

# ---PROGRAM---

## Monday, October 9

18:00-20:00 **Get-Together Party** (Mitsui Garden Hotel Kashiwa)

## Tuesday, October 10

9:10-9:30 **Opening**

**Fumio Komori**, *Chair*, the ISSP-10 symposium

**Kazuo Ueda**, *Director*, ISSP

**Announcement**

**Yukio Hasegawa**, *ISSP*

**Session 1: Theory I** ..... *Chair: Osamu Sugino (ISSP)*

9:30-10:00      A-1      **Roberto Car**, *Princeton University, USA*  
"Non-equilibrium Electron Transport in Nanoscale Systems"

10:00-10:30    A-2      **Satoshi Watanabe**, *University of Tokyo*  
"Theoretical Analyses on Property Measurements Using  
Scanning Probe Microscopes"

10:30-10:50    ... *Coffee Break* ...

**Session 2: Transport properties in nano-scale** ..... *Chair: Fumio Komori (ISSP)*

10:50-11:10    A-3      **Kenji Hirose**, *NEC*  
"Contact Effects on Anomalous Electron Transport through  
Single Molecules -- ab initio Calculation Study --"

- 11:10-11:30    A-4    **Yoshifumi Oshima**, *Tokyo Institute of Technology*  
 "Elongation of Carbon Fullerene in High-electric Field"
- 11:30-12:00    A-5    **Bing Wang**, *University of Science and Technology of China, China*  
 "Conduction Mechanism of Aviram-Ratner Diodes with Single  
 Pyridine- $\sigma$ -C<sub>60</sub> Oligomers"

12:00-12:20    *Group Picture*

12:20-14:00    ... *Lunch* ...

**Session 3: Theory II** ..... *Chair: Kiyoyuki Terakura (Hokkaido Univ.)*

14:00-14:30    A-6    **Walter Kohn**, *University of California-Santa Barbara, USA*  
 "Nearsightedness" at Surfaces

14:30-14:50    A-7    **Katsuyoshi Kobayashi**, *Ochanomizu University*  
 "Complementary Media of Electrons"

**Session 4: Organic Molecules at surfaces** .. *Chair: Satoshi Watanabe (Univ. Tokyo)*

14:50-15:20    A-8    **Yoshitada Morikawa**, *Osaka University*  
 "First-principles Theoretical Study of Metal/Organic  
 Interfaces"

15:20-15:50    A-9    **Flemming Besenbacher**, *University of Aarhus, Demark*  
 "Dynamics and Self-assembly of Organic Molecules on Surfaces  
 Revealed by High-resolution, Fast-scanning STM"

15:50-16:10    ... *Coffee Break* ...

Poster Presentation I ..... *Chair: Kan Nakatsuji (ISSP)*

16:10-18:10                    **Poster Session (odd #)**

# Wednesday, October 11

## Session 5: Nano-scale processes at surfaces ······ Chair: Jun Yoshinobu (*ISSP*)

- 9:00-9:30      B-1      **Hans-Joachim Freund**, *Fritz Haber Institute, Germany*  
"From Atoms to Particles: Metals on Oxide Films"
- 9:30-10:00    B-2      **Katsuyuki Fukutani**, *University of Tokyo*  
"Ortho-para Conversion of Hydrogen on Metal and Oxide Surfaces"
- 10:00-10:30   B-3      **Yoshiyasu Matsumoto**, *Institute for Molecular Science*  
"Thermal and Photochemical Reactivity of Oxygen atoms on Gold Nanocluster Surfaces"
- 10:30-10:50   ... *Coffee Break* ...

## Session 6: Low dimensional properties at surfaces

··········· Chair: Toshio Takahashi (*ISSP*)

- 10:50-11:20   B-4      **Shinichiro Hatta**, *Kyoto University*  
"Phase Transitions in Metallic Monolayers on Cu(001)"
- 11:20-11:50   B-5      **Ian Robinson**, *University College, London, UK*  
"Mapping of Interfacial Contact Forces in Nanostructures by Coherent X-ray Diffraction "
- 11:50-12:20   B-6      **Hiroshi Daimon**, *Nara Institute of Science and Technology*  
"Total Analysis of Surface Structure and Properties by UHV Transfer System"
- 12:20-14:00   ... *Lunch* ...

