

Poster session Monday, 31 Aug.

Graphene and carbon-based nanomaterials (P-Mo-001 to P-Mo-032)

P-Mo-001 Study of bromine molecules in intercalated compounds of fluorinated graphite
Igor Asanov, Tatiana Asanova, Dmitry Pinakov

P-Mo-002 Graphene and Other Overlayers Forming Interference Lattices: a Unified Theoretical Treatment
Klaus Hermann

P-Mo-003 Research of sensor activity of the nitro group modified carbon nanotube to some metal atoms
Natalia Polikarpova, Irina Zaporotskova, Sergei Boroznin, Pavel Zaporotskov

P-Mo-004 Investigation of carbon nanotubes modified by amino group.
Irina Zaporotskova, Natalia Poikarpova, Pavel Zaporotskov, Sergei Boroznin, Dinara Vilkeeva

P-Mo-005 Investigation of sensor activity of the amino group boundary-modified CNT to some metal atoms
Pavel Zaporotskov, Irina Zaporotskova, Sergei Boroznin, Natalia Polikarpova

P-Mo-006 Structural Characterization of sidewall graphene nanoribbons by Scanning Tunneling Microscope and Scanning Transmission Electron Microscope

Maya Narayanan Nair, Irene Palacio, Arlensiu Celis, Alexandre Gloter, Alberto Zobelli, Muriel Sicot, Daniel Malterre, Meredith Nevius, Walt A. de Heer, Claire Berger, Edward H Conrad, Amina Taleb-Ibrahimi, Antonio Tejada

P-Mo-007 Carbon nanotubes for improving the properties of lubricating oils
Irina Arkharova, Irina Zaporotskova

P-Mo-008 Electron dynamics in graphene by ultrafast Tr-ARPES
Cephise Cacho, R.T. Chapman, I. Gierz, A. Cavalleri, J.C. Johansson, S. Ulstrup, P. Hofmann, E. Springate

P-Mo-009 High-quality graphene on sapphire grown in UHV
Gloria Anemone, Esteban Climent-Pascual, Hak Ki Yu, Amjad Al Taleb, Félix Jiménez-Villacorta, Carlos Prieto, Alec M. Wodtke, Alicia de Andrés, Daniel Farías

* **P-Mo-010** Atomic and electronic structure of SWCNT encapsulated by TbBr_3
Alexander Rashkovskiy, Anatoly Kovalev, Dmitry Wainstein, Andrey Kumskov, Nikolay Kiselev, Ivan Verbitsky, Andrey Eliseev

P-Mo-011 Carbon-Based Materials as Foundation to Realize Designer Materials
Wilson Agerico Diño, Hiroshi Nakanishi, Hideaki Kasai, Yousuke Kawahito

P-Mo-012 High quality of graphene grown on oxidized copper foils by chemical vapour deposition
Van Lam Do, Regis Y. N. Gengler, Petra Rudolf

P-Mo-013 Wettability of graphene surface
Akira Akaishi, Jun Nakamura

P-Mo-014 Elastic modulus of Extreme Ultraviolet exposed single-layer graphene
Baibhav Mund, An Gao, Jacobus Sturm, Chris Lee, Fred Bijkerk

P-Mo-015 Single- and double-wall carbon nanotubes fully covered with tetraphenylporphyrins: Stability and optoelectronic properties from ab-initio calculations
Walter Orellana

P-Mo-016 Carbon Nanotube Network Film as a Compliant and Transparent Electrode
Seung-Youl Kang, Jaehyun Moon, Seong Deok Ahn

P-Mo-017 Theoretical study on quantum capacitance of charged bilayer graphene with applied electric field
Yutaro Mori, Emi Minamitani, Yasunobu Ando, Kasamatsu Shusuke, Kaoru Kanayama, Kosuke Nagashio, Satoshi Watanabe

P-Mo-018 Morphology of Transferred Graphene Affected by Surface Steps in Copper Substrate
Masamichi Yoshimura, Takashi Nagamori, Seiya Suzuki

P-Mo-019 Covalent modification of carbon-based surfaces with electroactive organic radicals
Gonca Seber, Alexander Rudnev, Marta Mas-Torrent, Jaume Veciana, Núria Crivillers, Concepció Rovira

P-Mo-020 Ballistic transport in self-assembled graphene nanoribbons
Frederik Edler, Jens Baringhaus, Johannes Aproz, Walt A. de Heer, Claire Berger, Christoph Tegenkamp

P-Mo-021 Remote Plasma Enhanced – Chemical Vapor Deposition (rPE-CVD) of Graphene on Various Substrates
Marc González Cuxart, **Eric Pellegrin**

P-Mo-022 Domain boundaries in merged graphene nanoislands on Ni(111)
Sofia Parreiras, Cesar Moreno, Maximiliano Martins, Roberto Paniago, Gustavo Ceballos, Aitor Mugarza

P-Mo-023 On-surface assembly of graphene nanoribbons
Eduard Carbonell, Richard Balog, Maciej Topyla, Manuel Vilas, Martina Corso, Jingcheng Li, Diego Peña, Nacho Pascual

P-Mo-024 Sorption properties of carbon nanotubes with different concentration of boron impurities.
Sergei Boroznin, Irina Zaporotskova, Natalia Polikarpova

P-Mo-028 Improvement of strength properties of dental materials by using carbon nanotubes.
Lusine Elbakyan, Irina Zaporotskova

P-Mo-029 Transport properties of polycrystalline CVD graphene during Gallium deposition
Pavel Procházka, **Jindřich Mach**, Jakub Piastek, Miroslav Bartošík, Zuzana Lišková, Tomáš Šikola

P-Mo-030 Charge transfer between separated graphene sheets studied by Kelvin probe force microscopy in ambient conditions
Martin Konečný, Miroslav Bartošík, Pavel Procházka, Jindřich Mach, Peter Varga, Tomáš Šikola

P-Mo-032 Adsorption behaviors of nano-porous activated carbon produced from agricultural residues
Kamal Khalil, Omar Allam

Superconductivity in 2D materials (P-Mo-033)

P-Mo-033 Control of microstructure of clad wire with multifilament attacked inside
Haguk Jeong, Jong-beom Lee

Surface magnetism (P-Mo-034 to P-Mo-036)

P-Mo-034 XMCD-PEEM and ARPES study of the twinned Ni_{49.7}Mn_{29.1}Ga_{21.2}(100) martensite crystal
Yaroslav Polyak, Vladimír Cháb, Oleg Heczko, Jaromír Kopeček, Jan Honolka, Ján Lančok, Josef Kudrnovský, Václav Drchal, Ladislav Fekete, Vitaliy Feyer

P-Mo-035 Enhanced magnetic anisotropy in self-organized (Fe,Co) nanodots
Cyril Chacon, Jean Baptiste Marie, Yann Girard, Vincent Repain, Jérôme Lagoute, Sylvie Rousset, Emiliano Fonda, Philippe Ohresser, Hélène Magnan

P-Mo-036 Ballistic electron emission microscopy: a tool for ultrathin films magnetic imaging with a nanometer resolution. **Stanislas Rohart**, Ian Aupiais, André Thiaville

Materials for energy: photovoltaics, solar and fuel cells, etc. (P-Mo-037 to P-Mo-053)

P-Mo-037 *This paper has been withdrawn by the author.*

P-Mo-039 In-situ electrochemical atomic force microscopy study of the evolution of Pt-Co thin film catalyst during electrochemical aging test

Ivan Khalakhan, Mykhailo Vorokhta, Michal Václavů, Roman Fiala, Iva Matolínová, Vladimír Matolín

