Poster Session
March 9th & 10th

ICYS Researcher

PIR-1 Three-Dimensional Strutted-Graphene and its Supercapacitors
Xue-Bin Wang (ICYS-MAMA, NIMS)

PIR-2 Chop-nod method: Opening up a new world for surface analysis
Bo Da (ICYS-Sengen, NIMS)

PIR-3 Large negative linear compressibility in a dense metal-organic framework
Hamish H-M Yeung (ICYS-MAMA, NIMS)

PIR-4 Exploring the Potential of Porphyrinoids in Various Research Fields
Huynh Thien Ngo (ICYS-MAMA, NIMS)

PIR-5 Enhancement mode hydrogenated diamond MISFETs
Jiangwei Liu (ICYS-MAMA, NIMS)

PIR-6 Development of versatile receptor layer materials for nanomechanical sensor-based detection/discrimination
Kota Shiba (ICYS-MAMA, NIMS)

PIR-7 Electrical conductivity engineering of copper nanowire by graphene or boron-nitride coating layer
Nguyen Thanh Cuong (ICYS-MAMA, NIMS)

PIR-8 Steric effect in O_2 adsorption on Pt(111)
Hirokazu Ueta (ICYS-Sengen, NIMS)

PIR-9 A Temperature Responsive Micelle System for Efficient Anti-Cancer Drug Loading
Yohei Kotsuchibashi (ICYS-MAMA, NIMS)

PIR-10 Nanostructured interface for ideal and thermally stable diamond Schottky diodes
Alexandre Fiori (ICYS-MAMA, NIMS)

PIR-11 Growth of Coupled Quantum Dot-Ring structures by Multiple-Droplet Epitaxy Process
Martin Elborg (ICYS-Sengen, NIMS)

PIR-12 First-principles study of Dirac cone formation in a single-component molecular crystal under pressure
Takao Tsumuraya (ICYS-Namiki, NIMS)

PIR-13 Synthesis and photophysics of organic semiconductor microcrystals and nanowires
James W. Ryan (ICYS-GREEN, NIMS)

PIR-14 Hoop stress tolerance of a new high strength alloy laminated Bi-2223 conductor
Yasuyuki Miyoshi (ICYS-Sengen, NIMS)

PIR-15 Berezinskii-Kosterlitz-Thouless transition in atomic-layer superconductor on silicon surface
Shunsuke Yoshizawa (ICYS-MAMA, NIMS)

PIR-16 Efficient Electronic-Structure-Analysis Tool for Large-scale DFT Calculations
Ayako Nakata (ICYS-Namiki, NIMS)

PIR-17 Corrosion Fatigue of Ti-6Al-4V Alloy in a Simulated Body Fluid including Proteins and Cells
Kotaro Doi (ICYS-Sengen, NIMS)

PIR-18 Sacrificial Rotaxane – New Synthetic Route to Control Speed and Direction of Energy and Electron Transfer in Porphyrinoid Conjugates
Huynh Thien Ngo (ICYS-MAMA, NIMS)

Nano-Materials

PM-1 Oxidative Control of Resorcinarene Conformation
Jonathan P. Hill (WPI-MANA, NIMS)

PM-2 Multiferroic Properties of AMn_7O_{12} (A = Cd, Ca, Sr, and Pb) Perovskites
Alexei A. Belik (WPI-MANA, NIMS)

PM-3 Artificial design for perovskite ferroelectrics using nanosheet architectonics
Khan Muhammad Shuaib (WPI-MANA, NIMS/Waseda University)

PM-4 Nanostructuing of 1D Fullerene superstructure by with Naphthalene, Anthracene, and Pyrene
Qin Tang (Nanjing University of Science & Technology)

PM-5 Diacetylene monolayers and aggregates self-assembled on atomically flat surfaces
Elisseos Verveniotis (WPI-MANA, NIMS)

PM-6 Strain engineering of the mobility of individual Si nanowires
Dai-Ming Tang (WPI-MANA, NIMS)

PM-7 Atomic structures of nanomaterials analyzed by X-ray pair distribution functions
Satoshi Tominaka (WPI-MANA, NIMS)

PM-8 New Properties of hydroxylated h-BN
Qunhong Weng (WPI-MANA, NIMS)

