

SESSION TIME 08:30-10:00

Plenary Session II

Room: Viktoriahallen

Time	Title	Abs No
08:30	Quantum transport in semiconductor nanowires and carbon nanotubes <i>Kouwenhoven, Leo</i> <i>Kavli Institute of Nanoscience, Delft University of Technology, Delft, The Netherlands</i>	PLE02-IS1
09:15	A narrow-minded approach to materials science and device physics: NANOWIRES <i>Samuelson, Lars</i> <i>Department of Solid State Physics, Lund University, Lund, Sweden</i>	PLE02-IS2

ADV02 - Advanced Light Sources II

Room: Viktoriahallen

NS06 - Nanomagnetism I

Room: K1

Time	Title	Abs No	Time	Title	Abs No
10:30	Diamond- a next generation synchrotron radiation facility <i>Materlik, Gerhard</i> <i>United Kingdom</i>	ADV02-IS1	10:30	Domain-wall manipulations in ferromagnetic (Ga,Mn)As <i>Dietl, Tomasz</i> <i>Polish Academy of Sciences, Warszawa, Warszawa, Poland</i>	NS06-IS1
11:00	XMCD measurement in CFS and CIS modes <i>Kim, J.-Y.</i> <i>Republic of Korea</i>	ADV02-Or1	11:00	Spin transport phenomena in layered magnetic structures: New results, unresolved questions <i>Grünberg, Peter A.</i> <i>Forschungszentrum Jülich, Germany</i>	NS06-IS2
11:15	High-resolution compact x-ray microscopy <i>Bertilson, Michael C. (Sweden); Takman, Per A C (Sweden); Stollberg, Heide (Sweden); Holmberg, Anders (Sweden); Lindblom, Magnus (Sweden); Vogt, Ulrich (Sweden); Hertz, Hans M (Sweden)</i>	ADV02-Or2			
11:30	Dissociation dynamics of positive-ion and negative-ion fragments of gaseous and condensed Si(CH₃)₂Cl₂ via Si 2p, Cl 2p, and Cl 1s core-level excitations <i>Lu, K. I. (Taiwan); Chen, J. M. (Taiwan); Lee, J. M. (Taiwan); Chen, C. K. (Taiwan); Haw, S. C. (Taiwan)</i>	ADV02-Or3	11:30	What is the smallest volume into which light can be focused, efficiently? <i>Vedantam, Shantha; Lee, Hyojune; Tang, Japeck; Staffaroni, Matteo; Conway, Josh; Yablonovitch, Eli</i> <i>UC Berkeley Electrical Eng. & Comp. Science Dept., UCLA Electrical Engineering Dept., Los Angeles, United States</i>	NS06-IS3
11:45	Developments at the European x-ray free electron laser in Hamburg <i>Decking, Winfried (Germany)</i>	ADV02-IS2			
			12:00	Current induced magnetization switching — is it possible with SP-STM? <i>Krause, Stefan¹; Berbil-Bautista, Luis²; Herzog, Gabriela¹; Bode, Matthias¹; Wiesendanger, Roland¹</i> <i>¹University of Hamburg, Institute of Applied Physics, Hamburg, Germany; ²Lawrence Berkeley Laboratory, Material Sciences Division, Berkeley, United States</i>	NS06-Or1

ASS02 - Adhesion

Room: K2

VST02 - Micromechanical Sensors and Vacuum Metrology

Room: K11

Time	Title	Abs No	Time	Title	Abs No
10:30	Adhesion and Wetting in Aqueous Environments <i>Marmur, Abraham</i> Technion - Israel Institute of Technology, Chemical Engineering, Haifa, Israel	ASS02-IS1	10:30	Microelectromechanical sensors for measuring pressure and gas flow <i>Völklein, Friedemann</i> University of Applied Sciences Wiesbaden, Germany	VST02-IS1
11:00	Optimal roughness for minimum adhesion <i>Liu, Deli¹; Martin, Jack²; Burnham, Nancy¹</i> ¹ Worcester Polytechnic Institute, Department of Physics, Worcester, United States; ² Analog Devices Incorporated, Micromachined Products Division, Cambridge, United States	ASS02-Or1	11:00	Silicon resonant microcantilevers for absolute pressure measurements <i>Cocuzza, Matteo¹; Schina, Paolo²; Correale, Raffaele³</i> ¹ Politecnico di Torino, Physics, Torino, Italy; ² Olivetti I-Jet, Arnad, Italy; ³ Varian Vacuum Technologies, Leini, Italy	VST02-Or1
11:15	Plasma surface modification of carbon fibres for adhesion improvement to epoxy <i>Kusano, Yukihiko; Sørensen, Bent F.; Andersen, Tom L.; Michelsen, Poul K.</i> Technical University of Denmark, Risø National Laboratory, Roskilde, Denmark	ASS02-Or2	11:15	Investigation of tunable diode laser absorption spectroscopy for its application as primary standard for partial pressure measurements <i>Padilla Viquez, Gerardo José¹; Jousten, Karf²; Bock, Thomas²</i> ¹ Lacomet, San Pedro Montes de Oca, Costa Rica; ² PTB, Berlin, Germany	VST02-Or2
11:30	Interaction of 1,2-diaminoethane on technical aluminium surfaces <i>Mercier, Dimitri; Barthes-Labrousse, Marie-Genevieve</i> CNRS, Vitry-sur-Seine, France	ASS02-Or3	11:30	Metrological analysis of dynamic expansion system of Czech metrology institute <i>Vicar, Martin¹; Repa, Petr²; Peksa, Ladislav²; Gronych, Tomas²; Tesar, Jiri³; Prazak, Dominik¹; Stanek, Frantisek¹</i> ¹ Czech Metrology Institute, Primary Pressure and Vacuum Department, Brno, Czech Republic; ² Charles University, Faculty of Math & Physics, Prague, Czech Republic; ³ Czech Metrology Institute, Department of Fundamental Metrology, Prague, Czech Republic	VST02-Or3
11:45	Improved adhesion for thermoplastic polymers using oxyfluorination <i>Achereiner, Frédéric; Münstedt, Helmut</i> Friedrich-Alexander University Erlangen-Nürnberg, Institute of Polymer Materials, Erlangen, Germany	ASS02-Or4	11:45	Development of a constant pressure flowmeter for He standard leak calibration <i>Arai, Kenta; Yoshida, Hajime; Akimichi, Hitoshi; Hirata, Masahiro</i> AIST, National Metrology Institute of Japan, Tsukuba, Japan	VST02-Or4
			12:00	Comparison of the secondary standards of leak with a primary standard of low gas flow <i>Prazak, Dominik¹; Repa, Petr²; Tesar, Jiri³; Vicar, Martin¹; Peksa, Ladislav²; Gronych, Tomas²</i> ¹ Czech Metrology Institute, Primary Pressure and Vacuum Department 6013, Brno, Czech Republic; ² Charles University, Faculty of Math&Physics, Prague, Czech Republic; ³ Czech Metrology Institute, Fundamental Metrology Department 0211, Prague, Czech Republic	VST02-Or5

TF/SE02: Fundamental in Thin Film Proc.: Ionized-PVD I

Room: K12

JS02 - Joint Session: ASS - Tribology and TF/SE - Physics and Chemistry of Protective Films II

Room: K13

Time	Title	Abs No	Time	Title	Abs No
10:30	Ionized physical vapor deposition (IPVD): Technology and applications <i>Gudmundsson, Jon T.</i> University of Iceland, Science Institute, Reykjavik, Iceland	TFSE02-IS1	10:30	Tribological characteristics of nanostructured carbon-tungsten film prepared by thermionic vacuum arc method <i>Lungu, P. Cristian¹; Surdu Bob, Cristina¹; Mustata, Ion¹; Anghel, Alexandru¹; Lungu, Ana Mihaela¹; Pompilian, Oana¹; Dutu, Elena¹; Tudor, Andre²; Laurian, Tiberiu²; Prodan, Gabriel²; Clupina, Victor²; Grula, Ion³</i> ¹ NILPRP, PTJ, Bucharest, Romania; ² Politehnica University, Tribology, Bucharest, Romania; ³ Ovidius University, Physics, Constanta, Romania; ⁴ University of Bucharest, Physics, Bucharest, Romania	JS02-Or1
			10:45	Features of static and dynamic friction profiles in one and two dimensions on polymer and atomically flat surfaces using atomic force microscopy <i>Watson, Gregory; Watson, Jolanta</i> Griffith University, School of Biomolecular & Physical Sciences, Nathan, Australia	JS02-Or2
11:00	Anomalous transport through lower-hybrid waves in a HIPIMS sputtering magnetron <i>Brenning, Nils¹; Lundin, Danie²; Kirkpatrick, Scott³; Helmersson, Ulf⁴</i> ¹ Royal Institute of Technology, KTH, Space- and Plasma Physics, EE, Stockholm, Sweden; ² Linköping University, Plasma and Coatings Division, IMF Material Physics, Linköping, Sweden; ³ University of Nebraska - Lincoln, Mechanical Engineering, Lincoln, United States	TFSE02-Or1	11:00	Forces, charges, and light emission during the rupture of microscopic adhesive contacts <i>Miura, Takashi¹; Chini, Michael²; Bennewitz, Roland²</i> ¹ Gakushuin University, Department of Physics, Tokyo, Japan; ² McGill University, Department of Physics, Montreal, Quebec, Canada	JS02-Or3
11:15	Effect of adspecies flux on texture and structure evolution in TiN thin films deposited by pulsed i-PVD <i>Lattemann, Martina; Jädernäs, Daniel; Helmersson, Ulf</i> Linköping University, Department of Physics, Chemistry and Biology (IFM), Linköping, Sweden	TFSE02-Or2	11:15	Residual friction and dissipation in atomic-scale contacts subject to periodic loading <i>Maier, Sabine; Socoliuc, Anisoara; Baratoff, Alexis; Gnecco, Enrico; Meyer, Ernst</i> University of Basel, Institute of Physics, Basel, Switzerland	JS02-Or4
11:30	High-power pulsed magnetron discharges for ionized high-rate deposition of metallic films <i>Vlček, Jaroslav; Kudláček, Pavel; Burcalová, Kristýna</i> University of West Bohemia, Department of Physics, Plzeň, Czech Republic	TFSE02-Or3	11:30	Tribological properties comparison between fluorinated polymethacrylates and fluorinated diazonium salts thin films <i>Benedetto, Alessandro¹; Alamarguy, David²; Balog, Mirela³; Viel, Pascal¹; Le Derf, Franck³; Sallé, Marc³; Noël, Sophie²; Palacin, Serge¹</i> ¹ CEA Saclay, DSM-DRECAM-SPCSI, Gif-sur-Yvette, France; ² Laboratoire de Génie Electrique de Paris, Gif-sur-Yvette, France; ³ Université d'Angers, CIMMA, Angers, France	JS02-Or5
11:45	HIPIMS – properties and opportunities <i>Böhlmark, Johan; Greczynski, Grzegorz</i> Chemfilt Ion Sputtering AB, Linköping, Sweden	TFSE02-IS2	11:45	Static friction on the fly: velocity pinning transitions of lubricants in motion <i>Santorio, Giuseppe Ernesto¹; Vanossi, Andrea²; Manini, Nicola²; Caruso, Fabio³; Tosatti, Erio¹</i> ¹ International School for Advanced Studies (SISSA), Condensed Matter Theory Sector, Trieste, Italy; ² University of Modena and Reggio Emilia, CNR-INFN S3 and Department of Physics, Modena, Italy; ³ University of Milan, Department of Physics, Milan, Italy	JS02-Or76

SS04 - Chemical Reactions on Surfaces

Room: K16/17

TF/SE03: Dielectric Magnetic and Multi-Functional Compound Growth and Processing

Room: K21

Time	Title	Abs No	Time	Title	Abs No
10:30	First principles ammonia synthesis and decomposition over a Ru-based catalyst <i>Honkala, Karoliina</i> University of Jyväskylä, Department of Chemistry, Jyväskylä, Finland	SS04-IS1	10:30	A comprehensive study of Exchange Bias <i>Schuller, Ivan¹; Roshchin, Igor¹; Li, Chang Peng¹; Morales, Rafael¹; Li, Zhi Pan¹; Roy, Sujoy¹; Sinha, Sunil¹; Fitzsimmons, Mike²; Altbir, Dora³; Mejia, Jose⁴; Romero, Aldo⁵; Battle, Xavier⁶</i> ¹ University of California-San Diego, Physics, La Jolla, Ca. 92093, United States; ² Los Alamos National Labs, Los Alamos, NM 87545, United States; ³ Universidad de Santiago, Fisica, Santiago, Chile; ⁴ Pontificia Universidad Católica, Fisica, Santiago, Chile; ⁵ CINVESTAV, Queretaro, Mexico; ⁶ Universitat Barcelona, Fisica Fonamental, Barcelona, Spain	TFSE03-IS1
11:00	Cis-trans-isomerization of 2-butene on Fe₃O₄-supported Pd model catalysts <i>Brandt, Bjoern¹; Fischer, Jan-Henrik¹; Schalow, Tobias¹; Zaera, Francisco²; Schauerermann, Svetlana¹; Libuda, Joerg³; Freund, Hans-Joachim¹</i> ¹ Fritz-Haber-Institut (MPG), Chemical Physics, Berlin, Germany; ² University of California, Department of Chemistry, Riverside (CA), United States; ³ Friedrich-Alexander-Universitaet, Lehrstuhl Physikalische Chemie II, Erlangen, Germany	SS04-Or1	11:00	Improvement of electrical properties in BLT films deposited by magnetron sputtering <i>Besland, Marie-Paule¹; Borderon, Caroline²; Richard-Plouet, Mireille¹; Averty, Dominique²; Brohan, Luc¹; Djouadi, Abdou¹</i> ¹ Institut des Materiaux Jean Rouxel, Nantes, France; ² Ireena, Nantes, France	TFSE03-Or1
11:15	A surface science approach to understanding the key steps of the oxygen reduction reaction in fuel cells <i>MacNaughton, Janay B.; Naslund, Lars; Ogasawara, Hirohito; Anniyev, Toyli; Nilsson, Anders</i> Stanford Linear Accelerator Center, Stanford Synchrotron Radiation Laboratory, Menlo Park, United States	SS04-Or2	11:15	Study of vanadium doped ZnO thin films prepared by dc reactive magnetron sputtering at different pressures <i>Wang, Liwei¹; Wang, Liwei²; Wang, Liwei³; Meng, Lijian¹; Meng, Lijian²; Teixeira, Vasco⁴; Placido, Frank⁴; Xu, Zheng³</i> ¹ Instituto Superior de Engenharia do Porto, Departamento de Física, Porto, Portugal; ² Universidade do Minho, Centro de Física, Guimarães, Portugal; ³ Beijing Jiaotong University, Institute of Optoelectronics, Beijing, China; ⁴ University of Paisley, Thin Film Center, Paisley, United Kingdom	TFSE03-Or2
11:30	Ethanol adsorption and dehydrogenation on Rh(111) surface with and without presence of the water: A first principle study <i>Yang, Ming-Mei; Bao, Xin-He; Li, Wei-Xue</i> Dalian Institute of Chemical Physics, Dalian, China	SS04-Or3	11:30	Synthesis of highly textured thin piezoelectric AlN films with a tilted c-axis <i>Bjurstrom, Johan¹; Lidbaum, Hans²; Wingqvist, Gunilla¹; Katardjiev, Ilija¹; Leifer, Klaus²</i> ¹ Uppsala University, Solid State Electronics, Uppsala, Sweden; ² Uppsala University, Electron Microscopy and Nanoengineering, Uppsala, Sweden	TFSE03-Or3
11:45	Interaction of CO and O₂ with a Au/Ni(111) surface alloy <i>Merte, Lindsay B.¹; Knudsen, Jan¹; Resta, Andrea²; Vang, Ronnie T.¹; Andersen, Jesper N.²; Besenbacher, Flemming¹</i> ¹ University of Aarhus, iNANO and Department of Physics and Astronomy, Aarhus, Denmark; ² Lund University, Department of Synchrotron Radiation Research, Lund, Sweden	SS04-Or4	11:45	Epitaxial CoFe₂O₄(111)-based tunnel junctions for spin filter applications <i>Ramos, Ana¹; Moussy, Jean-Baptiste¹; Guitte, Marie-Josephe¹; Gautier-Soyer, Martine²; Mattana, Richard³; Petroff, Frederic²</i> ¹ CEA Saclay, Gif-sur-Yvette, France; ² UMP CNRS/Thales, Palaiseau, France	TFSE03-Or4
12:00	Selective functionalization of Si(111) and Ag(110) surfaces through self-aligned nanostructures for the ordered growth of dense magnetic nano-dots and nanowires <i>Moyen, Eric¹; Léandri, Christel¹; Agnus, Guillaume²; Fleurence, Antoine²; Macé, Magali¹; Maroutian, Thomas²; Masson, Laurence¹; Wulfhekel, Wulf¹; Bartenlian, Bernard²; Beauvillain, Pierre²; Hanbücken, Margrit¹</i> ¹ CRMCN-CNRS, Marseille, France; ² IEF, Orsay, France; ³ Universität Karlsruhe, Physikalisches Institut, Karlsruhe, Germany	SS04-Or5	12:00	Doping of polar interfaces in perovskite oxides <i>Kalabukhov, A.S.¹; Gunnarsson, R¹; Borjesson, J¹; Olsson, E¹; Winkler, D¹; Claesson, T¹</i> ¹ Chalmers, Microtechnology and Nanoscience, Gothenburg, Sweden; ² Chalmers, Applied Physics, Gothenburg, Sweden	TFSE03-Or5