**Session 7: Semiconductor surfaces***Chair: Katsuyuki Fukutani (Univ. of Tokyo)*

- 14:00-14:30    B-7    **Jillian Buriak**, *University of Alberta, Canada*  
"Using Self-assembled Nanoscale Structures to Direct Surface  
Chemical Functionalization of Silicon"
- 14:30-14:50    B-8    **Kazuto Akagi**, *University of Tokyo*  
"Regioselective Chemisorption of Alkene Molecules on Si(100)  
Clean Surface"
- 14:50-15:10    B-9    **Yoshiyuki Yamashita**, *ISSP*  
"Site-specific Observation of Valence Electronic Structure at  
Interface: Soft X-ray Absorption and Emission Spectroscopic  
Study"
- 15:10-15:40    B-10    **Robert J. Hamers**, *The University of Wisconsin-Madison, USA*  
"Chemical Functionalization of Nanocarbon Surfaces"
- 15:40-16:00    ... *Coffee Break* ...

**Session 8 : Water at metal surfaces***..... Chair: Shinji Tsuneyuki (Univ. of Tokyo)*

- 16:00-16:30    B-11    **Marc Koper**, *Leiden University, The Netherlands*  
"Electrocatalysis at Nanostructured Surfaces"
- 16:30-17:00    B-12    **Osamu Sugino**, *ISSP*  
"First-Principles Molecular Dynamics Simulation of  
Electrode/Solution Interface and Electrochemical Reactions"
- 17:00-17:20    B-13    **Susumu Yamamoto**, *Stanford University, USA*  
"Different Wetting Behavior on Cu (110) and (111) at Ambient  
Conditions: in-situ Photoemission Spectroscopy Study"
- 17:20-17:40    B-14    **Tomoko Shimizu**, *Lawrence Berkeley National Lab., USA*  
"Adsorption, Dissociation and Cluster Formation of Water on  
Ru(0001)"

19:00-21:00     **Banquet** at Mitsui Garden Hotel Kashiwa

## Thursday, October 12

### Session 9: Dynamics of molecules at surfaces ·· *Chair: Tetsuya Aruga (Kyoto Univ.)*

- 9:00-9:30        C-1     **Gerald Dujardin**, *Université Paris-Sud, France*  
"Electronic Control of Single Molecule Dynamics"
- 9:30-10:00      C-2     **Maki Kawai**, *University of Tokyo and RIKEN*  
"Vibrational Excitation of Single Molecules by STM"
- 10:00-10:30     C-3     **Hiromu Ueba**, *Toyama University*  
" Adsorbate motions by vibrational mode coupling "
- 10:30-10:50     ... *Coffee Break* ...

### Session 10: New phenomena in nano-scale at surfaces

..... *Chair: Hiroshi Tochiwara (Kyushu Univ.)*

- 10:50-11:20     C-4     **Se-Jong Kahng**, *Korea University, Korea*  
"Electron Bound States in Semiconducting Carbon Nanotubes"
- 11:20-11:40     C-5     **Ken-ichi Tanaka**, *Saitama Institute of Technology*  
"Controlled Growth of Nano-size Crystalline Metal Dots on the  
Si(111)-7x7 Surface Saturated with C<sub>2</sub>H<sub>5</sub>OH"
- 11:40-12:00     C-6     **Tomohiro Matsui**, *University of Hamburg, Germany*  
"STS Studies of Fe Monomers and Multimers on InAs(110)  
Surfaces"

12:00-12:30 C-7 **Qikun Xue**, *Tsinghua University, China*  
"Quantum Size Effects in Pb/Si(111) System: from 2D Films to 1D Nanobelts"

12:30-14:00 ... *Lunch* ...

**Session 11: Application of synchrotron radiation to nano materials**

..... *Chair: Hiroshi Daimon (Nara Inst. Sci. Tech.)*

14:00-14:30 C-8 **Christoph Quitmann**, *Swiss Light Source, Switzerland*  
"The Dance of the Domains: Excitations in Magnetic Micro-particles"

14:30-15:00 C-9 **Akio Kimura**, *Hiroshima University*  
"Spin-Resolved Energy Band Structure of Ultra-thin Fe Films on Co(001)"

15:00-15:20 C-10 **Takeshi Nakagawa**, *Institute for Molecular Science*  
"Magnetic Circular Dichroism on Ferromagnetic Ultra Thin Films using Laser Photoemission"

15:20-15:40 C-11 **Akira Saito**, *RIKEN Harima Inst. & Osaka University*  
"Scanning Tunneling Microscopy for Nanoscale Surface Chemical Analysis based on Synchrotron Radiation"

15:40-16:00 ... *Coffee Break* ...