PM-9 A Clear Guidance for Architecting Liquid Pyrenes with Tailorable Photophysical Properties
Fengniu Lu (WPI-MANA, NIMS)

PM-10 Chemistry of Liquid Porphyrins: Engineering with Branched Alkyl Chains
Avijit Ghosh (WPI-MANA, NIMS)

PM-11 Stability and quality of the aqueous colloidal suspension of chemically exfoliated MoS_2 nanosheets
Leanddas Nurdiwijayanto (WPI-MANA, NIMS)

PM-12 Bifunctional Oxygen Electrocatalysis with Cubic Phase α-Mn_2O_3 Prisms
Joel Henzie (WPI-MANA, NIMS)

PM-13 Hunting for Two-Dimensional Oxide Nanosheets and Their Architectures
Hyung-Jun Kim (WPI-MANA, NIMS)

PM-14 Surface modification of gold nanoparticles with porphyrins through a covalent and a topological linkage
Akira Shinohara (University of Yamanashi)

PM-15 Light-triggered assembly of spiropyran modified gold nanorods
Chihiro Mochizuki (University of Yamanashi)

PM-16 Tunable Electrochemical Properties of Graphene Oxide Nanosheets
Takaaki Taniguchi (WPI-MANA, NIMS)

PM-17 Encapsulation of highly swollen oxide crystals into a hydrogel matrix
Tatsumasa Hoshide (WPI-MANA, NIMS)

PM-18 Entropy Controlled Formation of Low-Symmetry Nanostructures via Self-Assembly
Daniel Packwood (WPI-AIMR, Tohoku University/JST (PRESTO))

PM-19 Nanowire Bending in Tandem with Photocurrent Spectroscopy in HRTEM
Chao Zhang (WPI-MANA, NIMS)

PM-20 Infrared Plasmonic Perfect Absorbers - Based Selective Infrared Devices
Thang Duy Dao (WPI-MANA, NIMS)

PM-21 *In situ* HRTEM Cyclic Telescoping of Multi-Walled Carbon Nanotubes
Ovidiu Cretu (WPI-MANA, NIMS)

PM-22 Orientation of Molecules on Aligned PTFE Surfaces through their Atomic Grooves
Toshihiko Tanaka (Fukushima College, National Institute of Technology)

PM-23 Aluminum Matrix Composites Reinforced with Multi-Walled BN Nanotubes Fabricated by a High-Pressure Torsion Technique
Yanming Xue (WPI-MANA, NIMS)

PM-24 Mass Production of 3D Strutted Graphene by Ammonium-assisted Chemical Blowing for High-performance Supercapacitors in Organic Electrolytes
Xiangfen Jiang (WPI-MANA, NIMS)

Nano-System

PS-1 Proposal for Achieving Topological Photonic Crystals by Dielectric Materials
Long-Hua Wu (WPI-MANA, NIMS)

PS-2 Quantum-dot transport in silicon-based tunnel field-effect transistors
Satoshi Moriyama (WPI-MANA, NIMS)

PS-3 Schottky Barrier Control in α-$MoTe_2$ for Ambipolar Carrier Transport
Shu Nakaharai (WPI-MANA, NIMS)

PS-4 Identifying the Majorana bound states in topological superconductors
Takuto Kawakami (WPI-MANA, NIMS)

PS-5 Multi-functional manipulations of resonant tunneling through molecular dots in Si-based double tunnel junction
Ryoma Hayakawa (WPI-MANA, NIMS)

PS-6 Fabrication and characterization of self-assembled hierarchal biomolecular structures
Makoto Sakurai (WPI-MANA, NIMS)

PS-7 *In Situ* Tuning of Magnetization and Magnetoresistance in Fe_3O_4 Thin Film Achieved with All-Solid-State Redox Device
Takashi Tsuchiya (WPI-MANA, NIMS)

PS-8 Enhanced brightness from Ge nanostructures sensitized by CdTe/PbS QDs
Satish L. Shinde (WPI-MANA, NIMS)

PS-9 Resonant non-radiative decay in nanoparticles for sunlight absorption
Satoshi Ishii (WPI-MANA, NIMS)

