

**POSTER SESSIONS OVERVIEW**

## Poster Session Overview: Tue-PS1

### GRAPHENE

Tue-PS1-1 **Molecular beam scattering from electronically modified graphite surface by metal nano-clusters and nitrogen ions**

Takahiro Kon do, June Pyo Oh, Daigo Hatake, Yujiro Honma, Keitaro Arakawa, Takahiro Machida, Junji Nakamura

Tue-PS1-3 **Graphene modification by atomic hydrogen**

Richard Balog, Bjarke Jorgensen, Erik Lægsgaard, Philip Hofmann, Silvano Lizzit, Flemming Besenbacher, Liv Hornekær

Tue-PS1-5 **Computer Simulation of Atomic Adsorption on Graphite Monolayer**

Vitaliy Gorbenko

### NANO-MAGNETISM

Tue-PS1-6 **Scanning tunneling microscopy investigation of Fe/CoO and Fe/NiO layered structures**

Alberto Brambilla, Andrea Picone, Paolo Sessi, Lamberto Duò, Marco Finazzi, Franco Ciccacci

Tue-PS1-7 **Dominant role of epitaxial strain in the magnetism of core-shell Co/Au self-organized nanodots**

Yasmine Nahas, Vincent Repain, Cyril Chacon, Yann Girard, Jérôme Lagoute, Jean Klein, Hervé Bulou, Christine Goyhenex, Sylvie Rousset

Tue-PS1-8 **Electronic and magnetic properties of Au nanowires by alloying with 5d TM (Pt, Ir, and Os)**

Javier Guevara

Tue-PS1-10 **Magnetism of organized (Co,Pt) alloyed nanostructures on Au (111)**

Nicolas Moreau, Cyril Chacon, Vincent Repain, Philippe Ohresser, Fabrice Scheurer, Jérôme Lagoute, Yann Girard, Jean Klein, Sylvie Rousset

Tue-PS1-11 **Ferromagnetism in ZnCoO thin films: the role of Co nanoclustering**

Nathalie Jedrecy, Jurgen von Bardeleben, Dominique Demaille

Tue-PS1-12 **Electronic and magnetic properties of self-organized Co islands on Au(111)**

Koen Schouteden, Erwin Lijnen, Dimitriy Muzychenk, Arnout Ceulemans, Liviu Chibotaru, Peter Lievens, Chris Van Haesendonck

### NANOPARTICLES AND CLUSTERS

Tue-PS1-13 **Size dependent electronic properties of mass selected clusters**

Koen Lauwaet, Koen Schouteden, Chris Van Haesendonck, Peter Lievens

Tue-PS1-17 **QSE-dependent nucleation on Pb islands grown on Si(111)**

Zdenek Chvoj, Zdenka Kuntova, Steven Binz, Myron Hupalo, Michael Tringides

Tue-PS1-19 **Diffusion of Copper on Silica in an Oxygen Environment: Toward Preparation of Copper Nanowires by Self-Assembly**

Hua-Yang Liao, Kang-Jung Lo, Che-Chen Chang

### NANOMATERIALS: OPTICAL PROPERTIES

Tue-PS1-21 **Modification of surface plasmon resonance in ion-bombarded Au films**

Aída Serrano, Oscar Rodríguez de la Fuente, Miguel Angel García

### SCANNING PROBE MICROSCOPY

Tue-PS1-23 **Tunnelling barrier height imaging at a nanoscale.**

Grzegorz Goryl, Maria Goryl, Franciszek Krok, Jacek J. Kolodziej

Tue-PS1-24 **Simulated Force Map of Atomic Force Microscopy on Si(111)-(5x5)-DAS Surface**

Akira Masago, Masaru Tsukada

Tue-PS1-25 **Real-time scanning tunneling microscope observation of implanted gold atoms on silicon surface**

Takafumi Kamioka, Yutaka Kazama, T. Yoshida, Iwao Ohdomari, Takanobu Watanabe

Tue-PS1-26 **Near-to-contact regime of STM: semiconductor and other surfaces**

Pavel Jelínek, Martin Svec, Zsolt Majzik, Vladimir Chab, Pablo Pou, Ruben Perez

Tue-PS1-27 **Study of the hydrogen terminated Si(113) surface by scanning tunneling microscopy and ab initio calculation**

Shinsuke Hara, Toru Suzuki, Kazuhiro Fuse, Katsumi Irokawa, Hirofumi Miki, Akira Kawazu, Hiroki Fujishiro

