PROGRAM

May 29th (Thu)

13：30-13：35 **Opening Remarks** （Meeting Chair: Shinji HAYASHI）

13：35-17：50 **Symposium 1 ＜The Fronteir in Strategy of Nano Science & Technology＞**

[Chair: Shinji HAYASHI (Kobe Univ)]

13：35-14：35 Atsushi NAKAJIMA (Keiko Univ, JST)
"Creation of Nanometer Scale Materials through Size-Selective Soft-Landing"

14：35-15：35 Keisuke TOMINAGA (Kobe Univ)
"Intermolecular Interactions and Dynamics in Condensed Phases"

Break (15 min)

[Chair: Atsushi NAKAJIMA (Keio Univ, JST)]

15：50-16：50 Hajime ISHIHARA (Osaka Univ)
"Novel Nano-Optical Phenomena Arising from the Matter Coherence"

16：50-17：50 Hisanori SHINOHARA (Nagoya Univ)
"Peapods: Novel Nano-Carbon Materials"

May 30th (Fri)

10：00-11：45 Contributed Papers／Poster Session 1

Poster Hall Ⅰ (2nd floor)

PaⅠ-1 Nano-structure Analysis of Gold Catalyst Ⅰ Structure Analysis by Analytical TEM
○T.Akita, S.Ichikawa, K.Tanaka, K.Okazaki, S.Tanaka, M.Kohyama, S.Tsubota, M.Haruta (AIST)

PaⅠ-2 Nano-structure Analysis of Gold Catalyst Ⅱ
○S.Ichikawa[1)], T.Akita[1)], K.Okazaki[1)], M.Okumura[2)], K.Tanaka[1)], M.Kohyama[1)] ([1)]AIST [2)]Osaka Univ)

PaⅠ-3 Nano-structure Analysis of Gold Catalyst Ⅲ
○K.Okazaki, Y.Morikawa, T.Akita, S.Ichikawa, S.Tanaka, K.Tanaka, M.Kohyama (AIST)

PaⅠ-4 Statistics of Au Nanoparticle Morphologies Derived by HRTEM Observations
○K.Koga, K.Sugawara (AIST)

PaⅠ-5 Effect of Reduction Rate on the Size of Gold Nanoparticles
○M.Iwamoto[1)], K.Kuroda[1)], S.Hayashi[1)], J.Kanzow[2)], F.Faupel[2)] ([1)]Mitsuboshi Belting Ltd [2)]Univ of Kiel)

PaⅠ-6 STM/STS Investigations of Ag Nanoparticle Growth on H/Si(111)-(1x1) Surface
○S.Suto[1)], R.Czajaka[1)2)], S. Szuba[2)], A.Kasuya[1)] ([1)]Tohoku Univ [2)]Poznan Univ of Tech)

PaⅠ-7 Fabrication of Gold Nanoparticle/Silica Composite and Its Application
○Y.Tai, M.Watanabe, J.Murakami, K.Teraoka, K.Tajiri (AIST)

PaⅠ-8 Preparation of 2D and 3D Superlattices of Gold Nanoparticles Based on Hydrogen-Bonding Networks
○H.Kojima, H.Yao, S.Sato, K.Kimura (Himeji Inst of Tech)

PaⅠ-9 Ordered Uniform Ag Nano-Crystals Using an Aerosol-Colloid Process
○A.Gotoh, S.Sano, A.Tsuzuki (AIST)

PaⅠ-10 Small Metal Coordinative Ligand-Stabilized Metal Nanoparticles and Their Assemblies
○T.Yonezawa[1)2)], K.Kawamoto[2)] ([1)] Univ of Tokyo, JST [2)] Nagoya Univ)

PaⅠ-11 Two-Dimensional Layers of Gold Nanoparticles Immobilized on Glass Substrate through Covalent Bond-Forming Reaction
○K.Akamatsu[1)], A.Fujimoto[1)], H.Nawafune[1)], H.Katayama[2)], F.Ozawa[1)] ([1)] Konan Univ [2)]Osaka City Univ)

PaⅠ-12 Effects of Capping Thiols on Laser-Induced Deposition of Gold Nanoparticles
○H.Takahashi, Y.Niidome, S.Yamada (Kyushu Univ)

PaⅠ-13 Fabrication of Low Symmetric 2D Superlattices of Gold Nanoparticles Using Solution Process
○T.Teranishi[1)2)], M.Kanehara[1)], Y.Ohmi[1)], T.Sano[1)] ([1)] JAIST [2)]PRESTO, JST)

Pa I -14 Electrical Property and Water Repellency of Gold Particle Monolayer

○Y.Yamamoto[1)], S.Tokonami[1)], H.Shiigi[1)], K.Hori[1)], T.Nagaoka[2)] ([1)] Yamaguchi Univ [2)] Osaka Pref Univ)