P-Mo-040 Elaboration and caractérisation of ZnO-Cu thin films

By thermal evaporation

Dergham Driss, Salim Hassani, Ouchaabane Mohamed, Lakoui Fouaz

*** P-Mo-041** Influence of the electrosynthesis method on the supercapacitive properties of polypyrrole

Franciele Wolfart, Deepak P. Dubal, Marcio Vidotti, Pedro Gómez-Romero

*** P-Mo-042** Effects of Nb-doped MgH₂ in H desorption energy: A DFT approach

Estefania German, Alfredo Juan

P-Mo-043 Analysis of thin films Pd-catalysts prepared for DFAFC

Igor Bieloshapka, Petr Jiricek, Andrii Rednyk, Mykhailo Vorokhta

P-Mo-044 Structural studies of hydrogenated silicon films prepared by RF magnetron sputtering

Fouzia Zeudmi Sahraoui, Aissa Kebab, Jamal Dine Sib, Yahia Bouizem, Djamal Benlekhal, larbi chahed

P-Mo-045 Significant efficiency improvement of the ZnO nanorod arrays based perovskite solar cell through acid treatment

Bingjie Feng, Yang Xu

P-Mo-046 Effect of TiO₂ scaffold thickness on the photovoltaic performance of perovskite solar cells

Hao Wang, Bingjie Feng

P-Mo-049 Oxygen adsorption on the C60 cage of PC60BM and its influence on the O 1s XPS and NEXAFS spectra

Barbara Brena, Iulia Emilia Brumboiu, Leif Ericsson, Rickard Hansson, Ellen Moons, Olle Eriksson

P-Mo-050 Spectroscopic impedance analysis of Metal-Insulator-semiconductor based on Al₂O₃ dielectric thin films on silicon for solar cells applications

Lyes Zougar, Samira Sali, Salim Kermadi, Khadidja Mahdid, Messaoud Boumaour, Mohamed Kechouane

P-Mo-051 Solar cell metallization: from the electroless Ni nucleation to the NiSi setting up

Elise Delbos, Hanane El Belghiti, **Damien Aureau**, Muriel Bouttemy, Arnaud Etcheberry

P-Mo-052 Structural Study of radiation induced Ni-Mg nanoparticles in Ni/MgO catalysts

Nassira Keghouche, Nora Ouafek, Emérite Jaqueline Belloni

P-Mo-053 Conductive and transparent ZnO-based multilayer thin film electrodes for solar cell applications

Salim Hassani, Racha Hadj Ali, Ibtissem Djemai, Fouaz Lekoui, Mohamed Kechouane, Ahmed Taleb

Metal, alloy and quasicrystal surfaces (P-Mo-054 to P-Mo-060)

P-Mo-054 Experimental study on the heat transfer performance of titanium fiber porous materials

Liu Shifeng

P-Mo-055 Stainless steel surfaces studied by XPEEM

Lisa Rullik, Yuran Niu, Eleonora Bettini, Alexei A. Zakharov, Jinshan Pan, Edvin Lundgren

P-Mo-056 Effect of B content on the amorphization process of the mechanically alloyed Fe-Nb-B powders

Nadia Bensebaa, Thaouanza Chabi, Safia Alleg, Sonia Azzaza, Joan Josep Sunol, Jean Marc Grenèche

P-Mo-057 Fabrication and Shape Control of a Single Ag Nanoparticle Using Scanning Tunneling Microscopy
Satoshi Katano, Masaki Hotsuki, Yoichi Uehara

P-Mo-058 Stress Control Factor of Tungsten Thin Film by Chemical Vapor Deposition
Dong-Hoon Han, Kyunghwan Lee, Seon-Woo Kim, Sunsoo Lee, Yoonbon Koo, Kyengmo Koo, Youngchae Seo, Jeonghoon Nam, Kangsoo Kim

P-Mo-059 Structural and EPR studies of Cr doped ZnO thin films
Osman Gürbüz, Sadık Güner

P-Mo-060 Thermal processes on Surface and in Bulk: [Pt(NH₃)₄][MCl₆] (M is Re or Os)
Tatyana Asanova, Igor Asanov

Novel and advancement of experimental and computational methods (P-Mo-061 to P-Mo-068)

P-Mo-061 Bias Dependent Potential of High-k thin films obtained from Operando Photoelectron Spectroscopy
Yoshiyuki Yamashita, Hideki Yoshikawa, Toyohiro Chikyow

P-Mo-062 Dependence of fogging electron current at a specimen surface on the bias-voltage
Taku Noda, Yoshifumi Hagiwara, Masatoshi Kotera, Raynald Gauvin

P-Mo-063 Dependence of charging of insulator film by electron beam irradiation on the bias-voltage
Masashi Tokai, Yuki Handa, Masatoshi Kotera

P-Mo-064 Simulation of charging process of PMMA film on Si substrate under electron beam irradiation
Akihiro Fukuzawa, Masatoshi Kotera

P-Mo-065 X-ray tubes for investigations of macro and micro properties of surface
Andrey Trubitsyn, Evgeniy Grachev, Vladimir Ivanov, Boris Polonskiy, Victor Bochkov

P-Mo-066 Simulation of fogging electron trajectories in Scanning Electron Microscope
Taiki Nishino, Masatoshi Kotera

P-Mo-067 Accurate explicit formulae for higher harmonic force spectroscopy by FM-AFM
Kfir Kuchuk, Uri Sivan

P-Mo-068 Energy distributions of the secondary and backscattered electrons from polymethylmethacrylate irradiated by an electron beam. A Monte Carlo simulation
Maurizio Dapor

Oxide surfaces and thin/ultra-thin oxide films (P-Mo-069 to P-Mo-095)

P-Mo-069 Compositional study by SIMS and RBS of oxidized silicon nitride prepared by PECVD
Samir Meziani, Abderrahmane Moussi, Linda Mahiou, Ratiba Outemzabet

P-Mo-070 Desorption of D₂ O and D₂ molecules in hydrogen removal of surface oxide layers on Ru(001)
T. Goto, G. Yasutomi, T. Yamauchi, **Akira Izumi**, A. Namiki, H. Oizumi, T. Anazawa, O. Suga, I. Nishiyama

P-Mo-071 Hybrid orientation structure of CeO₂(100) and (110) regions grown on SOI substrates with lithographically formed trenches
Tomoyasu Inoue, Shigenari Shida

P-Mo-072 Temperature-dependent surface charging of epitaxial lithium tantalate films
Federico Gramazio, Jaume Roqueta, Guillaume Sauthier, Nuria Bagues, Jose Santiso, Jordi Fraxedas

P-Mo-073 Defects in sol-gel derived tin dioxide thin films - a way to control the oxide's electronic and chemical properties
Maciej Krzywiecki, Lucyna Grządziel, Adnan Sarfraz, Georgi Genchev, Andreas Erbe

P-Mo-074 Interaction of CO₂ with well-ordered CaO(001) thin films
Xuefei Weng, Yi Cui, Brian Solis, Joachim Sauer, Shamil Shaikhutdinov, Hans-Joachim Freund

P-Mo-075 Structural and electrical characterization of titanium oxynitride deposited by reactive magnetron sputtering

Rodrigo César, Angélica Barros, Ioshiaki Doi, Andressa Rosa, José Diniz, Jacobus Swart

P-Mo-076 Growth and thermal effects of Co on CeO₂(111)

Gábor Vári, László Óvári, Christian Papp, Hans-Peter Steinrück, János Kiss, Zoltán Kónya

P-Mo-077 Initial surface oxidation of Zr: XPS, PEEM, FIM, FEM and DFT studies

Ivan Bepalov, Martin Datler, Sebastian Buhr, Johannes Zeininger, Peter Blaha, Günther Rupprechter, Yuri Suchorski

P-Mo-078 Formation of NiO Nanoclusters on MgO Monolayers induced by Segregation of Interfacial Oxygen.