**Poster Presentation II** ..... *Chair: Yoshiyuki Yamashita (ISSP)*

16:00-18:00 **Poster Session (even #)**

# Friday, October 13

## Session 12: Local interaction and electronic states at surfaces

..... Chair: Akio Kimura (*Hiroshima Univ.*)

- |             |     |                                                                                                                                                        |
|-------------|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9:00-9:30   | D-1 | <b>Seizo Morita</b> , <i>Osaka University</i><br>"Mechanical Atom Identification and Following Artificial Nanostructuring"                             |
| 9:30-9:50   | D-2 | <b>Kan Nakatsuji</b> , <i>ISSP</i><br>"Superstructure Nano-manipulation through Tunneling Carrier Injection on Clean Ge(001)"                          |
| 9:50-10:10  | D-3 | <b>Iwao Matsuda</b> , <i>University of Tokyo</i><br>"Two-dimensional Hume-Rothery Phase of a Metallic Monolayer on the fcc(111) Semiconductor Surface" |
| 10:10-10:40 | D-4 | <b>Franz J. Himpsel</b> , <i>University of Wisconsin-Madison, USA</i><br>"Atomic Chains: from Low-Dimensional Electrons to the Limits of Data Storage" |
| 10:40-11:00 | ... | <i>Coffee Break ...</i>                                                                                                                                |

## Session 13: Low dimensional electronic states at surfaces

..... Chair: Shuji Hasegawa (*Univ. Tokyo*)

- |             |         |                                                                                                                          |
|-------------|---------|--------------------------------------------------------------------------------------------------------------------------|
| 11:00-11:30 | D-5     | <b>Han Woong Yoem</b> , <i>Yonsei University, Korea</i><br>"Phase Transitions of Atomic Wires on Silicon Surfaces"       |
| 11:30-12:00 | D-6     | <b>Yukio Hasegawa</b> , <i>ISSP</i><br>"Real-space Observation of Screened Potential by Scanning Tunneling Spectroscopy" |
| 12:00-12:20 | Closing |                                                                                                                          |

# Poster Session

- P-001 Hydrogen atom absorption and diffusion on the Pd(111) surface and in the subsurface within the framework of quantum method**  
N. Ozawa, T. A. Roman, H. Nakanishi, H. Kasai
- P-002 Adsorbing of hydrogens on Ni(111) surface and reemitted slow positron**  
K.Hirota, M.Osawa, H.Suzuki, I.Kanazawa, K.Fukutani, K.Nozawa, F.Komori
- P-003 Trapping Silicon Surface Radicals - Chemistry on Silicon with Nanoscale Precision**  
Dong Wang, Jillian Buriak
- P-004 Regioselective cycloaddition reaction of asymmetric alkene molecules to the asymmetric dimer on Si(100)c(4x2)**  
K. Oguchi, K. Mukai, Y. Yamashita, J. Yoshinobu
- P-005 Attaching Aromatic Molecules to the Si(111) Surfaces via Conjugated Bond**  
Hideyuki Murata, Atsushi Itabashi, Toyoko Arai, Masahiko Tomitori
- P-006 Three-Dimensional Molecular Assemblies on Silicon with Si-C Covalent Bonds**  
M.Ara, M.Tsuji, H.Tada
- P-007 Adsorption of 1,3-butadiene on Si(001)c(4x2) surface at RT**  
Jaeyoon Baik, Minkook Kim, In-Kyung Song, Chong-Yun Park, Joung Real Ahn, Ki-Seok An
- P-008 Different adsorption states of 1,4-cyclohexadiene on Si(001) depending on the substrate temperature**  
H. S. Kato, M. Wakatsuchi, M. Kawai, J. Yoshinobu
- P-009 STM and HREELS study of 1D water chain on Cu(110)**  
H. Okuyama, T. Yamada, S. Tamamori, S. Hatta, T. Aruga
- P-010 Water Adsorption on  $\alpha$ -Fe<sub>2</sub>O<sub>3</sub> (0001) and TiO<sub>2</sub> (110) at Ambient Conditions**  
Susumu Yamamoto, Guido Ketteler, Tom Kendelewicz, Hendrik Bluhm, David E. Starr, Klas Andersson, Hirohito Ogasawara, Miquel Salmeron, Gordon E. Brown Jr., Anders Nilsson



