

## ACSIN-9 Poster Sessions (Tentative)

**12 Nov. (Monday)**

### Poster Session 1

#### Topic 4: Scanning Probe Microscopy

- PS1- 1 Adsorption and diffusion behaviors of isolated water dimers on transition metal surface  
Kenta Motobayashi, Chiba, Japan
- PS1- 2 Energy Landscape of Biotin-Streptavidin Interactions Selectively Probed using Dynamic Force Spectroscopy  
Atsushi Taninaka, Ibaraki, Japan
- PS1- 3 Molecular dynamics simulation of compressed green fluorescent protein molecule by AFM tip  
Katsunori Tagami, Tokyo, Japan
- PS1- 4 Analysis of Stress Relaxation Processes of Living Cells Measured by AFM  
Takaharu Okajima, Sapporo, Japan
- PS1- 5 Enhancement in Alignment of CNT-STM Tips Grown by Microwave Plasma Enhanced Chemical Vapor Deposition Using Hydrogen Plasma  
Fa-Kuei Tung, Nagoya, Japan
- PS1- 6 Parametric excitation of piezoelectric cantilevers based on elasticity control  
Tatsuya Tomita, Kyoto, Japan
- PS1- 7 Development of modulation scanning tunneling microscope cathodoluminescence spectroscopy  
Kentaro Watanabe, Tokyo, Japan
- PS1- 8 Electro- and photoluminescence from semiconductor nanostructures by a transparent STM tip: spatial resolution and collection efficiency  
Ilya Sychugov, Atsugi, Kanagawa, Japan
- PS1- 9 STM-excited light emission from Au films on HOPG surface  
Tiezhu Han, Osaka, Japan
- PS1- 10 What can we observe by femtosecond time-resolved STM? - Carrier dynamics probed with ultimate spatial and temporal resolutions -  
Yasuhiko Terada, Tsukuba, Japan
- PS1- 11 Theoretical Study of Tip-Induced Band Bending and Local Tunneling Barrier Height on H-Terminated Si(100) Surface  
Hideomi Totsuka, Tokyo, Japan
- PS1- 12 Nanoscale Electrostatic Potential Variation in Semiconductor probed by Light Modulated Scanning Tunneling Spectroscopy  
Shoji Yoshida, Tsukuba, Ibaraki, Japan
- PS1- 13 A direct observation of nanosized contacts by STM  
Keiichi Fujita, Kyoto, Japan
- PS1- 14 Surface standing waves on Cu-9%Al(111)  
Yinghui Yu, Tsukuba, Japan
- PS1- 15 Real-Space observation of electronic structure in 2D Fe-nanodots on Au(111) by Scanning Tunneling Microscope  
Hirotaka Inoue, Chiba, Japan
- PS1- 16 Effect of Short Range Step-Step Interactions on Relaxation of Nano-scale Holes on SrTiO<sub>3</sub>(001)  
Mahito Yamamoto, Osaka, Japan
- PS1- 17 Electric Field Modulation Nano-spectroscopy of beta-FeSi<sub>2</sub> Nano-dots  
Nobuyasu Naruse, Tokyo, Japan
- PS1- 18 Spatial fluctuations in the quality of ultrathin SiO<sub>2</sub> films evaluated by electrical scanning probe microscopy technique  
Atsushi Ando, Tsukuba, Japan
- PS1- 19 Study of One-Dimensional Iron Silicide  
Yutaka Ohira, Nagoya, Japan
- PS1- 20 Adsorption structure of palladium on Si(113) surface  
Shinsuke Hara, Nagoya, Japan
- PS1- 21 Adsorption structure of L-Tyrosine on Si(111)7x7 surface  
Masashi Yoshimura, Ikoma, Japan
- PS1- 22 Pt-induced structures on Si(110) studied by STM  
Anton Visikovskiy, Nagoya, Japan
- PS1- 23 Microstructure and local density of states of Ruthenium silicide on Si(001) surface  
Masamitsu Toramaru, Yokohama City, Japan
- PS1- 24 Investigation of C<sub>60</sub> and C<sub>84</sub> Molecules on a Si(111)-7x7 Surface with Scanning Tunneling Microscopy  
Mon-Shu Ho, Taichung, Taiwan
- PS1- 25 Formation of Ru silicide on Si(111) surface  
Naoto Kobayashi, Yokohama, Japan
- PS1- 26 Growth behavior of manganese germanide on Ge(001) surface  
Howon Kim, Seoul, Korea
- PS1- 27 Formation and control of comblike nanostructure on oxidized Mo(110) surface  
Arifumi Okada, Nagoya, Japan
- PS1- 28 Au diffusion on Ir(111) investigated by scanning tunneling microscopy  
Jun Nakamura, Tokyo, Japan
- PS1- 29 Multi-Atom Complexes Observed on the Surface of Cu(111)  
Goo-Eun Jung, Seoul, Korea
- PS1- 30 Ab initio study of a predicted step structure on Si(111)-2x1 surface  
Takeo Hoshi, Tottori, Japan