Mario Agostino Rocca, Marco Smerieri, Letizia Savio, Jagriti Pal, Riccardo Ferrando, Luca Vattuone, Sergio Tosoni, Livia Giordano, Gianfranco Pacchioni

P-Mo-079 Cleaning and Profiling of STO oxide with new ion source.

Damien Aureau, Karl Ridier, Arnaud Fouchet, Arnaud Etcheberry

P-Mo-080 Upconversion luminescence of Er³⁺ sensitized by Yb³⁺ ions in Zn₂TiO₄ crystals.

Toshihiro Nonaka, Shin-Ichi Yamamoto

P-Mo-081 Growth of transition metals on cerium tungstate model catalyst layers

Tomas Skala, Vladimir Matolin

* **P-Mo-082** Atomically flat Fe-doped cobalt ferrite single crystal islands with μm-sized magnetic domains

L. Martín-García, A. Quesada, C. Munuera, M. Foerster, L. Aballe, J. de la Figuera

* **P-Mo-083** A photoemission study of adsorbates on TiO₂

Daniel Payne, Yu Zhang, Chi Lun Pang, Helen Fielding, Geoff Thornton

P-Mo-084 Engineering the Oxide/Metal interface through the insertion of a buffer layer: CoO growth onto metastable Co/Fe(001) bilayers.

Andrea Picone, Michele Riva, Dario Giannotti, Alberto Brambilla, Lamberto Duò, Franco Ciccacci, Marco Finazzi

P-Mo-085 Structural study of several conducting SrTiO₃ crystal surfaces

Xavier Torrelles, M. Salluzzo, Z. Ristic, J. Drnec, R. Felici, R. Di Capua, N. Plumb, M. Radovic

P-Mo-086 Stabilization of the <1-10> step structure on vicinal TiO₂(110)

Alejandro Miccio, Martin Setvin, Ignacio Piquero, Mikel Abadía, Celia Rogero, Frederik Schiller, Jorge Lobo-Checa, Michael Schmid, Ulrike Diebold, Enrique Ortega

P-Mo-087 Optical and gas sensing properties of nanostructure SnO₂ synthesized by microwave plasma

Somchai Thongtem, Arrak Klinbumrung, Associate Titipun Thongtem

P-Mo-088 Local Restriction of Co Diffusion through Ultrathin SiO₂ Layer by Substrate Modification by Focussed Ion Beam

Jan Cechal, Josef Polcak, Adam Závodný, Tomas Sikola

P-Mo-090 Dissociation of formic acid on metal oxide surfaces probed by UHV-IRRAS and complimentary techniques

Heshmat Noei, Oscar Gamba, Maria Buchholz, Yuemin Wang, Gareth Parkinson, Martin Muhler, Ulrike Diebold, Christof Wöll, Andreas Stierle

P-Mo-091 Sandwich heterostructures of antimony trioxide and bismuth trioxide films: structural, morphological and optical analysis

Simona Condurache-Bota, Mirela Praisler, Raluca Gavrila

P-Mo-092 Near-infrared energy bandgap bismuth oxide thin films and their in-depth morpho-structural and optical analysis

Simona Condurache-Bota, Nicolae Tigau, Mirela Praisler, Gabriel Corneliu Prodan, Raluca Gavrila

P-Mo-093 Water adsorption and freezing on ferroelectric oxide thin films

Laura Rodríguez, Kumara Cordero, María José Esplandiú, Carlos Escudero, Victoria Pérez, Annalisa Calò, Neus Domingo, Albert Verdaguer

P-Mo-094 SiO_x films deposited by HFCVD: Annealing effect on the compositional and optical properties

Jose Alberto Luna Lopez, Diana Elizabeth Vazquez Valerdi, Alfredo Benitez Lara, Godofredo Garcia Salgado, Jesus Carrillo López, Alvaro David Hernandez de la Luz, Miguel Angel Dominguez Jimenez

P-Mo-095 Direct Visualisation of Au atom bonding to O-vacancies on TiO₂(110)

Andrew Mellor

Poster session Tuesday, 1 Sept.

Molecules at surfaces (P-Tu-001 to P-Tu-047)

P-Tu-001 Heat-induced formation of molecular coordination networks of porphyrin derivatives on Au(111): Towards tuning the dimensionality

Tuan Anh Pham, Fei Song, Mariza N. Alberti, Carlo Thilgen, Francois Diederich, Meike Stöhr

P-Tu-003 Post-deposition Hydrogen treatment effect on surface roughness and hydrophobicity of amorphous silicon films

Yamina Brahmi, Larbi Filali, Jamal Dine Sib, Yahia Bouizem, Djamal Benlekhal, Aissa Kebab, Larbi Chahed

P-Tu-004 Analysis of the intra-molecular components of the inelastic electron tunneling signal by means of first-principles calculations

Giuseppe Foti, Héctor Vazquez

P-Tu-005 Interplay between Molecular Orbitals and Charging Effect of Manganese Phthalocyanine on Atomic Thin Insulator

Liwei Liu, Thomas Dienel, Roland Widmer, Oliver Groening

P-Tu-006 Bending of pentacene on Fibonacci modulated Cu film

M. Lahti, K. Pussi

P-Tu-008 Reactivity of Metal-Organic Coordination Networks for CO₂ activation

Daniel Hurtado, **Ane Sarasola**, Gustavo Ruano, Klaus Kern, Andrés Arnau, Magalí Lingenfelder

P-Tu-009 Biphenylene: a building block for 2D graphene-like gap-provided molecular network

Roberta Totani, Johann Lüder, Monica de Simone, Ieva Bidermane, Cesare Grazioli, Teng Zhang, Marcello Coreno, Henrik Ottosson, Barbara Brena, Luca Lozzi, Carla Puglia

P-Tu-010 Electronic structure of sexithiophene ultrathin films grown on passivated Si(001) surfaces

Shinya Ohno, Hiroya Tanaka, Kazuma Tanaka, Kazutoshi Takahashi, Masatoshi Tanaka

P-Tu-011 Soft bombardment with argon cluster on crystalline Si-H: Model system to study molecules at surfaces

Damien Aureau, Muriel Bouttemy, M. Jackie Vigneron, Arnaud Etcheberry

P-Tu-012 Induced infrared absorption due to H₂, D₂, O₂, and CO₂ adsorbed on porous NaCl films

Koichiro Yamakawa, Katsuyuki Fukutani

P-Tu-013 Quasi-one dimensional pentacene structures on prepatterned vicinal silicon surface.

Pawel Nita, Paweł Dyniec, Roberto Otero, Mieczysław Jałochowski

P-Tu-014 Charging C₆₀ islands on NaCl(001) by the AFM tip

Brice Hoff, Claude R. Henry, **Clemens Barth**

P-Tu-015 Interplay between molecule-molecule and molecule-substrate interaction: Pentacene on Pb/Si(553) surface.

