

Wednesday Dec. 9		
Room A		
7:00-8:00 AM	Breakfast	
Session: Graphene I		
8:00-8:25AM	A01: Quasiparticle scattering in epitaxial graphene nanoflakes	Mikhail Fonin University of Konstanz, Germany
8:25-8:50AM	A02: Band structure of silicene and phosphorene compared to graphene	Lok Lew Yan Voon The Citadel, USA
8:50-9:15AM	A03: Dilute fluorination of graphene: engineering charge transport and spin-flip scattering	Jun Zhu The Pennsylvania State University, USA
9:15-9:40AM	A04: Spin transport in graphene on SrTiO ₃	Tamalika Banerjee University of Groningen, The Netherlands
9:40-10:05AM	A05: On the quest for intrinsic spin lifetimes in graphene spin-valves	Bernd Beschoten RWTH Aachen University, Germany
10:05-10:20AM	Session Break	
Session: Complex Magnets & Skyrmions I		
10:20 -10:45AM	A06: Skyrmions dressed with ferroelectric polarization and a zoo of multiferroic phases in the lacunar spinel GaV ₄ S ₈	Alois Loidl University of Augsburg, Germany
10:45-11:10AM	A07: Skyrmions in confined Geometry	Mingliang Tian Hefei Institute for Physical Science, CAS, China
11:10-11:35PM	A08: A neutron scattering study of the cycloidal order and Néel-type skyrmion lattice in GaV ₄ S ₈	Sandor Bordacs Budapest University of Technology and Economics, Hungary
11:35-12:00PM	A09: Electric Field-Induced Skyrmion Distortion and Giant Lattice Rotation in the Magnetoelectric Insulator Cu ₂ OSeO ₃	Jonathan White Paul Scherrer Institute, Switzerland
12:00-13:00PM	Session Break	
Session: Terahertz Technology I		
13:00-13:25PM	A10: Terahertz spectroscopy on condensed matter	Keisuke Tominaga Kobe University, Japan
13:25 -13:50PM	A11: MCT heterostructures grown by MBE for IR and THz detectors	Sergey A. Dvoretzky Siberian Branch of the Russian Academy of Sciences, Russia
13:50 -14:15PM	A12: Current Update in Application of THz Spectroscopy - to Biological System From Medicines	Masae Takahashi Tohoku University, Japan

14:15 -14:40PM	A13: Exploration of the Interlayer Chemistry in Clay Minerals by Terahertz Spectroscopy	Ingrid Wilke Rensselaer Polytechnic Institute, USA
14:40-15:05PM	A14: Generation and detection of continuous THz-waves using InP-based ultrafast devices	Hiroshi Ito Kitasato University, Japan
15:05-15:20PM	Session Break	
Session: Complex Magnets & Skyrmions II		
15:20-15:45PM	A15: Nonreciprocal magnon propagation in a noncentrosymmetric ferromagnet LiFe_5O_8	Yoshinori Onose University of Tokyo, Japan
15:45-16:10PM	A16: Various magnetoelectric couplings in multiferroic materials	Nobuo Furukawa Aoyama Gakuin University, Japan
16:10-16:35PM	A17: Recent Progress in highly ordered double-perovskite $\text{Bi}_2\text{FeMnO}_6$ epitaxial thin film	Chun-Gang Duan East China Normal University, China
16:35-17:00PM	A18: Reproducible formation and features of single bubble state in array of Co/Ni dots	Thomas Hauet University of Lorraine, France
17:00-17:25PM	A17: Toward the realization of a single atom magnet	Fabio Donati Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland
18: 00PM	Dinner Social	