### **Topic 6: Electronic Transport**

- PS1- 31 Molecular dynamics study on interfacial resistance of graphene nanoribbon junctions  
Toru Takahashi, Tokyo, Japan
- PS1- 32 Forces Induced by the Current On Adatoms on Metallic and semiconducting Carbon Nanotubes  
Yvan Girard, Tokyo, Japan
- PS1- 33 Transport Properties of Iron-porphyrin Complexes Sandwiched between Au Surfaces  
Hisashi Kondo, Tsukuba, Japan
- PS1- 34 Transient Inelastic Transport Behavior of Atomic Contacts: Tight-Binding Calculation Based on the von Neumann Equation  
Koji Yamada, Tokyo, Japan
- PS1- 35 The Effect of Redox States of Ligand-Supported Metal-Atom Chains on the Single-Molecular Conductance: an Electrochemical STM Study  
Hao-Cheng Lu, Taipei, Taiwan
- PS1- 36 Influence of impurities on electrical properties of atomic wire self-assembled on silicon surface  
Takahide Shibasaki, Tokyo, Japan
- PS1- 37 Conductance and structure changes at the very initial stage of K adsorption on Si(111)  
Sakura Nishino Takeda, Nara, Japan
- PS1- 38 Effect of surface state on carrier transport of nano sized TiSi<sub>2</sub> islands  
Yorinobu Maeda, Kyoto, Japan
- PS1- 39 Periodic Orbit Scars in Time-evolution of Wave Packets in 2D Nanostructures  
Masaki Nishikawa, Tokyo, JAPAN
- PS1- 40 Numerical Studies of Electron Transfers in Two-Dimensional Multiple Quantum Dots  
Hanako Kusumoto, Musashino, Japan

### **Topic 7: Nano-Magnetism**

- PS1- 41 Magnetic structures of exchange bias Ni/FeF<sub>2</sub>(110) interface  
Yusuke Ishihama, Tsu, Japan
- PS1- 42 Magnetic structures and magnetocrystalline anisotropy in bulk and thin film Fe<sub>3</sub>Pt  
Hiroshi Suzuki, Tsu, Japan
- PS1- 43 In-situ XMCD measurement system for ultrathin magnetic films at the soft X-ray beamline BL-14 of HiSOR  
Masahiro Sawada, Higashi-Hiroshima, Japan
- PS1- 44 Magnetotransport properties of epitaxial Fe<sub>3</sub>O<sub>4</sub> layer on GaAs(001)  
Tomoyasu Taniyama, Yokohama, Japan
- PS1- 45 Spin filtering effect at epitaxial Fe/GaAs(001) Schottky interfaces  
Eiji Wada, Yokohama, Japan
- PS1- 46 Structural, magnetic, and optical properties of Zn<sub>1-x</sub>CoxO films prepared by rf sputtering and pulsed laser deposition  
Changmin Lee, Daegu, Korea
- PS1- 47 Reactive Ion Etching of FePt using Inductively Coupled Plasma  
Tomomi Kanazawa, Tsukuba, Japan
- PS1- 48 Gd adsorption on In-induced metallic surface superstructures on Si(111)  
Yuto Niinuma, Tokyo, Japan
- PS1- 49 Formation of ultrahigh density epitaxial Fe<sub>3</sub>Si nanodots on Si (111) substrates covered with ultrathin SiO<sub>2</sub> films  
Kenjiro Fukuda, Tokyo, Japan
- PS1- 50 A sonochemical synthesis and characterization of La<sub>1-x</sub>SrxMnO<sub>3</sub> perovskite nanoparticles  
Do-Hyung Kim, Daegu, Republic of Korea