- P-011 Molecular scale study of water dimers on Pt(111) surface**  
K. Motobayashi, C. Matsumoto, Y. Kim, M. Kawai
- P-012 Adsorption, desorption and microscopic structures of water on Rh(111)**  
A. Beniya, S. Yamamoto, K. Mukai, Y. Yamashita, J. Yoshinobu
- P-013 Single-molecule vibrational spectroscopy of water using STM**  
Y. Kim, K. Motobayashi, C. Matsumoto, M. Kawai
- P-014 Time-resolved SFG study on formate adsorbed on TiO<sub>2</sub> film on Pt(111)**  
Jun Kubota, Jun Chen, Kazunari Domen
- P-015 Three-Ni-atom cluster formed by sulfur adsorption on Ni(111)**  
H. Hirashima, A. Kitada, K. Izumi, M. Yamada, J. Nakamura
- P-016 Surface differential reflectance study of initial oxidation kinetics on Si(001)**  
J. Takizawa, Y. Mogawa, J. Koizumi, S. Ohno, K. Shudo, M. Tanaka
- P-017 Reflectance difference spectroscopy study of initial oxidation kinetics on Si(001)**  
Shin-ya Ohno, Hiroaki Kobayashi, Fumitake Mitobe, Takanori Suzuki, Ken-ichi Shudo, Masatoshi Tanaka
- P-018 Origin of the 97 meV-peak on H:Si(111)1x1 Surface**  
T. Taoka, H. Kato, T. Yamada, A. Kasuya, S. Suto
- P-019 Reversible electromigration and formation of (2x1)-Si structures on Tl adsorbed Si(111) surfaces**  
A. Visikovskiy, H. Tochiara, Y. Ohira, M. Yoshimura, K. Ueda
- P-020 Development of a Miniature Double Pass Cylindrical Mirror Electron Energy Analyzer (DPCMA), and Its Application for Auger-Photoelectron Coincidence Spectroscopy (APECS)**  
Eiichi Kobayashi, Junya Seo, Akira Nambu, Kazuhiko Mase

- P-021 Simultaneous measurements of mass and kinetic energy distribution of desorbed ions using a compact cylindrical mirror analyzer (CMA) and synchrotron radiation in single-bunch operation**  
Eiichi Kobayashi, Kouji K. Okudaira, Kazuhiko Mase
- P-022 Development of an Electron Electron Ion Coincidence Apparatus and its Application for a Study of Desorption Induced by Electron Transitions**  
T. Kakiuchi, E. Kobayashi, K. Oyamada, N. Okada, M. Okusawa, K. K. Okudaira, K. Mase
- P-023 CO oxidation on Pd-SnO<sub>2</sub> catalysts: XPS, XRD, TEM and TPR study**  
I. Matolinova, V. Matolin, T. Mori, M. Yoshitake
- P-024 Microscopic processes of NO migration on Pt(997)**  
Noriyuki Tsukahara, Kozo Mukai, Yoshiyuki Yamashita, Jun Yoshinobu
- P-025 Role of Steps in Cu<sub>2</sub>O Formation on Cu(410) using Hyperthermal O<sub>2</sub> Molecular Beam**  
M. Okada, L. Vattuone, K. Moritani, A. Gerbi, L. Savio, A. Yoshigoe, Y. Teraoka, M. Rocca, T. Kasai
- P-026 Effect of the internal excited states of oxygen molecule in the dissociative adsorption processes on Cu surfaces**  
K. Moritani, Y. Teraoka, M. Okada, A. Yoshigoe, T. Kasai
- P-027 One-and two-dimensional structures on Tl/Ge(111)**  
S. Hatta, C. Kato, S. Takahashi, T. Okuda, A. Harasawa, T. Kinoshita, H. Okuyama, T. Aruga
- P-028 Oscillatory behavior of the charge transport through ultrathin Pb films**  
N. Miyata, I. Matsuda<sup>1</sup>, K. Horikoshi, T. Hirahara, S. Hasegawa
- P-029 Temperature dependence of the quantum confinement effect at Cu(110)(2x1)O striped surface studied by angle resolved photoemission spectroscopy**  
M.Nagira, M.Sawada, M.Higashiguchi, K.Yaji, T.Moko, T.Ueno, Y.Miura, K.Shimada, A.Kimura, H.Namatame, M.Taniguchi
- P-030 Step-type Dependence of One-Dimensional Electronic States on Nickel Stepped Surfaces**  
Koji Ogawa, Kenryo Yamamoto, Nobuyuki Fujisawa, Koji Nakanishi, Hidetoshi Namba