Wednesday Dec. 9		
Room B		
7:00-8:00AM	Breakfast	
Session: General I		
8:00-8:25AM	B01: Motor molecules	Michel A. Van Hove Hong Kong Baptist University, Hong Kong
8:25-8:50AM	B02: Nuclear spin polarization and manipulation in semiconductor quantum systems	Yoshiro Hirayama Tohoku University, Japan
8:50-9:15AM	B03: Group IV compounds on insulator for electronic and photonic convergence	Frederic Gardes University of Southampton, UK
9:15-9:40AM	B04: Identifying Carbonaceous Promoter in MoS ₂ Synthesis Process	Hui Ying Yang Singapore University of Technology and Design, Singapore
9:40-9:55AM	B05: Utilization Potential of Daylighting in Building Using Light Pipe in Tropical Climate	Surawut Chuangchote King Mongkut's University of Technology Thonburi, Thailand
10:05-10:20AM	Session Break	
Session: Surface and Interface Analysis I		
10:20 -10:45AM	B06: Development of Large-Scale Molecular Dynamics Simulator for the Design of Solid Oxide Fuel Cell	Momoji Kubo Tohoku University, Japan
10:45-11:10AM	B07: Phenomena in Self-Organized Epitaxial Nanostructure Growth and Structures in the Dimensional Crossover Regimes	Bhupendra N. Dev Indian Association for the Cultivation of Science, India
11:10-11:35AM	B08: Electric-field-induced strain transfer effect in multiferroic heterostructures	Tomoyasu Taniyama Tokyo Institute of Technology, Japan
11:35-12:00PM	B09: Modifications in atomic structure and correlated electronic properties of Bi ₂ Se ₃ (0001) surfaces doped with non-metallic elements	Sumalay Roy Max Planck Institute of Microstructure Physics, Germany
12:00-13:00PM	Lunch Break	
Session: Nanocomposites for Advanced Technologies I		
13:00-13:25PM	B10: Luminescent supramolecular gel-based transparent polymer film for light management	Hiroataka Ihara Kumamoto University, Japan
13:25 -13:50PM	B11: Nanomaterials for functional and 3D printing	Shlomo Magdassi The Hebrew University of Jerusalem, Israel

13:50 -14:15PM	B12: Facile synthesis of smart polymeric nanocomposites via click chemistry	Monalisa Mukherjee Amity University, India
14:15 -14:40PM	B13: Fabrication and characterizations of silver nanoparticles-loaded regenerated cellulose hydrogel: stabilization using graphene oxide and chitosan	Chin-Hua Chia National University of Malaysia, Malaysia
14:40-15:05PM	B14: Simulation, Fabrication, and Characterization of High Permittivity Core-Shell Nanocomposites for Energy Storage and Thermal Management Solutions	Nacer Badi University of Tabuk, Saudi Arabia; University of Houston, USA
15:05-15:20PM	Session Break	
Session: Graphene II		
15:20-15:45PM	B15: Synthesis of Hybrid Graphene-Porphyrin Nanofiber Structures by Ionic Self-Assembly	Valentinas Snitka Kaunas University of Technology, Lithuania
15:45-16:10PM	B16: Spin-dependent electronic transport in transition metal dichalcogenides	Mikito Koshino Tohoku University, Japan
16:10-16:35PM	B17: Dirac-spectrum dependence of hot carrier dynamics in graphene	Jeng-Chung Chen National Tsing-Hua University, Taiwan
16:35-17:00PM	B18: Mechanics of graphene and graphene oxide	Tobin Filleter University of Toronto, Canada
17:00-17:25PM	B19: Carbon based energy-saving system —in a case of capacitor	Toyoko Imae National Taiwan University of Science and Technology, Taiwan
18:00PM	Dinner Social	

Wednesday Dec. 9		
Room C		
7:00-8:00AM	Breakfast	
Session: Terahertz Technology II		
8:00-8:25AM	C01: Nonlinear optical THz-wave generation and applications	Kodo Kawase Nagoya University, Japan
8:25-8:50AM	C03: Catalytic reaction evaluated by a terahertz chemical microscopy	Toshihiko Kiwa Okayama University, Japan
8:50-9:15AM	C04: Non-destructive evaluation of organic conducting polymer by ultrabroadband THz-IR-vis spectroscopy	Chiko Otani RIKEN, Japan
9:15-9:40AM	C04: Detection of THz Excitation, Manipulation and Destruction of Quantum Orbital Wavepackets in Si:P Using a Voltage Meter	Juerong Li University of Surrey, UK
9:40-10:05 AM	C05: Developments of terahertz electric-field vector measurement systems and its applications	Shinichi Watanabe Keio University, Japan
10:05-10:20AM	Session Break	
Session: Nanoparticulate Catalysis I		
10:20 -10:45AM	C06: Plasmonic Nanostructures Induced Surface Photochemistry	Micha Asscher The Hebrew University of Jerusalem, Israel
10:45-11:10AM	C07: Relationship between the thermal treatment and photocatalytic activity of hydrogenated titanium dioxide	Joon Ching Juan University of Malaya, Malaysia
11:10-11:35AM	C08: Synthesis of rhenium carbide at ambient pressure-temperature used as a catalyst in hydrogen production from coconut shell	Miguel Avalos-Borja IPICYT, Mexico
11:35-12:00PM	C09: Catalysis by gold	Peter Miedziak Cardiff University, UK
12:00-13:00PM	Lunch Break	
Session: Complex Magnets & Skyrmions III		
13:00-13:25PM	C10: Chiral magnetic skyrmions -insight from materials specific theory	Stefan Blügel Forschungszentrum Jülich, Germany
13:25 -13:50PM	C11: Chiral interactions in thin film magnets	Christopher H. Marrows University of Leeds, UK
13:50 -14:15 PM	C12: Magnetic textures in chiral magnetic thin films	Theodore Monchesky Dalhousie University, Canada