Tue-PS1-28 **The adsorption of a solubilised PTCDA derivative on a graphite surface**

James Russell, Matthew Blunt, Gudrun Goretzki, Anna Phillips, Neil Champness, Peter Beton

Tue-PS1-29 **Surface electron spectroscopy based on nc-AFM with changing bias voltage at closer tip-sample separations**

Toyoko Arai, Kosei Kiyohara, Taiki Sato, Shugaku Kushida, Masahiko Tomitori

### SELF-ASSEMBLY OF FUNCTIONAL MOLECULES

Tue-PS1-32 **Evaluation of binding states of p-terphenyls with amino groups on Si(111)7x7 using STM and XPS.**

Takashi Nishimura, Akira Sasahara, Hideyuki Murata, Toyoko Arai, Masahiko Tomitori

Tue-PS1-33 **Temperature, surface and coverage-induced conformational changes of azobenzene derivatives on Cu(001)**

Jorge Miguel, Marten Piantek, Alex Krüger, Cristina Navio, Matthias Bernien, David Ball, Klaus Hermann, Wolfgang Kuch

Tue-PS1-34 **Chemical characterization of porphyrins at copper/electrolyte interfaces using synchrotron x-ray photoelectron spectroscopy**

Stephan Breuer, Knud Gentz, Gennady Cherkashinin, Thomas Mayer, Klaus Wandelt

Tue-PS1-36 **Self Assembling Monolayer of Metalloporphyrins on Gold and Silver (111) surfaces**

Maddalena Pedio, Roberto Felici, Manvendra Kumar, Andrea Resta

Tue-PS1-37 **Nanoscale tubular structures from plant surface waxes: Influence of salts and surfactants**

Adrian Niemiety, Kerstin Koch, Wilhelm Barthlott, Klaus Wandelt

Tue-PS1-38 **About the orientation of viologen monolayers on a electrode surface: refining existing structure models**

Melanie Roefzaad, Klaus Wandelt

### SURFACE-INTERFACE ELECTRONIC PROPERTIES

Tue-PS1-39 **Electronic structure of Bi lines on clean and H-passivated Si(001) by STS**

Jakub Javorsky, Kazushi Miki, James Owen, David Bowler

Tue-PS1-40 **Exchange interactions in the bcc Fe/TaW(001) system**

Václav Drchal, Martin Ondráček, Josef Kudrnovský, Olivier Bengone, Ilja Turek, František Máca

Tue-PS1-41 **Scanning tunneling spectroscopy of Al, In and Sn one-dimensional chains on Si(100)-2x1**

Ivan Ošřádal, Martin Setvín, Pavel Sobotik, Jan Pudl, Pavel Kocán

Tue-PS1-42 **The detection of SHG from periodic steps on rutile TiO<sub>2</sub> (110)**

Hiroaki Takahashi, Ryousuke Watanabe, Goro Mizutani

Tue-PS1-43 **Spatially resolved STS on Si(110)-16x2**

Martin Setvín, Kazuyuki Sakamoto, Kazushi Miki

Tue-PS1-44 **Local electronic structure of amorphous zinc oxide thin films: x-ray absorption spectroscopy and fine structure analyses**

Deok-Yong Cho, Kwang Duk Na, Jaewon Song, Cheol Seong Hwang

Tue-PS1-45 **Electronic Structure Properties of Vanadate Photocatalysts MVO<sub>4</sub> (M=Y, In, Bi) Slab Systems with Water Molecules Adsorbed on the Surfaces.**

Mitsutake Oshikiri, Mauro Boero

## Poster Session Overview: Tue-PS1

Tue-PS1-46 **Resonantly enhanced second-harmonic generation in the ultra-thin alkali-metal covered Si(111)-7x7**

Kenichi Fujiwara, Daisuke Inoue, Youichi Karaki, Masatoshi Tanaka, Takanori Suzuki

Tue-PS1-47 **Electronic structure of Mn/Ge(111)- $\sqrt{3}\times\sqrt{3}$  thin films studied by photoelectron spectroscopy**

Hanmin M. Zhang, Lars S. O. Johansson, Joakim Hirvonen Grytzelius

Tue-PS1-48 **Local electronic properties of MgO/GaAs(001) tunnel contact studied by ballistic electron emission microscopy**