PST/F02 - Plasma Science & Technology II

Room: K22

NS07 - Nanostructuring II

Room: K23

Time	Title	Abs No	Time	Title	Abs No
10:30	Data collection and management in the semiconductor industry <i>Schimunek, Bernhard</i> MKS Instruments Inc. CIT Product Group, München, Germany	PSTF02-IS1	10:30	Structural bistability of the oxygen-adsorbed graphene sheet <i>Nakamura, Jun</i> ; Ito, Jun; Natori, Akiko The University of Electro-Communications, Department of Electronic-Engineering, Tokyo, Japan	NS07-Or1
			10:45	Synthesis and characterization of a self-assembled nanostructured silicon/metal composite <i>Granitzer, Petra</i> ¹ ; Rumpf, Klemens ¹ ; Poelt, Peter ² ; Reichmann, Angelika ² ; Krenn, Heinz ¹ ¹ Karl Franzens University Graz, Institute of Physics, Graz, Austria; ² University of Technology, Institute for Electron Microscopy, Graz, Austria	NS07-Or2
11:00	Time evolution of the space-charge sheath in an rf hollow cathode <i>Söderström, Daniel</i> ; Baránková, Hana; Bárdos, Ladislav The Ångström Laboratory, Uppsala University, Uppsala, Sweden	PSTF02-Or1	11:00	Carbon nanosheets — a sub-nanometer two-dimensional carbon nanostructure <i>Holloway, Brian</i> College of William & Mary, Applied Science, Williamsburg, VA, United States	NS07-Or3
11:15	Plasma diagnostics and mass spectrometry <i>Peter, Günter</i> Inficon AG, Balzers, Liechtenstein	PSTF02-Or2	11:15	Boron nitride nanomesh: Functionality from a corrugated monolayer <i>Berner, Simon</i> ¹ ; Corso, Martina ¹ ; Brugger, Thomas ¹ ; Widmer, Roland ² ; Groening, Oliver ² ; Laskowski, Robert ³ ; Blaha, Peter ³ ; Schwarz, Karlheinz ² ; Goriachko, Andrii ⁴ ; Over, Herbert ⁴ ; Gsell, Stefan ⁵ ; Schreck, Matthias ⁵ ; Sachdev, Hermann ⁶ ; Greber, Thomas ¹ ; Osterwalder, Juerg ¹ ¹ University of Zurich, Zurich, Switzerland; ² EMPA, Thun, Switzerland; ³ TU Vienna, Vienna, Austria; ⁴ Justus-Liebig-University Giessen, Giessen, Germany; ⁵ University of Augsburg, Augsburg, Germany; ⁶ Universitaet des Saarlandes, Saarbruecken, Germany	NS07-Or4
11:30	Direct measurement of sidewall roughness on si, poly-si and poly-SiGe by AFM <i>Gudmundsson, Valur</i> ; Hellström, Per-Erik; Zhang, Shi-Li; Östling, Mikael Royal Institute of Technology, Electrum 229, SE-164 40 Kista, Stockholm, Sweden	PSTF02-Or3	11:30	Gold nitride as a new SERS substrate <i>Alves, Luis</i> ; Brieve, Abel; Krishnamurthy, Satheesh; Chao, Yimin; Siller, Lidija Newcastle University, Chemical Engineering and Advanced Materials, Newcastle, United Kingdom	NS07-Or5
11:45	Optical emission spectroscopy for small open area end point detection in dry etching technique <i>Pistoni, Mario Francesco</i> ; Dergbi, Federico Stmicroelectronics, Central R&D, Agrate Brianza - Milan, Italy	PSTF02-Or4	11:45	Nano-scale dopant ring devices in Si patterned by STM lithography <i>Reusch, Thilo C. G.</i> ¹ ; Fuchsle, Martin ¹ ; Fuhrer, Andreas ² ; Rueß, Frank J. ¹ ; Weber, Bent ² ; Pok, Wilsor ² ; Scappucci, Giordano ³ ; Thompson, Daniel ¹ ; Simmons, Michelle Y. ¹ ¹ University of New South Wales, Centre for Quantum Computer Technology, Sydney, Australia; ² University of New South Wales, School of Physics, Sydney, Australia	NS07-Or6
			12:00	Metal-dielectric nanosandwiches: Plasmon hybridization and optical magnetism from bottom-up <i>Dmitriev, Alexandre</i> ¹ ; Pakizeh, Tavako ² ; Käll, Mikael ³ ¹ Chalmers University of Technology, Applied Physics / Chemical Physics, Göteborg, Sweden; ² Chalmers University of Technology, Applied Physics / Bionanophotonics, Göteborg, Sweden; ³ Chalmers University of Technology, Applied Physics / Bionanophotonics, Göteborg, Sverige	NS07-Or7

NS08 - Cluster and Nanoparticles II

Room: K24

SS05 - Electronic Structure II

Room: A2

Time	Title	Abs No	Time	Title	Abs No
10:30	Ion beam deposition technique for fabricating luminescent thin films using colloidal nanocrystalline semiconductor dots <i>Kobayashi, Satoshi; Tani, Yuki; Kawazoe, Hiroshi</i> <i>HOYA corp., R&D center, Tokyo, Japan</i>	NS08-Or1	10:30	From atomic-scale structures to dynamic and electronic processes: the power of simulations in scanning tunneling microscopy <i>Hofer, Werner</i> <i>The University of Liverpool, Surface Science Research Centre, Liverpool, United Kingdom</i>	SS05-IS1
10:45	Molecular functionalization and nano-hybrids synthesis: a novel approach to improved sensing applications <i>Iannotta, Salvatore; Coppedè, Nicola; Aversa, Lucrezia; Nardi, Marco; Siviero, Fabrizio; Toccoli, Verucchi; Verucchi, Roberto</i> <i>IFN-CNR Institute for Photonics and Nanotechnology, FBK - Trento Division, Povo di Trento, Italy</i>	NS08-Or2			
11:00	Novel plasmonic materials: Pt and Pd nanoparticles for plasmonic hydrogen sensing and plasmon mediated photo-chemistry <i>Langhammer, Christoph¹; Clemens, Bruce M.²; Zoric, Igor¹; Kasemo, Bengt¹</i> <i>¹Chalmers University of Technology, Applied Physics, Göteborg, Sweden; ²Stanford University, Materials Science and Engineering, Stanford, United States</i>	NS08-Or3	11:00	Electronic states of the interfacial cobalt on Co/N/Cu(001) surfaces <i>Nakatsuji, Kan¹; Takagi, Yasumasa²; Yoshimoto, Yoshihide¹; Tomatsu, Kota¹; Yaji, Koichiro¹; Imori, Takushi¹; Harada, Yoshihisa²; Tokushima, Takashi²; Takeuchi, Tomoyuki²; Takata, Yasutaka²; Shin, Shik¹; Ishikawa, Tetsuya²; Komori, Fumio¹</i> <i>¹Institute for Solid State Physics, University of Tokyo, Kashiwa-shi, Japan; ²RIKEN SPring-8 Center, RIKEN Harima Institute, Sayo-cho, Japan</i>	SS05-Or1
11:15	CO adsorption on an Au nanocrystallite: the role of transient atomic configurations at finite temperature <i>McKenna, Keith; Sushko, Peter; Shluger, Alex</i> <i>University College London, Physics and Astronomy, London, United Kingdom</i>	NS08-Or4	11:15	Image-potential state effective mass controlled by light pulses <i>Pagliara, Stefania¹; Ferrini, Gabriele¹; Galimberti, Gianluca¹; Pedersoli, Emanuele¹; Giannetti, Claudio¹; Parmigiani, Fulvio²</i> <i>¹Universita' Cattolica, Matematica e Fisica, Brescia, Italy; ²Universita' Trieste, Fisica, Trieste, Italy</i>	SS05-Or2
11:30	Self-assembly and organization of straight and branched semimetal nanorods <i>Wang, Xue-sen</i> <i>National University of Singapore, Physics Department, Singapore 117542, Singapore</i>	NS08-Or5	11:30	Confinement of the image potential states inside vacancy islands in the 1MLAr/Cu(100) system <i>Diaz-Tendero, Sergio; Borisov, Andrey G.; Gauyacq, Jean-Pierre</i> <i>CNRS - Université Paris-Sud, Lab. des Collisions Atomiques et Moleculaires, Orsay, France</i>	SS05-Or3
11:45	Process of phase separation induced by low energy electronic excitation in GaSb nanoparticles <i>Yasuda, Hidehiro</i> <i>Kobe University, Mechanical Engineering, Kobe, Japan</i>	NS08-Or6			
12:00	Nano-pattern formation in strained 2D metallic alloys: comparison of simple cubic(100) and fcc(111) surfaces <i>Kotrla, M.¹; Weber, S.²; Bieh1, M.³</i> <i>¹Institute of Physics of the ASCR, Praha, Czech Republic; ²Universitaet Wuerzburg, Institut fuer Theoretische Physik und Astrophysik, Wuerzburg, Germany; ³University of Groningen, Institute of Mathematics and Computing Science, Groningen, Netherlands</i>	NS08-Or7			

SS06 - Chemical Reactions

Room: A3

NS09 - Novel SPM

Room: A4

Time	Title	Abs No	Time	Title	Abs No
10:30	Error-controlled multiscale modeling approaches to surface chemistry and catalysis <i>Reuter, Karsten</i> Fritz-Haber-Institut der MPG, Berlin, Germany	SS06-IS1	10:30	The force microscope reunited with STM <i>Giessibl, Franz J</i> Institute of Experimental and Applied Physics, University of Regensburg, Regensburg, Germany	NS09-IS1
11:00	Interaction of metals with silica: ultra-thin vs thick silica films <i>Baron, Martin; Stachhiola, Dario; Shaikhutdinov, Shamil; Freund, Hans-Joachim</i> Fritz Haber Institute, Berlin, Germany	SS06-Or2	11:00	Novel single molecular tip for detection of intermolecular interaction and manipulation of electron at high spatial resolution <i>Fukui, Ken-ichi¹; Takamatsu, Daiko¹; Miwa, Takeshi¹; Yamakoshi, Yoko²</i> ¹ Tokyo Institute of Technology, Chemistry, Tokyo, Japan; ² University of California at Santa Barbara, Chemistry and Biochemistry, Santa Barbara, United States	NS09-Or1
11:15	Real-time photoelectron spectroscopy study on the oxidation-induced strained Si atom at SiO₂/Si(001) interface: dependence on oxidation temperature <i>Ogawa, Shuichi¹; Yoshigoe, Akitaka²; Ishidzuka, Shinji²; Teraoka, Yuden²; Takakuwa, Yuji¹</i> ¹ Tohoku University, Sendai, Japan; ² Japan Atomic Energy Research Agency, Sayo, Japan; ³ Akita National College of Technology, Akita, Japan	SS06-Or3	11:15	Element specific imaging by STM combined with synchrotron radiation light <i>Eguchi, Toyoaki; Okuda, Taichi; Matsushima, Takeshi; Kataoka, Akira; Harasawa, Ayumi; Akiyama, Kotone; Kinoshita, Toyohiko; Hasegawa, Yukio</i> The University of Tokyo, The Institute for Solid State Physics, Chiba, Japan	NS09-Or2
11:30	Real-time ultraviolet photoelectron spectroscopy study on the oxidation reaction kinetics of an Si_{1-x}C_x alloy layer (x=0.1) grown on p-type Si(001) surface with ethylene <i>Takakuwa, Yuji; Ogawa, Shuichi</i> Tohoku University, IMRAM, Sendai, Japan	SS06-Or4	11:30	Ab initio Green's function study on STM-NMR simulation of single molecular devices <i>Tada, Tomofumi; Watanabe, Satoshi</i> The University of Tokyo, Department of Materials Engineering, CREST-JST, Tokyo, Japan	NS09-Or3
11:45	The unique surface reactivity of monolayer Ag supported on Si(111) <i>Yao, Yunxi; Fu, Qiang; Bao, Xinhe</i> The Chinese Academy of Sciences, Dalian Institute of Chemical Physics, Dalian, China	SS06-Or5	11:45	Electric dipole moment observation of single Si atom on Si(111)7×7 surface using non-contact scanning nonlinear dielectric microscopy <i>Cho, Yasuo; Hirose, Ryusuke</i> Tohoku University, Research Institute of Electrical Communication, Sendai, Japan	NS09-Or4
	Abstract withdrawn	SS06-Or1	12:00	Measuring energy dissipation with frequency modulated torsional resonance mode AFM (FM-TR-AFM) <i>Yurtsever, Ayhan; Gigler, Alexander; Stark, Robert</i> Ludwig-Maximilians-University, Munich, Germany	NS09-Or5

EMP03 - New Developments in Film Patterning (104)

Room: A5

Time	Title	Abs No
10:30	<p>Floating Gate Memory From Aerosol-Synthesized Silicon Nanoparticles <i>Flagan, Richard</i> California Institute of Technology, Chemical Engineering, Pasadena, CA 91125, United States</p>	EMP03-IS1
11:00	<p>Accumulated side-wall damage and its impact on carrier lifetimes in dry-etched InP-based photonic crystals <i>Shi, Yaocheng; Berrier, Audrey; Siegert, Jörg; Marcinkevicius, Saulius; He, Sailing; Anand, Srinivasan</i> Royal Institute of Technology, Microelectronics and Applied Physics, SE-16440 Kista, Sweden</p>	EMP03-Or1
11:15	<p>Effects of a compliant layer in solid parallel-plate UV-based nanoimprint lithography <i>Bergmair, Iris¹; Mühlberger, Michael¹; Gusenbauer, Markus¹; Schöftner, Rainer¹; Glinsner, Thomas²; Hingerl, Kurt³</i> 1Profactor GmbH, Steyr-Gleink, Austria; 2EV Group, E. Thallner GmbH, St. Florian/Inn, Austria; 3CD Laboratory for Surface Optics, Linz, Austria</p>	EMP03-Or2
11:30	<p>ionLiNE a new tool concept for nanofabrication in surface science and thin film engineering <i>Rampe, Andreas¹; Remscheid, Andreas²; Bruchhaus, Lars³; Bauerdick, Sven³</i> 1Raith GmbH, Product Management, Dortmund, Germany; 2Raith GmbH, Sales, Dortmund, Germany; 3Raith GmbH, R&D, Dortmund, Germany</p>	EMP03-Or3
11:45	<p>Patterning polymeric structures with 2 nm resolution at 3 nm half-pitch in ambient conditions <i>Martinez, Javier; Martinez, Ramses; Losilla, Nuria; Garcia, Ricardo</i> Instituto de Microelectronica de Madrid, Nanofabrication Lab, 28760 Tres Cantos, Madrid, Spain</p>	EMP03-Or4

ADV03 - Advanced Light Sources III

Room: Viktoriahallen

ASS03 - High Pressure Studies and Catalytic Molecular

Room: K1

Time	Title	Abs No	Time	Title	Abs No
13:30	SPring-8 X-ray Free Electron Laser Project <i>Shintake, Tsumoru</i> RIKEN/SPring-8 Harima Institute, Japan	ADV03-IS1	13:30	Au clusters on reduced or oxidized TiO₂ surfaces <i>Hammer, Bjørk¹; Besenbacher, F.; Wendt, Stefan²</i> ¹ University of Aarhus, DK-8000 Århus C, Denmark; ² University of Aarhus, DK-8000 Århus C, Denmark	ASS03-IS1
14:00	LCLS design, construction status, and first experiments <i>Bozek, John (United States)</i>	ADV03-IS2	14:00	The structure of surfaces in equilibrium with gases at near ambient pressures <i>Salmeron, Miguel</i> University of California, Berkeley, Berkeley, United States	ASS03-IS2
14:30	The Synchrotron Radiation and Free Electron Laser Project MAX IV at MAX-lab <i>Brandin, Mathias (Sweden); Eriksson, Mikael (Sweden); Lindgren, Lars-Johan (Sweden); Sjöström, Magnus (Sweden); Thorin, Sara (Sweden); Werin, Sverker (Sweden); Wallén, Erik (Sweden)</i>	ADV03-Or1	14:30	Vibrational spectroscopy for in situ studies of initial atmospheric corrosion of zinc induced by formic acid <i>Hedberg, Jonas; Qiu, Ping; Leygraf, Christofer</i> Royal Institute of Technology (KTH), Chemistry, Stockholm, Sweden	ASS03-Or1
14:45	The European Spallation Source - neutrons for material <i>Carlile, Colin (Sweden)</i>	ADV03-IS3	14:45	A novel bonding mechanism for molecular adsorption on oxide-metal systems <i>Hellman, Anders; Grönbeck, Henrik</i> Competence Centre for Catalysis, Chalmers University of Technology, Göteborg, Sweden	ASS03-Or2
			15:00	Trace amounts of hydrogen in air detected with a catalytic metal gate device <i>Klingvall, Roger; Eriksson, Mats; Lundström, Ingemar</i> Linköping University, Physics, Chemistry and Biology, and S-SENCE, Linköping, Sweden	ASS03-Or3

NS10 - Nanomagnetism II

Room: K2

VST03 - Outgassing and Adsorption/Desorption Phenomena

Room: K11

Time	Title	Abs No	Time	Title	Abs No
13:30	Giant tunneling magnetoresistance in MgO-based magnetic tunnel junctions and its applications to spintronic devices <i>Yuasa, Shinji</i> AIST, Nanoelectronics Research Institute, Tsukuba, Japan	NS10-IS1	13:30	Interaction of water with surfaces: relevance to technical surfaces in vacuum <i>Madey, Theodore</i> Rutgers University, Physics and Astronomy, Piscataway, United States	VST03-IS1
14:00	Interface at the nano scale and influence of magnetism <i>Johansson, Börje</i> Uppsala, Sweden	NS10-IS2	14:00	5 – 17.7 MeV/u Ar beam induced desorption <i>Hedlund, Emma¹; Leandersson, Mats²; Westerberg, Lars²; Malyshev, Oleg B³; Fridén, Carl-Johan⁴; Bellachioma, Maria Christina⁵; Bender, Markus⁶; Krämer, Andreas⁶; Kollmus, Holger⁶</i> ¹ Uppsala University, Department of Nuclear and Particle Physics, Uppsala, Sweden; ² Royal Institute of Technology KTH, Materials Physics, Stockholm, Sweden; ³ Uppsala University, Department of Physics, Uppsala, Sweden; ⁴ ASTeC CCLRC Daresbury Laboratory, Warrington, United Kingdom; ⁵ Uppsala University, The Svedberg Laboratory, Uppsala, Sweden; ⁶ GSI, Darmstadt, Germany	VST03-Or2
			14:15	Investigations on ion induced desorption using UHV-ERDA <i>Bender, Markus¹; Kollmus, Holger¹; Kraemer, Andreas¹; Assmann, Walter²</i> ¹ GSI Darmstadt, Darmstadt, Germany; ² LMU Muenchen, Muenchen, Germany	VST03-Or3
14:30	Entanglement in anderson nanoclusters <i>Samuelsson, Peter; Verdozzi, Claudio</i> Lund University, Mathematical Physics, Lund, Sweden	NS10-Or1	14:30	Surface morphology, surface composition and outgassing behaviour of vacuum fired stainless steel <i>Leisch, Manfred</i> Graz University of Technology, Solid State Physics, Graz, Austria	VST03-IS2
14:45	Novel mechanism for rapid spin flip with increasing in-plane wave vector in slightly asymmetric modulation-doped quantum wells <i>Gvozdic, Dejan¹; Ekenberg, Ulf²</i> ¹ University of Belgrade, Faculty of Electrical Engineering, Belgrade, Serbia and Montenegro; ² Royal Institute of Technology, Microelectronics and Applied Physics, Kista, Sweden	NS10-Or2			
15:00	Tunable phase shift between a spin torque oscillator and an AC current <i>Zhou, Yan; Johan, Persson; Johan, Åkerman</i> Royal Institute of Technology, Department of Microelectronics and Applied Physics, Kista, Sweden	NS10-Or3			
				Abstract withdrawn	VST03-Or1