Mariusz Krawiec, Paweł Nita, Roberto Otero, Mieczysław Jałochowski

*** P-Tu-016**

The work function changes of Ag(100) surface induced by cobalt phthalocyanine

Agata Sabik, Franciszek Gołek, Grażyna Antczak

P-Tu-017 Large X ray circular dichroism in adsorbed films of homochiral organic molecules

Juan José de Miguel, Francisco Jesus Luque, Iwona Agnieszka Kowalik, Miguel Angel Niño, Dimitri Arvanitis, Rodolfo Miranda

P-Tu-018 Coverage-dependent molecular packing and electronic structure of DNTT and Picene monolayer on Au(111)

Yuri Hasegawa, Takuya Hosokai, Yutaka Wakayama, Yoichi Yamada, Masahiro Sasaki

P-Tu-019 Change in molecular orientation of metal phthalocyanines on heteroepitaxial growth using templating layer

Heeseon Lim, Sehun Kim, Jeong Won Kim

P-Tu-020 Changing the Quantum Well Structure of Oxide-Supported Au Nanoislands by Molecular Adsorption: Chemisorption versus Physisorption

Christian Stiehler, Wolf-Dieter Schneider, Niklas Nilius, Hans-Joachim Freund

P-Tu-021 Effect of the Type of Fluorofunctional Organosilicon Compounds onto the Surfaces on its Hydrophobic Properties

Joanna Karasiewicz, Hieronim Maciejewski

P-Tu-022 STM studies on Alkali Doping of Organic Monolayers

Yoichi Yamada, Masahiro Yano, Yuri Hasegawa, Masahiro Sasaki

P-Tu-023 Thermal evolution of hydrogenated phthalocyanine molecules on copper

Ane Sarasola, Mikel Abadia, Ruben González-Moreno, Giacomo Lovat, Luca Floreano, **Celia Rogero**, Aran García-Lekue

P-Tu-025 An in situ XPS study of biomolecules co-adsorbed with water on gold

Astrid Jürgensen, Hannes Raschke, Norbert Esser, Roland Hergenröder

P-Tu-026 Control parameters in a local epoxidation reaction using scanning probe lithography

Vincent Mesquita, Julien Botton, Lionel Patrone, Mathieu Abel, Silviu Balaban, Olivier Chuzel, Jean-Luc Parrain, Sylvain Clair

P-Tu-027 Computational modelling of Lindqvist polyoxomolybdate on Au (111)

Zhongling Lang, Anna Clotet, Josep M. Poblet

P-Tu-028 Interaction of copper phthalocyanine with Sn and In reconstructed Si(111) surfaces — STM study

Petr Zimmermann, Pavel Sobotik, Karel Majer, Pavel Kocan, Ivan Ostadal

P-Tu-029 On-surface reactions of porphyrin molecules on Au(111)

Nino Hatter, Laëtitia Farinacci, Sonja Schubert, Benjamin W. Heinrich, Katharina J. Franke

P-Tu-031 Para-hexaphenyl-dicarbonitrile on Au(111) and graphene: A STM and nc-AFM study

Juan Carlos Moreno Lopez, Stefano Gottardi, Leticia Monjas, Leonid Solianyk, Jun Li, Kathrin Müller, Fei Song, Tuan A. Pham, Anna K. H. Hirsch, Meike Stöhr

P-Tu-033 Effects of an oxygen adlayer on the on-surface Ullmann polymerization of halobenzenes on Cu(110)

Gianluca Galeotti, Marco Di Giovannantonio, Nicola Angelo Rana, Maryam Ebrahimi, Josh Lipton-Duffin, Dmitrii F. Perepichka, Giorgio Contini, Federico Rosei

P-Tu-034 Unstable configuration of CuPc molecules on the Sn/Si(111)-(√3×√3) surface studied by scanning tunneling microscopy

Karel Majer, Petr Zimmermann, Pavel Sobotík, Pavel Kocán, Ivan Ošťádal

P-Tu-036 Molecular electronics functional units on Si(100)

Wojciech Koczorowski, Maciej Bazarnik, Sci. Agnieszka Racis, Leszek Jurczyszyn, Marian W. Radny, Karina Morgenstern, Ryszard Czajka

P-Tu-037 Computational investigation of adsorption and dynamics of molecules for organic-semiconductor interfaces on Si(001)

Josua Pecher, Ralf Tonner

P-Tu-039 Hydrogenation of polycyclic aromatic hydrocarbons studied with scanning tunneling microscopy.

Anders Lind Skov, Jakob Jørgensen, Liv Hornekær

P-Tu-040 Electronic characterization of the gas phase iron phthalocyanine by means of soft x-ray spectroscopy and multiplet calculations

Johann Lüder, Ieva Bidermane, Roberta Totani, Cesare Grazioli, Monica de Simone, Marcello Coreno, Antti Kivimäki, John Åhlund, Luca Lozzi, Barbara Brena, Carla Puglia

P-Tu-042 GIXRD study about adsorption behavior of aqueous proline solution on fluorapatite (100) surface

Anna Kupka, Xavier Torrelles, Hermann Gies, Klaus Merz

P-Tu-043 Comparative study of carbon monoxide oxidation on model titania and lithium fluoride supported gold nanoparticles

Soslan Khubezhov, Inga Tvauri, Ivan Silaev, Bela Gergieva, Galina Grigorkina, Viktoria Magkoeva, Aleksan Bliev, Tamerlan Magkoev

P-Tu-044 Steering the Conformation of Polypeptides by Adsorption on Cu₂N

Daniel P. Rosenblatt, Sebastian Koslowski, Sabine Abb, Markus Etzkorn, Stephan Rauschenbach, Klaus Kern, Uta Schlickum

P-Tu-045 Controlling Protein Conformation on Surfaces by Soft-Landing Electrospray Ion Beam Deposition

Stephan Rauschenbach, Gordon Rinke, Ludger Harnau, Klaus Kern

P-Tu-046 Theoretical investigation of carboranethiols on gold (111) surface

Ersen Mete, Gülden Güney, Ayşen Yılmaz, Fatih Danişman

P-Tu-047 Self-assembly and on-surface coupling of carbonyl-bridged triphenylamines

Maximilian Ammon, Zechao Yang, Tim Sander, Patrick Seitz, Milan Kivala, Sabine Maier

Polymer surfaces and interfaces (P-Tu-048 to P-Tu-059)

P-Tu-048 Preparation of Highly Porous Spherical Nanocomposite of Poly(methyl methacrylate) and TiO₂ by Electrospraying Approach

Hyunsuk Lee, Donghyun Paik, Yongjin Kim, Johnhwan Lee, Sejun Park, Kyungho Choi, Youngjin Choi, Sung-Wook Choi

P-Tu-049 Hydrophobic recovery in plasma-polymerized polymers vs conventional polymers after plasma treatment in different gases

Jerson Peralta, Francesc Benitez, Arturo Lousa, Joan Esteve

*** P-Tu-050** Surface modification of electrospun nanofiber by laser treatment

Masume Ayazi, Nadreh Golshan Ebrahimi, Saiede Khalaji, Emad Jafari

P-Tu-052 Interaction between dimethyl methylphosphonate (DMMP) and polydimethylsiloxane (PDMS)-coated TiO₂: towards development of effective MALDI matrix

Eun Ji Park, Sang Wook Han, Myung-Geun Jeong, Dae Han Kim, Ju Ha Lee, Bo Ra Kim, Soong Yeon Kim, Ki Jung Park, Il Hee Kim, Young Dok Kim

P-Tu-053 Hydrophilic Treatment for Intraocular Lens Injectors By Graft Copolymerization

William Lee, Pei-Lin Lu, Ih-Houng Loh

*** P-Tu-054** Characterization of amorphous hydrogenated carbon (a-C:H) layers industrially deposited on common high-density polyethylene (HDPE)

Alberto Catena, Simonpietro Agnello, Franco Mario Gelardi, Stefan Wehner, J. Christian Berthold Fischer

P-Tu-056 Characterization of degradation of PMMA by SEM and FTIR analyzes

El Hadi Belhiteche, Mohand Amokrane Handala, Nora Kireche

P-Tu-057 Improved adhesion of sputtered coatings on PC by RF oxygen plasma pretreatments
Joan Esteve, **Jerson Peralta**, Francesc Benitez, Arturo Lousa