PS-10 Fabrication and Transport Characteristics of Hexagonal Boron Nitride (hBN)/Graphene/hBN Heterostructures
Katsuyoshi Komatsu (Tokyo Institute of Technology)

PS-11 Optoelectronic memory based on single-layer WSe_2 covered with Wo_x
Mahito Yamamoto (WPI-MANA, NIMS)

PS-12 Enormous Plasmonic Cavity Enhancement of Suspended Graphene Controlled by Silicon Nanoarchitecture for Surface-Enhanced Raman Scattering
Li-Wei Nien (National Taiwan University)

PS-13 High Temperature Selective IR Emitters Based on Plasmonic Perfect Absorber
Takahiro Yokoyama (WPI-MANA, NIMS)

PS-14 Magnetotransport of electric-field-induced charge carriers in diamond
Takahide Yamaguchi (NIMS)

PS-15 Superconducting Fibers of Fullerene-based Materials
Hiroyuki Takeya (NIMS)

PS-16 Resistive switching properties and current fluctuation in polymer-coated Ag nanowire network
Rintaro Higuchi (WPI-MANA, NIMS)

PS-17 Contact Conductance of a Graphene nanoribbon with its Graphene Nano-electrodes
Saurabh Srivastava (WPI-MANA, NIMS)

PS-18 Composition and Temperature Sensitive Conducting Gel
Rekha Goswami Shrestha (WPI-MANA, NIMS)

PS-19 LT-UHV-STM Characterization of Wafer-Fab Si(100)H Atomically Precise Surface Chip
Christian Joachim (Toulouse MANA Satellite)

PS-20 Conductivity measurement of Silver nanowires by MP-SPM
Ming Li (WPI-MANA, NIMS)

PS-21 Effects of the composition of Ta_2O_5 films on the resistive switching properties of Ta_2O_5 based atomic switches.
Cedric Mannequin (WPI-MANA, NIMS)

PS-22 Filament growth kinetics on resistive switching behavior in solid polymer electrolyte based planar devices
Karthik Krishnan (WPI-MANA, NIMS)

PS-23 Decision Maker based on Atomic Switches
Song-Ju Kim (WPI-MANA, NIMS)

PS-24 Highly Energy-Efficient Programmable Logic using Atom Switch
Toshitsugu Sakamoto (NEC)

Nano-Power

PP-1 Supramolecular polymer sensor toward personal monitoring of chemical warfare agents
Shinsuke Ishihara (MIT/NIMS)

PP-2 Tuning Doping Microstructures in Metal-free sp^2 Carbon to Promote Oxygen Reduction in Alkaline/acidic Medium
Lijun Yang (Nanjing University)

PP-3 CO_2 Conversion through Methane Reforming under Visible Light: Surface Plasmon Mediated Nonpolar Molecule Activation
Huimin Liu (WPI-MANA, NIMS)

PP-4 Deposition of SrB_6 Thin Films with MBE and CVD
Tommi Tynell (WPI-MANA, NIMS)

PP-5 Epitaxial Growth of $LiCoO_2$ Films with (001) Orientation
Koichi Okada (WPI-MANA, NIMS)

PP-6 Dimensionality of thermoelectric transport properties and electronic structures in layered complex metal nitrides
Isao Ohkubo (WPI-MANA, NIMS)

PP-7 Synthesis and Thermoelectric Properties of ternary higher borides $R_xAl_yB_{14}$ and quaternary borides in the *R*-site solid solution $(R1R2)_xAl_yB_{14}$
Satofumi Maruyama (WPI-MANA, NIMS)

PP-8 Active Sites Implanted Carbon Cages in Core-Shell Architecture: Highly Active and Durable Electrocatalysts for Hydrogen Evolution Reaction
Huabin Zhang (WPI-MANA, NIMS)

Nano-Life

PL-1 Effect of gold nanoparticles size and shape on osteogenic differentiation of human mesenchymal stem cells
Jingchao Li (WPI-MANA, NIMS)

PL-2 Boron-Cluster-containing Redox Nanoparticles Assisted Satisfactory Boron Neutron Capture Therapy, Leading to High Therapeutic Efficiency and Low Adverse Effects
Zhenyu Gao (University of Tsukuba)