14:15 -14:40PM	C13: Ultrafast dynamic of magnetic vortex under perpendicular AC magnetic field	Ruifang Wang Xiamen University, China
14:40-15:05PM	C14: Exciting skyrmions and helices in chiral magnets	Markus Garst University of Cologne, Germany
15:05-15:20PM	Session Break	
Session: General II		
15:20-15:45PM	C15: Hydrophobic and self-healing light-to-heat conversion membrane for water distillation	Peng Wang King Abdullah University of Science and Technology, Saudi Arabia
15:45-16:10PM	C16: Heat transport and magnetic phase transitions of low-dimensional quantum magnets	Xuefeng Sun University of Science and Technology of China, China
16:10-16:35PM	C17: The investigation of electrical transport properties and the fabrication of optoelectronic devices	Zuliang Du Henan University, China
16:35-17:00PM	C18: Fabrication and Properties of Ag Nanowire Transparent Conductive films by Organic Precursor Painting Reduction Method	Yamato Hayashi Tohoku University, Japan
17:00-17:15PM	C19: Ultrahigh electrocatalytic activity of Pd coated on 3D reduced graphene oxide aerogel paper toward an oxidation reaction of ethylene glycol in alkaline solution	Atiweena Krittayavathananon Vidyasirimedhi Institute of Science and Technology, Thailand
18:00PM	Dinner Social	

Thursday Dec. 10		
Room A		
7:00-8:00AM	Breakfast	
Session: Ultrathin Inorganic Materials I		
8:00-8:25AM	A20: Extremely High Sensitivity of Charge Transport to Magnetic Field in Ferromagnet/Insulator/Semiconductor Hybrid Structures	Nikita Volkov Siberian Branch of Russian Academy of Science, Russia
8:25-8:50AM	A21: First-principles simulation on piezoresistivity in semiconducting nanomaterials	Koichi Nakamura Kyoto University, Japan
8:50-9:15AM	A22: Exciton and Valley dynamics in transition metal di-chalcogenides mono-layers and their alloys: an optical investigation	Thierry Amand Toulouse University, France
9:15-9:40AM	A23: Electronic and magnetic properties of hybrid two-dimensional structures	JaeDong Lee DGIST Light and Matter Theory Laboratory, Korea
9:40-10:05 AM	A24: Thermoelectric properties and Resonant Raman spectra in transition metal dichalcogenides	Teng Yang Institute of Metal Research, CAS, China
10:05-10:20AM	Session Break	
Session: Terahertz Technology III		
10:20 -10:45AM	A25: A New Method of Microscopy in the Terahertz	Susumu Komiyama The University of Tokyo, Japan
10:45-11:10AM	A26: Narrowband Terahertz Emitter based on GaAs based High Electron Mobility Transistors	Jae-Hyung Jang Gwangju Institute of Science and Technology, Korea
11:10-11:35AM	A27: Original Probes and Circuits for Terahertz and Infrared Near Field Microscopy	Tahsin Akalin IEMN, DHS Dpt., Lille University, France
11:35-12:00PM	A28: Full-range Gate-controlled Terahertz Phase Modulation with Graphene Metasurfaces	Qiong He Fudan University, China
12:00-13:00PM	Lunch Break	
Session: Surface and Interface Analysis II		
13:00-13:25PM	A29: Transmission-induced metal-dielectric multilayered metamaterial	Yi-Jun Jen National Taipei University of Technology, Taiwan
13:25 -13:50PM	A30: Light polarization as sensitive probe of nanomaterials properties	Jan Mistrik University of Pardubice, Czech Republic