Sophie Guézo, Pascal Turban, Claude Lallaizon, Jean-Christophe Le Breton, Sylvain Le Gall, Philippe Schieffer, Guy Jézéquel

### SURFACE-INTERFACE STRUCTURAL PROPERTIES

Tue-PS1-49 **3x3-Si(111) structures formed by molecular beam homoepitaxy on Si(111) 4°-miscut surfaces.**

Natalia Galiana, María Moreno, Federico Soria, Ana Ruiz, María Alonso

Tue-PS1-50 **Surface atomic structure of Zn-Histidine complex**

Pilar Ferrer, Juan Rubio-Zuazo, Germán R Castro

Tue-PS1-51 **Structural properties of phtalocyanines on Ag(111) in the submonolayer to monolayer range**

Angot Thierry, Bobaru Stefania, Salomon Eric, Layet Jean-Marc

Tue-PS1-52 **X-ray diffraction study of the interface of epitaxial iron silicides on Si(111)**

Toshio Takahashi, Tetsuroh Shirasawa, Makoto Abe, Kouji Sekiguchi, Wolfgang Voegeli, Ken Hattori, Azusa N. Hattori, Hiroshi Daimon

Tue-PS1-54 **Growth and mixing of Sn and In on the Si(100)-(2x1) surface**

Jan Pudl, Pavel Sobotik, Martin Setvin, Pavel Kocan, Ivan Ostadal

Tue-PS1-55 **Modelling the hydrated surface of bioactive glasses**

Antonio Tilocca, Alastair Cormack

Tue-PS1-57 **Scanning tunneling microscopy study of interfacial structure of InAs/InP quantum dots grown by a double-cap method**

Arao Nakamura, Yasuhiko Akanuma, Ichiro Yamakawa, Yoshiki Sakuma, Tatsuya Usuki

### THIN FILM GROWTH AND APPLICATION

Tue-PS1-58 **Self-assembly of bismuth nanowires during physical vapour deposition**

Steven Stanley, Michael Cropper

Tue-PS1-59 **Synthesis and characterization of a nanorefractory dimetaloxide spinel**

Leila Torkian, Mostafa M. Amini, Zohreh Bahrami

## Poster Session Overview: Wed-PS2

### CHARACTERIZATION AND INSTRUMENTATION

#### Wed-PS2-1 **DEIMOS: A soft x-ray beam-line dedicated to magnetic spectroscopies**

Philippe Ohresser, Stefan Stanescu, Edwige Otero, Françoise Deschamp, Bruno Lagarde, François Polack, Philippe Sainctavit

### ELECTRONIC TRANSPORT

#### Wed-PS2-3 **First-principles study on electrical properties of a single molecular bridge in aqueous solution**

Arihiro Tawara, Daiki Inazuka, Tomofumi Tada, Satoshi Watanabe

#### Wed-PS2-4 **Theoretical Study on Transition of Electron Tunneling Mechanisms in Molecular Junctions**

Masaaki Araidai, Masaru Tsukada

#### Wed-PS2-5 **CoPc chemisorbed on Cu(111): Impact of bonding on transport**

Benjamin W. Heinrich, Laurent Limot, Cristian Iacovita, Deung Jang Choi, Mircea V. Rastei, Jean-Pierre Bucher, Werner A. Hofer, Thomas Brumme, Jens Kortus

#### Wed-PS2-6 **Thermoelectric power of SnO<sub>2</sub> submicron semiconductor thin films**

Carlos Jácome, Juan Carlos Giraldo

#### Wed-PS2-7 **A calculation of thermoelectric power coefficient on CdS<sub>x</sub>Te<sub>1-x</sub> heterostructures**

Carlos Jácome, Juan Carlos Giraldo

#### Wed-PS2-8 **Correlation between band structure and magneto-transport properties in medium-infrared detector II-VI modulated nanostructure superlattice**

Abdelhakim Nafidi, Mohamed Braigue, Brahim Er-Raha, Essediq Youssef El Yakoubi, Redawane Morghi<sup>5</sup>

#### Wed-PS2-9 **Metallic conduction and Anderson localization on In monatomic layer on silicon**

Shiro Yamazaki, Yoshikazu Hosomura, Iwao Matsuda, Rei Hobaru, Shuji Hasegawa

### NANO-BIOTECHNOLOGY

#### Wed-PS2-10 **Atomic Force Microscopy and Spectroscopy Studies of Intermolecular Interactions Leading to Pathological Precipitation of Cryoglobulins**