TF/SE04: Fundamentals in Thin Films Process: Ionized-PVD... II

Room: K12

EMP04 - Ferroelectrics

Room: K13

Time	Title	Abs No	Time	Title	Abs No
13:30	Hich Power Impulse Magnetron Sputtering: Ready for Industrialisation <i>Münz, Wolf-Dieter</i> SYSTEC-SVS, Vacuum Coating Technologies, D-97753 Karlstadt, Germany	TFSE04-IS1	13:30	The profile of interface state density and their relaxation time in Au/Bi4Ti3O12/SiO2/n-Si(MFIS) structures <i>Bulbul, Mehmet Mahir¹; Altindal, Semsettin¹; Parlakturk, Funda²; Tataroglu, Adem¹</i> ¹ Gazi University, Physics, Ankara, Turkey; ² Turkish Atomic Energy Agency, Ankara, Turkey	EMP04-Or1
			13:45	Epitaxial growth of MgO:Al2O3 on Si(100) by MBE <i>Moldovan, Antoniu; Norga, Gerd J.</i> LNESS, Department of Physics, Politecnico di Milano, Como, Italy	EMP04-Or2
14:00	Deposition of crystalline alumina by reactive high power impulse magnetron sputtering <i>Wallin, Erik; Swedin, Staffan; Lattemann, Martina; Helmersson, Ulf</i> Linköping University, Department of Physics, Chemistry and Biology (IFM), Linköping, Sverige	TFSE04-Or1	14:00	Cross-sectional observation of nano-domain dots formed in lithium tantalate single crystal <i>Cho, Yasuo; Daimon, Yasuhiro</i> Tohoku University, Research Institute of Electrical Communication, Sendai, Japan	EMP04-Or3
14:15	Influence of interface engineering by production scale high power impulse magnetron sputtering on coating adhesion <i>Ehiasarian, A P¹; Reinhard, C¹; Hovsepian, P Eh.¹; Wen, J G²; Petrov, P</i> ¹ Sheffield Hallam University, Nanotechnology Centre for PVD Research, Sheffield, United Kingdom; ² University of Illinois, Frederick Seitz Materials Research Laboratory, Urbana, United States	TFSE04-Or2	14:15	Dielectric and electro-optical study of guest host ferroelectric liquid crystal systems <i>Manohar, Rajiv; Srivastava, Abhishek; Shukla, J.P</i> University of Lucknow, Lucknow, India	EMP04-Or4
14:30	Microscopic processes of oxidation reaction at SiO2/Si(100) interfaces with oxidation-induced strain <i>Akiyama, Toru¹; Kageshima, Hiroyuki²; Masashi, Uematsu²; Tomonori, Ito¹</i> ¹ Mie University, Department of Physics Engineering, Tsu, Japan; ² NTT Basic Research Laboratories, NTT Corp., Atsugi, Japan	TFSE04-Or3	14:30	Nanoscale observation of fatigue-free Bi3.25La0.75Ti3O12 thin films and relaxor ferroelectric PbMg1/3Nb2/3O3-PbTiO3 thin films by scanning force microscopy <i>Jo, William; Kim, T. Y.; Lee, J. H.; Oh, Y. J.; Choi, M. R.</i> Ewha Womans University, Physics, Seoul, Republic of Korea	EMP04-Or5
14:45	Co-sputtered Au-Cu alloy nanoparticles in SiO2 thin films <i>Sangpour, Parvaneh; Moshfegh, Alireza; Akhavan, Omid</i> Sharif University of Technology, Physics, Tehran, Islamic Republic of Iran	TFSE04-Or4			
15:00	Ion beam induced glancing angle deposition of Si <i>Patzig, Christian¹; Mäder, Marisa¹; Rauschenbach, Bernd¹; Erfurth, Wilfried²; Fuhrmann, Bodo³</i> ¹ Leibniz-Institut für Oberflächenmodifizierung e.V., Leipzig, Germany; ² Max-Planck-Institut für Mikrostrukturphysik, Halle, Germany; ³ Martin-Luther-Universität Halle, Interdisziplinäres Zentrum f. Materialwissenschaft, Halle, Germany	TFSE04-Or5			

SS07 - Phase Transitions, Statistical Mechanics and Thermodynamics

Room: K16/17

TF/SE05: Magnetic Thin Film and Application

Room: K21

Time	Title	Abs No	Time	Title	Abs No
13:30	Investigations of ultrathin Au films deposited on Pt(111) <i>Kobiela, Tomasz¹; Moors, Marco¹; Linhart, Wojciech²; Cebula, Izabela²; Krupski, Aleksander²; Becker, Conrad¹; Wandelt, Klaus¹</i> ¹ Institute of Physical and Theoretical Chemistry, University of Bonn, Bonn, Germany; ² Institute of Experimental Physics, University of Wrocław, Wrocław, Poland	SS07-Or2	13:30	Dzyaloshinskii-Moriya interactions in Nanoparticles <i>Vedmedenko, Elena¹; Udvardi, Laszlo²; Weinberger, Peter³; Wiesendanger, Roland¹</i> ¹ University of Hamburg, Hamburg, Germany; ² Budapest University of Technology and Economics, Budapest, Hungary; ³ Technical University Vienna, Vienna, Austria	TFSE05-Or1
13:45	Lead Adsorption on the pseudo-10-fold surface of the T-Al3(Mn,Pd) approximant crystal and on quasicrystal surfaces <i>Ledieu, Julian¹; Addou, Rafik¹; Deniozou, Thalia¹; Smerdon, Joseph²; Wearing, Lisa²; Leung, Lydie²; McGrath, Ronan²; Heggen, Marc²; Feuerbacher, Michael²; Lograsso, Thomas⁴; Wu, Dongmei⁴; Gröning, Oliver⁵; Fournée, Vincent¹; Dubois, Jean-Marie¹</i> ¹ LSG2M UMR 7584 CNRS INPL UHP, Ecole des Mines, Parc de Saurupt, Nancy, France; ² Surface Science Research Centre, Dept. of Physics, The University of Liverpool, Liverpool, United Kingdom; ³ Institut für Festkörperforschung, Forschungszentrum Jülich, Jülich, Germany; ⁴ Ames Laboratory, Iowa State University, Ames, United States; ⁵ EMPA, Federal Lab. for Materials Testing and Research, Thun, Switzerland	SS07-Or3	13:45	Enhanced synchronization of spin torque oscillator pairs <i>Åkerman, Johan; Zhou, Yan; Persson, Johan</i> KTH, Microelectronics and Applied Physics, Kista, Sweden	TFSE05-Or2
14:00	Scanning tunnelling microscopy and spectroscopy study of the (10-100) 2-fold surface of the d-AlNiCo quasicrystal <i>Gröning, Oliver; Mäder, Ruben; Widmer, Roland</i> EMPA, Materials Science and Technology, nanotech@surfaces, Thun, Switzerland	SS07-Or4	14:00	Magnetic memory: a real space study of microscopic return point memory by mfm <i>Ashworth, Timothy¹; Pilet, Nicolas¹; Marioni, Migue²; Hug, Hans Josef¹; Katzgraber, Helmut³; Zhang, Kun⁴</i> ¹ University of Basel, Institut für Physik, CH-4056 Basel, Switzerland; ² EMPA Duebendorf, Duebendorf, Switzerland; ³ ETH Zurich, Theoretische Physik, Zurich, Switzerland; ⁴ Georg-August-Universität Göttingen, II. Physikalisches Institut, Göttingen, Germany	TFSE05-Or3
14:15	The magnetic properties, surface and electronic structure of Pd ultrathin films on Ru(0001) and C(0001) <i>de Siervo, Abner¹; de Biasi, Emilio¹; Garcia, Flavio¹; Landers, Richard²; Martins, Maximiliano D.³; Macedo, Waldemar A. A.³</i> ¹ Brazilian Synchrotron Light Laboratory -LNLS, Campinas, Brazil; ² Universidade Estadual de Campinas, Instituto de Física, Campinas, Brazil; ³ Centro Desenvolvimento da Tecnologia Nuclear-CDTN, Belo Horizonte, Brazil	SS07-Or5	14:15	Towards ferromagnetic Co doped ZnO films by solution-based synthesis <i>Coleman, Victoria¹; Born, Philip²; Wikberg, Magnus³; Pohl, Annika²; Svedlindh, Peter³; Karis, Olof¹; Westin, Gunnar²</i> ¹ Ångström Laboratory, Uppsala University, Department of Physics, Uppsala, Sweden; ² Ångström Laboratory, Uppsala University, Department of Materials Chemistry, Uppsala, Sweden; ³ Ångström Laboratory, Uppsala University, Department of Materials Science, Uppsala, Sweden	TFSE05-Or4
14:30	Complex surface alloys formed in the Al -Cu system <i>Fournee, Vincent¹; Duguet, Thomas²; Deniozou, Thalia²; Ledieu, Julian²; Dubois, Jean-Marie²</i> ¹ LSG2M, UMR 7584 CNRS-INPL-CNRS, Nancy, France; ² LSG2M, UMR 7584 CNRS-INPL-UHP, Nancy, France	SS07-Or6	14:30	Symmetry breaking effects in epitaxial magnetic thin films: non-symmetric reversal and butterfly remanence behavior <i>Jimenez, Erika¹; Ecija, David¹; Camarero, Julio¹; Mikuszeit, Nikolai¹; Gallego, Jose M.²; Vogel, Jan²; Sacristán, Nicolás¹; Miranda, Rodolfo¹</i> ¹ Universidad Autonoma de Madrid, Fisica de la Materia Condensada, Madrid, Spain; ² CSIC, Instituto de Ciencia de Materiales de Madrid, Madrid, Spain; ³ CNRS, Laboratoire Louis Néel & IPMC, Grenoble, France	TFSE05-Or5
14:45	Growth of Pt and Fe on gold surfaces : on the robustness of prepatterned templates <i>Nahas, Yasmine; Repain, Vincent; Chacon, Cyril; Rohart, Stanislas; Girard, Yann; Tejeda, Antonio; Rousset, Sylvie</i> Matériaux et Phénomènes Quantiques, Université Paris 7, Paris, France	SS07-Or7	14:45	Temperature dependence of orientation and crystalline quality of gadolinium nitride films prepared by ion-beam-assisted molecular-beam epitaxy <i>Gerlach, Jürgen W.¹; Mennig, Julius¹; Potzger, Kay²; Rauschenbach, Bernd¹</i> ¹ Leibniz-Institut für Oberflächenmodifizierung, Leipzig, Germany; ² Forschungszentrum Dresden-Rossendorf, Inst. für Ionenstrahlphysik und Materialforschung, Dresden, Germany	TFSE05-Or6
15:00	<i>Abstract withdrawn</i>	SS07-Or1	15:00	Swift heavy ion modification of the structural and magnetotransport properties of Fe/Cr systems <i>Kac, Malgorzata¹; Tokman, Valeriy²; Kruk, Robert³; Polit, Aleksander¹; Zabala, Yevhen¹; Maranda, Stanislaw¹; Toulemonde, Marcel⁴; Marszalek, Marta¹</i> ¹ Institute of Nuclear Physics PAN, Krakow, Poland; ² Sumy State University, Sumy, Ukraine; ³ Forschungszentrum Karlsruhe, Karlsruhe, Germany; ⁴ Ciril (CEA-CNRS-ENSICAEN), Caen, France	TFSE05-Or7

PST/F03 - Plasma Science & Technology III

Room: K22

NS11 - Nanostructuring III

Room: K23

Time	Title	Abs No	Time	Title	Abs No
13:30	Molecular-Level Investigations of Plasma Surface Modification of Polymers <i>Fisher, Ellen R.</i> Colorado State University, Department of Chemistry, Fort Collins, CO, United States	PSTF03-IS1	13:30	Manipulation on Cu (100) at various temperatures <i>Norris, Andrew; Ozer, H.O.; Pethica, J.B.</i> Crann Laboratory, Trinity College Dublin, Physics, Dublin, Ireland	NS11-Or1
14:00	Optical methods for diagnostics in plasmas <i>Hancock, Gus</i> Physical & Theoretical Chemistry Laboratory, Oxford, United Kingdom	PSTF03-IS2	13:45	Shape transitions of Er silicide nanostructures on Si(001) surface <i>Cai, Qun; Zhu, Yan; Zhou, Wei; Ji, Ting</i> Fudan University, Physics, Shanghai, China	NS11-Or2
14:30	Plasma etching challenges for poly floating gate definition in advanced embedded logic & flash systems <i>Sciarrillo, Samuele</i> STMicroelectronics, Agrate Brianza (Milan), Italy	PSTF03-Or1	14:00	Patterning iron stripes by Bi-nanolines on silicon surfaces <i>Miwa, Roberto Hiroki¹; Orellana, Walter²; Srivastava, Gyaneshwar P.³</i> ¹ Universidade Federal de Uberlândia, Instituto de Física, Uberlândia, Brazil; ² Universidad de Chile, Departamento de Física, Santiago, Chile; ³ University of Exeter, School of Physics, Exeter, United Kingdom	NS11-Or3
14:45	Pulsed-DC magnetron selfsputtering of copper <i>Wiatrowski, Artur¹; Posadowski, Witold Michal¹; Radzinski, Zbigniew²</i> ¹ Wroclaw University of Technology, Faculty of Microsystem Electronics and Photonics, Wroclaw, Poland; ² Silicon Quest International, Reno, United States	PSTF03-Or2	14:15	In-situ novel labyrinth-like island growth in metal/metal heteroepitaxy <i>Rougemaille, Nicolas¹; El Gabaly, Farid²; Stumpf, Roland³; Schmid, Andreas K.¹; Thurmer, Konrad⁴; Bartelt, Norm C.⁵; de la Figuera, Juan⁶</i> ¹ Lawrence Berkeley National Laboratory, National Center for Electron Microscopy, Berkeley, United States; ² Universidad Autonoma de Madrid, CMAM and Dpto. de Física de la Materia Condensada, Madrid, Spain; ³ Sandia National Laboratories, Livermore, United States	NS11-Or4
			14:30	Nanoscale surface faceting <i>Revenant, Christine¹; Leroy, Frederic²; Renaud, Gilles³; Lazzari, Remi⁴; Letoublon, Antoine⁵; Madey, Theodore⁶</i> ¹ CEA, DRFMC, Grenoble, France; ² CRMCN, Marseille, France; ³ CEA, Grenoble, France; ⁴ INSP - Universites Paris 6 et Paris 7, Paris, France; ⁵ INSA, Rennes, France; ⁶ The State University of New Jersey, Piscataway, United States	NS11-Or5
			14:45	Silicon on Ag(110) : From individual nanowires to a nanoscale grating <i>Aufroy, Bernard¹; Sahaf, Houda¹; Masson, Laurence²; Le Lay, Guy²</i> ¹ CRMCN-CNRS, Campus de Luminy, Case 913, Marseille Cedex 9, France; ² CRMCN-CNRS, Campus de Luminy, Marseille, France	NS11-Or6
			15:00	A zero-gradient nano-stepped surface on au(111) <i>Yin, Feng¹; Palmer, Richard²; Guo, Quanmin²</i> ¹ University of Birmingham, Birmingham, United Kingdom; ² University of Birmingham, School of Physics and Astronomy, Birmingham, United Kingdom	NS11-Or7
			15:15	Characterization of nanostructured manganese dioxide thin films prepared by a novel self-assembly process <i>Pang, Suh Cem; Wee, Boon Hong</i> Universiti Malaysia Sarawak, Department of Chemistry, Sarawak, Malaysia	NS11-Or8