Pa I -15 Preparation of Gold Nanorods: Effects of Organic Salts

○Y.Niidome, S.Urakawa, K.Nishioka, S.Yamada (Kyushu Univ)

Pa I -16 Influence of Silver Nanoparticles / Nano-rods on Luminescent Properties of Europium Complex

○H.Nabika, S.Deki (Kobe Univ)

Pa I -17 Preparation of Carbon Thin Films Containing Au/Fe Alloy Nanoparticles

S.Deki,○H.Nabika, T.Kawamura, M.Mizuhata, A.Kajinami (Kobe Univ)

Pa I -18 Magnetic Au/Iron-Oxide Composite Nanoparticles Synthesized by Reversed Micelle Method

○T.Kinoshita[1)], S.Seino[1) 2)], Y.Otome[1)], K.Okitsu[1)], T.Nakayama[1)], T.Nakagawa[1)], T.A.Yamamoto[1)]
([1)] Osaka Univ [2)]JSPS)

Pa I -19 Magnetic Au/Iron-Oxide Composite Nanoparticles Synthesized by Gamma -ray Irradiation

○S.Seino[1), 2)], T.Kinoshita[2)], Y.Otome[2)], K.Okitsu[2)], T.Nakagawa[2)], T.A.Yamamoto[2)]
([1)] JSPS [2)]Osaka Univ)

Pa I -20 Self-Assembling and Structural Diversity of Monodisperse Fe Nanoparticle Arrays

○S.Yamamuro[1)], T.Ando[2)], K.Sumiyama[2)], D.Farrell[3)], S.Majetich[3)]
([1)] VBL, Nagoya Univ [2)]Nagoya Univ [3)]Carnegie Mellon Univ)

Pa I -21 Formation and Magnetic Properties of Fe-Pt Alloy Clusters by Plasma-Gas-Condensation

D-L.Peng[1)],○ K.Sumiyama[2)], T.Hibara[2)] ([1)] JSPS [2)] Nagoya Inst of Tech)

Pa I -22 Size Dependence of the Magnetization in Noble Metal Nanoparticles

○T.Miura, Y.Yamamoto, T.Teranishi, M.Miyake, H.Hori (JAIST)

Pa I -23 Synthesis of Size- and Structure-Controlled Magnetic Nanoparticles by Using Polyol Process

○T.Hinotsu, C.Chinnsamy, K.Shinoda, B.Jeyadevan, K.Tohji (Tohoku Univ)

Pa I -24 Fabrication and Structural Characterization of Polymeric Matrix Containing Nanosized Metal Oxide Particles

○H.Yanagimoto[1)], K.Gotoh[1)], S.Hiraoka[2)], S.Deki[2)] ([1)]Mitsuboshi Belting Ltd [2)]Kobe Univ)

Pa I -25 Synthesis of Ultra-fine Particles from a Gaseous Mixture of Tetraethenylgermane and Carbon Disulfide

○H.Morita[1)], J.Pola[2)] ([1)]Chiba Univ [2)]Inst of Chem Process Found)

Pa I -26 Synthesis of Barium Titanate Nanoparticles by RF-plasma CVD Method and its Size Driven Phase Transition

○K.Suzuki, K.Kijima, A.Okada (Kyoto Inst of Tech)

Pa I -27 Synthesis of Si Nanoparticles by an Electrochemical Method

○M.Kobayashi, S.Sato, H.Yao, K.Kimura (Himeji Inst of Tech)

Pa I -28 Molecular Carbon Aggregates Produced by the Matrix Sublimation Method

○T.Wakabayashi[1)], M.Kato[1)], T.Momose[1)], H.Kataura[2)], S.Suzuki[1)], Y.Achiba[2)], Y.Tobe[3)], W.Kr?tschmer[4)]
([1)] Kyoto Univ [2)]Tokyo Metropolitan Univ [3)]Osaka Univ [4)]MPI f?r Kernphysik)

Pa I -29 Formation of Nano Particle by Laser Ablation of Graphite Immersed in Liquid

○H.Tabata, S.Hayashi (Kobe Univ)

Pa I -30 Stepwise Construction of CdS Nanoparticles-Based Nanocomposite Films

○T.Tsuruoka, K.Akamatsu, H.Nawafune (Konan Univ)

Pa I -31 Infrared Transient Absorption of Excitons and Biexcitons Confined in CuCl Nano-Particles

○K.Miyajima[1)], Y.Kagotani[1)], K.Edamatsu[2)], T.Itoh[1)] ([1)]Osaka Univ [2)]Tohoku Univ)

Pa I -32 Electron-Excitation Induced Phase Separation in GaSb Compound Nanoparticles

○H.Yasuda[1)], H.Mori[2)], J.G.Lee[2)] ([1)] Kobe Univ [2)]Osaka Univ)