Anna Radzik, Marta Targosz-Korecka, Ryszard Drozd, Joanna Tisończyk, Marek Szymonski

#### Wed-PS2-11 **Electrical and structural properties of insulin-templated chains of silver nanoparticles**

Maarten Gysemans, Frederic Leroux, Sara Bals, Johan Snauwaert, Gustaaf Van Tendeloo, Chris Van Haesendonck

#### Wed-PS2-12 **Control of Solid/Lipid Bilayer Interfaces by Well-Defined Solid Surfaces**

Toshinari Isono, Kenji Yamazaki, Toshio Ogino

### OXIDES

#### Wed-PS2-13 **Nanoscale modification of Ni/Al interfaces by low-energy O<sup>2+</sup> reactive ion beam mixing.**

A. Arranz, C. Palacio

#### Wed-PS2-14 **Determination of optical parameters single-films by envelope method**

Petro Kosoboutskyy, Mar'yana Karkulovska

#### Wed-PS2-15 **Polarization dependent XAS study on LaAlO<sub>3</sub>/SrTiO<sub>3</sub> interfaces**

Taeyeong Khim, Jaeyoung Kim

#### Wed-PS2-16 **Cation Distribution and Magnetic Properties of Mg-substituted Nickel-Chromium Ferrite**

Imad Al-Omari, Abdelmajid Rais

#### Wed-PS2-17 **Magnetic properties of CrO<sub>2</sub>/SnO<sub>2</sub> layers**

Pablo P. D. Borges, Luisa Scolfaro, Horacio Leite Alves, Eronides da Silva Jr

#### Wed-PS2-18 **Monolayer-thick oxygen-deficient cobalt oxide (3x3) superstructures on Ir(100)-(1x1)**

Christina Ebensperger, Matthias Gubo, Wolfgang Meyer, Lutz Hammer, Klaus Heinz

### REACTION AND DYNAMICS

#### Wed-PS2-19 **First-Principles Study on the mechanism of Halogen atom diffusion on Si(111) surface**

Jun Nara, Yusuke Asari, Takahisa Ohno

#### Wed-PS2-20 **Structure determination of Pd-catalyst supported on S-terminated GaAs (001) using DFT calculation**

Akira Ishii

#### Wed-PS2-21 **Metal (Mo or W) carbonyl dissociation process through e-beam**

Bruno Domenichini, Stéphanie Bruyère, Valérie Potin, Zheshen Li, Sylvie Bourgeois

#### Wed-PS2-23 **Exciton dissociation at donor-acceptor heterojunctions of semiconducting polymers**

Hiroyuki Tamura

#### Wed-PS2-25 **Large-scale Quantum Chemistry Study on the Interfacial Property of Supported Precious Metal Catalyst**

Sunho Jung, Ai Suzuki, Hideyuki Tsuboi, Nozomu Hatakeyama, Akira Endou, Hiromitsu Takaba, Momoji Kubo, Akira Miyamoto

#### Wed-PS2-26 **Structures and Stability of CO and N<sub>2</sub> Physisorbed on MgO: Descending the Devil's Staircase.**

A K Sallabi, D B Jack

### SELF-ASSEMBLY OF FUNCTIONAL MOLECULES

#### Wed-PS2-27 **Epitaxial Growth at Surfaces of Organic Nanocrystals with Antiferroelectric Stacking**

Marta Trelka, Anaïs Medina, David Écija, Christian Urban, Christian Claessens, Roberto Otero, José María Gallego, Tomás Torres, Rodolfo Miranda

#### Wed-PS2-28 **Self-assembly on a reactive surface: evidence for enol-enol and ketone-aryl assemblies on Pt(111)**

Vincent Demers-Carpentier, Marc-André Laliberté, Stéphane Lavoie, Gautier Mahieu, Peter McBreen

#### Wed-PS2-29 **Self-assembled molecular nanowires with highly pi-stacking crystal structure for opto-electronic applications**

Yutaka Wakayama, Ryoma Hayakawa, Toyohiro Chikyow, Kenji Kobayashi

#### Wed-PS2-31 **Discrete or Continuous Energy Tuning of Amplified Spontaneous Emissions from $\pi$ -Conjugated Polymer Thin Films**