NS12 - Imaging of Biomolecules and Biomolecular Interactions

Room: K24

SS08 - Oxide Surfaces and Environmental and Biological Surface Science

Room: A2

Time	Title	Abs No	Time	Title	Abs No
13:30	Role of lipid membrane composition on membrane protein activation: lateral pressure profiles through atom-scale simulations <i>Vattulainen, Ilpo</i> Tampere University of Technology, Institute of Physics, Tampere, Finland	NS12-IS1	13:30	The surface chemistry and reactivity of oxide surfaces: From UHV to atmospheric pressure <i>Over, Herbert</i> Justus Liebig University, Physikalisch Chemisches Institut, Giessen, Germany	SS08-IS1
14:00	Fibre formation of α-helix peptide studied by AFM <i>Aoki, Gaku; Kojima, Shuichi; Yamada, Toyokazu; Mizoguchi, Tadashi</i> Gakushuin University, Faculty of Science, Tokyo, Japan	NS12-Or1	14:00	Environmental surface chemistry: Ambient pressure photoelectron spectroscopy studies of the composition and chemistry of solution interfaces <i>Hemminger, John C.</i> University of California, Irvine, Department of Chemistry, Irvine, California, United States	SS08-IS2
14:15	A catalytic surface for biomolecular fibril formation <i>Ali, Malik¹; Hammarström, Per¹; Mishra, Rajesh¹; Svensson, Samuel²; Tengvall, Pentti¹; Lundström, Ingemar¹</i> ¹ Linköping University, Physics, Chemistry and Biology, Linköping, Sweden; ² AstraZeneca, Södertälje, Sweden	NS12-Or2			
14:30	Model cell membrane for STM studies - phospholipid monolayer and multilayers on thiol-modified Au (111) <i>Matsunaga, Soichiro¹; Yokomori, Ryo¹; Yamada, Taro²; Kawai, Maki¹</i> ¹ University of Tokyo, Advanced Materials Science, Chiba, Japan; ² RIKEN, Saitama, Japan	NS12-Or3	14:30	High-pressure XPS study of the molecular water reactions with (111) surfaces of magnetite (Fe₃O₄) <i>Kendelewicz, I.¹; Yamamoto, S.²; Starr, D. E.³; Bluhm, H.³; Nilsson, A.²; Brown, G. E.¹</i> ¹ Stanford University, GES, Stanford, United States; ² Stanford Synchrotron Radiation Lab., Menlo Park, United States; ³ Lawrence Berkeley National Lab., Berkeley, United States	SS08-Or1
14:45	Surface-bound optical excitation of biological specimens using symmetric planar waveguides <i>Leosson, Kristjan¹; Agnarsson, Bjorn¹; Sørensen, Mads²; Nikolajsen, Thomas²; Hansen, Michael³</i> ¹ Science Institute, University of Iceland, Reykjavik, Iceland; ² Crystal Fibre A/S, Birkerød, Denmark; ³ Capres A/S, Kgs. Lyngby, Denmark	NS12-Or4	14:45	Water adsorption on defective sites at MgO surfaces: simulations and experiments <i>Finocchi, Fabio¹; Goniakowski, Jacek¹; Jupille, Jacques¹; Ealet, Benedicte²; Costa, Dominique³</i> ¹ INSP - University Paris 6 and CNRS, Paris, France; ² CRMCN - CNRS and University Aix-Marseille III, Marseille, France; ³ LRS - CNRS and University Paris 6, Paris, France	SS08-Or2
15:00	Angstrom-resolution imaging of internal structures of amyloid fibrils by frequency modulation atomic force microscopy in liquid <i>Fukuma, Takeshi; Mostaert, Anika; Jarvis, Suzanne</i> Trinity College Dublin, Dublin, Ireland	NS12-Or5	15:00	Electronic structure of copper films in aqueous solutions: in-situ x-ray spectroscopic study <i>Butorin, S. M.¹; Kvashnina, K. O.¹; Modin, A.¹; Soroka, I.¹; Marsellini, M.¹; Guo, J.-H.²; Werme, L.³; Nordgren, E. J.¹</i> ¹ Uppsala University, Department of Physics, Uppsala, Sweden; ² Lawrence Berkeley National Laboratory, Advanced Light Source, Berkeley, United States; ³ SKB, Stockholm, Sweden	SS08-Or3

SS09 - Electronic Structure, Semiconductors II

Room: A3

NS13 - Molecules on Surfaces I

Room: A4

Time	Title	Abs No	Time	Title	Abs No
13:30	Metal-insulator transition of doped Si(111)-7x7 surface <i>Xiao, Xudong</i> Chinese University of Hong Kong, Department of Physics, Hong Kong, Hong Kong	SS09-IS1	13:30	Bonding individual molecules to semiconductors via the carbonyl group <i>Schofield, Steven; Radny, Marian; Smith, Phillip; Saraireh, Sherin; King, Bruce</i> University of Newcastle, School of Mathematical and Physical Sciences, Callaghan, Australia	NS13-Or1
14:00	Temperature dependent photoemission study of surface state emission above the fermi level on Ge(100) <i>Eriksson, P.E.J.¹; Adell, M.²; Kazuyuki, Sakamoto³; Uhrberg, R.I.G.¹</i> ¹ Linköping University, Department of Physics, Chemistry and Biology, Linköping, Sweden; ² Lund University, Max-Lab, Lund, Sweden; ³ Chiba University, Graduate School of Science and Technology, Chiba, Japan	SS09-Or2	13:45	Theoretical studies of the adsorption and diffusion of organic molecules on the MgO (001) and TiO2 (011) surfaces <i>Trevethan, Thomas; Watkins, Matthew; Sushko, Maria; Shluger, Alexander</i> University College London, Physics and Astronomy, London, United Kingdom	NS13-Or2
14:15	Metallicity onset of two-dimensional systems by surface transfer doping <i>Avila, José¹; Sanchez, Juan²; Asensio, Maria C.¹</i> ¹ Synchrotron SOLEIL, Gif sur Yvette, France; ² Universidad de Valencia, ICMUV, Valencia, Spain	SS09-Or3	14:00	Scanning tunneling microscopy characterization of metal-free phthalocyanine monolayer structures <i>Nilson, Katharina¹; Åhlund, John¹; Brena, Barbara¹; Göthelid, Emanuelle¹; Schiessling, Joachim²; Lou, YP¹; Mårtensson, Nils¹; Puglia, Carla¹</i> ¹ Uppsala University, Department of Physics, Uppsala, Sverige; ² University of Lund, MAX-lab, Lund, Sverige; ³ Royal Institute of Technology (KTH), Theoretical Chemistry, Stockholm, Sverige	NS13-Or3
14:30	Momentum-dependent spin-polarized surface states in ultrathin Bi films <i>Hirahara, Toru¹; Miyamoto, Koji²; Matsuda, Iwao³; Kadono, Toshiharu²; Kimura, Akio²; Nagao, Tadaaki⁴; Bihlmayer, Gustav⁵; Chulkov, E. V.⁶; Qiao, S.²; Shimada, Kenya⁷; Namatame, Hirofumi⁷; Taniguchi, Masaki⁷; Hasegawa, Shuji⁷</i> ¹ University of Tokyo, Tokyo, Japan; ² Hiroshima University, Higashi-Hiroshima, Japan; ³ ISSP, Kashiwa, Japan; ⁴ NIMS, Tsukuba, Japan; ⁵ Forschungszentrum Jülich, Jülich, Germany; ⁶ DIPC, San Sebastian, Spain; ⁷ Hiroshima Synchrotron Radiation Center, Higashi-Hiroshima, Japan	SS09-Or4	14:15	Understanding and controlling of molecular structures on different surfaces <i>Gao, Hongjun</i> Institute of Physics, Chinese Academy of Sciences, Beijing, China	NS13-IS1
14:45	Spin- and k- resolved photoelectron spectroscopy of ultra-thin Fe films on Co(001) surface <i>Kimura, Akio¹; Miyamoto, Kouji¹; Sakamoto, Kazuaki¹; Hasegawa, Kazuhiro¹; Qiao, Shan²; Shimada, Kenya²; Namatame, Hirofumi²; Taniguchi, Masaki¹</i> ¹ Hiroshima University, Graduate School of Science, Higashi-Hiroshima, Japan; ² Hiroshima University, Hiroshima Synchrotron Radiation Center, Higashi-Hiroshima, Japan	SS09-Or5	14:45	Electronic structure studies of PTCDA on Ag/Si(111)-√3×√3 <i>Zhang, Hanmin; Gustafsson, Jörgen; Johansson, Lars</i> Karlstad University, Department of Physics, Karlstad, Sweden	NS13-Or4
15:00	Mediating emiconductor surface/interface properties by nanochemistry: Selective metallization/passivation and nano-objects <i>Soukiassian, Patrick</i> Commissariat à l'Energie Atomique + U. Paris-Sud, DSM-DRECAM-SPCSI-SIMA, Bât. 462, Saclay, Gif sur Yvette Cedex, France	SS09-IS2	15:00	Nanodots and nanowires of organic molecules self-assembled on a Fe/Au(111) surface <i>Caillard, Renaud¹; Otero, Gonzalo¹; Sanchez-Sanchez, Carlos¹; Andres, Pedro de²; Martin-Gago, José Angel¹; Mendez, Javier¹</i> ¹ Instituto de Ciencia de Materiales de Madrid ICMM, Física e Ingeniería de Superficies, Madrid, Spain; ² Instituto de Ciencia de Materiales de Madrid ICMM, Teoría de la Materia Condensada, Madrid, Spain	NS13-Or5

EMP05 - Wide Bandgap Semiconductors - GaN

Room: A5

Time	Title	Abs No
13:30	<p>Solar blind detectors and arrays based on AlGaIn <i>Duboz, Jean-Yves¹; Brault, Julien¹; Grandjean, Nicolas¹; Dusaigne, Amélie¹; Reverchon, Jean-Luc²; Verly, Pierre³; Simpson, Robert³</i> ¹CNRS, CRHEA, Valbonne, France; ²TRT, Thales, Palaiseau, France; ³IMS, NRC, Ottawa, Canada</p>	EMP05-IS1
14:00	<p>Characterization of thin native-oxide layer formed on GaN by photoelectrochemical process in glycol solution <i>Shiozaki, Nanako; Hashizume, Tamotsu</i> Research Center for Integrated Quantum Electronics, Hokkaido University, Sapporo, Japan</p>	EMP05-Or1
14:15	<p>Recombination dynamics of excitons in bulk GaN <i>Monemar, Bo¹; Paskov, Plamen¹; Bergman, Peder¹; Pozina, Galia¹; Toropov, Alexey²; Shubina, Tatiana²; Usui, Akira³</i> ¹Linköping University, IFM, Linköping, Sweden; ²Ioffe Physicotechnical Institute, St Petersburg, Russian Federation; ³Furukawa Co Ltd, Tsukuba, Japan</p>	EMP05-Or2
14:30	<p>Time-resolved photoluminescence studies of iron doped GaN <i>Pinos, Andrea; Aggerstam, Thomas; Marcinkevicius, Saulius;</i> Lourdudoss, Sebastian Royal Institute of Technology (KTH), Department of Microelectronics and Applied Physics, Stockholm, Sweden</p>	EMP05-Or3
14:45	<p>CORRELATION BETWEEN CRYSTALLINE QUALITY AND MECHANICAL STRESS IN M-PLANE ORIENTED WURTZITIC GALLIUM NITRIDE FILMS DEPOSITED BY ION-BEAM-ASSISTED MOLECULAR-BEAM EPITAXY <i>Rauschenbach, Bernd¹; Gerlach, Jürgen W.¹; Hofmann, Andreas¹; Höche, Thomas¹; Benndorf, Gabriele²</i> ¹Leibniz-Institut für Oberflächenmodifizierung, Leipzig, Germany; ²Universität Leipzig, Institut für Experimentelle Physik II, Leipzig, Germany</p>	EMP05-Or4
15:00	<p>Relation between structural, electronic, and magnetic properties in MOCVD grown (Ga,Fe)N, (Ga,Fe)N:Mg, and (Ga,Fe)N:Si <i>Bonanni, Alberta¹; Simbrunner, Clemens¹; Li, Tian¹; Navarro-Quezada, Andrea¹; Wegscheider, Matthias¹; Quast, Martin¹; Kiecana, Michał²; Sawicki, Maciek²</i> ¹Johannes Kepler University, Semiconductor and Solid State Physics, Linz, Austria; ²Polish Academy of Sciences, Institute of Physics, Warsaw, Poland</p>	EMP05-Or5

SESSION TIME 17:30-19:00

Park Systems Company Symposium

Room: A2

Time Title

Excellence in nanometrology

Sang-il Park

Korea

Title to be announced

Sang-Joon Cho

Korea

Title to be announced

Ryan Yoo

Korea

User presentation

Alexandre Cuenat

England

**Construction of an environmental chamber for anatomic force microscope
and some measurement with it**

Markus Ahlskog

Finland

Poster Sessions – Poster Group 2

Tuesday 3 July from 15.45 to 17.45 in Hall A1 (exhibition hall)

Presenting authors are present by their poster during the poster sessions.

ASS - Characterization of Nanomaterials

ASSP2-01

Analytical TEM study of the core-shell structure of Au-Pd nano-particles prepared by sonochemical technique

Akita, Tomoki¹; Hase, Naoki²; Taguchi, Noboru²; Tanaka, Shingo¹; Kohyama, Masanori¹; Hori, Fuminobu²

¹National Institute of Advanced Industrial Science, Research Institute for Ubiquitous Energy Devices, Ikeda, Osaka, Japan; ²Osaka Prefecture University, Department of Materials Science, Sakai, Osaka, Japan

ASSP2-02

Rare earth nanoparticles as contrast agent in MRI: Nanomaterial design and biofunctionalization

Ahrén, Maria¹; Olsson, Petter¹; Söderlind, Fredrik¹; Klasson, Anna²; M. Petoral Jr, Rodrigo¹; Engström, Maria²; Käll, Per-Olov¹; Uvdal, Kajsa¹

¹Linköping University, Department of Physics, Chemistry and Biology, Linköping, Sweden; ²Linköping University, / Department of Medicine and Care/Radiology, Linköping, Sweden

ASSP2-03

Atomic and electronic structures and local reactivities of Au@Pd core-shell nanoparticles

Tanaka, Shingo¹; Taguchi, Noboru²; Akita, Tomoki¹; Okazaki, Kazuyuki¹; Hori, Fuminobu²; Kohyama, Masanori¹

¹AIST, UBIQEN, Ikeda, Osaka, Japan; ²Osaka Prefecture University, Dept. of Materials Science, Sakai, Osaka, Japan

ASSP2-04

Humidity-dependent current images of self-assembled dots observed by conductive atomic force microscopy

Chang, Mao-Nan¹; Lin, Hung-Min¹; Ni, Wei-Xin¹; Chang, Yu-Cheng²; Cheng, Chao-Chia²; Lin, Hung-Cheng³; Chyi, Jen-Inn³; Zhao, Ming⁴

¹National Nano Device Laboratories, Hsinchu, Taiwan; ²Chung Hua University, Electrical Engineering, Hsinchu, Taiwan; ³National Central University, Electrical Engineering, Chungli, Taiwan; ⁴Linköping University, Physics, Linköping, Sweden

ASSP2-05

Tuning of the charge state of InAs/GaAs quantum dot by a magnetic field

Larsson, Arvid¹; Moskalenko, Evgenii²; Larsson, Mats¹; Holtz, Per Olof¹

¹Linköping University, IFM, Linköping, Sverige; ²A. F. Ioffe Physical-Technical Institute, St. Petersburg, Russian Federation

ASSP2-06

Chemical-state-selective observations on silicon compounds at nanometer scale by photoelectron emission microscopy combined with synchrotron radiation

Baba, Yuji; Sekiguchi, Tetsuhiro; Shimoyama, Iwao; Honda, Mitsunori; Hirao, Norie; Deng, Juzhi; Narita, Ayumi

Japan Atomic Energy Agency, Ibaraki-ken, Japan

ASSP2-07

Nanoscale surface characterization using tunneling probe acoustics technique

Lysenko, Oleg; Novikov, Nikolai; Grushko, Vladimir

Institute for Superhard Materials, Kiev, Ukraine

ASSP2-08

Multilayer silicon rich oxy-nitride films characterization by SIMS, VASE and AFM

Barozzi, Mario¹; Iacob, Erica¹; Vanzetti, Lia¹; Bersani, Massimo¹; Anderle, Mariano¹; Kompocholis, C.²; Ghulinyan, M.²; Bellutti, Pierluigi²; Pucker, Georg²

¹Fondazione Bruno Kessler - IRST, Physics and Chemistry of Surf. and Int. Division, Povo, Trento, Italy; ²Fondazione Bruno Kessler - IRST, Microtechnologies Laboratory, Povo, Trento, Italy

ASSP2-09

Characterization of Au seeded Ge nanowire arrays by conductive AFM

Birjukovs, Pavels¹; Petkov, Nikolay²; Phelan, Richard²; Holmes, Justin²; Ertz, Donats¹

¹University of Latvia, Institute of Chemical Physics, Riga, Latvia; ²National University of Ireland, Department of Chemistry, Cork, Ireland

ASSP2-10

Metallic nano-clusters growth and characterization on solid surfaces studied using weakly bound buffer layer

Asscher, Micha

The Hebrew University of Jerusalem, Physical Chemistry, Jerusalem 91904, Israel

ASSP2-11

Kinetic facet evolution during the growth of Ge on Si(001)

Richard, Marie-Ingrid¹; Schüllli, Tobias¹; Renaud, Gilles¹; Wintersberger, Eugen²; Bauer, Guenther²; Holy, Vaclav³

¹CEA-Grenoble, Grenoble, France; ²Johannes Kepler Universität Linz, Linz, Austria; ³Charles University, Prague, Czech Republic

ASSP2-12

Current pathway in the electrical measurements of platinum silicide nanowires using double-scanning-probe microscope

Kubo, Osamu¹; Lim, Do Kyung²; Shingaya, Yoshitaka³; Kim, Sehun²; Aono, Masakazu³; Nakayama, Tomonobu³

¹National Institute for Materials Science, Nanomaterials Laboratory, Tsukuba, Ibaraki, Japan; ²Korea Advanced Institute of Science and Technology, Dept. of Chemistry and School of Molecular Science, Daejeon, Republic of Korea; ³National Institute for Materials Science, Nano System Functionality Center, Tsukuba, Ibaraki, Japan

ASSP2-13

Properties of the Ce on Ru overlayer system

Tollefsen, Henrik; Erik Olav, Laastad; Mari, Juel; Xiaofeng, Yu; Raaen, Steinar

NTNU, Physics, Trondheim, Norway

ASSP2-14

Local atomic structure investigated by X-ray absorption fine structure in Co-doped ZnO diluted magnetic semiconductors prepared by pulsed laser deposition and by melt spinning: comparative study

Teodorescu, Cristian-Mihail¹; Macovei, Dan¹; Neamtu, Jenica²; Malaeru, Teodora²; Georgescu, Gabriela²; Socol, Gabrie³; Axente, Emanuel³; Ristoscu, Carmen³; Cristescu, Rodica²; Mihailescu, Ion Nicolae³; Pivin, Jean-Claude⁴; Mougou, Alexandra⁵; Ferre, Jacques⁵

¹National Institute of Materials Physics, Low Dimensional Systems, Magurele-Ifov, Romania; ²National Institute of Electrical Engineering, Magnetic nanostructures, Bucharest, Romania; ³National Institute of Lasers, Plasma and Radiation, Laser-Plasma-Surface Laboratory, Magurele-Ifov, Romania; ⁴Centre Universitaire Paris Sud, CNSNSM, Orsay, France; ⁵Université Paris Sud, Laboratoire de Physique des Solides, Orsay, France

ASSP2-15

Mechanical properties of nanostructured surfaces

Navarro, Violeta; Rodríguez de la Fuente, Oscar; Mascaraque, Arantzazu; Rojo, Juan Manuel

Universidad Complutense, Física de Materiales, Madrid, Spain

ASSP2-16

Characterisation of high-k dielectric films and interfaces by analytical electron microscopy

Suvorova, Alexandra

The University of Western Australia, Centre for Microscopy, Characterisation, Analysis, Crawley, Australia

ASSP2-17

Cluster core-level binding energy shift in photoemission spectroscopy study of Ni/TiO₂ interface

Pan, J. S.; Tao, J. G.; Huan, C. H. A.; Chai, J. W.; Wang, S. J.