- P-031 Strain-induced change in electronic structure of Cu(100)**  
D. Sekiba, Y. Yoshimoto, K. Nakatsuji, Y. Takagi, T. Iimori, S. Doi, F. Komori
- P-032 X-ray Spectromicroscopy Mapping of Metal-Induced Ordering of Semiconductor Nanostructures**  
J. T. Robinson, O. Moutanabbir\*, F. Ratto, S. Heun, M. Tonezzer, A. Locatelli, O. T. Mentis, L. Aballe, A. Liddl, K. M. Itoh, O.D. Dubon
- P-033 Electronic Properties of Platinum and Nickel on Tin(II) Porphyrin and Other Related Compounds**  
E.S. Dy, H. Kasai
- P-034 Spectrum of bulk SHG from rutile TiO<sub>2</sub>(001)**  
Ryosuke Watanabe, Miki Omote, Goro Mizutani
- P-035 Optical reflectance study of hydrogen adsorption processes on Si(001)-2x1**  
Fumitake Mitobe, Junya Koizumi, Jun-ichi Takizawa, Shin-ya Ohno, Yoshiharu Mogawa, Takanori Suzuki, Ken-ichi Shudo, Masatoshi Tanaka
- P-036 Metal-insulator transition of Si(111) 7x7 by Na adsorption**  
Keiko Takase, Iwao Matsuda, Marie D'angelo, Toru Hirahara, Shuji Hasegawa
- P-037 Photoemission Spectroscopy Study of the Interface Formation of Pentacene Molecules on Si(111) 7×7, Ag/Si(111)  $\sqrt{3}\times\sqrt{3}$ , and H/Si(111) 1×1**  
D. Y. Jung, L. Yan, J. R. Ahn, J. H. Byun, H. W. Yeom
- P-038 High-resolution photoemission study of the anisotropic phase in Pb/Si(557)**  
K. S. Kim, W. H. Choi, H. W. Yeom\*
- P-039 Metallic transport and metal-insulator transition on Si(111)- $\sqrt{7}\times\sqrt{3}$ -In surface superstructure**  
S. Yamazaki, Y. Hosomura, I. Matsuda, R. Hobara, S. Hasegawa
- P-040 Photoemission study of thallium adsorbed Si(111) surface**  
Kazuyuki Sakamoto, P.E.J. Eriksson, Nobuo Ueno, R.I.G. Uhrberg
- P-041 The electronic states of F4-TCNQ on the ethylene-terminated Si(100) surface**  
K. Mukai, Y. Kagata, Y. Yamashita, J. Yoshinobu