13:50 -14:15PM	A31: Highly spin-polarized electronic interface states: a common feature of ferromagnetic metal-organic interfaces	Wolfgang Weber IPCMS, Université de Strasbourg, France
14:15 -14:40PM	A32: Quantum analysis of localized surface plasmons in an asymmetric nano-structure of matamaterial	Byoung Ham Gwangju Institute of Science and Technology, Korea
14:40-15:05PM	A33: Nano-scale phenomena induced by electric field in scanning tunneling microscopy and their applications	Wei-Bin Su Institute of Physics, Academia Sinica, Taiwan
15:05-15: 20PM	Session Break	
Session: Graphene III		
15:20-15:45PM	A34: Graphene on Metal Surfaces: Adsorption and Intercalation	Jörg Kröger Technical University of Ilmenau, Germany
15:45-16:10PM	A35: Dirac physics in artificial graphene	Esa Rasanen Tampere University of Technology, Finland
16:10-16:35PM	A36: Optical conductivity of quasifreestanding multilayer epitaxial graphene on the C-face of SiC at low and high energies	Iman Santoso Universitas Gadjah Mada, Indonesia
16:35-17:00PM	A37: High-performance Supercapacitor of Ultrahigh Porous N-doped Reduced Graphene Oxide Aerogel Coated on Carbon Fiber Paper	Montree Sawangphruk Vidyasirimedhi Institute of Science and Technology, Thailand
17:30PM	Dinner Social	

Thursday Dec. 10		
Room B		
7:00-8:00AM	Breakfast	
Session: Complex Magnets & Skyrmions IV		
8:00-8:25AM	B20: Anatomy of Dzyaloshinskii-Moriya interaction and mechanisms of its tuning at transition metal interfaces	Mairbek Chshiev INAC-SPINTEC, CEA, France
8:25-8:50AM	B21: Determination of Dzyaloshinskii-Moriya Interaction Energy in the broken inversion symmetry systems	Chun-Yeol You Inha University, Korea
8:50-9:15AM	B22: Spin Orbit Torques for ultra-low Power Computing	Weisheng Zhao Beihang University, China
9:15-9:40AM	B23: Spintronics with 2D Materials	Yongbing Xu Nanjing University, China; York University, UK
9:40-10:05AM	B24: Interfacial contribution of the spin-orbit torques in heavy metal/ferromagnet/oxide structures	Byong-Guk Park Korea Advanced Institute of Science and Technology, Korea
10:05-10:20AM	Session Break	
Session: Graphene IV		
10:20 -10:45AM	B25: Interplay of Spin and Valley in 2D materials	Guido Burkard University of Konstanz, Germany
10:45-11:10AM	B26: Structure and Properties of certain Graphene-based 2-D Nanomaterials	Cristian V. Ciobanu Colorado School of Mines, USA
11:10-11:35AM	B27: Optical signatures of states bound to vacancy defects in monolayer MoS2	Michael N. Leuenberger University of Central Florida, USA
11:35-12:00PM	B28: Spintronics with two-dimensional materials and its van der Waals heterostructures	Saroj Prasad Dash Chalmers University of Technology, Sweden
12:00-13:00PM	Lunch Break	
Session: Terahertz Technology IV		
13:00-13:25PM	B29: Electro-optic sampling of terahertz pulses based on non-collinear Cherenkov phase-matching	Masahiko Tani University of Fukui, Japan
13:25 -13:50PM	B30: Extreme Nonlinear Terahertz Optics	Tsuneyuki Ozaki INRS-EMT, Canada
13:50 -14:15PM	B31: Terahertz Transitions in Narrow-Gap Carbon Nanotubes and Graphene Nanoribbons	Mikhail E. Portnoi University of Exeter, UK

14:15 -14:40PM	B32: THz laser sources using cascaded stimulated polariton scattering	Andrew Lee Macquarie University, Australia
14:40-15:05PM	B33: Development of GaN/AlGaN based Terahertz Quantum Cascade Lasers	Wataru Terashima RIKEN, Japan
15:05-15: 20PM	Session Break	
Session: Novel Materials for Electrochemical Energy Storage and Conversion I		
15:20-15:45PM	B34: Nanosheet-derived Metal-oxide Electrodes for Electrochemical Capacitors and their Applications to Thin Film Devices	Masaru Miyayama The University of Tokyo, Japan
15:45-16:10PM	B35: A Simple Synthesis of Porous Graphene Based Nanomaterials as Anode Materials for Li-ion Batteries	Yuanzhe Piao Seoul National University, Korea
16:10-16:35PM	B36: Looking for New Electrode Materials for Na and Li ion batteries: a good way to discover original redox mechanism	Valerie Pralong Laboratoire CRISMAT-ENSICAEN/CNRS, France
16:35-17:00PM	B37: Ab-initio Computations on Electrode Material System of Lithium Battery	Qianfan Zhang Beihang University, China
17:30PM	Dinner Social	