Institute of Materials Research & Engineering, Singapore, Singapore

ASSP2-18

A comparative multi-technique study of single-walled and multi-walled carbon nanotubes

Houchin, Rachael¹; Jacobs, Alexander²; Coxon, Paul¹; Butenko, Yuriy⁴; Alves, Luis³; Zaikovskii, V F⁵; Ishchenko, A V⁵; Siller, Lidija³; Hunt, Michael¹

¹Durham University, Department of Physics, Durham, United Kingdom; ²Durham University, Department of Physics, Durham, United Kingdom; ³University of Newcastle upon Tyne, School of Chemical Engineering and Adv. Materials, Newcastle upon Tyne, United Kingdom; ⁴University of Newcastle upon Tyne, School of Chemical Engineering and Adv. Materials, Newcastle upon Tyne, United Kingdom; ⁵Boriskov Institute of Catalysis, Novosibirsk, Russian Federation

ASSP2-19

Thermal conductivity of thin insulating films by photothermal measurements

Guziewicz, Marek¹; Golaszewska, Krystyna¹; Piotrowska, Anna¹; Kaminska, Eliana¹; Bodzenta, Jerzy²; Kazmierczak-Balata, Anna²; Pyka, Monika²

¹Institute of Electron Technology, Warsaw, Poland; ²Silesian University of Technology, Gliwice, Poland

ASSP2-20

A study of 2D GISAXS patterns of nanostructured cerium/vanadium oxide thin films

Lucic Lavcevic, Magdi¹; Dubcek, Pavo²; Sreder, Aljaska¹; Turkovic, Aleksandra²; Orel, Bojan³; Crnjak Orel, Zorica⁴; Bernstorff, Sigrid⁵

¹Faculty of Chemical Technology, Physics, Split, Croatia; ²Institute Rudjer Boskovic, Zagreb, Croatia; ³Faculty of Computer and Information Science, Ljubljana, Slovenia; ⁴National Institute of Chemistry, Ljubljana, Slovenia; ⁵Sincrotrone ELETTRA, Trieste, Italy

ASSP2-21

Molecular dynamics simulations and quantum mechanical calculations of a doubly linked porphyrin-fullerene dyad

Cramariuc, Oana¹; Tappura, Kirsi²; Hukka, Terttu I.³; Lemmetyinen, Helge²; Rantala, Tapio I.¹

¹Tampere University of Technology, Institute of Physics, Tampere, Finland; ²VTT Information Technology, Microsensing, Tampere, Finland; ³Tampere University of Technology, Institute of Materials Chemistry, Tampere, Finland

ASSP2-22

Effect of surface composition on luminescent property from nanocrystalline silicon particles immersed in pure water

Sato, Keisuke; Hiruoka, Masaki; Hirakuri, Kenji

Tokyo Denki University, Department of Electronic and Computer Engineering, Saitama, Japan

ASSP2-23

Controlled distribution of ZnO nanoparticles on Si/SiO₂ surfaces

Ericsson, Leif KE; Grützelius Hirvonen, Helena; Magnusson, Kjell O

Karlstad university, Physics, Karlstad, Sweden

ASSP2-24

Interfacial interactions of montmorillonite clays with poly(acrylic acid)

Tran, N H; Wilson, M A; Milev, A S; Dennis, G R; Kannangara, G S K

University of Western Sydney, College of Health and Science, Penrith South DC, Australia

ASSP2-25

Diffusion activity in nanosized Au-Cu layered film system

Kryshchal, Aleksandr; Bogatyrenko, Sergiy; Gladkikh, Nikolai; Samsonik, Alexander; Sukhov, Ruslan

Karazin national university, Kharkov, Ukraine

ASSP2-26

High temperature vapor phase synthesis of SnO₂ nanostructures and their gas sensing properties

Manzoor, Umair¹; Kim, Do Kyung²

¹Comsats Institute of Information Technology (CIIT), Department of Physics, Islamabad, Pakistan; ²Korea Advanced Institute of Science & Technology, Department of Materials Science & Engineering, Daejeon, Republic of Korea

ASSP2-27

Effects of ion irradiation on electrical properties of carbon nanotubes.

Rodrigues Vaz, Alfredo; Leon, Jorge; Verissimo, Carla; Moshkalev, Stanislav A.; Flacker, Alexander; da Silva, Marina M.; Swart, Jacobus W.

UNICAMP, Center for Semiconductor Components (CCS), Campinas-SP, Brazil

ASSP2-28

Atom probe characterization of nanoscale Dy₂Fe₁₀Co₄B thin films deposited using a pulsed laser

Sundararajan, Sriram¹; Molian, Pal¹; Nair, Rajeev¹; Rajan, Krishna²

¹Iowa State University, Mechanical Engineering, Ames, United States; ²Iowa State University, Materials Science and Engineering, Ames, United States

ASSP2-29

Fabrication and optimization of gelatin nanostructure as a colloidal carrier systems

Jahanshahi, Mohsen¹; Sanati, Mohamad Hosein²; Ardestani, Fatemeh¹; Hajizadeh, Solmaz¹; Babaie, Zahra¹

¹Noshirvani Mazandaran University of technical, Chemical Engineering, babol, Islamic Republic of Iran; ²The National Research Center for Genetic Engineering, Biotechnology, Tehran, Islamic Republic of Iran

ASSP2-30

Study the surface composition distribution of Nanostructures by High resolution FE-AES and SEM

Fei, Xue¹; Liu, Junliang¹; Yang, Xinju²

¹Baosteel Institute, Shanghai, China; ²Fudan University, Shanghai, China

ASSP2-31

Structure and interface interactions peculiarities of benzophenone in composite materials with metal-modified polydisperse TiO₂ nanocrystallites

Bezrodna, Tamara; Melnyk, Volodymyr; Puchkovska, Galyna; Shymanovska, Valentyna; Vorobjev, Volodymyr

Institute of Physics, National Academy of Sciences, Kyiv, Ukraine

ASSP2-32

Effect of thermal treatment on the morphology and electrical transport properties of carbon nanotube films

Passacantando, Maurizio; Bussolotti, Fabio; Grossi, Valentina; Lozzi, Luca; Santucci, Sandro

University of L'Aquila, Department of Physics, L'Aquila, Italy

ASSP2-33

Surface characterization of silica nano-plates formed by exfoliation of lucentite

Tran, N.H.; Wilson, M.A.; Milev, A.S.; Dennis, G.R.; Kannangara, G.S.K.

University of Western Sydney, College of Health and Science, Penrith South DC, Australia

ASSP2-34

European project ANNA (Activity of Excellence and Networking for Nano and Micro-electronics Analysis): structure and applicative examples

Bersani, Massimo

Fondazione Bruno Kessler-IRST, Physics Chemistry of Surfaces and Interfaces, Povo - Trento, Italy

ASSP2-35

Modelling of the fracture in low Y doped nano - -alumina

Popescu-Pogrión, Nicoletta

National Institute for Materials Physics, Electron Microscopy, Bucharest, Romania

ASSP2-36

Synthesis and spectral properties of starch capped CdS nanoparticles in aqueous solution

Rodríguez, Patricia¹; Muñoz, Narciso²; Gonzalez de la Cruz, Gerardo³; San Martín Martínez, Eduardo¹; Tomas, Sergio A.³; Zelaya Angel, Orlando³

¹Cicata-IPN, Mexico, D.F., Mexico; ²Instituto Mexicano del Petróleo, Mexico, D.F., Mexico; ³Cinvestav-IPN, Physics, Mexico, D.F., Mexico

ASSP2-37

Numerical and experimental investigations of the process of formation of powder nanocomposites

Vakhrouchev, Alexandre Vasilevich; Vakhroucheva, Ludmila

Institute of Applied Mechanics of Ural Branch RAS, Izhevsk, Russian Federation

ASSP2-38

Ion sputtering-assisted X-ray photoelectron spectroscopy investigations of nanocrystalline porous silicon

Stavarache, Ionel¹; Ciurea, Magdalena Lidia¹; Iancu, Vladimir²; Negrița, Catalin³; Teodorescu, Cristian-Mihail¹

¹National Institute of Materials Physics, Low Dimensional Systems, Magurele-Ilf, Romania; ²University "Politehnica" Bucharest, Department of Physics, Bucharest, Romania; ³National Institute of Materials Physics, Advanced Materials, Magurele-Ilf, Romania

ASSP2-39

Investigation of the carbon nanotube (CNT) synthesis by arc discharge method in NaCl solution with use of transition metal element (Co)

Hosseini, Ali.A; Allahyari, Mohsen; Daftari Besheli, Somayeh

Mazandaran University, Physics, Babolsar, Islamic Republic of Iran

ASSP2-40

Characterization of multi quantum wells by cathodoluminescence technique. Monte Carlo model of AIAs/GaAs/AIAs nanostructure

Nouiri, Abdelkader; Aouati, Redha

University of Constantine, Physics, Constantine, Algeria

ASSP2-41

Design and subdesign of Li phosphorous doped bronzes obtained by using spray pyrolysis

Nedic, Zoran

Faculty of Physical Chemistry, Beograd, Serbia and Montenegro

ASSP2-42

Lateral Stark effect on an exciton in a quantum coin

Abdelkrim, Oukerroum¹; El Mustapha, Feddi¹; Bouchaib, Hartiti¹; José, Bosch²; Juan Martínez, Pastor²

¹LPMAER, FST Mohammedia, Physics, Mohammedia, Morocco; ²IC(UV)M, Universidad de Valencia, Ciencia de los Materiales, Valencia, Spain

ASSP2-43

Para-sexiphenyl growth on modified mica(001)

Hlawacek, Gregor¹; Teichert, Christian¹; Frank, Paul¹; Winkler, Adolf¹

¹University of Leoben, Inst. of Physics, Leoben, Austria; ²Graz Technical University, Inst. f. Solid State Phys., Graz, Austria

ASSP2-44

CS-AFM investigations of the influence of nitrogen percentage on morphological and electrical characteristics of sputtered amorphous carbon nitride films

Cachet, Hubert; Deslouis, Claude; Martinhon-Tomiasso, Priscila; Paillet, Alain

University Pierre et Marie Curie, UPR 15 CNRS (LISE), PARIS, France

ASSP2-45

Optical studies on chemical and core-shell surface-passivation techniques of InP and GaAs nanowires

*Muench, Steffen*¹; *Reitzenstein, Stephan*¹; *Hofmann, Carolin*¹; *Skold, Niklas*²; *Tragardh, Johanna*²; *Crankshaw, Shanna*³; *Chang-Hasnain, Connie*³; *Samuelson, Lars*²; *Forchel, Alfred*¹

¹Technical Physics, Wuerzburg University, Wuerzburg, Germany; ²Solid State Physics, Lund University, Lund, Sweden; ³University of California at Berkeley, Applied Science and Technology Group, Berkeley, United States

ASSP2-46

On the stability of silver nanoparticles on TiO₂ (110)

*Marques, Hugo*¹; *Canário, Ana*¹; *Augusto, Moutinho*²; *Teodoro, Orlando*³

¹Faculdade de Ciências e Tecnologia UNL, Cefitec, Department of Physics, Caparica, Portugal; ²Faculdade de Ciências e Tecnologia UNL, Physics Department, Caparica, Portugal; ³Faculdade de Ciências e Tecnologia UNL, Department of Physics, Caparica, Portugal

ASSP2-46B

Measurement of residual stress by using focused ion beam and digital imaging correlation in thin-sized steel wires used for tire cords

*Yang, Yo-Sep*¹; *BAE, Jong Gu*²; *Park, Chan Gyung*³

¹Pohang Univ. of Science and Tech., Materials Science and Engineering, Pohang, Republic of Korea; ²KISWIRE, R & D Center, Pohang, Republic of Korea; ³Pohang Univ. of Science and Tech. (POSTECH), Materials Science and Eng., Pohang, Republic of Korea

ASSP2-46C

Ellipsometry porosimetry: fast and non destructive method of porosity characterization of cubic mesoporous TiO₂ thin films

Couraudon, V.; *Defranoux, C.*; *Bourgeois, A.*; *Piel, J.P.*

SOPRA, Bois-Colombes, France

ASSP2-46D

A new user friendly tool for force distance curve analysis

Amsel, Lars; *Petzold, Thomas*; *Struckmeier, Jens*; *Wegmann, August*

nAmbition GmbH, Head software development, Dresden, Germany

ASS - Environmental Analysis

ASSP2-47

Coupling chemical physical with electrocoagulation treatments of CMP wastewater from semiconductor fabrication in the photovoltaic industry: Optimization of the operating conditions

*Bouri, Mounia*¹; *Hachemi, Messaoud*²; *Drouiche, Nadjib*¹; *Palahouane, Baya*¹; *Hicini, Mouna*¹

¹UDTS, CMP, Alger, Algeria; ²Université de Boumerdes, Laboratoire des Matériaux minéraux et composites, Boumerdes, Algeria

ASSP2-48

Novel MIS-structures based on nanoporous silicon for detection of hydrogen containing gas molecules in ambient

Gorbanuyk, Tatyana; *Evtukh, Anatolii*; *Litovchenko, Volodymir*; *Solntsev, Vyacheslav*

V.E. Lashkaryov Institute of Semiconductor Physics, Surface Physics and Microelectronics, Kiev, Ukraine

ASSP2-49

Characterization of aerosol and space contamination with multiple analytical techniques

Chen, Xu; *Huang, Yanhua*; *Liu, Yunxi*; *Wang, Guangpu*; *Cha, Liangzhen*

Tsinghua University, Department of Electronic Engineering, Beijing, China

ASSP2-50

Quantifying the concentration and distribution of surface oxides on carbonaceous surfaces; influence of surface chemistry on the colloidal stability, mobility and sorption properties of carbon nanotubes in aquatic environments

*Fairbrother, Howard*¹; *Smith, Billy*¹; *Cho, Hyun-hee*²; *Ball, William*²

¹Johns Hopkins University, Chemistry, Baltimore, United States; ²Johns Hopkins University, Geography and Environmental Engineering, Baltimore, United States

EMP: Ferroelectrics

EMPP2-51

Structure and ferroelectric properties of Bi_{3.25}La_{0.75}Ti₃O₁₂ nano-rod

Kim, Kyoung-Tae; *Kim, Gwan-Ha*; *Kim, Chang-Il*

Chung-Ang University, School of Electrical and Electronic Engineering, Seoul, Republic of Korea

EMPP2-52

Electronic structure of multiferroic TbMn_2O_5 probed by resonant x-ray inelastic scattering and x-ray absorption spectroscopy

Chen, J. M.¹; Lee, J. M.¹; Huang, S. W.²; Shen, C. C.³; Jarrige, I.¹; Ishii, H.¹; Cai, Y. Q.¹; Lu, K. T.¹; Yang, T. J.²; Liang, K. S.¹

¹National Synchrotron Radiation Research Center, Research Division, Hsinchu, Taiwan; ²National Chiao Tung University, Department of Electrophysics, Hsinchu, Taiwan;

³National Taiwan University, Department of Chemistry, Taipei, Taiwan

EMPP2-53

Abstract withdrawn

EMPP2-54

Structure and dielectric properties of PST(10/90) / PST(90/10) heterolayered thin films

Kim, Kyoung-Tae¹; Kim, Gwang-Ha¹; Lee, Sung-Gap²; Kim, Chang-Il¹

¹Chung-Ang University, School of Electrical and Electronics Engineering, Seoul, Republic of Korea; ²Gyeongsang National University, Department of Ceramic Engineering, Eng. Res. Insti, Jinju, Republic of Korea

EMPP2-55

Abstract withdrawn

EMP: Silicides

EMPP2-56

Defects behavior in IBSD- α -FeSi₃ thin film on silicon(100) substrate

Sasase, Masato¹; Yamaguchi, Kenji²; Yamamoto, Hiroyuki²; Shamoto, Shi-ichi²; Hojou, Kiichi⁴

¹The Wakasa wan Energy Research Center, Tsuruga, Fukui, Japan; ²Japan Atomic Energy Agency, Quantum Beam Science Directorate, Tokai, Ibaraki, Japan; ³Japan

Atomic Energy Agency, Quantum Beam Science Directorate, Toaki, Ibaraki, Japan; ⁴Japan Atomic Energy Agency, Advanced Science Research Center, Tokai, Ibaraki, Japan

EMPP2-57

Formation of the NiSi contact using electroless Ni deposition on Pd-activated Self-Assembled Monolayer (SAM) on Si

Duhin, Alla; Sverdlov, Yelena; Shacham-Diamand, Yosi

Tel-Aviv University, Ramat-Aviv, 69978, Israel

EMPP2-58

Optimisation of a smooth multilayer Nickel Silicide surface for ALN growth

Martin, David M; Yantchev, Ventsislav; Olsson, Jorgen; Katardjiev, Ilija

Uppsala University, Solid State Electronics, Uppsala, Sweden

EMPP2-59

Effect of deposition conditions on the structure, phase composition and electrical properties of the chromium silicide films

Trofimov, Vladimir¹; Kim, Jongil²; Bae, Seongil³

¹Institute of Radioengineering & Electronics, Moscow, Russian Federation; ²CN-Regional Innovation Agency, Asan, Republic of Korea; ³University of Incheon, Incheon, Republic of Korea

EMPP2-60

Iron disilicide by reactive diffusion epitaxy: Thin film optical properties and morphology

Dmitruk, Nicholas¹; Dozsa, Laszlo²; Mamykin, Sergiy¹; Kondratenko, Olga¹; Molnar, Gyorgy²

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EMPP2-61

Fabrication and characterisation of nickel silicide ohmic contacts to n-type 4h silicon carbide

Kuchuk, Andrian¹; Kladko, Vasyli¹; Guziejewicz, Marek²; Piotrowska, Anna²; Minikayev, Roman³; Stonert, Anna⁴; Ratajczak, Renata⁴

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EMPP2-62

Crystallinity of CoSi_2 nanolayer grown by refractory metal interlayer and cap layer methods

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EMP: Applications of Optoelectronics

EMPP2-63

The layered bismuth oxyhalide singlecrystals as elements of functional optoelectronic circuits

Bunda, Victor V.; Bunda, Svitlana O.; Vashchuk, Fedir G.