PL-3 Oral administration of pH-sensitive redox nanoparticles provide skin protection against excessive exposure to ultraviolet radiation
Chitho P. Feliciano (University of Tsukuba/Philippine Nuclear Research Institute)

PL-4 Oral Redox Nanotherapeutics for Cancer Therapy – Suppressing Adverse Effects of Conventional Chemotherapy
Long Binh Vong (University of Tsukuba)

PL-5 Design of a novel molecular system targeting tumor hypoxia
Yutaka Ikeda (University of Tsukuba)

PL-6 Apoptotic Cell Membrane-inspired Nanomaterials for Immunomodulation
Yasuhiro Nakagawa (WPI-MANA, NIMS)

PL-7 3D nanofiber architecture for the model system to investigate the generation of corneal superstructure under the growing up stress
Hisatoshi Kobayashi (WPI-MANA, NIMS)

PL-8 A New Strategy for Creating Arbitrarily Shaped Hydrogels with PEG-base Self-healing Template
Takeshi Sato (University of Tsukuba)

PL-9 Material-Induced Senescence (MIS) for Cancer Therapy
Sharmy Saimon Mano (WPI-MANA, NIMS)

PL-10 Preparation of Viral Mimetic Surface via Layer-by-Layer Assembly for Cancer Immunotherapy
Takaharu Okada (University of Tsukuba)

PL-11 Appropriate Combinations of Polymeric Materials and Peptides Could Provide Selective Cell Adhesion
Rio Kurimoto (WPI-MANA, NIMS)

PL-12 Boron nitride nanotubes as vehicles for fluorescent probes
Jukka Niskanen (University of Montreal/University of Helsinki)

PL-13 Reduced adhesive ligand density induces an epithelial-mesenchymal-like transition
Jun Nakanishi (WPI-MANA, NIMS)

PL-14 Smart Nanofiber Meshes as A New Approach to Blood Dialysis Replacement
Ryo Takai (University of Tsukuba/WPI-MANA, NIMS)

PL-15 Smart Thermo/Chemo-therapeutic Nanofiber Meshes for A Combined Attached on Tumors
Eri Niiyama (WPI-MANA, NIMS)

PL-16 Functional Double-Shelled Silicon Nanocrystals for Two-Photon Fluorescence Cell Imaging
Sourov Chandra (WPI-MANA, NIMS)

PL-17 Development of Local Anesthetic Drug-Loaded Redox-Active Injectable Gel for Postoperative Pain Treatment
Yutaro Mizukoshi (University of Tsukuba)

PL-18 Impact of nanoparticles on the adhesion and spreading of cell aggregates on substrates
Grégory Beaune (WPI-MANA, NIMS)

PL-19 A Novel Purifying Method for Biomarkers using Clickable Thermo-responsive Polymer
Naoto Nomura (WPI-MANA, NIMS)

PL-20 DNA structure control immunostimulatory effect of CpG ODN
Kazuaki Hoshi (WPI-MANA, NIMS)

PL-21 Hydration-driven swelling and exfoliation of a layered perovskite niobate in quaternary ammonium hydroxide solutions
Yeji Song (WPI-MANA, NIMS)

PL-22 Time-dependent toxic effect and distribution of silver nanoparticles compared to silver ions in rats
Alaa Fehaid (WPI-MANA, NIMS)

PL-23 Design of a novel redox-polymer for stainless surface coating
Kouya Akasaka (University of Tsukuba)

PL-24 The Alteration in Leader Cell Appearance using Photoactivatable Substrates with Various Densities of Immobilized cRGD
Shimaa A. Abdellatef (WPI-MANA, NIMS)

PL-25 Modelling of Cell-Microparticle Hybrid Aggregates
Nagarajan Usharani (WPI-MANA, NIMS)

PL-26 Thermo/photo-sensitive star-shape PNIPAm based supramolecular system
Xuewei Zhang (University of Montreal)

PL-27 Effecting of polystyrene nanoparticles on the growth of human squamous carcinoma cell line A431
Le Thi Minh Phuc (WPI-MANA, NIMS)

PL-28 Low dose of Titanium Dioxide Nanoparticles Induce Cellular Proliferation of Hepatocyte Cell Line
Qingqing Sun (WPI-MANA, NIMS)