Yasushi Kamiyama, Akihiro Tomioka, Takahiro Anzai, Kazuhisa Iwamoto

#### Wed-PS2-32 **Formation of very dense, oxalate-based, metal-organic coordination networks on Cu(100)**

David Écija, Christian Urban, Marta Trelka, Carlos Martí-Gastaldo, Eugenio Coronado, Roberto Otero, José María Gallego, Rodolfo Miranda

#### Wed-PS2-33 **Electronic chiral surfaces created by achiral molecules**

Aitor Mugarza, Nicolas Lorente, Cornelius Krull, Sebastian Stepanow, Gustavo Ceballos, Jordi Fraxedas, Marie Laure Bocquet, Pablo Ordejón, Pietro Gambardella

### SURFACE-INTERFACE ELECTRONIC PROPERTIES

#### Wed-PS2-34 **Surface electronic band structure of the (100) surface of AIII-BV semiconductors**

Lukasz Walczak, Miguel Angel Valbuena, Grzegorz Goryl, Maria Goryl, Jacek Jaroslaw Kolodziej, Ivana Vobornik, Enrique Garcia Michel

#### Wed-PS2-35 **Electron doping of metal phthalocyanines as a function of metal d-occupancy**

Antonio Calabrese, Pierluigi Gargiani, Giovanni Battista Pasquino, Carlo Mariani, Maria Grazia Betti

**Wed-PS2-36 Disorder-induced antiferromagnetic to ferromagnetic transition in magnetic overlayers: (Fe,Mn)W(001) as a case study**

Josef Kudrnovsky, Martin Ondracek, Olivier Bengone, Frantisek Maca

**Wed-PS2-37 Continuous displacement model for  $3 \times 3 - \sqrt{3} \times \sqrt{3}$  phase transition of Sn adsorbed Ge (111) surface**

Hiroko Kaji, Satoshi Yokoya, Yoichiro Yagi, Kiminori Kakitani

**Wed-PS2-38 Ag<sub>2</sub>S nanodot showing switching property**

Takeo Ohno, Tsuyoshi Hasegawa, Masakazu Aono

**Wed-PS2-39 Tight binding model analyses of one-dimensional surface states on Si(553)-Au surface**

Kiminori Kakitani, Yoichiro Yagi, Hiroko Kaji

**Wed-PS2-40 Surface electronic structure of imidazolium-based ionic liquids studied by electron spectroscopy**

Tomonori Ikari, Angela Keppler, Oliver Höfft, Markus Reinmöller, Wichard J. D. Beenken, Frank Endres, Stefan Krischok

**Wed-PS2-42 Possibility of nanosize current switching device based on styrene chains –interaction between double chains–**

Masato Oda, Hisashi Kondo, Jun Nara, Takahisa Ohno

**Wed-PS2-43 Changes in electronic and mechanical properties of carbon structures by evaporation and implantation of alkali metals**

Assunta Bonanno, Marianna Barberio, Pasquale Barone, Michele Camarca, Davide Remo Grosso, Antonino Oliva, Roberta Vasta, Fang Xu

**Wed-PS2-44 Lifetimes of confined states in Pb overlayers on Cu(111)**

Asier Zugarramurdi, Nerea Zabala, V. M. Silkin, Andrei G. Borisov, Eugene V. Chulkov

**Wed-PS2-45 Determination of surface thermodynamic parameters of natural fillers for paints and coatings by inverse gas chromatography at infinite dilution**

Chernai Safia, Hamdi Boualem, Kessaissia Zoubir, Balard Henri

**Wed-PS2-46 Comparison of Patterson function analysis for different adsorbate on Si(111) surface with LEED I-V curves**

Shinya Hori, Atsuko Murata, Akinori Yamamoto, Toshio Urano

**Wed-PS2-47 Role of Ta replacing Nb in FINEMET alloy**

Adam Puzskarz, Marek Moneta

**Wed-PS2-48 LEED and XPS analysis of the cobalt / rutile TiO<sub>2</sub> (110) – (1x2) interface: film growth and thermal treatments**

Jose Abad, F. Javier Palomares, Ana Ruiz, Federico Soria, María Alonso

**Wed-PS2-50 Monitoring of surface properties evolution of ground attapulgite samples by inverse gas chromatography**

Hamdi Boualem, Boudriche Lylia, Calvet Rachel, Balard Henri, Kessaissia Zoubir

**Wed-PS2-51 Carbon monoxide adsorption on cobalt-deposited platinum single crystal surfaces investigated by IR reflection-absorption and low-energy electron diffraction**