Transcarpathian state University, Institute of Computer Sciences, Uzhgorod, Ukraine

EMPP2-64

Study of low power deposition of ITO for top emission OLED with facing target and RF sputtering systems

Sawada, Yutaka¹; Kasahara, Yoshihiro¹; Onai, Yusuke¹; Osotchan, Tanakorn²; Uchida, Takayuki¹; Dangtip, Somsak²

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EMPP2-65

Anisotropy of photoconductivity and nonlinear effect in GaSe

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EMPP2-66

Strong photoacoustic pulses generated in TlGaSe₂ layered crystals

Grivickas, Vytautas¹; Bikbajevs, Vitalijus¹; Gavryushin, Vladimir¹; Linnros, Jan²

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EMPP2-67

Study of the secondary ion emission from micro-channel plates

Nevshupa, Roman¹; Konovalov, Pavel²; Roman, Elisa¹; de Segovia, Jose Luis¹; Baliasniy, Lev³

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EMP: Wide bandgap Semiconductors

EMPP2-68

Fabrication of low resistivity p-type ZnO thin films by N⁺ ions implanting

Tsai, Shu-Yi¹; Lu, Yang-Ming²; Hon, Min-Hsiung¹

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EMPP2-69

Effects of interface charge distribution on anomalous luminescence phenomenon of quaternary AlInGaN multiple quantum well light-emitting diodes

Li, Chia-Hao¹; Wang, Cheng-Kang¹; Chen, Wan-Yi¹; Wang, Wei-Tzer¹; Hung, Cheng-Wei¹; Ke, Chih-Chun¹; Wang, Jen-Cheng¹; Shen, Hui-Tang¹; Nee, Tzer-En¹; Hu, Yeu-Jen²; Lee, Jiunn-Chy²; Wu, Ya-Fen²; Fang, Chia-Hu²

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EMPP2-70

Electron paramagnetic resonance study on n-type electron-irradiated 3C-SiC

Carlsson, Patrick¹; Rabia, K.¹; Son, N. T.¹; Ohshima, N.²; Morishita, N.²; Itoh, H.²; Isoya, J.³; Janzén, E.¹

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EMPP2-71

High dose Fe implantation of GaN: Damage build-up and dopant redistribution

Azarov, Alexander Yu.¹; Jensen, Jens²; Aggerstam, Thomas³; Lourdudoss, Sebastian³; Possnert, Goran²; Hallen, Anders³

¹St. Petersburg State Polytechnical University, St. Petersburg, Russian Federation; ²Uppsala University, The Angstrom Laboratory, Uppsala, Sweden; ³Royal Institute of Technology, Department of Microelectronics and IT, Kista, Sweden

EMPP2-72

Corrected electron inelastic mean free paths (IMFPs) for selected wide band gap semiconductors

Krawczyk, Mirosław

Institute of Physical Chemistry PAS, Electrochemistry, Corrosion and Appl.Surf.Sci., Warszawa, Poland

EMPP2-73

Study of initial periods of low-temperature GaN ultrathin film growth

Voborny, Stanislav; Novacek, Zdenek; Tomanec, Ondrej; Cechal, Jan; Pokorny, Josef; Mach, Jindrich; Dittrichova, Libuse; Spousta, Jiri; Sikola, Tomas
Brno University of Technology, Institute of Physical Engineering, Brno, Czech Republic

EMPP2-74

Origin of the different band-edge optical absorption and polaronic effects in the conducting transparent oxides SnO₂ and TiO₂

Persson, Clas¹; Ferreira da Silva, Antonio²

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EMPP2-75

Hysteresis problem in ZnO TFT devices

Lee, Jae Woo¹; Ryu, Hyecheon¹; Kim, Daehyun¹; Kim, Gyutae¹; Lee, Honyun²; Sung, Myeon Chang²; Kang, Sun Ki²; Ji, Hyunjin¹

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EMPP2-76

Defect Induced Low Temperature Ferromagnetism in Zn_{1-x}Co_xO Films

Fonin, Mikhail¹; Mayer, Gillian¹; Biegger, Erwin¹; Dedkov, Yury S.²; Ruediger, Ulrich¹

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EMPP2-77

Gaussian distribution of barrier heights in (Ni/Au)/AlGaIn/GaN-heterostructures from forward bias I-V-T measurements

Zeki, Tekeli¹; Pemsetin, Altyn dal¹; Mehmet, Cakmak¹; Süleyman, Özçelik¹; Mehmet Deniz, Çalybkan²; Ekmel, Özbay²

¹Gazi University, Ankara, Turkey; ²Bilkent University, Ankara, Turkey

EMPP2-78

Free-carrier screening of piezoelectric fields in GaN quantum wells: A variational approach

Gonzalez, Gerardo; Ramirez, Manolo

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EMPP2-79

Evaluation of optical parameters and energy band gap of GaN films from the optical transmittance spectra

Santic, Branko¹; Scholz, Ferdinand²

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EMPP2-80

Investigation of ZnO/Si structural, electrical and optical properties prepared by sputtering and PLD

Skrlinarova, Jaroslava¹; Kovac, Jaroslav¹; Bruncko, Jaroslav²; Vincze, Andrej²; Vesely, Marian¹; Novotny, Ivan¹; Janos, Lubomir¹; Jakobovic, Jan¹; Hasko, Daniel²

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EMPP2-81

AION insulated-gate structure on AlGaIn prepared by ECR-CVD using an aluminum-ethoxide source

Mizue, Chihoko; Matsuyama, Tetsuya; Kotani, Junji; Miczek, Marcin; Hashizume, Tamotsu

Research Center for Integrated Quantum Electronics, Hokkaido University, Sapporo, Japan

EMPP2-82

Characterization of deep levels in MOCVD-grown AlGaIn by capacitance transient spectroscopy

Kotani, Junji; Hashizume, Tamotsu

Research Center for Integrated Quantum Electronics, Hokkaido University, Sapporo, Japan

EMPP2-83

Thermofield forward current of surface-barrier structures based on GaN

Blank, Tatiana; Goldberg, Yuri; Konstantinov, Oleg; Nikitin, Victor; Posse, Elena

A.F. Ioffe Physico-Technical Institute, St.Peterburg, Russian Federation

EMPP2-84

Band gap calculations for Si_xTi_{1-x}O₂ thin films

Savchenko, Nicolai; Shchurova, Tatiana; Opachko, Ivan

Uzhgorod National University, Uzhgorod, Ukraine

EMPP2-85

Characterization of ternary GaN(x)As(1-x) with high N concentrations grown by r f. sputtering

Mendoza-Alvarez, Julio G.¹; Cardona-Bedoya, Jairo A.²; Arias-Ceron, J. Saul³; Zelaya-Angel, Orlando¹

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EMPP2-86

Doping compensation in helium implanted 4H-SiC studied by scanning spreading resistance microscopy

Suchodolskis, Arturas¹; Hallén, Anders²

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EMPP2-87

Comparative study on stress in AlGaIn/GaN HEMT structures grown on 6H-SiC, Si and on composite substrates of the 6H-SiC/poly-SiC and Si/poly-SiC

Guziewicz, Marek¹; Kaminska, Eliana¹; Poisson, Maria, A.²; Lahreche, Hacene³; Langer, Robert³; Domagala, Jaroslaw⁴; Bove, Philippe³; Piotrowska, Anna¹

¹Institute of Electron Technology, Warsaw, Poland; ²Alcatel Thales III-V Lab, Marcoussis, France; ³Picogiga Int., Courtaboeuf, France; ⁴Institute of Physics, PAS, Warsaw, Poland

EMPP2-87B

Ammonia-free chemical bath deposition of nanocrystalline ZnS thin film buffer layer for solar cells: preparation and characterization

Goudarzi, Alireza; Motedayen Aval, Ghaffar; Sahraei, Reza; Ahmadpour, Hiva

Tarbiat Moallem University, Chemistry, Tehran, Islamic Republic of Iran

EMPP2-87C

Carbonization process and SiC formation at C60/Si(111) interface studied by SRPES

Wu, Yuyu; Liu, Jinfeng; Sun, Bai; Liu, Zhongliang; Xu, Pengshou

University of Science and Technology of China, National Synchrotron Radiation Laboratory, Hefei, China

EMPP2-87D

Temperature-stable nonvolatile memory operation in silicon carbide field-effect transistors: simulation and experiment

Jo, Yeong-Deuk¹; Choi, Chang-Yong¹; Lee, Jae-Sang¹; Park, Joon-Sung¹; Koh, Jung-Hyuk¹; Ha, Jae-Geun¹; Koo, Sang-Mo¹; Khartsev, Sergey²; Zetterling, Carl-Mikael²; Lee, Hyung-Seok²; Domeij, Martin²; Grishin, Alex²; Östling, Mikael²

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EMPP2-87E

Effects of Si/C flux ratios and deposition rates on the growth of 3C-SiC on Si (111) by SSMBE

Pengshou, Xu; Zhongliang, Liu; Jinfeng, Liu; Peng, Ren

University of Science and Technology of China, NSRL, Hefei, China

EMP: New Developments in Film Patterning

EMPP2-88

Dynamics of halogen-assisted Cu atom abstraction from Cu(111) and CuO(100)

Roman, Tanglaw¹; Dino, Wilson Agerico²; Nakanishi, Hiroshi¹; Kasai, Hideaki¹

¹Osaka University, Department of Applied Physics, Suita, Osaka, Japan; ²Osaka University, Department of Physics, Toyonaka, Osaka, Japan

EMPP2-89

Bottom-up nanopatterning and nanofabrication by soft replication of spontaneously faceted crystal surfaces

Gabal-malka, Rachel; Ismach, Ariel; Joselevich, Ernesto

Weizmann Institute of Science, Materials and Interfaces, Rehovot, Israel

EMPP2-90

Hybrid lithography process for sub-30nm fully depleted MOS transistor gate

Pauliac, Sébastien¹; Brianceau, Pierre¹; Chiaroni, Julien¹; Faynot, Olivier²

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EMPP2-91

UV patterning of vanadium pentoxide film for device application

Putrolainen, Vadim¹; Velichko, Andrey¹; Pergament, Alexander¹; Grishin, Alex²; Cheremisin, Alexander¹; Khartsev, Sergey²; Bonetti, Stefano²

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EMPP2-92

Electrostatic lens integrated Schottky emitter array for parallel electron beam lithography*Tsai, Ching-Hsiang; Ono, Takahito; Esashi, Masayoshi
Tohoku University, Sendai, Japan*

EMPP2-93

High-resolution PET nano-imprint lithography*Cecchini, Marco; Pingue, Pasqualantonio; Beltram, Fabio
Scuola Normale Superiore and NEST-CNR-INFN, Pisa, Italy***EMP: Films - Epitaxial Growth**

EMPP2-94

Study of nucleation and growth of semiconductor quantum dots on crystalline oxides for possible integration of optoelectronic functionalities on Si*Robach, Yves; Xu, Gengzhao; Saint Girons, Guillaume; Regreny, Philippe; Gendry, Michel; Hollinger, Guy
Ecole Centrale de Lyon, INL-CNRS - UMR5270, Ecully, France*

EMPP2-95

InAs film grown on silicon by metalorganic vapour phase epitaxy*Caroff, Philippe¹; Jeppsson, Mattias¹; Wernersson, Lars-Erik¹; Wheeler, Dane²; Seabaugh, Alan²
¹Lund University, Department of Solid State Physics, Lund, Sverige; ²University of Notre Dame, Department of Electrical Engineering, Notre Dame, United States*

EMPP2-96

Critical thickness of MBE-grown $\text{Al}_{0.9}\text{Ga}_{0.1}\text{As}_{1-y}\text{Sb}_y$ on GaSb*Fimland, Bjorn-Ove¹; Bugge, Renato¹; Myrvaagnes, Geir¹; Selvig, Espen²
¹Norwegian University of Science and Technology, Department of Electronics and Telecommunications, Trondheim, Norway; ²Norwegian Defence Research Establishment, Kjeller, Norway*

EMPP2-97

Epitaxial growth of ZnMgTe with a wide composition range on ZnTe substrate by molecular beam epitaxy*Tanaka, Tooru¹; Saito, Katsuhiko¹; Nishio, Mitsuhiko²; Guo, Qixin²; Ogawa, Hiroshi³
¹Saga University, Synchrotron Light Application Center, Saga 840-8502, Japan; ²Saga University, Department of electrical and electronic engineering, Saga 840-8502, Japan*

EMPP2-98

Growth structure of Co films on GaAs(001) covered with MgO buffer by RF sputtering*Makihara, Kenji¹; Hashimoto, Mituru²; Shi, Ji²; Zohta, Yasuhito³
¹Tokyo University of Technology, Department of Bionics, Katakura, Hachioji, Tokyo, Japan; ²Japan Physitech Co., Myojin Hachioji, Tokyo, Japan; ³Tokyo Institute of Technology, Department of Metallurgy and Ceramics Science, O-okayama, Meguro-ku, Tokyo, Japan*

EMPP2-99

Improvement of MOVPE grown ZnTe:P layers by annealing treatment*Saito, Katsuhiko¹; Fujimoto, Kenji²; Yamaguchi, Kouji²; Tanaka, Tooru³; Nishio, Mitsuhiko²; Guo, Qixin²; Ogawa, Hiroshi³
¹Saga University, Venture Business Laboratory, Saga, Japan; ²Saga University, Faculty of Science and Engineering, Saga, Japan; ³Saga University, Synchrotron Light Application Center, Saga, Japan*

EMPP2-100

Surface and optical properties of $\text{Al}_x\text{Ga}_{1-x}\text{N}$ heterostructure depending on annealing treatment*Zeki, Tekeli¹; Süleyman, Çörekçi¹; Sibel, Özkaya¹; Demet, Usanmaz¹; Semran, Sađlam¹; Mehmet, Çakmak¹; Süleyman, Özçelik¹; Ekmel, Özbay²
¹Gazi University, Ankara, Turkey; ²Bilkent University, Nanotechnology Research Center, Turkey*

EMPP2-101

Growth and characterizations of AlGaAs/ GaAs multi quantum well infrared photodetector structure*Özçelik, Süleyman; Altuntas, Halit; Akaoglu, Baris; Bengi, Aylin; Mammedov, Tofiq
Gazi University, Physics Department, Ankara, Turkey*

EMPP2-102

Study of B incorporation in strained-SiGe layers*Ghandi, Reza; Kolahdouz, Mohammadreza; Hållstedt, Julius; Radamson, Henry
Royal Institute of Technology, MAP/EKT, Stockholm, Sweden*

EMPP2-103

Investigation of The Recrystallization Behaviour Involved During Nickel-Induced Annealing of Amorphous Silicon Thin films

Chen, T.T.¹; Chen, Y.K.²; Chao, C.L.³; Ou, Y.K.⁴; Ma, K.J.⁵; Chen, Y.T.²

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EMP: High k Dielectrics

EMPP2-104

Growth and characterisation of thin magnesium oxide layers on silicon(111) and indium phosphide surfaces

Casey, Patrick; Hughes, Greg

Dublin City University, School of Physical Sciences, Dublin, Ireland

EMPP2-105

Application of supercritical fluids for enhancing low-temperature-deposited aluminum oxide

Tsai, Chih-Tsung¹; Liu, Po-Tsun²; Chang, Ting-Chang³; Yang, Po-Yu²; Kuo, Yu-Chieh²

¹National Tsing Hua University, Institute of Electronics Engineering, HsinChu, Taiwan; ²National Chiao Tung University, Department of Photonics and Display Institute, HsinChu, Taiwan; ³National Sun Yat-set University, Department of Physics, HsinChu, Taiwan

EMPP2-106

Band alignment of nitrated Hf-silicate films as a function of composition and post-nitride anneal

Hwang, Uk¹; Kang, Hee Jae¹; Chung, Kwun Bum²; Yi, Yeonjin²; Cho, Mann-Ho³

¹Chungbuk National University, Physics, Cheongju, Republic of Korea; ²Korea Research Institute of Standards and Science, Advanced Industrial Technology Group, Daejeon, Republic of Korea; ³Yonsei University, Physics and Applied Physics, Seoul, Republic of Korea

EMPP2-107

Compositional, structural and electrical characterizations of high-k gate insulator comprising Al₂O₃, HfO₂ and HfTiO nanolaminate films

Mikhelashvili, Vissarion; Eisenstein, Gadi; Lahav, Alex

Technion-Israel Institute of Technology, Electrical Engineering, Haifa, Israel

EMPP2-108

X-ray absorption spectroscopy study on oxygen-deficient hafnium oxide film

Cho, Deok-Yong; Oh, Se-Jung; Hwang, Cheol Seong

Seoul National University, Seoul, Republic of Korea

EMPP2-109

Photoemission studies of the interface formation of ultrathin magnesium oxide dielectric layers on the oxidised silicon(111) surface

Brennan, Barry; McDonnell, Stephen; Hughes, Greg

Dublin City University, School of Physical Sciences, Dublin, Ireland

EMPP2-110

Aluminum oxynitride gate dielectric obtained by DC sputtering deposition in nitrogen with additional rapid thermal oxidation and annealing