### **Topic 8: Nano-Photonics**

- PS1- 51 Waveguide Properties and Optical Switching in Prism-Coupled Au:SiO<sub>2</sub> Nanocomposite Films  
Kyeong-Seok Lee, Seoul, Korea
- PS1- 52 Investigation of Theoretical Luminescence Spectra on Nitride Quaternary Alloys Double Quantum Wells  
Eronides Da Silva JR, RECIFE - PE, Brazil
- PS1- 53 Novel Photoactive Aggregates of Rhodamines: Switching between a Dequenched State and a Quenched State  
Akihiro Tomioka, Osaka, Japan
- PS1- 54 Carboxymethyl cellulose-assisted hydrothermal synthesis of PbS with nano and microcrystals  
Sulawan Kaowphong, Chiang Mai, Thailand
- PS1- 55 Blue-shift of Molecular Fluorescence from Porphyrin in STM with Bias  
Hongwen Liu, Osaka, Japan
- PS1- 56 The preparation of core-shell CdSe/ZnS quantum dot via pyrolysis reaction  
Jongsung Kim, Seongnam-City, Korea
- PS1- 57 Confocal Raman Spectroscopic Mapping Studies on a Single CuO Nanowire  
Sheng Yun Wu, Hualien, Taiwan

### **Topic 10: Atomic and Molecular Manipulation**

- PS1- 58 Development of simulation package for atomic processes of ultra-large-scale system based on electronic structure theory  
Hitoshi Nitta, Tokyo, Japan
- PS1- 59 The role of two surface-bound vibrations in surface diffusion of CO/Cu(110)  
Tomonari Okada, Wako, Saitama, Japan
- PS1- 60 Nanoscale Pit and Metal Dot Formation on SiO<sub>2</sub> Surface by STM  
Takeshi Kitajima, Yokosuka, Japan

### **Topic 14: Carbon Nanotubes and Related Materials**

- PS1- 61 Giant Fullerenes formed on C<sub>60</sub> Films irradiated with Electrons field-emitted from Scanning Tunneling Microscope Tips  
Yoshiaki Nakamura, Tokyo, JAPAN
- PS1- 62 Investigation of the properties of gold catalyst in SWCNT growth  
Huaping Liu, Tokyo, Japan

- PS1- 63 Growth of CNTs on the Ni/TiO<sub>2</sub> Surface by Catalytic CVD Method  
Yuki Aoki, Niigata, Japan
- PS1- 64 Growth of Carbon-based Composite Materials by Hot-Filament Chemical Vapor Deposition  
Hidejiro Chiba, Yokohama, Japan
- PS1- 65 Formation of Carbon Nanotubes on a Polyimide Substrate by Chemical Vapor Deposition Method  
Masato Shimanuki, Kitakyushu, Japan
- PS1- 66 Influence by the difference of the vacuum degree to the growth of carbon nanotubes on silicon carbide surface  
Junichi Yoshida, Kitakyushu, Japan
- PS1- 67 Effects of Hydrogen and Oxygen Plasma Treatment on the Structural Properties of Carbon Nanotubes  
Jae-Hyeong Lee, Kunsan, South Korea
- PS1- 68 Growth Rate of Carbon Nanotubes Measured by In Situ Environmental Transmission Electron Microscopy  
Yusuke Tanemoto, Osaka, Japan
- PS1- 69 In-situ SEM Observation of Single Walled Carbon Nanotube Growth from Au Catalysts  
Tomohito Chokan, Tokyo, Japan
- PS1- 70 Chemical state of iron nanoparticle catalysts for single-walled carbon nanotube growth studied by in situ photoelectron spectroscopy  
Fumihiko Maeda, Atsugi-shi, Kanagawa, Japan
- PS1- 71 Enhancement of Field Electron Emission from Vertically Aligned Carbon Nanotubes with Various Content of Nitrogen  
Yu-Hao Lai, Taipei, Taiwan
- PS1- 72 Surface-Conduction Electron Emitter Display with Geometry Structure of Carbon Nanotube Emitter Arrays  
Hon Vun Tong, Taipei, Taiwan
- PS1- 73 Ion desorption from carbon nanotubes induced by soft X-ray illumination  
Yutaka Mera, Tokyo, Japan
- PS1- 74 Study of Hydrogen Adsorption on Single-walled Carbon Nanotubes  
Jin-Hyo Boo, Suwon, Korea
- PS1- 75 Study for adsorption of metal adatoms on CNT using the DFT calculation  
Akira Ishii, Tottori-City, Japan
- PS1- 76 Bilirubin/Albumin Adsorption on Carbon Nanotube Surfaces for Medical Treatment  
Keiichi Ando, Yokohama, Japan
- PS1- 77 Infrared Absorption Spectroscopy Study on Protein Adsorption on Carbon Nanotube Surfaces  
Akihiro Ueda, Yokohama, Japan
- PS1- 78 Multiwalled carbon nanotubes with tunable mechanical properties  
Yuan Chih Chang, Taipei, Taiwan
- PS1- 79 Characterization of Mechanical Properties of Suspended Carbon Nanotubes  
Yuki Ono, Yokohama, Japan
- PS1- 80 Manipulation of Carbon Nanotubes and Metal Nanoparticles using Atomic Force Microscope  
Yuta Kashiwase, Yokohama, Japan