Hirosato Yoshida, Koichiro Ogawa, Naoto Todoroki, Yoshinori Yamada, Toshimasa Wadayama

**Wed-PS2-52 Photoemission study of self-assembled Bi nanolines on InAs(100) surface**

Marja Ahola-Tuomi, Pekka Laukkanen, Marko Punkkinen, Karina Schulte, Jouko Lång, Riitta Perälä, Mikhail Kuzmin, Juhani Väyrynen

THIN FILM GROWTH AND APPLICATION

**Wed-PS2-53 Electron-phonon coupling in ultra thin Pb(111) films.**

Irina Sklyadneva, Rolf Heid, Klaus -P. Bohnen, Pedro M. Echenique, Eugene V. Chulkov

**Wed-PS2-54 Magneto-electric resistance modulation of (La<sub>0.7</sub>Sr<sub>0.3</sub>)MnO<sub>3</sub> ferromagnetic thin film**

Takeshi Yokota, Shinya Kito, Shotaro Murata, Manabu Gomi

**Wed-PS2-55 In-situ EHEED study of the alloying of CdSe/ZnSe quantum dot structure fabricated by an alternate molecular beam suppl**

Minoru Yoneta, Yuto Banden, Masakazu Ohishi, Hiroshi Saito

**Wed-PS2-57 Anticorrosive properties of lanthanum doped sol-gel silica thin films**

Noemi Carmona, Esther Enriquez, Miguel Angel Garcia, Jose Llopis

**Wed-PS2-58 Study of the growth of Bi thin films on semiconducting surfaces**

Manuel Abuin, Manuel Plaza, Miguel Angel Gonzalez-Barrio, Arantzazu Mascaraque, Lucas Perez

**Wed-PS2-59 Strain-engineering for controlled growth process of quaterylene thin films**

Ryoma Hayakawa, Ayse Turak, XueNa Zhang, Helmut Dosch, Nobuya Hiroshiba, Toyohiro Chikyow, Yutaka Wakayama

## Poster Session Overview: Thu-PS3

### CHARACTERIZATION AND INSTRUMENTATION

Thu-PS3-2 **Microinstrument for in-situ Reliability Studies in MEMS**  
Fang Liu, Ian Laborinate, Brian Bush, Carlo Carraro, Roya Maboudian

Thu-PS3-3 **Phosphate Oxide Glass: Thermal and Mechanical Characterization**  
Ladjouzi Samia, Saodi Saada

Thu-PS3-5 **Electronic states of inner organic thin films beneath Au electrodes studied by fluorescence-yield X-ray absorption spectroscopy**  
H.S. Kato, F. Yamauchi, M. Kawai, H. Yamane, M. Nagasaka, T. Hatsui, N. Kosugi

Thu-PS3-6 **SixS : a new beam line for surfaces and interfaces structural studies at Soleil**  
Alessandro Coati, Michèle Sauvage, Benjamin Voisin, Marc Ribbens, Thierry Moreno, Yves Garreau

### MECHANICS, FRACTURE AND NANOSTRUCTURES

Thu-PS3-7 **QCM studies of the nanofriction of cryogenic monolayers on superconducting lead**  
Giampaolo Mistura, Lorenzo Bruschi, Giovanni Fois, Matteo Pierno, Corrado Boragno, Francesco Buatier de Mongeot, Ugo Valbusa

Thu-PS3-8 **A New theory of MEMS Assembly System**  
Xiaoyang Kang, Hongchang Tian

### NANO-ELECTRONICS AND MOLECULAR-BASED DEVICES

Thu-PS3-9 **Fabrication and Measurement of Photo-Responsive Atomic Switch**  
Takami Hino, Hirofumi Tanaka, Tsuyoshi Hasegawa, Yusuke Miyake, Masakazu Aono, Takuji Ogawa

Thu-PS3-10 **Tunneling Effect in Quantum Hall Device**  
Shosuke Sasaki

Thu-PS3-11 **Synthesis of phthalocyanine nanowires in alumina pores and control in molecular orientation by a magnetic field**  
Seiichi Takami, Seiichi Furumi, Yasuhiro Shirai, Ryoma Hayakawa, Yoshio Sakka, Toyohiro Chikyo, Yutaka Wakayama