P-Tu-058 Refining biodegradable polyhydroxybutyrate (PHB) with amorphous hydrogenated carbon (a-C:H)
J. Christian Fischer, Stefan Wehner

P-Tu-059 Antimicrobial biopolymeric composites containing flavonoids and silver nanoparticles
Rodica Cristescu, Anita Visan, Gabriel Socol, Alexandru Mihai Grumezescu, Mariana Carmen Chifiriuc, Dan Mihaiescu, Ryan D. Boehm, Dina Yamaleyeva, Michael Taylor, Roger J. Narayan, Douglas B. Chrisey

Self-assembly at surfaces (P-Tu-060 to P-Tu-074)

P-Tu-060 Electronic effects in Gd thin films on W(110) at sub-monolayer coverage studied by STM
Danielle Schweke, Henry Realpe, Yishai Manassen

P-Tu-061 Microscopic and spectroscopic studies for the self-assembled 2D chiral honeycomb structures of unnatural amino acids on Au(111)
Sena Yang, Hangil Lee

P-Tu-062 Surface Functionalization of Oxide- covered Zinc and Iron with Phosphonated Phenylethynyl Phenothiazine
Julian Rechmann, Adnan Sarfraz, Alissa C. Götzinger, Elena Dirksen, Thomas J. J. Müller, Andreas Erbe

P-Tu-064 Magnetic Coupling and Single-Ion Anisotropy in Surface-Supported Mn-based Metal-Organic Networks
Luca Giovannelli, Adrien Savoyant, Mathieu Abel, Francesco Maccherozzi, Ksari Younal, Mathieu Koudia, Roland Hayn, Fadi Choueikani, Edwige Otero, Philippe Ohresser, Jean-M. Themlin, Sarnjeet Dhesi, Sylvain Clair

P-Tu-065 Photo-switchable conductivity of spiropyran SAMs on Au surface.
Sumit Kumar, R.Y.N. Gengler, Jochem Van Herpt, Ben L. Feringa, Petra Rudolf, R.C. Chiechi

P-Tu-067 Kinetic effects and packing densification in a supramolecular self-assembly: a Kinetic Monte Carlo approach
Sylvain Clair, Laurent Nony, Franck Bocquet, Mathieu Abel, Manuel Cobian, Christian Loppacher

P-Tu-068 STM study of the Si(111)/Ti-(1x1) surface as a metal-like passivated Si substrate for growth of nanostructures
Peter Matvijsa, Pavel Kocán, Ivan Ošťádal, Pavel Sobotík

P-Tu-069 Formation of metal-organic frameworks by subtle interplay between molecular epitaxy, H-bonding and thermal treatment
Nataliya Kalashnyk, Yangchun Xie, Ms Kawtar Mouhat, Frédéric Dumur, Didier Gigmès, Sylvain Clair

P-Tu-071 Self-assembly of low-symmetry aromatic molecules in 2D
Fabrizio De Marchi, Maryam Ebrahimi, Josh Lipton-Duffin, Jennifer MacLeod, Federico Rosei

P-Tu-072 Dynamics of dimethyl-disulfide on Au(111)
Scott Holmes, Richard Palmer, Quanmin Guo

P-Tu-073 Thermal stability of surface-confined assemblies comprising functional cross-shaped molecules – insights from Monte Carlo modeling
Adam Kasperski, Paweł Szabelski

P-Tu-074 Disaccharide self-assembly on metal surfaces
Sabine Abb, Ludger Harnau, Christian Schön, Juan Cortés, Stephan Rauschenbach, Klaus Kern

Surface dynamics (P-Tu-076 to P-Tu-081)

P-Tu-076 Molecular dynamics simulations of the high-speed copper nanoparticles interaction with the aluminum surface

Viktor Pogorelko, Dmitry Tikhonov, Alexander Mayer

* **P-Tu-077** New Insights into the O₂/Al(111) Dissociative Adsorption and Abstraction Dynamics

Koji Shimizu, Hiroshi Nakanishi, Wilson Agerico Diño

P-Tu-078 Dispersion of surface phonons in a xenon monolayer physisorbed on the graphite basal plane and its probing by scattering of helium atoms

Azamat Khokonov, Zeitun Akhmatov

P-Tu-079 Ultrafast Exciton Dynamics in Thin Sexithiophene Films

Wibke Bronsch, Malte Wansleben, Kristof Zielke, Sebastian Baum, Cornelius Gahl, Martin Weinelt

P-Tu-080 Hemoglobin dielectric parameters studied by SPR technique

Khaled AYADI

P-Tu-081 Effect of Vibrational Excitation on Chemical Reaction Dynamics of Water and Silicon Surface by First-Principles Molecular Dynamics Simulation

Naoki Yokoyama, Takeshi Nishimatsu, Yuji Higuchi, Nobuki Ozawa, Hiroo Yugami, Momoji Kubo

Adsorption and desorption (P-Tu-082 to P-Tu-098)

P-Tu-082 PTCDA molecules on Terraces and at Steps Sites of the KCl and NaCl Surfaces

Hazem Aldahhak, Eva Rauls, Wolf Gero Schmidt

P-Tu-083 Temperature-induced processes for size-selected metallic nanoparticles on surfaces

Mathias Getzlaff, Hendrik Bettermann, Torsten Veltum, Matthias Werner, Wolfgang Rosellen

P-Tu-084 Study on Effect of Corrosion on Outgassing of ITER Vacuum Vessel In-Wall Shielding Materials

Abha Maheshwari, Haresh Pathak, Bhoomi Mehta, Rahul Laad, Gurloleen Phull, Moin Shaikh, Ulhas Dethe, Sunil Dani

P-Tu-085 Effect of hydrogenation of amorphous silicon surfaces on protein adsorption

Larbi Filali, Yamina Brahmi, Jamal Dine Sib, Yahia Bouizem, Djamel Benlekhal, Aissa Kebab, Larbi chahed

P-Tu-086 Vacuum ultraviolet photon-stimulated desorption surface spectroscopy of polymers using a laser-produced plasma emission

Masanori Kaku, Masahito Katto, Atushi Yokotani, Wataru Sasaki, Shoichi Kubodera

* **P-Tu-088** DFT study of the SI/AL ratio in the adsorption of O₂, N₂ and CO₂ on faujasite

Gerard Alonso, Ramón Sayós, Xavier Giménez, Pablo Gamallo

P-Tu-089 Adsorption of silicon on Ag(111) studied with XPS and LEED

Dah-An Luh, Chiao-Yin Yeh, Tsai-Feng Yu, Chia-Hsin Wang, Yaw-Wen Yang

P-Tu-090 Investigation of local electronic structures of Cesium ion in clay minerals using Fluorescence XAFS measurements

Mitsunori Honda, Iwao Shimoyama, Shinishi Suzuki, Tsuyoshi Yaita

P-Tu-091 Characterization of green fluorescent protein monolayers utilizing controllable self-assembled monolayers

Shin-ichi Wada, Jumpei Kajikawa, Hironori Hayashita, Ryosuke Koga, Atsunari Hiraya

P-Tu-092 Theoretical study of NO adsorption on Cu(110) and O(2x1)/Cu(110) surfaces

Antón X. Brión-Ríos, Daniel Sánchez-Portal, Pepa Cabrera-Sanfelix

P-Tu-093 The formation and thermal stability of adsorbed HCOO groups on O/Pd(100) surfaces

Imre Kovács, János Kiss, Frigyes Solymosi

P-Tu-094 Atomistic thermodynamics study of SHCH₃ molecule adsorption and dissociation on the Fe(100) surface; GGA-PW91 and van der Waals corrections method comparison.

