

Poster Session

27th February, 2013

ICYS Researcher

- PIR-1 *Adjusting interlayer-space of layered-double-hydroxide at Sub-Ångström precision based on homogeneous*
Shinsuke Ishihara (ICYS-MANA Researcher, NIMS)
- PIR-2 *Roles of trichomes with silica particles on the surface of a leaf in *Aphananthe aspera**
Hiroyuki Takeda (ICYS-Sengen Researcher, NIMS)
- PIR-3 *Control of order of phase transition by distortion effect in frustrated spin system*
Ryo Tamura (ICYS-Sengen Researcher, NIMS)
- PIR-4 *Carrier scattering mechanism in MoS₂ atomic sheets*
Song-Lin Li (ICYS-MANA Researcher, NIMS)
- PIR-5 *Characterization of pentacene-C₆₀ on TiO₂(101) by simultaneous STM/AFM*
Ce'sar Moreno (ICYS-Sengen Researcher, NIMS)
- PIR-6 *Revealing the anomalous tensile properties of WS₂ nanotubes by in situ transmission electron microscopy*
Dai-Ming Tang (ICYS-MANA Researcher, NIMS)
- PIR-7 *Synthesis of mesoporous titania thin films and its application to organic-inorganic hybrid solar cells*
Norihiro Suzuki (ICYS-Sengen Researcher, NIMS)
- PIR-8 *Micromagnetic simulations of magnetization reversals in Nd-Fe-B permanent magnets*
Hossein Sepehri-Amin (ICYS-Magne Researcher, NIMS)
- PIR-9 *An ultra-bright and monochromatic electron point source enabled by nanotechnology*
Han Zhang (ICYS-Sengen Researcher, NIMS)
- PIR-10 *Single-layer graphene growth on single crystal Pt(111) substrate*
Jianhua Gao (ICYS-Sengen Researcher, NIMS)
- PIR-11 *Self assembled monolayer (SAM): surface without bulk*
Hicham Hamoudi (ICYS-MANA Researcher, NIMS)
- PIR-12 *Oxygen tracer diffusion in Ba-Fe-based perovskite*
Ken Watanabe (ICYS-MANA Researcher, NIMS)
- PIR-13 *Micelles, gels and sheets: creating order from disorder in hydrophobic amphiphiles*
Martin Hollamby (ICYS-Sengen Researcher, NIMS)

Nano-Materials

- PM-1 *Highly emissive thermoformable conjugated polymers: a benefit of lacking $\pi - \pi$ stacking*
Chengjun Pan (Polymer Materials Unit, NIMS)
- PM-2 *Phosphorescence from pure organic fluorene derivative in solution at room temperature*
Jinjia Xu (Polymer Materials Unit, NIMS)
- PM-3 *Exploration of mid-temperature alkali-metal ion extraction from layered compounds using polytetrafluoroethylene and alkali-metal ion extracted layered compounds as precursors for metastable phase synthesis*
Tadashi Ozawa (MANA, NIMS)
- PM-4 *Synthesis and FRET properties of alternating donor–acceptor copolymer featuring orthogonally arrayed transition dipoles along polymer backbone*
Soichiro Ogi (Polymer Materials Unit, NIMS)
- PM-5 *Controlled growth of patterned WO₂ nanowire arrays on ITO glass substrate*
Fei Liu (Sun Yat-sen University)
- PM-6 *Utilization of multiwalled boron nitride nanotubes for the reinforcement of lightweight aluminum and aluminum alloy ribbons*
Maho Yamaguchi (MANA, NIMS)
- PM-7 *A first principles study of electronic and elastic properties in borides*
Ryoji Sahara (Tohoku University)
- PM-8 *A cyanurate gel derived from two different hydrogen-bonding Interactions in a binary system:evidence for the driving forces in gel formation.*
Sung Ho Jung (Gyeongsang National University)
- PM-9 *Luminescent metal-organic framework-functionalized graphene oxide nanocomposites and reversible detection of high explosives*
Ji Ha Lee (Gyeongsang National University)
- PM-10 *Synthesis of highly active and thermally stable nanostructured Pt/Clay materials by clay mediated In situ reduction*
Dharmesh Varade (Kawamura Institute of Chemical Research)
- PM-11 *A large family of polar materials in BiGaO₃-Based perovskites*
Alexei A. Belik (MANA Independent Scientist, NIMS)
- PM-12 *A new lead-free RbBiNb₂O₇ ferroelectric with high curie temperature*
Bao-Wen Li (MANA, NIMS)