Pa I -33 Local Structures and Photocatalytic Properties of Assembled Nano-Cluster Semiconductors

○K.Shinoda, T.Arai, B.Jeyadevan, A.Kasuya, K.Tohji (Tohoku Univ)

Pa I -34 Lattice Expansion of Nanosize Compound Particles

○M.Fukuhara (Toshiba Tungaloy)

Poster Hall Ⅱ (3rd floor)

PaⅡ-1 Theoretical Study on the Adsorption of Oxygen Molecule on Pt and Au Clusters
○T.Morisawa[1)], K.Tanaka[1) 2)], R.Sekine[1)] ([1)] Shizuoka Univ [2)]JAERI)

PaⅡ-2 Atomic Structure and Magnetism in Small Rhodium Clusters
○Y.C.Bae[1)], H.Osanai[1)], V.Kumar[2)3)], Y.Kawazoe[3)] ([1)] CODEC Co Ltd [2)] VKF [3)]Tohoku Univ)

PaⅡ-3 Absolute *GW* Quasiparticle Energies of Small Silicon Clusters
○S.Ishii[1)], K.Ohno[2)], V.Kumar[1)], Y.Kawazoe[1)] ([1)] Tohoku Univ [2)]Yokohama Nat. Univ)

PaⅡ-4 Endohedral Silicon Fullerenes strategical
○V. Kumar[1)2)], Y.Kawazoe[2)] ([1)]VKF [2)]Tohoku Univ)

PaⅡ-5 Structure and Magnetism of Fe Chain in Carbon Nano Capsule
○N.Fujima[1)], T.Oda[2)] ([1)] Shizuoka Univ [2)] Kanazawa Univ)

PaⅡ-6 Dielectric Function of $(CdSe)_n$ Clusters
Y.Noguchi[1)], ○K.Ohno[1)2)], A.Kasuya[2)] ([1)] Yokohama Nat Univ [2)] Tohoku Univ)

PaⅡ-7 Variational Monte Carlo Calculations of Diatomic Molecules
○K.Hongo, Y.Kawazoe (Tohoku Univ)

PaⅡ-8 Origin of Arrhenius Diffusivity in Cluster Surface Diffusion
○Y.Maruyama (AIST)

PaⅡ-9 Development of the Method for Size-Selective Structural Analysis of Neutral Free Clusters
○K.Nagaya[1)], M.Yao[1)], Y.Kajihara[1)], Y.Ohmasa[1)], Y.Katayama[2)], M.Ishii[3)]
([1)] Kyoto Univ [2)] JAERI [3)]JASRI)

PaⅡ-10 Direct Oxidation of Dinitrogen on Supported Tungsten Nanoclusters at Low Temperature
○W.Yamaguchi[1)], S.Matsushige[2)], J.Murakami[1)] ([1)] AIST [2)]Nagoya Inst of Tech)

PaⅡ-11 Chemical Potential Analysis of Size-Tunable Au Nanoclusters Studied by Tunneling Spectroscopy
○T.Ohgi[1)], H.Sakotsubo[1)], D.Fujita[2)], Y.Ohtsuka[1)] ([1)] Univ of Tsukuba [2)] NIMS)

PaⅡ-12 Formation of $Ni_{13}O_8^+$ and $Ni_{16}O_{10}^+$ by the Reaction of Nickel Cluster Ions with O_2
○K.Sugawara, K.Koga (AIST)

PaⅡ-13 Gas Phase Bismuch Carbide Clusters
○T.Nakagawa, Y.Yamada (Sci Univ of Tokyo)

PaⅡ-14 The Production of Metal Encapsulated Silicon Clusters in Gas Phase
○Y.Naono[1)], K.Koyasu[1)], M.Ohara[1)], A.Nakajima[1)2)], K.Kaya[3)] ([1)] Keio Univ [2)] JST [3)] Inst for Mol Sci)

PaⅡ-15 The Formation of Lanthanide-Phthalocyanine Multiple-Decker Clusters in Gas Phase
○E.Okada[1)], K.Miyajima[2)], A.Nakajima[1)2)], K.Kaya[3)] ([1)] Keio Univ [2)]JST [3)]Inst for Mol Sci)

PaⅡ-16 Giant Spin Magnetic Moments of Free Chromium and Manganese Clusters and Their Oxides
○A.Terasaki[1)], K.Tono[2)3)], T.Kondow[1)] ([1)] Toyota Tech [2)] Genesis Research Inst Inc [3)]Univ of Tokyo)

PaⅡ-17 Production of Liquid Cluster Ion and Its Irradiation Effect
○G.Takaoka, H.Noguchi, T.Seki (Kyoto Univ)

PaⅡ-18 Benzene-ring Formation Reaction Initiated by Electron Transfer in Gas-Phase Clusters
○H.Tsunoyama, K.Ohshimo, F.Misaizu, K.Ohno (Tohoku Univ)