Sherin Saraireh

P-Tu-095 Study of surface screening by adsorbates on LiNbO₃ single crystals in different environments by Near Ambient Pressure XPS.

Rohini Kumara Cordero Edwards, Laura Rodríguez, Carlos Escudero, Virginia Pérez, Gustau Catalán, Neus Domingo, Albert Verdguer

P-Tu-096 Preparation and structure of Ni/mixed oxides nanoparticles

Malika Doghmane, Fatiha Seridi, Sabah Chettibi, Nassira Kechouche

P-Tu-097 Effect of oxygen adsorption on the electron emission probability from Cs/GaAs (001) in vacuum

Andrey Zhuravlev, Vitaly Alperovich

P-Tu-098 Evaluation of activated carbon prepared by pyrolysis of sawdust of wood on the adsorption of acetaminophen

Naima Gherbi, Amel Dib, Rania Marouani, Angel Berenguer Murcia, Jame Garcia, A.Hassein Meniai, Diego Cazorla-Amoro

Surface diffusion and growth (P-Tu-099 to P-Tu-107)

P-Tu-099 Nucleation and initial film growth of pentacene on amorphous mica

Adolf Winkler, Levent Tumbek, Alberto Pimpinelli

P-Tu-100 Diffusion on one-dimensional lattice with NN and NNN lateral interactions between the adsorbed particles

Alexander Tarasenko, Lubomir Jastrabik

P-Tu-101 Ultraviolet photoelectron spectroscopy study of Cu(200 nm)/Si substrates treated by Ar ion sputtering and vacuum annealing

Xxx Ajiassaijian, Yuki Kotanigawa, Yudai Ohtomo, Shuichi Ogawa, Yuji Takakuwa

P-Tu-102 Electronegativity-dependent removal of tin from different surface materials

Malgorzata Pachecka, Chris Lee, Marko Sturm, Fred Bijkerk

P-Tu-103 Step dynamics on sidewalls of nanowires: step curvature and Ehrlich-Schwoebel effects

Yuri Hervieu, Sergey Filimonov

P-Tu-104 Interaction of Au(200 nm)/Si surface with photoemission-assisted plasma ion source: the surface flattening effect of He⁺, Ar⁺, Kr⁺, and Xe⁺ ions

Kotanigawa Yuki, XXX AJIASAIJIAN, Ogawa Shuichi, Takakuwa Yuji

P-Tu-105 Microstructural, Mechanical and Tribological Investigations of Nb-C-N and Nb-Al-C-N Coatings Obtained by Thermo-Reactive Deposition Technique

Eray Abakay, Şaduman Şen, Uğur Şen

*** P-Tu-106** Scanning electron microscopy study of ice nucleation and growth on mineral and metal surfaces

Sarah Delage, Patrick Ayotte

P-Tu-107 Low temperature selective growth of GaN single crystals on pristine and graphene modified SiO₂ substrates.

Jindřich Mach, Tomáš Šamořil, Pavel Procházka, Miroslav Bartošík, Stanislav Voborný, Kirill Andrejevič Ermakov, Tomáš Šíkola

Poster session Thursday, 3 Sept.

Band structure of surfaces (P-Th-001 to P-Th-003)

P-Th-001 Charge-Density-Wave Orderings in LaAgSb₂ - A Photoemission Study

Maya Narayanan Nair, Irene Palacio, R.F. Luccas, P. C. Canfield, E.G. Michel, A. Taleb-Ibrahimi, A. Tejeda

P-Th-002 Electronic structure of Au/Pt(001): observation of 1D surface states

Silvina Bengió, **Lukasz Walczak**, Ivana Vobornik, Pilar Segovia, Enrique García Michel

P-Th-003 Study of Half-Metallic Ferromagnetism of MgSe Doped with Zr in Zinc Blende Phase Using First Principles

Muhammad Rashid, Altaf Karim

Colloids and interfaces (P-Th-004 to P-Th-007)

P-Th-004 Mechanisms and Performance of Methyl Palmitate (Solid Fat Soil) Detergency under Microemulsion-Based Formulation

Jarussri Chanwattanakit, John F. Scamehorn, David A. Sabatini, Sumaeth Chavadej

P-Th-007 Different surface interactions in new self-assembled structures of gold nanorods and polysaccharides

Heloise Ribeiro de Barros, Izabel Riegel-Vidotti, Leandro Piovan, Mário Meneghetti, Ábner Nunes, Guilherme Lanzi Sassaki, Diego Araujo Sabry

Electronic properties of surfaces (P-Th-009 to P-Th-027)

P-Th-009 Influence of electronic and plasmonic structure of planar TiAlN/Ag metamaterials on its heat conductivity

Anatoly Kovalev, Dmitry Wainstein, AlexanRashkovskiy, Raul Gago, Jose Endrino

P-Th-010 Investigation of behaviour of copper during transition passive state to transpassive state by in situ spectroscopic techniques

Cigdem Toparli, Adnan Sarfraz, Andreas Erbe

P-Th-011 Influence of plasmon structure of multilayer metal-insulator-metal coatings on light reflection

Dmitry Wainstein, Anatoly Kovalev, AlexanRashkovskiy, Raul Gago, Jose Endrino

P-Th-012 An MIES study of variation in the local electronic structure during alkali-promoted oxygenation of GaAs(001) surfaces

Kenji Yamada, Hirofumi Takikawa

P-Th-013 Work function studies of gold surfaces for the KATRIN experiment using a custom high vacuum Kelvin Probe

Martin Babutzka, Kerstin Schöning

P-Th-014 Electron transport of single hydrogen molecule bridging between Au, Ag and Cu electrodes

Yu Li, Satoshi Kaneko, Manabu Kiguchi

P-Th-015 Metal-Molecule Interface of the Single Molecular Junction studied with Current-Voltage Characteristics

Yuki Komoto, Shintaro Fujii, Tomofumi Tada, Manabu Kiguchi

P-Th-016 Scattering-Energy and -Angle Landscape of the Spin-Filter Efficiency of W(001)

Dmytro Kutnyakhov, S. Borek, J. Braun, J. Minàr, H. Ebert, Hans-Joachim Elmers, G. Schönhense

P-Th-017 Electronic and magnetic properties of Sm nanostructure

Galif Kutluk, M. Nakatake, M. Arita, M. Sawada, H. Sumida, Y. Kooda, H. Namatame

P-Th-019 Electrical characteristics according to the tensile strain of stretchable substrates for soft electronics
Bock Soon Na, Chan Woo Park, Soon-Won Jung, Ji-Young Oh, Sang Seok Lee, Jae Bon Koo

P-Th-020 Electronic Structures of a Cerasome Model
Masato Oda

P-Th-021 Conductance in self-assembled terbium-silicide nanowires probed by multi-tip STM
Frederik Edler, Ilio Miccoli, Herbert Pfnür, Stephan Appelfeller, Mario Dähne, Christoph Tegenkamp

P-Th-022 Electronic structure of rutile TiO₂ - a polarisation dependent investigation of orbital character of the bulk valence band structure

Stephen Callaghan, Patrick Casey, Alexander Generalov, Alexei Preobrajenski, Cormac McGuinness

P-Th-023 Unexpected spectral properties in the band structure of a two dimensional layered dichalcogenide: 1T-TiS₂.