**13 Nov. (Tuesday)**

**Poster Session 2**

**Topic 1: Surface/Interface Structures and Properties**

- PS2- 1 Theoretical study of the structural stability for 3C-SiC/Si(110)  
Toru Kanno, Tsu, Japan
- PS2- 2 New surface local structures formed on Si(111)-(7x7) by TI deposition  
Pavel Kocan, Kasuga, Japan
- PS2- 3 Direct observations of Si adatom and dimer atom from O atoms inserted in backbonds by Auger electron diffraction  
Takashi Narikawa, Ikoma, Japan
- PS2- 4 ARPES measurements on Si(111) hole subband induced by Ga adsorption  
Makoto Morita, Ikoma, Japan
- PS2- 5 Structural study of Si(111)-5x2-Au by surface X-ray diffraction  
Yusaku Iwasawa, Kashiwa, Japan
- PS2- 6 Study of the interface structure of iron silicide on Si(111) with crystal-truncation rod scattering  
Kouji Sekiguchi, Kashiwa, Japan
- PS2- 7 Surface Structure Analysis of Metal adsorbed Si(111) Surfaces by Patterson Function with LEED I-V Curves  
Takuma Kuzushita, Kobe, Japan
- PS2- 8 An ab initio-based approach to phase diagram calculations for GaAs(001)-(2x4)gamma surfaces  
Tomonori Ito, Tsu, Japan
- PS2- 9 Formation of ultrahigh density GaSb nanodots on Si substrates covered with ultrathin SiO<sub>2</sub> films  
Tomohiro Sugimoto, Tokyo, Japan
- PS2- 10 Theoretical study of miscibility for Ga<sub>N</sub>xAs<sub>1-x</sub> on V-grooved substrates  
Naoki Takasu, Tsu, Mie, Japan
- PS2- 11 Theoretical investigations on the formation of wurtzite segments in group III-V semiconductor nanowires  
Tomoki Yamashita, Tsu, Japan
- PS2- 12 Theoretical investigation on structural stability of InN thin films on 3C-SiC(001)  
Takumi Ito, Tsu, Japan
- PS2- 13 Phase stability in substitutionally Mn-doped GaAs: role of lattice constraint  
Kohji Nakamura, Tsu, Japan
- PS2- 14 Theoretical investigations of initial growth processes on GaAs(111)B-(2x2) surfaces  
Hiroaki Tatematsu, Tsu, Japan
- PS2- 15 Theoretical investigations for zinc blende-wurtzite polytypism in GaAs layers at Au/GaAs(111) interfaces  
Yuya Haneda, Tsu, Japan
- PS2- 16 Nitridation of sapphire surface by Plasma-Assisted Molecular Beam Epitaxy  
In Ho Im, Sendai Miyagi, Japan
- PS2- 17 Investigation of the heterointerface formation of GaSb films grown on ZnTe templates by MBE  
Woong Lee, Pusan, Republic of Korea
- PS2- 18 Formation of atomically flat diamond (111) surfaces  