PaⅡ-19 Structures and Reactions of Biomolecular Cluster Ions Produced with Electrospray Ionization
○S.Nonose, S.Iwaoka, K.Mori, K.Fuke (Kobe Univ)

PaⅡ-20 Laser Manipulation of Metal Nanoparticles Using Optical Fiber
○T.Numata, Y.Otani, N.Umeda (Tokyo Univ of Agric And Tech)

PaⅡ-21 Development of Manipulation System for Nano Particles
○S.Yamanaka[1)], T.Matsuo[2)], N.Takase[2)], Y.Shikakura[3)], M.Yasutake[3)], K.Watanabe[3)], T.Tanimae[2)], T.Ohkawa[1)], S.Akita[4)]
Y.Nakayama[4)] ([1)] Daiken Chem Co Ltd [2)] FiatLux Corp [3)] Seiko Instruments Inc. [4)]Osaka Pref Univ)

PaⅡ-22 Fabrication of Polymeric Structure Containing Metal Oxide Nanoparticles by Two-Photon Polymerization
○X.M.Duan[1)], H.B.Sun[2)3)], K.Kaneko[3)], S.Kawata[1)3)4)] ([1)] CREST [2)]PRESTO [3)] Osaka Univ [4)]RIKEN)

PaⅡ-23 Nano-Structural Control of Organic Molecules on Indium-Tin-Oxide Substrate
○T.Sakanoue[1)], Y.Ueda[1)], H.Izumi[2)], T.Ishihara[2)], M.Motoyama[2)] ([1)] Kobe Univ [2)]Hyogo Pref Inst of Ind Res)

PaⅡ-24 Facile Synthesis and Properties of Highly Sensitive Polypyrrole Nanofilms
○U.Sree[1)], D.Kijima[1)], Y.Zhang[1)], H.Shiigi[1)], T.Nagaoka[2)], K.Hori[1)] ([1)] Yamaguchi Univ [2)] Osaka Pref Univ)

PaⅡ-25 Creation and the Properties of the Inorganic-Organic Composite Material
○M.Fujikane, H.Murota, K.Yamaguchi, S.Yamanaka, T.Nakayama, K.Niihara (Osaka Univ)

PaⅡ-26 Fabrication of the Oxide Nanohole Arrays
○T.Hamaguchi, S.Yamanaka, M.Uno (Osaka Univ)

PaⅡ-27 Orientation Control of Liquid Crystal Molecules Using an Atomic Force Microscope Nano-Rubbing
○I.Nishiyama, K.Yoneyama, Y.Ohtani, N.Umetani (Tokyo Univ of Agric and Tech)

PaⅡ-28 Effects of Plume on the Creation of Nanosized Si by Pulsed Laser Ablation
T.Kimura, M.Inada, T.Makino, ○I.Umezu, A.Sugimura (Konan Univ)

PaⅡ-29 Self-Organized Fabrication of Ordered Surface Nano-Structures
○T.Kubo, H.Nozoye (AIST)

PaⅡ-30 Selective Growth of C_{60} Thin Film by Molecular Beam Epitaxy
○Y.Asai, H.Suzuki, H.Kinoshita, M.Tagawa, N.Ohmae (Kobe Univ)

PaⅡ-31 Development of Nano-Composite Powder for Cosmetics
○K.Ogawa, K.Joichi, T.Kanemaru (Shiseido Res Ctr)

11：45-12：15 **General Assembly**

Break / Poster Change (105 min)

14：00-15：45 **Contributed Papers／Poster Session 2**

Poster Hall Ⅰ (2nd floor)

PpⅠ-1 Ambient Gas Effect on the Formation of Single-Walled Carbon Nanotubes
○S.Suzuki, M.Nishiyori, T.Tamaki, D.Nishide, H.Kataura, Y.Achiba
(Tokyo Metro Univ)

PpⅠ-2 Cooling Effect during Short-Period Arc-Discharge on Growth of Carbon Nanotubes
○M.Nishio, S.Akita, Y.Nakayama (Osaka Pref Univ)

PpⅠ-3 X-ray Diffraction Analysis of Iron Catalyst for Growth of Carbon Nanotubes
○K.Nishimura[1)], L.Pan[1)2)], N.Okazaki[2)], Y.Nakayama[1)2)] ([1)] Osaka Pref. Univ [2)] JST Innovation Plaza Osaka)

PpⅠ-4 Improvement of the Conductivity of Carbon Nanotube Probe by Metal Evaporation
○H.Negishi[1)], N.Choi[2)], S.Akita[1)], Y.Nakayama[1)] ([1)] Osaka Pref Univ [2)]Motorola Labs)

PpⅠ-5 Kelvin Force Microscopy with FM Detection Using Sharpened Carbon Nanotube Probe
○M.Ohashi, S.Akita, L.Pan, Y.Nakayama (Osaka Pref Univ)