Thursday Dec. 10		
Room C		
7:00-8:00AM	Breakfast	
Session: General III		
8:00-8:25AM	C20: Extreme detection based on plasmonic nanoblock	Soon-Hong Kwon Chung-Ang University, Korea
8:25-8:50AM	C21: Fe-excess Ions as Electronic Charge Suppliers for Zero Thermal Expansion in the Normal State of $\text{Fe}_{1.16}\text{Te}_{0.6}\text{Se}_{0.4}$	Wen-Hsien Li National Central University, Taiwan
8:50-9:15AM	C22: Electron emission from diamond surfaces for night vision applications	Richard B. Jackman University College London, UK
9:15-9:40AM	C23: Electric detection of spin fluctuation	Zhiyong Qiu Tohoku University, Japan
9:40-10:05AM	C24: To be updated	Omar A. Alhartomy King Abdulaziz University, Saudi Arabia
10:05-10:20AM	Session Break	
Session: Complex Magnets & Skyrmions V		
10:20 -10:45AM	C25: Engineering magnetic order in multiferroic nano composites	Jamal Berakdar Martin-Luther-Universität Halle-Wittenberg, Germany
10:45-11:10AM	C26: Spin meta-structures for information processing : Coupled gyration modes in vortex and vortex-antivortex lattices	Sang-Koog Kim Seoul National University, Korea
11:10-11:35AM	C27: Skyrmions in Frustrated Magnets	Maxim Mostovoy University of Groningen, The Netherlands
11:35-12:00PM	C28: Néel-type magnetic skyrmions with ferroelectric vortex cores	Istvan Kezsmarki Budapest University of Technology and Economics, Hungary
12:00-13:00 PM	Lunch Break	
Session: Nonlinear Systems I		
13:00 -13:25PM	C29: Bose-Einstein condensation of photons and periodic potentials for light	Martin Weitz University of Bonn, Germany
13:25 -13:50PM	C30: Stochastic Resonance in Nonlinear Electron Devices and Its Application	Seiya Kasai Hokkaido University, Japan
13:50 -14:15PM	C31: Modeling ribosomal movement	Tamir Tuller Tel Aviv University, Israel

Session: Graphene V		
14:15 -14:40PM	C32: Multiple electron scatterings in graphene	Hyung-Joon Shin Ulsan National Institute of Science and Technology, Korea
14:40 -15:05PM	C33: Graphene reduction dynamics probed with photo-electron spectroscopy	Wei Yen Woon National Central University, Taiwan
15:05-15: 20PM	Session Break	
Session: Nonlinear Systems II		
15:20-15:45PM	C34: Nonlinear charge dynamics in solids induced by ultrashort electric field transients	Thomas Elsaesser Max-Born-Institut für Nichtlineare Optik und Kurzzeitspektroskopie, Germany
15:45-16:10PM	C35: Nonlinear optical response of nanomaterials	Yoshihiko Takeda National Institute for Materials Science, Japan
16:10-16:35PM	C36: Wavelength conversion using quadratic optical nonlinearities in compound semiconductors	Takashi Kondo The University of Tokyo, Japan
16:35-17:00PM	C37: Fibered Optomechanical Sensing with III-V semiconductor disks	Biswarup Guha University of Paris Diderot, France
17:30PM	Dinner Social	

Thursday Dec. 10		
Room D		
7:00-8:00AM	Breakfast	
Session: Graphene VI		
8:00-8:25AM	D01: Opportunities for spintronics with novel 2d materials	Jaroslav Fabian University of Regensburg, Germany
8:25-8:50AM	D02: Towards all-electric spintronics in 2D carbon platforms	Aires Ferreira University of York, UK
8:50-9:15AM	D03: Controlling Spin Currents in Graphene and Two Dimensional Materials	Miguel A. Cazalilla National Tsing Hua University, Taiwan
9:15-9:40AM	D04: Computational Study of Defects and Dopants in Two Dimensional Materials	Gun-Do Lee Seoul National University, Korea
9:40-10:05AM	D05: Ion transport in 2D materials	Wenzhong Bao Fudan University, China
10:05-10:20AM	Session Break	
Session: General IV		
10:20 -10:45AM	D06: To be updated	Seong Chan Jun Yonsei University, Korea
10:45-11:10AM	D07: To be updated	Norbert Nickel Helmholtz-Zentrum Berlin für Materialien und Energie GmbH, Germany
11:10-11:35AM	D08: RFID tags composed of organic CMOS circuits	Hiroyuki Matsui The University of Tokyo, Japan
11:35-11:50PM	D09: Interpreting core-level spectra of oxidizing phosphorene: Theory and Experiment	Baojuan Dong Institute of Metal Research, CAS, China
12:00-13:00PM	Lunch Break	
Session: Plasma Electronics and Lasers I		
13:00-13:25PM	D10: Graphene synthesis by plasma process towards high-throughput production	Masataka Hasegawa AIST Nanomaterials Research Institute, Japan
13:25 -13:50PM	D11: Group-IV Quantum-Heterostructure Formation Based on Low-Energy Plasma CVD towards Electronic Device Application	Masao Sakuraba Tohoku University, Japan
13:50 -14:15PM	D12: H Atom Density Diagnostics in High-Pressure Microwave Hydrogen Plasma by Power Balance Calorimetry and Actinometry	Takahiro Yamada Osaka University, Japan