Norio Tokuda, Tsukuba, Japan
- PS2- 19 Effect of H<sub>2</sub> and O<sub>2</sub> plasma etching treatment on the surface of diamond-like carbon thin film  
Deok Yong Yun, Suwon, South Korea
- PS2- 20 Development of Theoretical Method for Optimizing of Polymer Electrolyte Fuel Cell Electrode  
Tatsuya Hattori, Sendai, Japan
- PS2- 21 Aluminium Adsorption on the Ir(111): A First Principle Study  
Hong Zhang, Chengdu, China
- PS2- 22 Deposition of Nanoparticles with Double-Layer Interactions: An Integral Equation Theory  
Panu Danwanichakul, Pathumthani, Thailand
- PS2- 23 Flexible structure of alumina at the interface observed by RHEED  
Michiko Yoshitake, Tsukuba, Japan
- PS2- 24 Atomic orbitals and photoelectron intensity angular distribution patterns of MoS<sub>2</sub> valence band  
Zsuzsa Janosfalvi, Ikoma, Japan
- PS2- 25 Birefringence measurements of MnPc thin film by polarization microscopy  
Tsutomu Hashimoto, Tokushima, Japan
- PS2- 26 Composite TiO<sub>2</sub>-SnO<sub>2</sub> Thin Films Prepared by Spin-Coating With High Photocatalytic Performance  
El-Maghraby Mohamed, Assiut, Egypt
- PS2- 27 One-dimensional Atomic and Electronic Structures of Submonolayer Potassium Deposited on Stepped Ni(755) Surface  
Koji Ogawa, Kusatsu, Japan
- PS2- 28 The annealing effect on tribological and structural properties of Ti doped a-C:H films prepared by CFUBM sputtering method  
Hyung Jun Cho, Suwon, Korea
- PS2- 29 Mesoporous PdO/CeO<sub>2</sub> Nanopowder: Crystalline Structure, Properties and Thermal Analysis Studies  
Abdul Hadi Zainal, Kuala Lumpur, Malaysia
- PS2- 30 Palladium Clusters on on Alumina/Cu-9%Al(111): Growth and Thermal Stability  
Weijie Song, Ningbo, P. R. China
- PS2- 31 Magnetic structures in monatomic Co and Fe wires on Pt(111) surface step edge  
Makoto Kadota, Tsu, Japan
- PS2- 32 Behavior of the reemitted slow positron on hydrogen-adsorbed Ni (111) surface  
Koji Hirota, Tokyo, Japan

**Topic 2: Thin Film Growth and Application**

- PS2- 33 Growth and Characterization of Aluminum-doped Zinc Oxide by Atomic Layer Deposition  
Chi-chung Kei, Hsinchu, Taiwan, R.O.C
- PS2- 34 High quality ZnO growth on (0001)Al<sub>2</sub>O<sub>3</sub> using Cr<sub>2</sub>O<sub>3</sub> buffer layer by plasma assisted molecular beam epitaxy  
Jinsub Park, Sendai, Japan