PpⅠ-6 Optical Emission Properties of Carbon Nanotubes under Joule Heating
○X.Cai, S.Akita, Y.Nakayama (Osaka Pref Univ)

PpⅠ-7 Synthesis of Carbon Nanotubes by Microwave Plasma Chemical Vapor Deposition
○H.Sakai, I.Kume, H.Kinoshita, M.Tagawa, N.Ohmae (Kobe Univ)

PpⅠ-8 Synthesis of Carbon Nanotubes by the Decomposition of C_2H_2
○S.Okada, I.Kume, H.Kinoshita, M.Tagawa, N.Ohmae (Kobe Univ)

PpⅠ-9 High Efficient Synthesis and Characterization of Radical Single-Walled Carbon Nanotubes by Arc-Discharge with Ce Catalyst ○Y.Sato, K.Motomiya, K.Shinoda, B.Jeyadevan, K.Tohji, H.Ishida
T.Hirata, R.Hatakeyama, A.Kasuya, Y.Nishina (Tohoku Univ)

PpⅠ-10 Origin of Luttinger-Liquid-Like Behavior in Multi-Walled Carbon Nanotubes
○A.Kanda[1)], Y.Tomida[1)], K.Tsukagoshi[2)], K.Aoyagi[3)], Y.Ohtsuka[1)]
([1)]Univ of Tsukuba [2)]RIKEN [3)]Tokyo Inst of Tech)

PpⅠ-11 Near-Field Nano-Raman Spectroscopy of Single Wall Carbon Nanotubes
○T.Yano[1)], N.Hayazawa[1)2)], Y.Inoue[1)2)], S.Kawata[1)2)3)] ([1)] Osaka Univ [2)]CREST [3)]RIKEN)

PpⅠ-12 Hetero-Peapod with Magic Silicon Clusters
○Q.Sun[1)2)], Q.Wang[2)], P.Jena[2)], Y.Kawazoe[1)] ([1)] Tohoku Univ [2)] Virginia Commonwealth Univ)

PpⅠ-13 Optical Second Harmonic Spectroscopy of Au Nanowire Arrays on the NaCl(110) Template

○G.Mizutani, T.Kitahara, A.Sugawara, H.Sano (JAIST)

PpⅠ-14 Formation of Nano-Size Wire Structures by Laser Ablation of Silver Colloinds

○T.Tsuji, M.Tsuji (Kyushu Univ)

PpⅠ-15 Electrochemical Performance of Vanadium Oxide Nanotubes

○W.Chen, L.Q.Mai, Q.Xu, H.Wang, Q.Y.Zhu (Wuhan Univ)

PpⅠ-16 Mn-Doped Germanium Nanotubes

○A.K.Singh, T.M.Brie, V.Kumar (Tohoku Univ)

PpⅠ-17 Study on Electronic States of Nanowire Superlattice GaAs/GaP

○H.Kawamura, V.Kumar, Y.Kawazoe (Tohoku Univ)

PpⅠ-18 A Novel Blockade Mechanism in a Suspended Single Electron Transistor

○N.Nishiguchi (Hokkaido Univ)

PpⅠ-19 Tunneling Spectroscopy of an Individual InAs Quantum Dot Embedded in a Nano-Pilar

○T.Sato[1], S.Tarucha[1], H.Z.Song[2], T.Miyazawa[2], Y.Nakata[2], T.Ohshima[2], N.Yokoyama[2]
([1] ERATO/JST [2]Fujitsu Labs Ltd)

PpⅠ-20 Field-Effect Transistors Made of Molecular Crystal Wires and Charge Carrier Transport Mechanism

○M.Ichikawa[1], H.Yanagi[2], O.Hotta[3], T.Koyama[1], Y.Taniguchi[1] ([1] Shinshu Univ [2] Kobe Univ [3] IRI)

PpⅠ-21 Pressure-Induced Coulomb Oscillations in Single-Electron Transistor

○Y.Ohtsuka, M.Kitada, A.Kanda (Univ of Tsukuba)

PpⅠ-22 Superconductor-Insulator Transition in Mesoscopic Josephson-Junction Arrays

○H.Miyazaki, T.Yamaguchi, A.Kanda, Y.Ohtsuka (Univ of Tsukuba)

PpⅠ-23 *Ab-Initio* and Genetic Algorithm Approaches for Nanoscale Device

○H.Mizuseki, N.Igarashi, Y.Kikuchi, R.Belosludov, A.Farajian, H.Chen, Y.Kawazoe (Tohoku Univ)

PpⅠ-24 Electrical Property of Gold Particle Monolayer and Its Interpretation

○H.Shiigi[1], Y.Yamamoto[1], S.Tokonami[1], T.Nagaoka[2], K.Hori[1] ([1] Yamaguchi Univ [2]Osaka Pref Univ)