- P-042 Atomic orbital analysis of the Fermi surface of  $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_y$  by Two-dimensional photoelectron spectroscopy**  
C. Sakai, F. Matsui, N. Takahashi, S. N. Takeda, H. Daimon
- P-044 Atomic orbitals and geometry of the Cu(111) Fermi surface studied by two-dimensional photoelectron spectroscopy using synchrotron radiation**  
K. Nakanishi, F. Matsui, Y. Hamada, Y. Nozawa, N. Takahashi, K. Ogawa, H. Daimon, H. Namba
- P-045 Intermolecular interactions of  $\text{Ir}(\text{ppy})_3$  mediated by surface state electrons on Cu(111)**  
Tomonori Takahashi, Kazuteru Shinozaki, Takashi Yokoyama
- P-046 High-resolution angle-resolved photoemission study of the surface states in Ni(100)**  
Y. Miura, K. Shimada, M. Hoesch, M. Higashiguchi, N. Tobita, X.Y. Cui, Y. Aiura, H. Namatame, M. Taniguchi
- P-047 Atomic layer resolved two-dimensional XAFS: Ni wedged film on Cu(001)**  
F. Matsui, T. Matsushita, Y. Kato, K. Inaji, F.Z. Guo, H. Daimon
- P-048 Role of Spin-Orbit Coupling and Hybridization Effects in the Electronic Structure of Ultrathin Bi films**  
T. Hirahara, T. Nagao, I. Matsuda, G. Bihlmayer, E. V. Chulkov, Y. M. Koroteev, P. M. Echenique, M. Saito, S. Hasegawa
- P-049 Curvature Effects on Surface Electron States in Ballistic Nanostructures**  
Hisao Taira, Hiroyuki Shima
- P-050 High-resolution low-temperature angle-resolved photoemission study of the Shockley state in Ni(111)**  
M. Higashiguchi, K. Shimada, M. Arita, Y. Miura, N. Tobita, X. Y. Cui, Y. Aiura, H. Namatame, M. Taniguchi
- P-051 Molecular orientation of metal free phthalocyanine on Si substrate by soft x-ray spectroscopy**  
K. K. Okudaira, S. Hosoumi, N. Mitsuo, S. Kera, K. Mase, N. Ueno

- P-052 Quasi one dimensional quantized states of ultra-thin Ag films on one dimensional structure Si(111)4×1-In**  
N.Nagamura, I.Matsuda, T.Uchihashi, N.Miyata, T.Hirahara, S.Hasegawa
- P-053 Optical Second Harmonic Spectroscopy of Pt nanowires**  
N. Hayashi, T. Iwai, R. Okushio, K. Aratake, A. Sugawara, H. Sano, G. Mizutani
- P-054 Surface Plasmon Resonance in Cu Nanowires**  
K.Locharoenrat, S.Takase, A.Sugawara, H.Sano, G.Mizutani
- P-055 Conductance behavior of [110] gold nanowire**  
Yoshifumi Oshima, Kurui Yoshihiko, Masakuni Okamoto, Kunio Takayanagi
- P-056 Electric conductance of metal nanowires measured by mechanically controllable break junction under electrochemical potential control**  
M. Kiguchi, N. Sekiguchi, K. Murakoshi
- P-057 Fabrication of Alloy Nanotubes**  
Sin-iti Kitazawa
- P-058 Temperature and Substrate Position Effects on the Growth of Silicon Nanowires by Carbothermal Technique**  
Sabar D. Hutagalung, Khatijah A. Yaacob, Azma F. Abdul Aziz
- P-059 Growth of Silicon Nanowires by Selective Etching of Silicon Wafer**  
Sabar D. Hutagalung, Tan Ruo Yee
- P-060 Ligand effect on O<sub>2</sub> interaction with metalloporphyrins**  
M. Tsuda, H. Kasai
- P-061 Quantum Confinement into Two-Dimensional Structures at Si(111)  $\sqrt{3} \times \sqrt{3}$ -Ag surfaces**  
S.Minamoto, T.Ishidsuka, H.Hirayama
- P-062 Optical properties of In and Cr magic clusters on Si(111)**  
S.A. Dotsenko, N.G. Galkin, L.V. Koval