- PM-13 *Mechanistic Study on Topochemical Transformation of Redoxable Transition-metal Hydroxides*
Renzhi Ma (MANA Scientist, NIMS)
- PM-14 *Study of electron spin resonance for $\text{EuFe}_2(\text{As}_{1-x}\text{P}_x)_2$ single crystals.*
Takanari Kashiwagi (University of Tsukuba)
- PM-15 *Design and analysis of the radiation pattern for the high- T_c superconducting THz source*
Manabu Tsujimoto (University of Tsukuba)
- PM-16 *Morphology-controlled nonwetting properties of BN nanostructure films*
Amir Pakdel (MANA, NIMS)

Nano-System

- PS-1 *Charge carrier generation and transportation along single planar polythiophene*
Kazunori Sugiyasu (Polymer Materials Unit, NIMS)
- PS-2 *Peptide-based neuromorphic nanostructures*
Rhiannon Creasey (MANA, NIMS)
- PS-3 *A guideline to estimate the phase transition density of thin plate-like nanoparticles*
Hitomi Nomura (Institute for Molecular Science)
- PS-4 *Approaching an inherent transport in atomically thin MoS_2 on crystalline hexagonal boron nitride substrates*
Mei Yin Chan (MANA, NIMS)
- PS-5 *Towards atomically precise manufacturing*
James Hugh Gervase Owen (Zyvex Labs)
- PS-6 *Energy-dependent phase-shift of electrons scattered in 2D subband states*
Katsumi Nagaoka (MANA, NIMS)
- PS-7 *Effects of dynamics of molecule and surface plasmons on light emission Induced by scanning tunneling microscopy*
Kuniyuki Miwa (Osaka University)
- PS-8 *Tunability of bilayer graphene junctions using a novel bandgap engineering*
Alex Aparecido Ferreira (MANA, NIMS)
- PS-9 *Selective adsorption of thiol molecules to sulfur vacancies on $\text{MoS}_2(0001)$, and repair of the vacancies via s-c dissociation*
Marina Makarova (MANA, NIMS)
- PS-10 *An improved MCMC of Heisenberg-model as an example of reduced usage of FFT*
Kazuhito Shida (IMR, Tohoku University)

- PS-11 *Anomalous behavior of supercurrent in ultra-small Josephson junction, and its application*
Daisuke Sakuma (Tokyo University of Science)
- PS-12 *Spectroscopic STM studies of Pt-porphyrin molecules on Cu(111)*
Puneet Mishra (MANA, NIMS)
- PS-13 *Joule's law for charge injection understanding in organic transistors*
Yong Xu (MANA, NIMS)
- PS-14 *Transport property of interface between domains of epitaxial CVD graphene*
Yui Ogawa (Kyushu University)
- PS-15 *Superconducting quantum interference devices based on Sr_2RuO_4*
Ryosuke Ishiguro (Tokyo University of Science)
- PS-16 *Field-induced quantum dots in graphene mesoscopic structures*
Satoshi Moriyama (MANA Independent Scientist, NIMS)
- PS-17 *Magnetic properties of multicomponent superconductors with time-reversal symmetry breaking*
Yuki Takahashi (MANA, NIMS)
- PS-18 *Proposal for manipulation of Majorana fermions in topological superconductors towards quantum computation*
Qifeng Liang (Theoretical physics unit, NIMS)
- PS-19 *Development of compact multiple scanning probe force microscope for electrical measurement of neuromorphic nanodevice*
Yoshitaka Shingaya (MANA Scientist, NIMS)
- PS-20 *Superconducting characteristics of $Si(111)-(\sqrt{7} \times \sqrt{3})-In$ covered with phthalocyanines*
Shunsuke Yoshizawa (MANA, NIMS)
- PS-21 *$AgX@CNHox$ hybrid film as an inorganic neuromorphic system*
Jianxun Xu (MANA, NIMS)
- PS-22 *Comprehensive developments of nanomechanical sensors; MSS*
Genki Yoshikawa (MANA Independent Scientist, NIMS)
- PS-23 *Low-temperature, fully-printed organic electronics using novel Au nanoparticle electrodes*
Takeo Minari (MANA Independent Scientist, NIMS)
- PS-24 *Vibrational spectroscopic study on adsorption state of CO on Ag(001)*
Ryuichi Arafune (MANA Independent Scientist, NIMS)
- PS-25 *Theoretical and experimental studies of atomic switch networks for reservoir computing*
Adam Stieg (UCLA)