Session: Ultrathin Inorganic Materials II		
14:15 -14:40PM	D13: Ab initio theory of point defects in 2D transition metal dichalcogenides	Biplab Sanyal Uppsala University, Sweden
14:40-15:05PM	D14: The synthesis of two dimensional transition metal dichalcogenides for energy applications	Hyungjun Kim Yonsei University, Korea
15:05-15: 20PM	Session Break	
Session: Complex Magnets & Skyrmions VI		
15: 20-15:45PM	D15: Magnetic anisotropy : theoretical insight and prospects	Nathalie Guihery Universit éToulouse 3-Paul Sabatier, France
15:45-16:10PM	D16: Frustration-induced symmetric skyrmion lattices in triangular magnets	Hikaru Kawamura Osaka University, Japan
16:10-16:35PM	D17: Electric field – Magnetic field phase diagram of cycloidal multiferroic BiFeO ₃	Rogério de Sousa University of Victoria, Canada
16:35-17:00PM	D18: Exploring the structural, optical, and magnetic properties of Cu ₂ OSeO ₃	Heribert Wilhelm Diamond Light Source Ltd., UK
17:30PM	Dinner Social	

Friday Dec. 11		
Room A		
7:00-8:00AM	Breakfast	
Session: Complex Magnets & Skyrmions VII		
8:00-8:25AM	A38: Multiferroicity from charge and spin frustration in complex oxides	Manuel Angst Forschungszentrum Jülich, Germany
8:25-8:50AM	A39: Dramatically enhanced stability of the skyrmion phase	Henrik M. Ronnow Ecole Polytechnique federale de Lausanne (EPFL), Switzerland
8:50-9:15AM	A40: Ferroelectric Control of Dynamic Magnetic Permeability	Chenglong Jia Lanzhou University, China
9:15-9:40AM	A41: Dynamics of magnetic skyrmions in multiferroics	Masahito Mochizuki Aoyama Gakuin University, Japan
9:40-10:05AM	A42: Magnetic skyrmions in nanowire and nanodisk	Yan Zhou The University of Hong Kong, Hong Kong
10:05-10:20AM	Session Break	
Session: Microwave and Millimeterwave I		
10:20 -10:45AM	A43: Millimeter-Wave Multiband RFIC Chips for Next-Generation Communications and Sensing Systems	Cam Nguyen Texas A&M University, USA
10:45-11:10AM	A44: Development of On-Wafer Micro-Coaxial Technology for Microwave and Millimeterwave Applications	Hong Wang Nanyang Technological University, Singapore
11:10-11:35AM	A45: Microwave Absorption of Magnetic Nanoparticles and Their Composites with Epoxy Resin Matrix	XingLong Dong Dalian University of Technology, China
11:35-12:00PM	A46: Multiscale structured ultrathin metal surface for microwave manipulation by spoof surface plasmon polariton	Jun-Jun Xiao Harbin Institute of Technology, China
12:00-13:00PM	Lunch Break	
Session: Novel Materials for Electrochemical Energy Storage and Conversion II		
13:00-13:25PM	A47: Engineering the thermal conductivity in thermoelectric chalcogenides	Antoine Maignan Laboratoire CRISMAT-ENSICAEN/CNRS, France
13:25 -13:50PM	A48: Solid Electrolytes for Dye-Sensitized Solar Cells	Zhong-Sheng Wang Fudan University, China