- P-063 Electric conductivity of Ge nanodot array on an oxidized Si surface**  
Y. Nakayama, I. Matsuda, S. Yamazaki, S. Hasegawa, M. Ichikawa
- P-064 Resistance of silicide nanowires epitaxially grown on Si(110)**  
Hiroyuki Okino, Iwao Matsuda, Rei Hobara, Yoshikazu Hosomura, Zhian He, P.A. Bennett, Shuji Hasegawa
- P-065 STM studies of the molecular line junctions fabricated through the chain reaction on the Si(100)-(2x1)-H surface**  
Md. Zakir Hossain, Hiroyuki S. Kato, Maki Kawai
- P-066 Structure modification of Sn adsorbed Ge (001) surface by carrier injection from the STM tip**  
Kota Tomatsu, Kan Nakatsuji, Takushi Iimori, Fumio Komori
- P-067 Polymerization and depolymerization of fullerenes induced by hole injection from scanning tunneling microscope tips**  
M. Yoshino, K. Saishu, Y. Nakamura, Y. Mera, K. Maeda
- P-068 Structures of Au nanoclusters protected by alkanethiolate on TiO<sub>2</sub>(110) and reduction of oxidized Au nanocluster surfaces**  
T. Matsumoto, P. Nickut, H. Tsunoyama, K. Watanabe, T. Tsukuda, K. Al-Shamery, Y. Matsumoto
- P-069 Synthesis and size control of a single carbon Fullerene at a nano-gap**  
M.Yoshida, Y.Kurui, Y.Oshima, K.Takayanagi
- P-070 Conductance of individual 1,4-benzenedithiol molecules**  
Y. Teramae, K. Horiguchi, M. Tsutsui, S. Kurokawa, A. Sakai
- P-071 Electron wave confinement to a single Si(100) dimer row**  
Keisuke Sagisaka, Daisuke Fujita
- P-072 Controlled formation of C<sub>60</sub> linear chains on a porphyrin network**  
F.Nisiyama, T.Yokoyama, T.Kamikado, S.Yokoyama, S.Mashiko, K.Sakaguchi, K.Kikuchi
- P-073 Fabrication and Analysis of Buried Iron Silicide Microstructures Using a Focused Low Energy Electron Beam**  
Youhei Kakefuda, Yoshiyuki Yamashita, Kozo Mukai, Jun Yoshinobu

- P-074 Determination of Stable Gold Nanowire using TEM-STM**  
Yoshihiko Kurui, Yoshifumi Oshima, Masakuni Okamoto, Kunio Takayanagi
- P-075 Conductance of Si nanocontacts**  
T. Iwanari, S. Kurokawa, A. Sakai
- P-076 Characterization of Carbon Nanotube Surfaces by Infrared Reflection Absorption Spectroscopy**  
A.Ueda, S.Yamada, T.Ogino
- P-077 Low Temperature Encapsulation of Fullerene Derivatives in Single Wall Carbon Nanotubes**  
A. Hassanién, A. Mrzel, Zheng Liu, K. Suenaga, Y. Miyata, K. Yanagi, H. Kataura
- P-078 Synthesis and Characterization of Double-Walled Carbon Nanotubes**  
K. Y. Chun, S. K. Choi, S. I. Jung, D. H. Shin, C. J. Lee
- P-079 Unquenched orbital magnetic moment in large cobalt cluster**  
T. Xie, Y. Cui, T. Moko, S. Qiao, H. Namatame, A. Kimura, M. Taniguchi, J. Jia, Q. Xue
- P-080 Enhanced Raman Scattering From the Aggregates of Gold Nanoparticles**  
M. K. Hossain, M. Kitajima, K. Imura, H. Okamoto
- P-081 Loop Thermal Current at Zero-Transmission Dips in Graphitic Ribbons with Structural Defects**  
Masahiro Morooka, Takahiro Yamamoto, Kazuyuki Watanabe
- P-083 Soft X-ray emission spectroscopy of Co nanodots on a nitrogen-adsorbed Cu(001) surface**  
Y. Takagi, K. Nakatsuji, K. Tomatsu, K. Yaji, T. Iimori, Y. Harada, T. Tokushima, T. Takeuchi, Y. Takata, S. Shin, T. Ishikawa, F. Komori
- P-084 Spin-resolved magnetic dichroism in angular distribution of fcc Co thin film on Cu(001)**  
K. Miyamoto, K. Iori, K. Sakamoto, H. Narita, A. Kimura, S. Qiao, K. Shimada, H. Namatame, M. Taniguchi
- P-085 Monolayer nanographite on Pt(111) and its magnetic property**  
S. Entani, M. Yamamoto, S. Ikeda, K. Saiki

- P-086 Adsorption patterns of Mn<sub>12</sub> single-molecule magnets on Au surface investigated by atomic force microscopy**  
S. H. Phark, Z. G. Khim, S. Yoon, J. M. Lim, J. Kim
- P-087 Initial Growth and Magnetism of Co on O/Cu(001) Surfaces**  
X. Liu, J. Albertos, T. Iimori, F. Komori
- P-088 Modification of structural property for Fe/Cu(001) film by Cr adsorbates**  
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