Thu-PS3-12 **Control of Interface Oxide for Improving Electrical Characteristics of HfO<sub>2</sub>/Epitaxial-Ge/GaAs MIS Structures**  
Noriyuki Miyata, Tetsuji Yasuda, Akihiro Ohtake

Thu-PS3-13 **Fabrication of Copper Nanogap Electrode by Molecular Ruler Method for Atomic Switch Devices**  
Hirofumi Tanaka, Takami Hino, Kotaro Tajima, Tsuyoshi Hasegawa, Yaomi Ito, Masakazu Aono, Takuji Ogawa

### NANOPARTICLES AND CLUSTERS

Thu-PS3-17 **Fabrication of nanocrystalline silicon particles as luminous source of white light**  
Toshiyuki Shimizu, Kenji Hirakuri, Yasuhiro Fukui

Thu-PS3-18 **Surface properties between detonation nanodiamond particles and size depending thermal conductivity in composites sintered at high pressure and high temperature**  
Sergey Kidalov, Fedor Shakhov, Alexander Vul', Alexander Ozerin, T.S. Kurkin, Alexander Smirnov

Thu-PS3-20 **Structural Relaxation and Vibrational States of Small Aluminum Clusters on Cu(111) surface**  
Svetlana Borisova, Galina Rusina, Sergey Ereemeev, Eugeni Chulkov

Thu-PS3-21 **Growth of Au and Mn nanostructures on the Co-Si(111) ( $\sqrt{7}\times\sqrt{7}$ )R19.1° surface reconstruction**  
Frederic Dulot, Marie-Christine Hanf, Régis Stephan, Patrick Wetzel

### NANOTUBES AND FULLERENES

Thu-PS3-23 **Cobalt nano particles size dependence on the noise modulation of nonlinearity**  
Toshio Kawahara, Satarou Yamaguchi, Kenzo Maehashi, Yasuhide Ohno, Kazuhiko Matsumoto, Tomoji Kawai

Thu-PS3-25 **Effect of surface morphology of sapphire on directional carbon nanotube growth**  
Tomohito Chokan, Tomoya Uetake, Shohei Chiashi, Yoshikazu Homma

### NANOWIRES AND NANOSTRUCTURES

Thu-PS3-27 **Molecular dynamics modeling of the processes of surface metallization.**  
Igor Golovnev, Vasily Fomin, Andrey Utkin

### SURFACE MICROSCOPY

Thu-PS3-28 **SiGe self-assembled island growth by surface diffusion from a nanofabricated Ge stripe on Si(100)**  
Giovanni Maria Vanacore, Maurizio Zani, Giovanni Isella, Johann Osmond, Alberto Tagliaferri

Thu-PS3-30 **Study of Sol-Gel Materials with Metallic Nanoparticles**  
David Framil Carpeño, Virginia Bouzas, Noemí Carmona Tejero, José Llopis Plá

Thu-PS3-31 **Pyrazolequinoline-based molecularly imprinted layers studied by fluorescence microscopy**  
Piotr J. Cywinski, Maja Sadowska, Wybren J. Buma, Albert M. Brouwer, Barbara Wandelt

### SURFACE-INTERFACE ELECTRONIC PROPERTIES

Thu-PS3-32 **Shockley states of vicinal noble metal surfaces investigated with curved crystals**  
Martina Corso, Frederik Schiller, Enrique Ortega

Thu-PS3-33 **Site-specific polarization screening in organic thin films: Tetracene on Ag(111)**  
Sergey Subach, Christian Weiss, Ruslan Temirov, Stefan Tautz

Thu-PS3-35 **Direct observation of Si(111)  $\sqrt{7}\times\sqrt{7}$ -Co structure and its local electronic structure**  
Yukichi Shigeta, Mayu Odagiri, Izumi Mochizuki

Thu-PS3-36 **Surface phase transitions for 0.5 Sn monolayers on vicinal Cu (100) surfaces**  
Miguel Angel Valbuena, Lukasz Walczak, Jesus Martinez-Blanco, Iulian Preda, Enrique Garcia Michel

Thu-PS3-37 **High-resolution photoemission spectroscopy of ferromagnetic Mn<sub>5</sub>Ge<sub>3</sub> films: a re-investigation of Ge 3d and Mn 3s spectra**  
P. De Padova, J.-M. Mariot, L. Favre, I. Berbezier, B. Olivieri, P. Perfetti, C. Quaresima, C. Ottaviani, A. Taleb-Ibrahimi, P. Lefevre, O. Heckmann, M. C. Richter, F. D'Orazio, F. Lucari, K. Hricovini