13:50 -14:15 PM	A49: Interfacial Modification for Efficient Inverted Polymer Solar Cells	Xin Guo Dalian Institute of Chemical Physics, CAS, China
14:15 -14:40PM	A50: Higher Manganese silicide: understanding the Mn-Si phase diagram towards better thermoelectric properties	Franck Gascoin Laboratoire CRISMAT-ENSICAEN/CNRS, France
14:40-15:05PM	A51: Rare-earth ferrites : from multiferroicity to oxygen storage	Francoise Damay Laboratoire L éon Brillouin, CEA, France
15:05-15:20PM	Session Break	
Session: Surface and Interface Analysis III		
15:20-15:45PM	A52: A Theoretical Description of How Molecular Packing Influences the Electronic Coupling at the Donor–Acceptor Interfaces	Demetrio A. da Silva Filho University of Brasilia, Brazil
15:45-16:10PM	A53: Novel Interface Structure of Epitaxial Graphene on SiC	Michiko Kusunoki Nagoya University, Japan
16:10-16:35PM	A54: Flexible nanoparticle devices for tactile sensing	Watson Kuo National Chung Hsing University, Taiwan
16:35-17:00PM	A55: Using computer vision and machine learning to accurately model the electronic structure of non-equilibrium 2-d materials	Isaac Tamblyn University of Ontario, Canada
17:30PM	Dinner Social	

Friday Dec. 11 Room B		
7:00-8:00AM	Breakfast	
Session: Novel Materials for Electrochemical Energy Storage and Conversion III		
8:00-8:25AM	B38: ESR Studies of Titania Nanotubes Produced by Hydrothermal Process	Figen Kaya Yildiz Technical University, Turkey
8:25-8:50AM	B39: Reactive magnetron sputtering: a unique method to grow new materials in thin film form for energy applications	Jean-Francois Pierson University of Lorraine, France
Session: General V		
8:50-9:15AM	B40: Spectroscopy of Colloidal Quantum Dots: Multistate blinking and scaling of the recombination rates in individual silica coated CdSe/CdS nanocrystals	Anton Malko The University of Texas at Dallas, USA
9:15-9:40AM	B41: Exciton Transport, Annihilation, and Photon Emission Properties in Semiconductor Carbon Nanotubes	Andrei Piryatinski Los Alamos National Laboratory, USA
9:40-10:05 AM	B42: Sonoluminescence of Carbon Nanotubes	Oleksiy Roslyak Fordham University, USA
10:05-10:20AM	Session Break	
Session: Vacuum Electronics I		
10:20 -10:45AM	B43: Electron Beam Sources From Graphene Edge Emitters	Jeff Tsai National Taiwan Ocean University, Taiwan
10:45-11:10AM	B44: On Microfabricated TWTs Based on Planar Helix and Field-Emitter Array	Sheel Aditya Nanyang Technological University, Singapore
11:10-11:35AM	B45: Ru-based binary or ternary thin films by atomic layer deposition for a seedless Cu interconnects	Soo-Hyun Kim Yeungnam University, Korea
11:35-12:00PM	B46: Lithographically Integrated Microsupercapacitors for Compact, High Performance, and Designable Energy Circuits	Kazufumi Kobashi AIST Nanotube Research Center, Japan
12:00-13:00PM	Lunch Break	
Session: Terahertz Technology IV		
13:00-13:25PM	B47: Digital Metasurfaces for Advanced Terahertz Imaging	Willie Padilla Duke University, USA
13:25 -13:50PM	B48: Terahertz-Field-Induced Break Down in Metal Particles	Makoto Nakajima Osaka University, Japan
13:50 -14:15PM	B49: Enhancement of THz signal	Ekmel Ozbay

	intensity by plasmonic monopole nanoantenna	Bilkent University, Turkey
Session: General VI		
14:15 -14:40PM	B50: Scanning gate imaging in confined geometries	Richard Steinacher ETH Zurich, Switzerland
14:40-14:55PM	B51: Development of Transparent Conducting Films for Flexible Electrochromic Devices	Kanyanee Sanglee King Mongkut's University of Technology Thonburi, Thailand
15:05-15:20PM	Session Break	
Session: Graphene VII		
15:20-15:45PM	B52: Observation of Negative Refraction in Ballistic Graphene Heterojunctions	Hu-Jong Lee Pohang University of Science and Technology, Korea
15:45-16:10PM	B53: Interplay of wrinkles, strain, lattice parameter, and small angle rotational domains in Graphene on Iridium	Michael Horn von Hoegen University of Duisburg-Essen, Germany
16:10-16:35PM	B54: High-performance Supercapacitor of Ultrahigh Porous N-doped Reduced Graphene Oxide Aerogel Coated on Carbon Fiber Paper	Montree Sawangphruk Vidyasirimedhi Institute of Science and Technology, Thailand
16:35-17:00PM	B55: Comparing graphene growth on Cu(111) vs. oxidized Cu(111)	Meike Stohr University of Groningen, The Netherlands
17:30PM	Dinner Social	