PpⅠ-25 Atomic and Electronic Structure and First-Principles Tensile Test of Cu/Al_2O_3 Nano-Hetero Interface

○S.Tanaka, R.Yang, M.Kohyama (AIST)

PpⅠ-26 Study of Mechanical Properties of Cu Point Contacts by Atomfactory Method

○M.Mori[1], S.Fujisawa[2], T.Kizuka[1] ([1]Univ of Tsukuba [2]AIST)

PpⅠ-27 Hardness Evaluation of DLC Thin Films Deposited on Polymer by Nano Indentation Method

○M.Hiratsuka, G. Bollore, T.Sumiya (Nanotec Corp)

PpⅠ-28 3D Electron Microscopic Observations of Nano Networks in Pt Super-Crystals

J.Yamazaki[1], ○N.Tanaka[1], N.Baba[2], O.Terasaki[3], H.Kakibayashi[4], M.Koguchi[4], R.Tsuneta[4], M.Iwaki[5], T.Kobayashi[5] ([1] Nagoya Univ [2] Kogakuin Univ [3]Tohoku Univ [4]Hitachi Ltd [5]RIKEN)

PpⅠ-29 Relativistic Effects on Ag and Au Adsorption on MgO Surface

○K.Tanaka[1][2] R.Sekine[1] M.Hirata[2] ([1]Shizuoka Univ [2]JAERI)

PpⅠ-30 Intermolecular Interactions and the Adsorption Behavior of Xe Atoms Confined in the One-Dimensional Nanochannels of Organic Materials as Studied by High-Pressure ^{129}Xe NMR

○H.Kobayashi, T.Ueda, K.Miyakubo, T.Eguchi (Osaka Univ)

PpⅠ-31 Magnetic Compton Profiles and Magnetic Anisotropy of Pd/CoMultilayers

○H.Sakurai[1], M.Ohta[1], F.Itoh[1], Y.Sakurai[2] M.Itoh[2] ([1] Gunma Univ [2]JASRI/SP ring-8)

PpⅠ-32 Local Magnetic Structure of Fe/Tb Multilayers

○K.Takano, M.Furuhata、K.Ikeuchi、H.Sakurai、H.oike、F.Itoh (Gunma Univ)

PpⅠ-33 Nano-prototyping,-machining,-characterization and -analysis using SEM/FIB

D. van der Wal[1], F. Morrissey[2] ([1] FEI Electron Optics, [2] FEI Company)

PpⅠ-34 Estimation of Layer-by layer Growing Surface by Small Glancing Angle X-ray Scattering

○Y.Fujii, H.Yasuda (Kobe Univ)

PpⅠ-35 Designing of Cluster-Type Hydrogen Storage Materials

○Y.Nakamori, S.Orimo (Tohoku Univ)

Poster Hall II (3rd floor)

PpII-1 Photoluminescence of Size Selected Si Nanoparticles Produced by Laser Ablation in He Background Gas
○T.Orii, M.Hiramasa, T.Seto, N.Aya (AIST)

PpII-2 Optical Properties of Silicon Nanoparticles Prepared by Pulsed Laser Ablation in Hydrogen Background Gas
○T.Makino, M.Inada, I.Umezu, A.Sugimura (Konan Univ)

PpII-3 Polarozation Anisotropy in Electroreflectance Spectrum of Porous Silicon
○K.Moriguchi, T.Suzuki, T.Toyama, H.Okamoto (Osaka Univ)

PpII-4 Fabrication of Luminescent Porous Silicon Layers by Anodic Etching in Extremely Dilute HF Solutions
○H.Koyama (Hyogo Univ of Teacher Edu)

PpII-5 Multi-Color Luminescence of Nanocrystalline Silicon Based EL Device
○K.Sato[1)2)], K.Hirakuri[1)], M.Iwase[2)], T.Izumi[2)], H.Morisaki[3)]
([1)]Tokyo Denki Univ [2)]Tokai Univ [3)]Univ of Electro-Comm)

PpII-6 Electroluminescent Devices with Nanostructured ZnS:Tb,X(X=F,O,OF) Emission Layer, and Ta_2O_5 Insulation Layer
○K.Yoshimura, H.Haze, T.Toyama, H.Okamoto (Osaka Univ)

PpII-7 Photoluminescence Polarization Properties and Electronic States in InAs/GaAs Self-Assembled Quantum Dots
P.Jayavel[1)], H.Tanaka[1)], T.Kita[1)], O.Wada[1)], H.Ebe[2)], M.Sugawara[2)], J.Tatebayashi[2)], Y.Arakawa[2)]
Y.Nakata[3)], T.Akiyama[3)] ([1)]Kobe Univ [2)]Univ of Tokyo [3)]Fujitsu Lab Ltd)