Ramos, A. C. S.¹; Diniz, J. A.¹; Pudenzi, M. A. A.²; Doi, L.¹; Swart, J. W.¹

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EMPP2-111

Abstract withdrawn

EMPP2-112

Structural, electronics and optical properties of CaO

Albuquerque, E.L.¹; Vasconcelos, M.S.²

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EMP: Metal/Semiconductor Interface

EMPP2-113

Precise resistivity measurement independent of contact resistance influence and its application

Kim, Daehyun¹; Ryu, Hyecheon²; Ji, Hyunjin²; Kim, Gyutae²

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EMPP2-114

The Pb-Si(001) interface: Structural and electronic properties from ab-initio pseudopotential calculations

Kessemeier, Thomas; Schmidt, Wolf Gero

University of Paderborn, Physics, Paderborn, Germany

EMPP2-115

Electrical conduction in Si:P δ -layers on Si(001) with high step density

Reusch, Thilo C. G.¹; Goh, K. E. Johnson¹; Pok, Wilson²; Butcher, Matthew J.²; Lo, W.-C. Nadia²; Simmons, Michelle Y.¹

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EMPP2-116

Annealing effect on structural and electrical properties at Ti/Si interface

Chhagan, Chhagan

University of Rajasthan, Jaipur, Centre for Non-Conventional Energy Resources, Jaipur, India

EMP - Semiconductor Surfaces Quantum Well Structures

EMPP2-117

Transition from two-dimensional electron-hole to geminate-exciton photoluminescence in GaAs/AlGaAs heterostructures under a high in-plane magnetic field

Ashkinadze, Boris¹; Christianen, Peter²; Cohen, Elisha¹; Rudenkov, Vadim³; Maan, J.K.²

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EMPP2-118

Investigation of the crack information on GaN/AlN multiple quantum well structures grown by MBE

Liu, Xinyu¹; Aggerstam, Thomas²; Holmstrom, Petter³; Lourdudoss, Sebastian²; Andersson, Thorvald⁴

¹Chalmers University of Technology, Microtechnology and Nanoscience, Goteborg, Sweden; ²Royal Institute of Technology, Microelectronics and Applied physics, Kista, Sweden; ³Sophia University, Electrical and Electronics Engineering, Tokyo, Japan

EMPP2-119

Photoluminescence study of Cd_xHg_{1-x}Te multiple quantum wells grown by molecular beam epitaxy

Tonheim, Celin Russoy; Selvig, Espen; Breivik, Magnus; Nicolas, Stephane; Haakenaasen, Randi

Norwegian Defence Research Establishment, Kjeller, Norway

EMPP2-120

Movement of diagonal resistivity in fractional quantum Hall effect via periodic modulation of magnetic field strength

Sasaki, Shosuke

Shizuoka Institute of Science and Technology, Fukuroi, Japan

EMPP2-121

Calculation of diffusion current in tunnel diode by a quantum mechanical approach

Roostaie, Mehdi; Beigagha, Rosa

University of Science and Technology of Iran, Physics, Tehran, Islamic Republic of Iran

EMPP2-122

Ultra-low-energy boron ion implantation of silicon

Yamamoto, Kazuhiro; Itoh, Hiroshi

National Institute of Advanced Industrial Science, Research Institute of Instrumentation Frontier, Tsukuba, Japan

EMP - Heteroepitaxy

EMPP2-123

Growth of undoped ZnMgTe layers by metalorganic vapour phase epitaxy

Saito, Katsuhiko¹; Kouno, Daisuke²; Tanaka, Tooru²; Nishio, Mitsuhiro²; Guo, Qixin²; Ogawa, Hiroshi³

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EMPP2-124

Size-selection of nanoclusters in transition from 2D to 3D growth in ion beam assisted deposition

Riekkki, Kirsi¹; Koponen, Ismo T.²

¹Helsinki University of Technology, Laboratory of Physics, Espoo, Finland; ²University of Helsinki, Department of Physical Sciences, Helsinki, Finland

EMPP2-125

Characterization of InN films on sapphire grown by RF-MOMBE

Chen, Wei-Chun¹; Kuo, Shou-Yi²; Hsiao, Chien-Nan¹

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EMPP2-126

The effect of C incorporation sites in SiGeC intermediate layer assisted SiGe layer relaxation

Kim, Hyun-Woo¹; Choi, Suk¹; Hong, Sukwon¹; Yoon, Euijoon¹; Kim, Chang Soo²

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EMPP2-127

Magnesium induced superstructural phase formation on high index Si (5 5 12) surface

Kumar, Mahesh; G., Govind; Shivaprasad, S.M.

National Physical Laboratory, Surface Physics and Nanostructures, New Delhi, India

EMPP2-128

SiGe-based quantum wells for uncooled long wavelength infra-red radiation (LWIR) sensors

Wissmar, Stanley¹; Radamson, Henry²; Yamamoto, Yuji³; Tillack, Bernd³; Vieder, Christian¹; Andersson, Jan¹

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EMP - Chemical Vapor Deposition

EMPP2-129

Influence of the deposition conditions on the as-grown photoluminescence of silicon nanoclusters embedded in silicon nitride matrix obtained by PECVD

Monroy, B. M.¹; Santana, G.¹; Benami, A.¹; García, M. F.¹; Ortiz, A.¹; Alonso, J. C.¹; Fandiño, J.²; Aguilar-Hernandez, J.³; Contreras-Puente, G.³

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EMPP2-130

AFM-Investigations on nanosized metallic surfaces prepared by organometallic chemical vapour deposition

Wochnowski, Joern¹; Hoffmann, Germar²; Heck, Jürgen¹; Wiesendanger, Roland²

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EMPP2-131

A study on the low leakage current of MIS structure fabricated by ICP-CVD

Tsai, Shu-Yi¹; Lu, Yang-Ming²; Hon, Min-Hsiung¹

¹Department of Materials Science and Engineering, National Cheng Kung University, Tainan, Taiwan; ²Graduate Institute of Electro-Optical and Material, National Formosa University, Yunlin, Taiwan

EMPP2-132

Growth and characterisation of RuO₂ - SiO₂ thin films deposited by aerosol CVD

Hodroj, Abbas¹; Gottlieb, Ulrich¹; Deschanvres, Jean-luc¹; Ferrer, Francisco²

¹LMPG CNRS INP Grenoble, Grenoble, France; ²Centro Nacional De Aceleradores, Sevilla, Spain

EMP - Narrow Band Semiconductors

EMPP2-133

Heterogeneous integration of InAs on W/GaAs by movpe

Astromskas, Gvidas; Lars-Erik, Wernersson

Lund University, Solid State Physics, Lund, Sweden

EMPP2-134

Optical and interface characterization of p-InGaAsSb/n-GaSb heterostructures for photovoltaic applications

Gomez-Herrera, M. Lucero¹; Herrera-Perez, José-Luis¹; Rodríguez-Fregoso, Patricia²; Riech, Ines³; Mendoza-Alvarez, Julio G.²

¹Cicata-IPN, U. Legaria, Mexico DF, Mexico; ²Cinvestav-IPN, Physics, Mexico DF, Mexico; ³Univ. Autónoma de Yucatan, Fac. Ingeniería Física, Merida, Mexico

EMPP2-135

Structural and electrical characterization of AgInSe₂ crystals grown by hot-press method

*Kinoshita, Aya*¹; *Shirahata, Yasuhiro*¹; *Yoshino, Kenji*¹; *Nomoto, Keita*²; *Yoshitake, Tsuyoshi*²

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EMPP2-136

Electrical characterization of Cu/In ratio in CuInS₂ crystal

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EMPP2-137

Photoluminescence study of Cd_xHg_{1-x}Te bulk and multiple quantum wells

Breivik, Magnus; *Tonheim, Celin Russøy*; *Selvig, Espen*; *Nicolas, Stephane*; *van Rheenen, Arthur D.*; *Brudevoll, Trond*; *Haakenaasen, Randi*
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EMPP2-138

Electrochemical deposition of PbSe onto n- and p-Si wafers and into nanopores in Si/SiO₂ system

*Ivanova, Yuliya*¹; *Fedotov, Aleksandr*²; *Streltsov, Eugene*¹; *Fink, D*³; *Petrov, Aleksandr*⁴

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NS - Electrical Transport through Molecules

NSP2-139

Chemically resolved electrical measurements within molecules: delving into the sub-molecular scale

Cohen, Hagai

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NSP2-140

First-principles study of electron transport through fullerene wires

Ono, Tomoya; *Hirose, Kikuji*

Osaka University, Graduate School of Engineering, Osaka, Japan

NSP2-141

Characterization of metal/organic/silicon devices using ballistic electron emission microscopy and in situ IV measurements

Goh, K. E. J.; *Troadec, C.*; *Zheng, Y.*; *Kunardi, L.*

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NSP2-142

Interpretation of the current-induced forces applied on atoms adsorbed on conducting carbon nanotubes

Girard, Yvan; *Yamamoto, Takahiro*; *Watanabe, Kazuyuki*

Tokyo University of Science, Department of Physics, Tokyo, Japan

NSP2-143

Liouville-von Neumann equation approach to time-dependent electronic transport in molecular bridges

Yamamoto, Takahiro; *Yamada, Kouji*; *Watanabe, Kazuyuki*

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NSP2-144

Transport through ferrocene in between ultrathin metallic Ag nanostructures

Tegenkamp, Christoph; *Gardinowski, Gernot*; *Schmeidel, Jedrzej*; *Pfnür, Herbert*

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NSP2-145

Ab initio study of electron transport through different conformations of dithienylethene photochromic molecules attached to metallic leads

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NSP2-146

Electronic transport in double-strand DNA segments

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NSP2-147

AC Conductance of DNA sequence at finite temperatures

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NSP2-148

Ab initio electronic and transport properties of a hybrid Si/organic/Si interface

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NSP2-149

Effects of contacts to electrodes and phonon scattering on transport of carbon nanotube devices

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NSP2-149B

Dithiocarbamates as a low ohmic metal-molecule interface for molecular electronics

von Wrochem, Florian; Nothofer, Heinz-Georg; Scholz, Frank; Yasuda, Akio; Wessels, Jurina M.

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NSP2-149C

Electron transport in PF6PolyPyrrole on ultrathin gold films

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NS - Magnetic Structures and Superconductors

NSP2-150

Effect of gold atoms on the magnetism of ordered co nanodots

Nahas, Yasmine; Repain, Vincent; Rodary, Guillemain; Rohart, Stanislas; Chacon, Cyril; GIRARD, Yann; Tejada, Antonio; Rousset, Sylvie

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NSP2-151

Exchange and spin-orbit interaction in ultra-thin Co film on W(110) with Ni buffer layer

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NSP2-152

Two kinds of magnetism observed in a semiconductor/metal nanocomposite

Rumpf, Klemens¹; Granitzer, Petra¹; Poelt, Peter²; Reichmann, Angelika²; Hofmayer, Michael¹; Krenn, Heinz¹

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NSP2-153

Abstract withdrawn

NSP2-154

Atomic kinetics of manganese growth on Ge(100)-(2x1) surface

Kim, H.; Jeong, G. E.; Ihm, J. H.; Jeon, J. H.; Kahng, S.-J.

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NSP2-155

'Current paths' in nanostructured superconductors

Ledenyov, Dimitri O.¹; Ledenyov, Viktor O.²; Ledenyov, Oleg P.²

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NSP2-156

First principle calculation of phonon spectra in nitride niobium

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NSP2-157

See NSP3-102C

NSP2-158

Abstract withdrawn

NSP2-159

Magnetic ordering of two-dimensional ion lattice and coherent states of delocalized charge carriers in this ion lattice

Shchurova, Ljudmila

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NSP2-160

Theoretical study on angle-resolved photoemission spectra of Bi₂Sr₂CaCu₂O₈

Ji, Kai; Nasu, Keiichiro

High Energy Accelerator Research Organization, Institute of Materials Structure Science, Tsukuba, Japan

NSP2-161

Realization of a magnetic field sensor with a porous silicon based structure for gas detection

Ouadah, Yahia; Gabouze, Noureddine; Cheraga, Houcine

Udts, Algiers, Algeria

NSP2-162

SP-STs applied to an electronically heterogeneous system: Co nanostructures on Pt(111)

Meier, Focko; Wiebe, Jens; von Bergmann, Kirsten; Ferriani, Paolo; Zhou, Lihui; Hashimoto, Katsushi; Bode, Matthias; Heinze, Stefan; Wiesendanger, Roland
Institute of Applied Physics, University of Hamburg, Hamburg, Germany

NSP2-162B

Increase of ferromagnetic ordering by Cu doping in Zn_{1-x}CoxO system

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NS - Nanostructuring

NSP2-163

Synthesis and characterization of boron-doped carbon nanotubes

Jose Ceragioli, Helder¹; Carlos Peterlevitz, Alfredo¹; Ciro Rojas Quispe, Jose¹; Larena, Alicia²; Baranauskas, Vitor¹

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NSP2-164

Nitrogen doping of single walled carbon nanotubes via very low energy N₂⁺ ion implantation

Minniti, Marina; Xu, Fang; Barone, Pasquale; Bonanno, Assunta

Università della Calabria, Dipartimento di Fisica, Rende (cs), Italy

NSP2-165

Absorptions of hydrogen in Ag-CNTs electrode

Khosrhevisan, Bahram; Bahpour, Mohsen; Ghoreishi, S Mehdi; Hemmati, Masumeh

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NSP2-166

Some methods of purification for carbon nanotubes (CNTs) synthesized by arc discharge method in liquid environment in the vicinity of some transition metal oxide elements such as Ni and Ni-Fe as catalyst

Hosseini, Ali.A; Bakhshiani, Fatemeh

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NSP2-167

Magnetic field effect on the purity of carbon nanotubes fabricated by Arc discharge method

Farbod, Mansoor; Hassani Matin, Mohammad Mahdi; Kazeminezhad, Iraj

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NSP2-168

Nano-patterning of carbon-based materials by electron-assisted local oxidation in humid environment

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NSP2-169

Resistance switch employing a simple metal nanogap junction

Naitoh, Yasuhisa; Shimizu, Tetsuo

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NSP2-170

Fabrication and nanostructure study of electrodeposited constantan/Cu thermopower sensor on Si & GaAs

Kazeminezhad, Iraj; Khoshbakht, Elham; Farbod, Mansoor

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NSP2-171

Fabrication and characterization of zinc oxide nanoparticles by DC arc plasma

Zargar Shoushtari, Morteza; Parhoodeh, Saeed; Farbod, Mansoor

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NSP2-172

Nanostructured coatings based on uv-curable polymeric matrices: preparation and characterization

Di Gianni, Anna; Amerio, Ezio; Sangermano, Marco; Bongiovanni, Roberta; Malucelli, Giulio; Lak, Nahal; Turcato, Elisa

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NSP2-173

Fabrication and characterization of nanogaps made by focused ion beam milling

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NSP2-174

The back-gate tunneling breakdown limitation in a SOI nanodevice with cavity

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NSP2-175

Wide-range control of tunnel resistance on metallic nanogaps using migration

Kayashima, Sho; Takahashi, Keisuke; Motoyama, Motoaki; Shirakashi, Jun-ichi

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NSP2-176

Formation of nanoscale iron and iron oxide structures using electron beam induced deposition techniques

Shimojo, Masayuki¹; Takeguchi, Masaki²; Mitsuishi, Kazutaka²; Tanaka, Miyoko²; Furuya, Kazuo²

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NSP2-177

Development of three target magnetron sputtering cathode cluster compatible with uhv chamber for preparation of nanomaterials

Venkatachalam, Sabarinathan¹; Sinna Nadar, Ramasamy¹; B, Purniah²

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NSP2-178

Nanocluster stability at 300 K due to atomic exchange mechanism.

Yurov, Vladimir; Andrushechkin, Boris; Chercez, Vladimir; Eltsov, Konstantin

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NSP2-179

The role of SrCl₂ in preparation of SnO₂, SrSnO₃ and Sr₂SnO₄ nanopowders by one-step solid-state reactions method

Hojabri, Alireza¹; Rezaenik, Yoseff¹; Novinroz, Javad²

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NSP2-180

Effect of high pressure annealing on defects induced by helium implantation in silicon

Capan, Ivana¹; Pivac, Branko¹; Dubcek, Pavo¹; Bernstorff, Sigrid²; Misiuk, Andrzej³; Prujiszczyk, M.³

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NSP2-181

Some aspects of spatio-temporal distribution of adsorbed chemical elements in AU-1500 filters at nuclear power plants

Neklyudov, I.M.¹; Ledenyov, O.P.²; Poltynin, P.Ya.¹; Fedorova, L.I.¹

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NSP2-182

The influence of irradiation by helium and hydrogen ions on the structure and electroresistance of nanoporous V-N coatings

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NSP2-183

Fabrication and characterization of WO_x nanostructured materials by thermal process

Kim, Sang Hyeob¹; Lee, Sunyoung¹; Myoung, Hey Jin¹; Choi, Youngjin¹; G. A. J., Amaratunga²; Maeng, Sung-Lyul¹

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NSP2-184

Features of oxygen and its vacancies diffusion in YBaCuO thin films near to magnetic quantum lines

Ledenyov, Viktor O.¹; Ledenyov, Dimitri O.²; Ledenyov, Oleg P.¹

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NSP2-185

Characterization of boron doped nanocrystalline diamonds

Mograo Manne, Gustavo; Augusto Sampaio, Marcio; Carlos Peterlevitz, Alfredo; Ciro Rojas Quispe, Jose; Jose Ceragioli, Helder; Baranauskas, Vitor

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NSP2-186

Carbon-nitrogen nanostructures prepared using polyamide catalyst in hot-filament chemical vapor deposition

Jose Ceragioli, Helder; Carlos Peterlevitz, Alfredo; Fonseca Iannini, Roberto; Ciro Rojas Quispe, Jose; Baranauskas, Vitor

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NSP2-187

Modification and electrical characterization of self-assembled monolayer/silicon samples with and without an interfacial oxide layer by the use of scanning probe microscopes

Han, Jiwon; Sano, Hikaru; Ichii, Takashi; Murase, Kuniaki; Sugimura, Hiroyuki

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NSP2-188

Growth and structural properties of Mg:C thin films prepared by dc magnetron sputtering discharge

Eriksson, Anna-Karin; Ingason, Arni Sigurdur; Olafsson, Sveinn

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NSP2-189

Pair distribution function and momentum distribution in parabolic quantum dots

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NSP2-190

Surface structure and reactivity of N/Cu(100) and O+N/Cu(100) as investigated by LEED, STM, AES and TPD

Hirsimäki, Mika; Ahonen, Marko; Lahtonen, Kimmo; Lampimäki, Markus; Valden, Mika

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NSP2-191

Atomistic modelling of the interface structure of Si nanocrystals in silica

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NSP2-192

Fabricating and aligning π -conjugated polymer functionalized DNA nanowires

Nakao, Hidenobu¹; Iwata, Futoshi²; Karasawa, Hidenori²; Hayashi, Hideki³; Miki, Kazushi¹

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NSP2-193

Influence of Aluminum Oxide Interfaces in Multilayer Stacks of Aluminum and Nickel.