- PS2- 35 Development of Cr-doping Particles into ZnO Micro-Nano Crystals on Sapphire (0001) Substrate  
Keiichi Shimoda, Nagaoka, Japan
- PS2- 36 Growth Orientation and Surface Morphology Temperature Dependence of Li-doped ZnO Thin Films on SiO<sub>2</sub>/Si Substrates  
El-Maghraby Mohamed, Assiut, EGYPT
- PS2- 37 Influence of hydrogen incorporation on the properties of ZnO:Al films deposited on polyimide substrate by r.f. magnetron sputtering  
Jae-Hyeong Lee, Kunsan, South Korea
- PS2- 38 Effects of surface texturing on electrical and optical properties of sputtered ZnO:Al films for solar cell applications  
Jae-Hyeong Lee, Kunsan, South Korea
- PS2- 39 Incorporation kinetics of nitrogen atoms into MBE grown ZnO films  
Seunghwan Park, Sendai, Japan
- PS2- 40 High Density SiO<sub>2</sub> Thin films Formed by Photo-Oxidation  
Atsuyuki Fukano, Ibaraki, Japan
- PS2- 41 A STM study of Ge epitaxial growth on Si(111) 3x 3-B substrates  
Tsuka Sekiguchi, Yokohama, Japan
- PS2- 42 A competition between quantum effect and kinetic processes in Ag thin Film growth on Si(111)7x7 substrates  
Masaru Miyazaki, Yokohama, Japan
- PS2- 43 Large Area Microcrystalline Si Films Grown by Electron Cyclotron Resonance Chemical Vapor Deposition at Low Temperature  
Chung-Chun Huang, Tao-Yuan, R.O.C
- PS2- 44 Preparation of boron doped uc-Si:H films by ICP-CVD and their characteristics for solar cell applications  
Chaehwan Jeong, Gwangju, Korea
- PS2- 45 DC and RF Characteristics of HfO<sub>2</sub> in Metal-Insulator-Metal Capacitor  
Jeong Seok-Won, Suwon Kyeonggi-do, Korea
- PS2- 46 Characteristics of Hafnium Silicate Films Deposited on Si by Atomic Layer Deposition Technique  
Roh Yonghan, Suwon, Korea
- PS2- 47 Growing SnO<sub>2</sub> Films by MBE Method  
Shunichi Hishita, Tsukuba, Japan
- PS2- 48 The Coloration of Tungsten-oxide Film by Impurity Doping and Its Mechanism  
Ryuji Sato, Tokyo, Japan
- PS2- 49 Preparation and electric properties of Cr<sub>2</sub>O<sub>3</sub> gate insulator embedded Fe dot  
Takaaki Kuribayashi, Nagoya, Japan
- PS2- 50 Electrochemical deposition on a hexagonally patterned aluminum substrate for the formation of nanowires and nanoparticles  
Jinsub Choi, Seoul, Korea
- PS2- 51 Growth simulation of GaN(0001) homoepitaxy based on the DFT calculation  
Akira Ishii, Tottori-City, Japan
- PS2- 52 HVPE GaN grown on vicinal sapphire (0001) substrates with CrN buffer layer  
Hyo Jong Lee, Sendai, Japan
- PS2- 53 Atomistic Nitriding Processes of Titanium Thin Films due to Nitrogen-Implantation  
Yoshitaka Kasukabe, Sendai, Japan
- PS2- 54 Effects of rf graded ratio on the microstructure and morphology of gradient TiN films produced by rf-reactive magnetron sputtering  
Chao-Te Lee, Hsinchu, Taiwan
- PS2- 55 MOCVD growth of various SiC nanostructures  
Shuhei Takao, Toyonaka, Japan
- PS2- 56 Structure and Morphology of CuPc/F16CuPc p-n Heterojunction  
Rongbin Ye, Morioka, Japan
- PS2- 57 Nanohardness and resistivity of Au and Au-V solid solution thin films sputtered on Si wafers  
Suparut Narksitipan, Chiang Mai, Thailand
- PS2- 58 Low-k hybrid polymer thin films and their electrical and mechanical properties  
Sang Jin Cho, Suwon, Korea