PpII-8 Origin of Blinking in SERS Signal
○M.Futamata, Y.Maruyama[2)], M.Ishikawa[3)] (AIST)

PpII-9 Effect of Ultraviolet Irradiation on Photoluminescence and Photothermal Intensities of Mn-Doped ZnS Nanoparticles
○T.Toyoda, A.B.Cruz (Univ of Electro-Comm)

PpII-10 Control of Size Distributions and Surface Structures of CdS Quantum Dots and Their Photoluminescence Dynamics
○D.G.Kim, T.Mihsima, M.Nakayama (Osaka City Univ)

PpII-11 Ab Initio Calculations of Optical Response of Si(111) Surface
○H.Sano[1)], G.Mizutani[1)], W.Wolf[2)], R.Podloucky[3)] ([1)]JAIST [2)]Material Design [3)]Univ of Vienna)

PpII-12 Emission of Spectra for ScO and ScH Molecules
○G.Yumei[1)], T.Okazaki[2)] ([1)]Shinyang Univ [2)]Meijo Univ)

PpII-13 Amplified Spontaneous Emission from Dye-Dispersed Glass Films Modulated by Au Nanoparticles
○M.Fukushima, S.Hayashi, H.Yanagi (Kobe Univ)

PpII-14 Evaluation of Photopolymer for Recording Holograms using Near-Field Optical Microscope
○N.Yamamoto[1)], N.Terasaki[1)], H.Tanikawa[1)], N.Tanigaki[1)], H.Mochizuki[1)], T.Hiraga[1)], T.Matsuo[2)]
([1)]AIST [2)]DAISO Co Ltd)

PpII-15 Time-Resolved Scanning Near-Field Optical Microscopic Study of the Thin Film of Porphyrin J-Aggregate
○T.Nagahara, K.Imura, H.Okamoto (Inst for Mol Sci)

PpII-16 Development of Photoelectric Conversion Devices by Surface Sol-Gel Processes
○S.Nitahara, T.Akiyama, S.Yamada (Kyushu Univ)

PpII-17 Photoelectric Conversion from Gold Particle —Porphyrin Hybrid Nanomaterials
○S.Yamada, T.Akiyama, N.Terasaki, S.Nitahara, T.Tasaki (Kyushu Univ)

PpII-18 Photocurrent Properties of a N3-Modified Nanostructured Electrode with Gold Nanoparticles
○N.Terasaki[1)], N.Yamamoto[1)], N.Tanigaki[1)], T.Hiraga[1)], T.Akiyama[2)], S.Yamada[2)] ([1)] AIST [2)]Kyushu Univ)

PpII-19 Numerical Simulation for the Resonance of the Localized Plasmon at a Metal Nano-Particle
○M.Haraguchi, T.Yamaguchi, T.Okamoto, M.Fukui (Univ of Tokushima)

PpII-20 Interactions between Vibrational Excitons, Structures, and Dynamics in Condensed Phases
○H.Torii (Shizuoka Univ)

PpII-21 Raman Spectra and Pressure-Induced Phase Transition of Si Clathrate Compounds
○T.Kume[1)], H.Fukuoka[2)], T.Koda[1)], S.Sasaki[1)], H.Shimizu[1)], S.Yamanaka[2)] ([1)] Gifu Univ. [2)]Hiroshima Univ)

PpII-22 Nanosheet Formation of Thiacyanine J Aggregates via Structural Phase Transition in Solution
○T.Isohashi, H.Yao, K.Kimura (Himeji Inst of Tech)

PpII-23 Probe Effects on Nanofabrication using Optical Near-Field Dissociation Processes
○K.Kobayashi[1)], T.Kawazoe[1)], M.Ohtsu[12)] ([1)] ERATO [2)]Tokyo Inst of Tech)

PpII-24 Electronic Structures and Reflection Spectra of the TTTA Crystal
M.Huruya[1], ○K.Ohno[1], Y.Kawazoe[2], J.Takeda[1] ([1] Yokohama Nat Univ [2] Tohoku Univ)

PpII-25 Activity of Stratified CdS Nano-Particle under Visible Light
○T.Arai, K.Shinoda, B. Jeyadevan, K.Tohji (Tohoku Univ)

PpII-26 Optical Properties of CdS Nanoparticles Covered by Polymer Chains on the Surface
R.Koizumi[1], A.Sugimoto[1], M.Inada[1], ○I.Umezu[1], A.Sugimura[1], Y.Sunaga[1], T.Ishii[1], Y.Nagasaki[2]
([1]Konan Univ [2]Tokyo Univ of Sci)

PpII-27 Surface Electrochemical Sensor for the Highly-Sensitive Measurement of Enzyme Activity: Application to the Detection of Peptide Hormone
○H.Matsuura[1], Y.Sato[2], T.Sawaguchi[2], F.Mizutani[1][2] ([1] Univ of Tsukuba [2]AIST)