Nano-Power

- PP-1 *Synthesis of highly Li-ion conductive $\text{Li}_3\text{xLa}_{2/3-\text{x}}\text{TiO}_3$ epilayers by composition control*
Tsuyoshi Ohnishi (MANA Scientist, NIMS)
- PP-2 *Synthesis of LiCoO_2 epitaxial thin film on single crystal SrTiO_3 substrates by sol-gel method*
Taeri Kwon (MANA, NIMS)
- PP-3 *Theoretical Study of Gas Storage Materials based on Clathrate Hydrate*
Hiroshi Mizuseki (IMR, Tohoku University)
- PP-4 *Flexible SnO_2 hollow nanosphere film based high-performance ultraviolet photodetector*
Wei Tian (MANA, NIMS)
- PP-5 *N-doped graphene-based sandwich papers as high-performance anodes for lithium-ion batteries*
Xi Wang (MANA, NIMS)
- PP-6 *New trend of functional meso/nanoporous materials*
Yusuke Yamauchi (MANA Independent Scientist, NIMS)
- PP-7 *Effect of pH and anion on the potential dependent adsorption of oxygen at a gold electrode surface studied by electrochemical quartz crystal microbalance*
Shengfu Tong (MANA, NIMS)
- PP-8 *Role of nitrogen doped structures in fixation of molecular catalyst on Ti electrode prepared by chemical and thermal treatments for water splitting application*
Rohit Khanna (Chubu University)
- PP-9 *Effect of trehalose on the stability of bilayer structure of DMPC in dehydration*
Ya Zhang (Hokkaido University)
- PP-10 *A new approach for Ge nanoparticles to separate by emission color*
Naoto Shirahata (MANA Independent Scientist, NIMS)
- PP-11 *Exploring photo-induced energy transfer dynamics on surfaces from Ultrafast Time-resolved SFG measurements*
Indrajit Bhattacharyya (MANA, NIMS)
- PP-12 *First principles modelling for dye-sensitised solar cells*
David Bowler (University College London)

Nano-Life

- PL-1 *Degradation behavior of a calcium phosphates-coated bioabsorbable magnesium alloy in a medium*
Sachiko Hiromoto (MANA Scientist, NIMS)
- PL-2 *Defect engineering in single-crystal SnO₂ by the application of stress and voltage*
Makoto Sakurai (MANA Scientist, NIMS)
- PL-3 *Tuning the properties of membrane-mimetic phosphorylcholine-substituted polysaccharides in thin films: An insight from optical and piezoelectric techniques*
Piotr Kujawa (Universite' de Montre'al)
- PL-4 *Preparation of PVA micropatterns with nanometer thickness for regulation of stem cell functions*
Xinlong Wang (MANA, NIMS)
- PL-5 *Single-walled carbon nanotubes functionalized with collagen for improved dispersibility and cellular uptake*
Hongli Mao (MANA, NIMS)
- PL-6 *Detection of influenza viruses by Fluorescence based SPR - High performance sensing by RNA-aptamers/PEG hybridized sensor*
Lakshmi Priya Thangavel (University of Tsukuba)
- PL-7 *Synthesis of calcium phosphate/alginate core/shell nanoparticles (CaP@alginate) through pre-gel method as a pH-responsive drug carrier*
Kevin C.-W. Wu (National Taiwan University)
- PL-8 *Highly stable PEGylated silica nanocomposite for high performance nanobiomaterials*
Md. Amran Hossain (University of Tsukuba)
- PL-9 *Redox-active Injectable Gel (RIG) for Treatments of Local Inflammation: Carrageenan-Induced Arthritis*
Min Ley Pua (University of Tsukuba)
- PL-10 *Interaction of redox nanoparticle with blood cells*
Madoka Shimizu (University of Tsukuba)
- PL-11 *Design and construction of a novel redox scaffold preventing cellular differentiations*
Hiromu Ito (University of Tsukuba)
- PL-12 *New PEGylation chemistry via newly designed glutaldehyde-ended poly(ethylene glycol)*
Jinya Katamachi (University of Tsukuba)
- PL-13 *Redox-Nanoparticle assisted delivery PPAR γ ligands for treatment of Prostate Cancer*
Sindhu Thangavel (University of Tsukuba)
- PL-14 *Protection of NSAIDs-induced small intestinal inflammation by redox nanoparticle*

Sha Sha (University of Tsukuba)

PL-15 *PEGylated iron oxide nanoparticles for doxorubicin delivery*

Magdalena Maria Halupka - Bryl (University of Tsukuba)

PL-16 *Redox-active nanoparticle as an adjuvant for chemotherapy enhances an activity of anticancer drug and suppresses its adverse effects*

Toru Yoshitomi (University of Tsukuba)

PL-17 *The effect of orally administered redox nanoparticles in colonic mucosa of mice with colitis*

Binh Long (University of Tsukuba)

PL-18 *Redox-active injectable gel for rheumatoid arthritis treatment*

Magdalena Bednarowicz (University of Tsukuba)

PL-19 *Controlling the surface physicochemical properties of the membrane-mimetic phosphorylcholine-substituted polysaccharide films*

Yiu Ting Richard Lau (MANA, NIMS)

PL-20 *Understanding of estradiol associated extranuclear nature by micropatterning method*

Baowen Qi (University of Montreal)

PL-21 *Design of boronic acid modified gold nanoparticles for targeting cancer cell surface*

Kosuke Kurosu (University of Tsukuba)