### **Topic 3: Reaction and Dynamics**

- PS2- 59 TiSi<sub>2</sub>-catalyzed nanowires and nanoparticles formed from TiO<sub>2</sub> nanonots utilizing silicon doping  
Sang-Won Jee, Ansan, Korea
- PS2- 60 In-situ monitoring of nucleation and evolution of Ge nanodots on faintly oxidized Si(111) surfaces  
Sung-Pyo Cho, Nagoya, JAPAN
- PS2- 61 Computational Chemistry Study on Formation Dynamics and Frictional Property of MoS<sub>2</sub> Tribofilm  
Yusuke Morita, Sendai, Japan
- PS2- 62 A Theoretical Investigation on the Wear Prevention Mechanism of ZDDP Boundary Lubricating Film  
Tasuku Onodera, Sendai, Japan
- PS2- 63 Model study of Eliashberg function  
Akihiro Nojima, Tokyo, Japan
- PS2- 64 5043 Suzuki SO<sub>3</sub> adsorption and dissociation on the electrode in the electrolysis  
Chikashi Suzuki, Ibaraki, Japan
- PS2- 65 Tight-Binding Quantum Chemical Molecular Dynamics Study on Oxygen Reduction Reaction of Polymer Electrolyte Fuel Cell Electrode  
Huifeng Zhong, Sendai, Japan
- PS2- 66 Temperature Dependence of the Oxidation-Induced Strain at SiO<sub>2</sub>/Si(001) Interface Studied by XPS Using Synchrotron Radiation  
Shuichi Ogawa, Sendai, Japan
- PS2- 67 Electron-stimulated reaction process on Si(001)-(2x1) studied with optical reflectance spectroscopic methods  
Shinya Ohno, Yokohama, Japan
- PS2- 68 The intermediates of Thermal Decomposition of 1,3-Disilabutane to Silicon Carbide on Si(100) Surface  
Hae-geun Jee, Suwon, Rep. of Korea
- PS2- 69 Analysis of NO reduction mechanism on the precious metal catalyst using tight-binding quantum chemical molecular dynamics method  
Sunho Jung, Sendai, Japan
- PS2- 70 Hydrogen-Assisted Reduction of Oxidized Ni (110) Surfaces Studied by Metastable-Induced Electron Spectroscopy  
Tomonori Ikari, Ube, Japan
- PS2- 71 Ortho-para Conversion of hydrogen molecules on Cr<sub>2</sub>O<sub>3</sub>-Effect of external magnetic field  
Yuta Motoshima, Tokyo, Japan

- PS2- 72 The Electronic Structure and Reactivity of the Oxygen-Modified Mo<sub>2</sub>C(0001) Surface  
Kazuyuki Edamoto, Tokyo, Japan
- PS2- 73 STM observation of oxygen adsorption on clean Cu(001) surface at low temperatures  
Kazuma Yagyu, Chiba-ken Kashiwa-city, Japan
- PS2- 74 Theoretical Investigation of Ethylene/1-Butene Copolymerization process using Constrained Geometry Catalyst - (CpSiH<sub>2</sub>NH)-Ti-Cl<sub>2</sub>  
Hema Malani, Sendai, Japan
- PS2- 75 Density functional theory -based calculations on the reactive ion etching (RIE) process model for TiO<sub>2</sub>(anatase) thin film  
Hirofumi Kishi, Osaka, Japan
- PS2- 76 Surface structure and phase transition of Ge(111)-3x3-Pb studied by reflection high-energy positron diffraction  
Yuki Fukaya, Takasaki, Japan
- PS2- 77 Structural phase transition of quasi-one-dimensional In chains on Si(111) surface studied by reflection high-energy positron diffraction  
Mie Hashimoto, Takasaki, Japan
- PS2- 78 Chitin-Humic Acid Hybrid as Adsorbent for Cr(III) in Effluent of Tannery Wastewater Treatment  
Sri Juari Santosa, Yogyakarta, Indonesia

**14 Nov. (Wednesday)**

**Poster Session 3**

**Topic 5: Surface Microscopy**

- PS3- 1 Damaged-layer formation in specimen preparation for atom probe tomography by FIB fabrication  
Teruyuki Kinno, Kawasaki, Japan
- PS3- 2 Characterization of diamond-like carbon produced by plasma deposition  
Somchai Thongtem, Chiang Mai, Thailand
- PS3- 3 Atomically Controlled Surfaces with Step and Terrace of b-Ga<sub>2</sub>O<sub>3</sub> Single Crystal Substrates for Thin Film Growth  
Shigeo Ohira, Sizuoka, Japan
- PS3- 4 Dynamic observation of the growth process of Ag on In/Si (111), and the chemical analysis by selected area XPS, SR-XPEEM  
Yoshiaki Matsuoka, Neyagawa, Japan
- PS3- 5 Observation of the growth process of Sb on In/Si (111) by the SR-XPEEM  
Masato Ueda, Neyagawa, Japan
- PS3- 6 Blur of XPEEM Image by Stochastic Coulomb Interaction  
Tsuneo Yasue, Osaka, Japan