PpII-28 Construction of Highly Aligned DNA Nanowire Arrays
○H.Nakao, T.Yoshino, S.Sugiyama, T.Ohtani (Nat Food Res Ctr)

PpII-29 The Phagocytosis of Nano-Particle in Macrophage
○N.Takaki, H.Higuchi (Tohoku Univ)

PpII-30 Nano-Modeling and Molecular Recognition on the Overoxidized Polypyrrole
D.Kijima[1], Y.Zhang[1], ○H.Shiigi[1], T.Nagaoka[2], K.Hori[1] ([1] Yamaguchi Univ [2]Osaka Univ)

PpII-31 Development of Electrical DNA Sensor using the Gold Nanoparticle-Network Film
○S.Tokonami[1], Y.Yamamoto[1], H.Shiigi[1], K.Hori[1], T.Nagaoka[2] ([1]Yamaguchi Univ [2]Osaka Univ)

PpII-32 Ultra-High Density Immuno and DNA Assays based on Fluorescence Enhancement in Gold Nanowells
A.Fujii, ○A.Ishida (Kyoto Pref Univ)

PpII-33 Development of Pinpoint Gene Delivery System with Protein Nano-Particles
○M.Muraoka[1], T.Yamada[1], M.Ueda[2], M.Seno[3], K.Tanizawa[4], S.Kuroda[4], H.Fukuda[1], A.Kondo[1]
([1]Kobe Univ [2] Keio Univ [3]Okayama Univ [4]Osaka Univ)

PpII-34 In *Situ* Observation of Adsorption Phenomena on Solid/Liquid Interface using Slab Optical Waveguide Spectroscopy
○N.Matsuda, J.Santos, Z.M.Qi, A.Takatsu, K.Kato (AIST)

Break (15 min)

16：00-18：00 **Special Talks**

[Chair: Yuichiro NISHINA (President of the Society)]

16：00-17：00 Special Talk 1 "Nanotechnology Research Strategy for Medical Application"
Noriaki OHUCHI (Tohoku Univ)

17：00-18：00 Special Talk 2 "Strategy of Nanotechnology in Japan"
Koji OHMI (former Minister of State for Science and Technology)

18：15-20：00 **Reception** (at Takigawa Memorial Hall)

May 31st (Sat)

10：00-11：40 **Symposium 2 ＜The Present Trends of Nanotechnology in East Asia＞**

[Chair: Sang-Moo LEE (Tsukuba Nanotechnology)]

10：00-10：50 Lee Sang Rok (Director, Center for Nanoscale Mechatronics & Manufacturing)
"Overview of Nanotechnology in Korea – 10 Years Blueprint"

10：50-11：40 Yoshiyuki KAWAZOE (Tohoku Univ)
"The Asian Consortium on Computational Materials Science"

Break (100 min)

13：20-17：30 **Symposium 3 ＜What Can We Do with Nano, Now?＞**

[Chair: Shinji HAYASHI (Kobe Univ)]

13：20-13：30 Shigehito DEKI （Kobe Univ)
Introduction- “What can We Fabricate by using Nano-Technology?”

13：30-14：15 Minoru FUJII （Kobe Univ)
“Si Nanocrystals as a Photosensitizer-“

14：15-15：00 Yasuo Takahashi (NTT Basic Research Lab, NTT Co., Ltd.)
“Fabrication and Application of Single-Electron Transistors as an Ultimate Low-Power Device”

Break (15 min)

[Chair: Shigehito DEKI（Kobe Univ.）]

15：15-16：00 Hirohiko MURAKAMI （ULVAC, Inc., Tsukuba Institute for Super Materials）
“A Challenge to Field Emission Display with Carbon Nanomaterials”

16：00-16：45 Kotaro KAJIKAWA （Tokyo Institute of Technology)
“Localized-Plasmon Biosensing”

16：45-17：30 Ichiro YAMASHITA
(Advance Technology Research Lab, Matsushita Electric Industrial Co., Ltd.)
“A New Process for Making Nano-Electronics Devices Utilizing Protein Supramolecules”

Categories of Poster Presentation

Category		Poster Number	Hall/Floor
A	Nanoparticles: Fabrication, Structures and Properties	PaI－1 ～ 34	Morning Poster Hall I (2nd flr)
B	Nanoclusters: Fabrication, Reaction and Properties	PaII－1 ～ 19	Morning Poster Hall II (3rd flr)
C	Manipulation and Characteristics of Nanostructures	PaII－20 ～ 31	
D	Nanotubes and Nanowires: Fabrication and Properties	PpI－1 ～ 17	Afternoon Poster Hall I (2nd flr)
E	Functions and Device Applications of Nanostructures	PpI－18 ～ 35	
		PpII－1 ～ 25	Afternoon Poster Hall II (3rd flr)
F	Nanobiotechnology	PpII－26 ～ 34	