Friday Dec. 11		
Room C		
7:00-8:00AM	Breakfast	
Session: Nanocomposites for Advanced Technologies II		
8:00-8:25AM	C38: Liquid Phase Exfoliation of Layered Materials for Energy Storage and Other Advanced Applications	Valeria Nicolosi Trinity College Dublin, Ireland
8:25-8:50AM	C39: Applications for Oxides and Nitrides for Plasmonic Energy Transduction	Tadaaki Nagao National Institute for Materials Science, Japan
8:50-9:15AM	C40: Electrodeposited nanocomposite coatings against high temperature oxidation	Xiao Peng Institute of Metal Research, CAS, China
9:15-9:40AM	C41: Polymeric Anodes with Enhanced Conductivity for ITO-free Organic Photovoltaic Cells	Pen-Cheng Wang National Tsing Hua University, Taiwan
9:40-10:05AM	C42: Novel oxide based nanotubes for storage applications	Cengiz Kaya Yildiz Technical University, Turkey
10:05-10:20AM	Session Break	
Session: Graphene VIII		
10:20 -10:45AM	C43: Contact resistances in CVD graphene and functionalized graphene sheets for electronic applications	Gerd Bacher University of Duisburg-Essen, Germany
10:45-11:10AM	C44: Graphene for metal ion sensors and lipase immobilisation	Colin Barrow Deakin University, Australia
11:10-11:35AM	C45: Transfer of CVD-Grown Graphene for Organic Electronics	Wi Hyoung Lee Konkuk University, Korea
11:35-12:00PM	C46: Electronic properties of graphene-hBN heterostructures	Vladimir Falko Lancaster University, UK
12:00-13:00PM	Lunch Break	
Session: Complex Magnets & Skyrmions VIII		
13:00-13:25PM	C47: From the Helical to the Skyrmion Lattice Phases: A Neutron Spin Echo Study in MnSi	Catherine Pappas Delft University of Technology, The Netherlands
13:25 -13:50PM	C48: Confinement of Chiral Skyrmions in Ferroelectric Nanodots	Igor Luk'yanchuk University of Picardie, France
13:50 -14:15PM	C49: Depth-Profiling of Complex Magnetic Oxide Thin Films by Polarised Neutron Reflectometry	Frank Klose Australian Nuclear Science and Technology Organisation, Australia

14:15 -14:40PM	C50: Manipulation of Skyrmion dynamics	Ki-Suk Lee Ulsan National Institute of Science and Technology, Korea
14:40 -15:05PM	C51: Non-equilibrium Transports in Skyrmions	Jiadong Zang University of New Hampshire, USA
15:05-15:20PM	Session Break	
Session: General VII		
15:20-15:45PM	C52: Energy storage on carbon allotropes	Michael Probst University of Innsbruck, Austria
15:45-16:10PM	C53: To be updated	Meir Orenstein Department of Electrical Engineering, Technion, Israel
16:10-16:35PM	C54: To be updated	Yanming Hu Changchun Institute Of Applied Chemistry, CAS, China
16:35-16:50PM	C55: Improved stability of organic light-emitting diodes based on F8BT/TFB with a nickel oxide hole transport layer	Ken Nakakura Nihon University, Japan
17:30PM	Dinner Social	

Poster Session

Thursday, December 10th 15:00pm – 16:00pm

P-01	The Fabrication of Patterned Volumetric Flask-like ZnO Cavities and Their Optical Properties	Ke Cheng Henan University, China
P-02	Magnetic and Magnetoelectric Properties of the $\text{HoFe}_{3-x}\text{Ga}_x(\text{BO}_3)_4$ Multiferroics	Evgeniy Eremin Russian Academy of Science, Siberian Branch, Russia
P-03	Fabric energy harvesters utilizing polyvinylidene fluoride film as a piezoelectric capacitor	Shiori Hara Nihon University, Japan
P-04	Structural Regulation of Inorganic Crystals at Langmuir Monolayer Interface	Binbin Hu Henan University, China
P-05	Control of the physical properties of carbon nanofibers obtained from coaxial electrospinning of PAN and PMMA with adjustable inner/outer nozzle ends	Navaporn Kaerkitcha Kyoto University, Japan
P-06	Spin Relaxation in Spin—Orbit Coupled Graphene	Manuel Offidani University of York, UK
P-07	Computational Molecular-Level Optimization of a Polymer Consisting of Muscle-Like [c2]Daisy Chains	Yanling Zhao Hong Kong Baptist University, Hong Kong