**Topic 9: Nano-Biotechnology**

- PS3- 7 Selective Adsorption of Proteins on Sapphire Surfaces  
Takayuki Ikeda, Yokohama, Japan
- PS3- 8 STM observation of the adsorption structure of double-stranded DNA  
Naoya Yoshimura, Fukuoka, Japan
- PS3- 9 Direct imaging of ionotropic glutamate receptor proteins using fast-scanning atomic force microscopy  
Youchi Shinozaki, Kanagawa, Japan
- PS3- 10 Morphology of Porous Alumina Surfaces Prepared by Anodic Oxidation  
Takahiro Tsukamoto, Yokohama, JAPAN
- PS3- 11 Preparation of CoS and NiS Quantum Dots Using Dendrimer Templates  
Ik Joong Kang, Sungnam, Republic of Korea
- PS3- 12 Effects of Na<sup>+</sup> and K<sup>+</sup> on the Molecular Arrangement of Tetragonal Thaumatin Crystals (110) Surface  
Nobuyasu Hori, Ibaraki, Japan
- PS3- 13 Selectivity Improvement in Protein Patterning with Hydroxy-Terminated Self-Assembled Monolayer Template  
Takeo Miyake, Tokyo, Japan
- PS3- 14 XPS and KPFM studies of ferritin cores reduced by low-energy ion beam irradiation  
Shin-ichi Yamamoto, Kobe, Japan
- PS3- 15 The preparation of IgG sensing media with CdSe/ZnS Qdots and AlexaFluor fluorophores  
Young Joo Na, Seongnam-City, Korea
- PS3- 16 Functionalized carbon nanotubes for biomedical application  
Anastasia Vyalikh, Dresden, Germany
- PS3- 17 Optimization of Zero-Mode Waveguide for Single Molecule Imaging by Computational Optics Simulation  
Rena Akahori, Shinjyuku-ku, Japan
- PS3- 18 Biocompatibility of functionalized porous silicon for immunosensor application  
Shalini Singh, New Delhi, India

**Topic 11: Molecular Assembly and Self-Organization**

- PS3- 19 Crystallization of Ga droplets using an intense As flux in droplet epitaxy  
Takaaki Mano, Ibaraki, Japan
- PS3- 20 Magic planar Ag clusters  
Ya-Ping Chiu, Kaohsiung, Taiwan
- PS3- 21 Growth and Characterization of ZnSe/CdSe/ZnSe quantum dots fabricated by using an alternate molecular beam supplying method  
Masakazu Ii, Okayama, Japan
- PS3- 22 New nanostructure materials derived from MoS<sub>2</sub>/Si nanowires  
Ales Mrzel, Ljubljana, Slovenia
- PS3- 23 Ion-induced Self-organized Ripple Patterns on Graphite and Diamond Surfaces  
Katsumi Takahiro, Kyoto, Japan
- PS3- 24 Si (111) (7x7) to (1x1) phase transition on the vicinal surface: A density matrix renormalization group study  
Noriko Akutsu, Osaka, Japan
- PS3- 25 Valence Electronic Structure of the Cu Clusters on the Zn-terminated ZnO(0001) Surface  
Kenichi Ozawa, Tokyo, Japan
- PS3- 26 Growth and characterization of ZnO nanowires on various substrates with and without catalysts  
Seok Cheol Choi, Daegu, Korea
- PS3- 27 Effect of Surface Preparation on the Morphology of ZnO Nanorods  
Sangwoo Lim, Seoul, Korea
- PS3- 28 Morphologies of Poly(vinylpyridines) Films and UV-irradiation Effects  
Satoko Nishiyama, Saitama, Japan
- PS3- 29 Fabrication of High-Density Nanoetchpit Array by Electron Beam Lithography Using Alkylsilane Monolayer Resist  
Meiki Nakamoto, Tokyo, Japan
- PS3- 30 Preparation of submicron dots by laser photo-polymerization process  
Yuriy Pihosh, Tsukuba, Ibaraki, Japan
- PS3- 31 Lateral Conduction for Thiophen Molecules Incorporated into Chemically Adsorbed Monolayer  
Shin-ichi Yamamoto, Kobe, Japan
- PS3- 32 Formation of porous niobium oxide based on anodization: effects of electrolytes and annealing  
Jinsub Choi, Seoul, Korea
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