Miguel Angel Valbuena, Stephane Pons, S. Conejeros, P. Alemany, Enric Canadell, E. Frantzeskakis, J. Avila, Maria Carmen Asensio, H. Berger, Marco Gioni

* **P-Th-024** Electronic properties of interfacial region in Polyethylene-MgO nanocomposite
Elena Kubyshkina, Lars Jonsson

P-Th-026 Structural and electronic properties of GdAg₂ and GdAu₂ surface alloys
Alexander Correa Aristizabal, Bin Xu, Matthieu Verstraete, Lucia Vitali

P-Th-027 Ultrafast Electron Spin Dynamics at the Fermi Level in Fe₃O₄ Thin films
Cephise Cacho, Christine Richter, Marco Battiato, Jean-Michel Mariot, Olivier Heckmann, Hubert Ebert, Jan Minar, Fulvio Parmigiani, Karol Hricovini

Liquid/solid and liquid/liquid interfaces (P-Th-028 to P-Th-031)

P-Th-028 Potential-dependent adsorption states of aromatic thiol molecules at liquid-Au interface studied by surface reflectance spectroscopy
Ippei Sakurada, Masatoshi Tanaka, Shinya Ohno

P-Th-029 Structural Dynamics Study of Hydration Shells in Aqueous Solution with Electrochemical Control
Fang Niu, Andreas Erbe

* **P-Th-030** Predicting CO₂-H₂O interfacial tension using COSMO-RS
Alessandro Silvestri, Martin P Andersson, Susan L.S. Stipp

P-Th-031 Structure of a Core-Shell Type Colloid Nanoparticle in Aqueous Solution Studied by XPS from a Liquid Microjet
Giorgia Olivieri, Alok Goel, Matthew Brown

Optoelectronic excitations at surfaces (P-Th-032)

P-Th-032 The antibacterial effect of TiO₂ coatings deposited by open air atmospheric pressure plasma jet with a TTIB sol precursor on surgical stainless steel.
Christin Rapp, Alexander Knospe, Christian Buske, Erich Wintermantel

Semiconductor surfaces (P-Th-034 to P-Th-041)

P-Th-034 Band energy alignment studies at heterojunction by X-ray photoelectron spectroscopy (XPS)
Jisheng Pan

P-Th-035 Polarity of polar and semipolar GaN by X-ray photoelectron diffraction
O. Romanyuk, S. Fernández-Garrido, P. Jiricek, I. Bartos, L. Geelhaar, O. Brandt, T. Paskova

* **P-Th-036** Force-driven single-atom manipulation on a low-reactive Si surface for tip sharpening and resolving of subsurface dangling bonds
Jan Berger, Evan Spadafora, Pingo Mutombo, Pavel Jelínek, Martin Švec

P-Th-037 Initial growth of Ba on Ge(001) - a DFT study

Agnieszka Puchalska, Wojciech Koczorowski, Marian Wojciech Radny, Leszek Jurczyszyn

P-Th-038 Stability and Electronic band structure of SnSi Nanocrystals in a Si Matrix

Andrey Klavsyuk, Denis Nagayuk, Alexander Saletsky, Alexander Tonkikh, Nikolai Zakharov, Peter Werner

P-Th-039 Atomic structure of Ir nanowires on Ge(001)

Nikolay Kabanov, Alexander Saletsky, Andrey Klavsyuk

P-Th-040 Non-contact scanning nonlinear dielectric microscopy study of oxygen-adsorption on a Si(100)-(2x1) surface

Kohei Yamasue, Masataka Suzuki, Yasuo Cho

P-Th-041 Investigation of MOVPE-prepared GaP(111)B by surface analytics and ab initio DFT calculations

Peter Kleinschmidt, Pingo Mutombo, OleksanRomanyuk, Marcel Himmerlich, Theresa Berthold, Weihong Zhao, Andreas Nägelein, Matthias Steidl, Agnieszka Paszuk, Sebastian Brückner, Oliver Supplie, Stefan Krischok, Thomas Hannappel

Surface phases and phase transitions (P-Th-042 to P-Th-045)

P-Th-042 Superhard nanocomposite AlO_x/TiAlSiCN coatings with high thermal stability and oxidation resistance

Konstantin Kuptsov, Alexander Sheveyko, Philipp Kiryukhantsev-Korneev, Dmitry Shtansky

P-Th-043 Theoretical analyses of 4x1-8x2 phase transition on In-adsorbed Si(111) surface with continuous displacement model

S.T.A. Abdulmawla, H. Kaji, K. Kakitani

P-Th-044 The equation of state of monolayer of inert gases and their mixtures on the basal plane of graphite

Zeitun Akhmatov, Azamat Khokonov, Murat Khokonov, Vitali Tarala

P-Th-045 Interaction between impurities and charge density wave in the phase transition of atomic wires

Hyungjoon Shim, Geunseop Lee, Jung-Min Hyun, Hanchul Kim

Surface structure (P-Th-046 to P-Th-053)

P-Th-046 Bound State Resonances at high velocities, a coherent skipping motion above the surface

Philippe Roncin, Asier Zugarramurdi, Maxime Debiossac, Anouchah Momeni, Petru Lunca-Popa, Hocine Khemliche, Andrei Guenadievitch Borisov

P-Th-047 Periodic quantum chemical calculations for the structure and stability of divalent metal fluoride surfaces

Zeinab Kaawar, Beate Paulus

P-Th-048 Theoretical and experimental study of molecular Deuterium diffractive scattering from Methyl-Si(111)

Cristina Díaz, Alberto S. Muzas, Marcos del Cueto, Terry J. Frankcombe, Fernando Martín, Zack M. Hund, Kevin J. Nihill, Steven J. Sibener

P-Th-049 Laser Irradiated ZnO for biosensor applications

Giorgia Fiaschi, Salvo Mirabella, Vicky Strano, Giorgia Franzó, Adrian Chitu, Luca Maiolo, Yigal Komem, Yosi Shacham-Diamand

P-Th-050 Synthesis and structural characterization of ultrathin heavy fermion compounds Ce-Pt on Pt(111)

Koichiro Ienaga, Sunghun Kim, Yukio Takahashi, Toshio Miyamachi, Fumio Komori

P-Th-051 Blister mechanism in extreme ultraviolet multilayer mirrors

R.A.J.M van den Bos, C.J. Lee, F. Bijkerk

P-Th-052 Toward 3D holographic imaging of surface atoms by CTR scatterings at SPring-8, BL13XU

Hiroo Tajiri

P-Th-053 On the microscopic structure of the Ag(441) surface

Thorsten Wagner, Daniel Roman Fritz, Robert Zimmerleiter, Peter Zeppenfeld

Strong correlations at surfaces (P-Th-055)

P-Th-055 Fermi surface analysis of the low temperature phases of alpha-Sn/Ge(111)

Antonio Tejeda, Irene Palacio, Yoshi Otshubo, Amina Taleb-Ibrahimi, Enrique Garcia Michel, Arantzazu Mascaraque

Topological insulators (P-Th-056 to P-Th-057)

P-Th-056 Theoretical calculation of electronic structures of SnTe and PbTe monolayers with supports

Katsuyoshi Kobayashi

P-Th-057 Surface Superconductivity in Metastable Phase of Topological Insulator Bi₂Se₃ Quenched after High-Pressure-High-Temperature Treatment

Sergei Buga, Vladimir Kulbachinskii, Vladimir Kytin, Nadezhda Serebryanaya, Sergei Tarelkin, Vladimir Blank

Tribology and mechanical properties at the atomic scale (P-Th-058)

P-Th-058 Influence of Si addition on the properties and wear behavior of nc-AlCrN/a-Si₃N₄ hard coatings deposited onto WC-Co turning inserts by LARC

Marián Haršáni, Tomáš Vopát, Martin Sahul, Ľubomír Čaplovič, Miroslav Béger

Catalysis under ideal and real conditions (P-Th-059 to P-Th-073)

P-Th-059 Temperature induced structural changes of Co-Rh/ceria catalysts

Erika Varga, Péter Pusztai, Albert Oszkó, János Kiss, András Erdőhelyi, Zoltán Kónya