Thu-PS3-38 **Electronic properties of metallic / porous semiconductor - electrolyte interface**  
Mihaela Miu, Irina Kleps, Monica Simion, Teodora Ignat, Adina Bragaru

Thu-PS3-40 **Density functional theory calculations of the adsorption of C and Pb on Si surface vacancies.**  
Pingo Mutombo, Vladimir Cháb

Thu-PS3-42 **Scanning tunneling microscopy study of interfacial structure of InAs/InP quantum dots grown by a double-cap method**  
Arao Nakamura, Yasuhiko Akanuma, Ichiro Yamakawa, Yoshiki Sakuma, Tatsuya Usuki

Thu-PS3-43 **DMO surfaces: clustering and phase decomposition**  
Nadia Sanchez, Silvia Gallego, Maria del Carmen Muñoz

Thu-PS3-45 **Structure of L-tyrosine adsorbed on atomically controlled Au/Si(111) surfaces**  
Masashi Yoshimura, Fumihiko Matsui, Hiroshi Daimon

Thu-PS3-46 **Synchrotron radiation photoemission study on native oxides of VC?Ti alloy and its modification by deuterium ion implantation**  
Yuden Teraoka, James Harries, Mayumi Tode, Akitaka Yoshigoe

### THIN FILM GROWTH AND APPLICATION

Thu-PS3-48 **Interface analysis of  $\beta$ -FeSi<sub>2</sub> thin films fabricated on ion irradiated Si with atomic resolution by scanning transmission electron microscope**

Masato Sasase, Hiroyuki Yamamoto

Thu-PS3-49 **La(Sr,Mn)O<sub>3</sub> thin films grown on SiO<sub>2</sub>/Si and sapphire substrates by rf magnetron sputtering**

Ho-Jung Sun, Chang-Sun Park

Thu-PS3-50 **Concentration fluctuation of Cu epitaxial growth on Ni(110) surface**

Tsuneo Fukuda, Kenji Umezawa, Hiroshi Nakayama

Thu-PS3-51 **Multilayer, wear resistant hard coating of high temperature working tool steel, obtained by Vacuum-Plasma DUPLEX technology**

Witold Precht, Piotr Malek, Robert Cincio

Thu-PS3-52 **Electrochemical formation of ultrathin copper sulfide films on Au(100) - An in situ STM study**

Christian Schlaup, Klaus Wandelt

Thu-PS3-53 **Photo-luminescence properties of ZnO thin Films prepared by PECVD**

Pablo Romero-Gomez, Johann Toudert, Juan R. Sanchez-Valencia, Angel Barranco, Agustin R. Gonzalez-Elipe

Thu-PS3-54 **Photocatalytic degradation of methylene blue in water by nanocomposite of Ag/TiO<sub>2</sub> and nanocrystalline TiO<sub>2</sub>**

Leila Torkian, Mostafa M. Amini, Ehsan Amerreh

Thu-PS3-55 **Growth of ordered CeO<sub>2</sub>(111) films on oxidized Cu(111) surface**

Filip Dvořák, Josef Mysliveček, Vladimír Matolín

POST DEADLINE

Thu-PS3-56 **Determination of contact formation in single-molecule tunnel junctions**

A. Garcia-Lekue, L.Vitali, T. Frederiksen<sup>1</sup>, D. Sanchez-Portal, A. Arnau

Thu-PS3-57 **CIRCE BEAMLINE at ALBA: Surface Spectroscopy and Microscopy**

Lucia Aballe

Thu-PS3-58 **Laser-pulsed Atom Probe Tomography – A Novel Tool for the Ex-situ Analysis of Semiconductor Nanostructures**

Michael Müller, Alfred Cerezo, George D. W. Smith

Thu-PS3-59 **Structural characterization of NiO/Oxides interfaces by means of NEXAFS**

Julian Preda, Jesús Chaboy, Germán Castro, Alejandro Gutiérrez, Leonardo Soriano

Thu-PS3-60 **ARPES and spin resolved Investigations on the 8-1500 eV high resolution Cassiopée beamline at SOLEIL**

Alessandro Nicolaou, François Bertran, Patrick Lefevre, Antonio Tejada, Julien Pinon, Daniel Ragonnet and Amina Taleb-Ibrahimi