Morsali Tarbiat Modares University, Iran
17:25PM	Dinner Social	