P-Th-060 Surface Hydrogen Induced CO₂ Conversion Mechanism at Cu(775) Step Surface

Yeonwoo Kim, Hangil Lee

P-Th-061 Preparation, characterization and catalytic behavior of cobalt spinel ferrite obtained by hydrothermal treatment

Laaldja Meddour-Boukhobza, Yasmina Hammiche-Bella, Amar Djadoun, Amel Benada, Aline Auroux

P-Th-062 Annealing effects on reactivity of oxide supported Rh nanoclusters in the decomposition of methanol

Meng-Fan Luo, Ting-Chieh Hung, Ting-Wei Liao, Zhenhe Liao, Po-Wei Hsu, Pei-Yang Cai

P-Th-063 Photocatalytic activity of gold nanoparticles on titanium oxide prepared by solution plasma method

Tsuyoshi Mizutani, Satoshi Ogawa, Muneaki Yamamoto, Hirofumi Nameki, Tomoko Yoshida, Shinya Yagi

P-Th-064 Spatially- and component-resolved reaction kinetics on a μm-scale:

CO oxidation on Pd model catalysts

Martin Datler, Ivan Bepalov, Günther Rupprechter, Yuri Suchorski

P-Th-067 Carbon contamination of metal nanoparticles detected by Kelvin probe force microscopy

Fayçal Mechehoud, Henrik Grönbeck, **Clemens Barth**

* **P-Th-068** Step edges on ceria stabilize Pt²⁺ ions

Andrii Tovt, Filip Dvořák, Mikhaylo Vorokhta, Tomáš Skála, Iva Matolínová, Josef Mysliveček, Vladimír Matolín, Fabio Ribeiro, Matteo Farnesi Camellone, Tran Nguyen Dung, Stefano Fabris

P-Th-069 Photocatalytic reduction of NO with ethanol on Au/TiO₂

Gyula Halasi, Tamás Bánsági, **Frigyes Solymosi**

P-Th-070 Catalytic properties of Fe-HMS materials in the phenol oxidation

Khalida Chellal, Khaldoun Bachari, Frida Sadi

P-Th-071 High UV-light photocatalytic activity of Ag₃PO₄ synthesized by simple precipitation and hydrothermal methods

Titipun Thongtem, Nuengruethai Ekthammathat, Saowalak Krungchanuchat, Anukorn Phuruangrat, Somchai Thongtem

P-Th-072 Synthesis and characterization of Co, Ce and Co+Ce incorporated mesoporous SBA-15 and KIT-6 catalysts

Plamen Stefanov, Tanya Tsoncheva, Genoveva Atanasova, Anton Naydenov

P-Th-073 HRTEM study of NiCe/Al₂O₃ nanoparticles

Sabah Chettibi, Fatiha Seridi, Nassira Keghouche

Corrosion at the atomic scale (P-Th-075)

P-Th-075 Initial surface transformations on hydrated bioactive glasses: insight from MD simulations

Antonio Tilocca

Electrochemistry at surfaces (P-Th-076 to P-Th-082)

P-Th-076 Some features on the electrosynthesis of nanostructured Nb₂O₅ anodic films

Leonid Skatkov, Larisa Liashok, Valeriy Gomofov, student Irina Tokareva, Boris Bayrachniy

P-Th-077 FeNi electrodeposited on meso and macroporous silicon

Souad Ouir, Ghania Fortas, Sabrina Sam, Noureddine Gabouze

* **P-Th-078** Electrochemical co-reduction of tellurium (IV) with copper (I), copper (II) or zinc (II) ions from Ethaline ionic liquid

Adriana-Simona Catrangiu

P-Th-080 Treatment of effluent of water paints industry by electrocoagulation

K. Zoulikha, D. Zerrouki, **Nassila Sabba**, M. Taleb Ahmed

P-Th-081 Effect of hydrous ruthenium oxide modification of conductive diamond substrate on the electrocatalytic performances of supported Pt particles

Tanta Spataru, Loredana Preda, Cecilia Lete, Petre Osiceanu, Alexandru Ioan Caciuleanu, Nicolae Spataru

P-Th-082 Heavy metals extraction and separation by electrodeposition on a steel substrate from wastewater

Addi Yassine

Real-time processes at surfaces (P-Th-083)

P-Th-083 High temperature real time observation of AuNPs by SEM on silicon oxide

Petr Bábor, Radek Duda, Jan Čechal, Stanislav Průša, Jan Polčák, Peter Varga, Tomáš Šikola

Surface chemical reactions, kinetics and heterogeneous catalysis (P-Th-084 to P-Th-099)

P-Th-084 Bond length effects during the dissociation of O₂ on Ni(111)

Ian Shuttleworth

P-Th-085 The role of dual perimeter catalytic sites of metal on metal oxide support

Pussana Hirunsit, Masahiro Ehara, Kajornsak Faungnawakij

P-Th-087 CO Desorption of MgO/Mo(001) Revisited – a TPD Study Combined with STM

Stefanie Stuckenholtz, Christin Büchner, Markus Heyde, Hans-Joachim Freund

P-Th-088 Ligands vs Ensembles in Catalysis and Surface Reactivity – the d-band theory challenged

Michael Bowker, Neil Perkins

P-Th-089 H-Abstraction from Methane in H-ZSM5 Zeolite

Maria Rutigliano, Nico Sanna, Amedeo Palma

* **P-Th-090** Influence of step sites in the water-gas shift reaction on copper surfaces

Hector Prats Garcia, Leny Álvarez, Pablo Gamallo, Francesc Illas, Ramón Sayós

P-Th-091 Atomic and electronic structure of guanine on Ge(100)

Do Hwan Kim, Young-Sang Youn, Hye Jin Lee

P-Th-092 Surface modification of mesoporous chromium terephthalate MIL-101 with NiO nanoparticles via atomic layer deposition

Myung-Geun Jeong, Dae Han Kim, Ju Ha Lee, Sang Wook Han, Eun Ji Park, Bo Ra Kim, Soong Yeon Kim, Il Hee Kim, Ki Jung Park, Young Dok Kim

P-Th-093 Encapsulation on Pd- and Pd-Au on TiO₂(110)

Michael Bowker, Ryan Sharpe

P-Th-094 Effect of SrWO₄ Micro/Nanostructures morphology on the Photodegradation of Rh B

Nadine Dirany, Sylvie Villain, Jean Raymond Gavarri, Madjid Arab

*** P-Th-095** In situ study of oxide supported gold nanoparticles by surface X-ray scattering techniques

Venkatesan Dhanasekaran, Andrea Resta, Beri Mbenkum, Yves Garreau, Alessandro Coati, Alina Vlad

P-Th-096 *This paper has been withdrawn by the author.*

P-Th-097 Methanol oxidation over pure and pt-doped tungsten oxide supported on activated carbon

Jan Polášek, Karel Mašek, Viktor Johánek, Anna Ostroverkh, Vladimír Matolín

P-Th-098 STM Study of Chirality Transfer Complexes on Pt(111)

Yi Dong, Jean-Christian Lemay, Peter McBreen

P-Th-099 Initial oxidation behavior of Ni₃Al (210) surface induced by supersonic oxygen molecular beam at room temperature

Ya Xu, Junya Sakurai, Yuden Teraoka, Akitaka Yoshigoe, Masahiko Demura, Toshiyuki Hirano

Surface structure (II)

P-Th-100 An STM/XPS study of the oxychlorination of Cu(111) and Cu(110) surfaces

Hatem Altass, Philip Davies, Albert Carley

Real-time processes at surfaces (II)

P-Th-101 Real-time STM studies of interface formation for EUV multilayer mirror applications

Cristina Sfiligoj