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NSP2-194

Focused ion beam as a nanoscale express technology

Luchinin, Victor; Savenko, Alexey

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NSP2-194B

The effect of Fe additive coated in different time periods to Ni catalyst on the growth of CNTs by TCVD method

Mahmoodi, Azam; Ghoranneviss, Mahmood; Eshghabadi, Ali

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NSP2-194C

Synthesis of single-walled carbon nanotubes by CVD method on Fe/Mo/Al₂O₃ catalyst

Hanifeh, Danial¹; Ghoranneviss, M.¹; Abrooand, P.²; Mahmoodi, A. A.¹; Ghoranneviss, T.³

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³Islamic Azad University, Tehran, Islamic Republic of Iran

NS - Molecules on Surfaces

NSP2-195

Abstract withdrawn

NSP2-196

Self-organized 4-tert-butyl-calix[4]erene on Au(110)

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NSP2-197

Ordering of large aromatic hydrocarbons on surfaces: The influence of substituents on the growth of quaterrylene derivatives

Wagner, Christian; Franke, Robert; Franke, Sebastian; Diemel, Thomas; Forker, Roman; Fritz, Torsten

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NSP2-198

A Monte Carlo simulation study of H₂ layers on NaCl (001)

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NSP2-199

Building a covalently bonded network of TBrPP molecules on a gold surface

Grill, Leonhard¹; Dyer, Matthew²; Persson, Mats²; Moresco, F¹; Peters, M V²; Hecht, S³

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NSP2-200

Long-range interaction of surface-adsorbed amino acids studied with density functional theory

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NSP2-201

STM/STS observation of a molecular p-n junction in a phenyl-linked porphyrin dimer

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NSP2-202

Investigating “molecular switches” — isomerisation of adsorbed molecules

Schmidt, Philipp M.¹; Püttner, Ralph²; Kolczewski, Christine²; Horn, Karsten¹; Kampen, Thorsten¹; Hermann, Klaus³

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NSP2-203

Theoretical investigation of CO adsorption on Pd(111) and Pd(111) - Zn and ZnO - Pd(111) systems

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NSP2-204

First principles calculations of the vacancy effects on the dissociative adsorption of H₂ on Pt(111) surface

Arboleda, Nelson Jr.; Kasai, Hideaki; Roman, Tanglaw; Nakanishi, Hiroshi

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NSP2-205

Adsorption of organic molecules on boron-nitride nanomesh

Perkins, Edward¹; Beton, Peter¹; Schreck, Matthias²; Sachdev, Hermann²; Berner, Simon⁴; Greber, Thomas⁴; Osterwalder, Juerg⁴

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NSP2-206

Steric effects and chirality in the adsorption of glycine and phenylglycine on Cu(110)

Blankenburg, Stephan; Schmidt, Wolf Gero

Universität Paderborn, Theoretische Physik, Paderborn, Germany

NSP2-207

DNA base adsorption on (110) metal surfaces calculated from first principles: Distinct differences between Cu, Ag and Au

Rauls, Eva; Schmidt, Wolf Gero

Universität Paderborn, Paderborn, Germany

NSP2-208

Ab-initio calculations and STM observations on Tetrapyrrolyl and Fe(II)-Tetrapyrrolyl-porphyrin molecules on Ag (111)

Zotti, Linda Angela¹; Teobaldi, Gilberto¹; Hofer, Werner A.¹; Auwärter, Wilhelm²; Weber-Bargioni, Alexander³; Barth, Johannes V.²

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NSP2-209

Electronic and geometric structure of methyl oxirane adsorbed on si (100) 2x1

Piancastelli, Maria-Novella¹; Bao, Zhuo¹; Hennies, Franz²; Travnikova, Oksana¹; Ceolin, Denis¹; Kampen, Thorsten³; Horn, Karsten³

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NSP2-210

Growth of a heterogeneous layer of DiMe-PTCDI and PTCDA on Cu(111) -

Karacuban, Hatice; Koch, Sascha; Wagner, Thorsten; Möller, Rolf

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NSP2-211

STM investigation of Salen-complexes

Kuck, Stefan¹; Brede, Jens¹; Scarfato, Alessandro¹; Hoffmann, Gernar¹; Wiesendanger, Roland¹; May, Sven²; Kloeckner, Jan-Peter²; Prosenc, Marc²

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NSP2-212

STM-tip-induced bistability of single 1,5 cyclooctadiene molecules on the Si(100) surface

Nacci, Christophe; Lagoute, Jérôme; Liu, Xi; Fölsch, Stefan

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NSP2-213

The growth of organic nano-crystallites studied by thermal desorption spectroscopy and scanning tunneling microscopy

Wagner, Thorsten; Karacuban, Hatice; Bannani, Amin; Bobisch, Christian; Möller, Rolf

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NSP2-214

SPM study of adsorption of organic molecules on III-V semiconductors

Such, Bartosz; Kolodziej, Jacek J.; Goryl, Maria; Goryl, Grzegorz; Krok, Franciszek; Szymanski, Marek

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NSP2-215

Low-temperature STM observation of a 10 nm long oligothiophene wire on Au(111)

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NSP2-216

Molecular layers of trimesic acid on Cu and 4H-SiC surfaces

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NSP2-217

Unusual magnetic properties of PbS nanoparticles bound via 1,8-octanedithiol to a p-type of GaAs surface

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NSP2-218

4-Bromostyrene on the Si(001)-(1 2) surface

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NSP2-219

High Resolution STM Imaging and Molecular Modeling of the Room-Temperature Adsorption of 2,4,6-Tri(2'-thienyl)-1,3,5-triazine on Si-B Interface

Duverger, Eric¹; Makoudi, Younés¹; Arab, Madjid¹; Palmino, Frank¹; Cherioux, Frederic¹; Picaud, Fabien²; Ramseyer, Christophe²

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NSP2-220

Self-alignment of molecular chains on pre-structured Sm/Si(111) interface

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NSP2-221

Abstract withdrawn

NSP2-222

Fullerenes induced nanopits formation on surfaces

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NSP2-223

Molecular states of polyacenes interacting with noble metal surfaces

Pedio, M¹; Doyle, B. P¹; Mahne, N.¹; Giglia, A.¹; Nannarone, S.²; Montecchi, M.³; Pasquali, L.³
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NSP2-224

TEMPO and MTSSL layers studied by STM, EPR and voltammetry

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SS - Liquid-solid and Liquid-liquid Interfaces

SSP2-225

Theoretical study of localization of excess electrons at the surface of ice

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SSP2-226

Combined in-situ STM and XRD study on reactive surfaces on electrochemical control

Zajonc, Hubert¹; Dosch, Helmut¹; Gentz, Knud²; Hümann, Sascha²; Wandelt, Klaus²; Broekmann, Peter²
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SSP2-227

The influence of halide anions on structure and reactivity of diphenylviologen on Cu(100) - in-situ ECSTM and XPS studies

Gentz, Knud¹; Hümann, Sascha¹; Pham, Duc Thanh¹; Breuer, Stefan¹; Hunger, Ralf²; Wandelt, Klaus¹; Broekmann, Peter¹
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SSP2-228

Molecular structure and parameters of long-term memory of stable water clathrate nano-cells

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SSP2-229

Deposition and crystallization studies of thin amorphous solid water films on Ru(0001) and on CO-precovered Ru(0001)

Kondo, Takahiro¹; Kato, Hiroyuki S.¹; Bonn, Mischa²; Kawai, Mak³
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SSP2-230

Using the quartz crystal microbalance to study macro- and nanoscale bubbles at solid-liquid interfaces

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SSP2-231

Calculation of bulk viscosity from a new formula

Mohammad Zaheri, Ali Hossein
Azad University of Arak, Physics, Arak, Islamic Republic of Iran

SS - Magnetic Properties of Surfaces

SSP2-232

Structure and magnetism in ultra-thin Cr layers on W(110) - how well do experiment and theory agree?

de la Figuera, Juan¹; Santos, Benito¹; Puerta, Juan M.²; Cerda, Jorge I.²; Stumpf, Roland³; McCarty, Kevin F.³

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SSP2-233

Co and Fe monolayer on Rh(111) studied by XMCD

Lehner, Anne¹; Rusponi, Stefano¹; Moulas, Géraud¹; Etkorn, Markus¹; Bencok, Peter²; Gambardella, Pietro³; Brune, Harald¹

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SSP2-234

First-principles calculations of Dzyaloshinskii-Moriya interaction at magnetic surfaces

Heide, Marcus¹; Ferriani, Paolo²; Bihlmayer, Gustav¹; Heinze, Stefan²; Blügel, Stefan¹

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SSP2-235

Oxygen vacancies in $\text{La}_{0.66}\text{Sr}_{0.33}\text{MnO}_3$: effects on electronic and magnetic structure

Cantoni, Matteo¹; Bertacco, Riccardo¹; Cattoni, Andrea¹; Petti, Daniela¹; Brivio, Stefano¹; Ciccacci, Franco¹; Ma, Chunlan²; Yang, Zhongqin²; Picozzi, Silvia³

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SSP2-236

Structure and magnetism of Mn/Pt(110)-(1x2)

De Santis, Maurizio¹; Langlais, Véronique²; Tolentino, Hélio¹; GAuthier, Yves¹; Bihlmayer, Gustav²; Blügel, Stefan³

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SSP2-237

Improvement of GMI magnetic sensing ability by the ion irradiation

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SSP2-238

Amplification of electron beam spin polarization after passing Fe304 – Bi interface

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SSP2-239

Growth and magnetic property studies of $\text{Cu}_x\text{Ni}_{1-x}$ alloy thin films, electrodeposited onto (111)n-type Si

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SSP2-240

DFT study for ferromagnetic thin film of iron silicide on Si(111) surface

Ishii, Akira¹; Takematsu, Emi¹; Hattori, Azusa²; Hattori, Ken²; Daimon, Hiroshi²

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SSP2-241

Ferromagnetic iron silicides on Si(111) surface grown by solid phase epitaxy

Hattori, Azusa¹; Hattori, Ken¹; Katayama, Yasuto¹; Kodama, Kenji¹; Hosoito, Nobuyoshi¹; Komori, Fumio²; Hiroshi, Daimon¹

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SSP2-242

YCo₂: intrinsic magnetic surface of a paramagnetic bulk material

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SSP2-243

The effect of the spin states of two magnetic atoms adsorbed on metal surface in scanning tunneling spectroscopy

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SSP2-244

Magnetization induced second harmonic generation from Co doped rutile TiO₂

Watanabe, Ryosuke¹; Yuasa, Mamoru¹; Yahata, Yoshinari¹; Mizutani, Goro¹; Suzuki, Takanori²; Segawa, Yuzaburo³; Matsumoto, Yuji⁴; Yamamoto, Yuishi⁴; Koinuma, Hideomi⁴

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SSP2-245

Evidence for the short-period oscillations in spin-resolved photoemission of thin Cr(110) films

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SSP2-246

Magnetic properties of room temperature exchange bias NiFe/FeMn bilayers

Mohanty, Jyoti¹; Persson, Andreas²; Arvanitis, Dimitri²; Charlton, Tim³; Langridge, Sean³; Dalgliesh, Rob³; Van Haesendonck, Chris¹; Temst, Kristiaan¹

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SS - New Methods and Techniques in Surface Science

SSP2-247

Force modulation AFM and High Resolution EELS studies of CVD diamond exposed to oxygen plasma

Shpilman, Ze'ev¹; Gouzman, Irina²; Grossman, Eitan²; Lafosse, Ann³; Adler, Joan¹; Hoffman, Alon⁴

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SSP2-248

High-resolution XPS combined with PAL technique: on the methodological possibilities in application to radiation-induced defects in chalcogenide semiconductors

Shpotyuk, Oleh¹; Jain, Himanshu²; Kovalskiy, Andrii²; Golovchak, Roman¹; Balitska, Valentina¹; Filipecki, Jacek³

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SSP2-249

Analytical tool for gap state analysis via near UV-excited photoemission

Schmidt, Manfred; Korte, Lars

Hahn-Meitner-Institut Berlin, Silizium Photovoltaik, Berlin, Germany

SSP2-250

New method of analysis of gas content in materials and coatings

Nevshupa, Roman; Roman, Elisa; de Segovia, Jose Luis

Institute of Material Science of Madrid, Madrid, Spain

SSP2-251

Uniformly dispersed surface deposition of colloidal nanoparticles by boiling

Lee, Kyumin; Duchamp, Martial; Magrez, Arnaud; Kulik, Gerit; Seo, Jin Won; Kulik, Andrzej J.; Forró, László

Ecole Polytechnique Fédérale de Lausanne (EPFL), Institute of Physics of Complex Matter, Lausanne, Switzerland

SSP2-252

Near surface photoacoustic imaging of Vickers indented solids without and under external loading

Muratikov, Kirill; Glazov, Alexey

Physical-Technical Institute of RAS, St.Petersburg, Russian Federation

SSP2-253

Design and evaluation of corner compensation patterns for anisotropic etching

Chen, Xing; Lee, Dong Weon

Chonnam National University, Gwangju, Democratic Peoples Republic of Korea

SSP2-254

Hard X-ray photoelectron spectroscopy (HAXPES) (≤ 15 keV) at SpLine, the spanish CRG beamline at the ESRF: First results

Rubio-Zuazo, Juan¹; Castro, German¹; Escher, Matthias²; Merkel, Michael²

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SSP2-255

Crystal truncation rod measurements on the Ge(001)-(1x2)/GaAs(001) surface reconstruction by azimuthal scan RHEED

Romanyuk, Oleksandr; Braun, Wolfgang

Paul Drude Institute for Solid State Electronics, Berlin, Germany

SSP2-256

Work function change observed with He atom scattering; delocalization of work function modification

Saida, Morihiko¹; Yamada, Yoichi¹; Ueta, Hirokazu¹; Yamamoto, Shigehiko²; Sasaki, Masahiro¹

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SSP2-257

Energy and time resolved microscopy with PEEM: Recent developments and state of the art

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SSP2-258

Directional Elastic Peak Electron Spectroscopy (DEPES) in the investigation of order– disorder transition in the surface layer of Cu₃Au(001) crystal.

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University of Wroclaw, Institute of Experimental Physics, Wroclaw, Poland

SS - Oxide Surfaces

SSP2-259

Electronic characterization of the one dimensional TiO₂(110)-1x2 surface reconstruction

Sánchez-Sánchez, C.¹; Abad, J.²; Vilmercati, P.³; Goldoni, A.³; Despont, L.⁴; Garnier, M. G.⁴; Aebi, P.⁴; Méndez, J.⁵; Blanco, M.⁵; de Andrés, P. L.⁵; López, M. F.⁵; Martin-Gago, J. A.⁵

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SSP2-260

Combined LEED/XPS study of FeO ultra-thin films on Ag(100) and Ag(111) surfaces

Paniago, Roberto¹; Abreu, G. J. P.¹; Lopes, E. L.¹; Soares, E. A.¹; de Carvalho, V. E.¹; Pfannes, H.-D.¹; Cruz, D. S.²; de Castilho, C. M.²

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SSP2-261

Oxygen interaction with Pd(110): experiment and theory

Kralj, Marko¹; Pertram, Tobias¹; Becker, Conrad¹; Seriani, Nicola²; Kresse, Georg²; Wandelt, Klaus¹

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SSP2-262

Effects of the tip and surface electronic structure in STM images of the Cu(014)-O surface measured with W and MnNi probes

Chaika, A.N.¹; Semenov, V.N.¹; Nazin, S.S.¹; Bozhko, S.I.¹; Murphy, S.²; Radican, K.²; Shvets, I.V.²

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SSP2-263

Quantitative coverage and thermal stability of OH groups on ultra-thin aluminum oxide on NiAl(110) after hydroxylation with aluminum

Wilde, Markus¹; Fukutani, Katsuyuki¹; Naschitzki, Matthias²; Freund, Hans-Joachim²

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SSP2-264

Self-size-selected growth of alumina on i-AIPdMn

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ETH Zurich, Solid state physics, Zurich, Switzerland

SSP2-265

La_{0.7}Ce_{0.3}MnO₃ thin films surface studied by photoelectron spectroscopy

Mickevicius, Sigita¹; Bondarenka, Vladimira¹; Grebinskij, Sergej¹; Senulis, Mindaugas¹; Tvardauskas, Henrikas¹; Vengalis, Bonifacijus¹; Oginskis, Antanas¹; Orłowski, Bronisław²; Osinnij, Wiktor²; Pietrzyk, Mieczysław²; Drube, Wolfgang³

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SSP2-266

Study of highly-oxidized Cu(110) surface using non-contact atomic force microscopy

Kishimoto, Shohei; Kageshima, Masami; Naitoh, Yoshitaka; Sugawara, Yasuhiro
Osaka University, Department of Applied Physics, Suita, Osaka, Japan

SSP2-267

Adsorption of NO on oxygen-modified Mo(112) surface studied by AES, LEED and ESDIAD

Irokawa, Katsumi; Frugoori, Shigeaki; Miki, Hirofumi
Tokyo University of Science, Department of Physics, Noda, Chiba, Japan

SSP2-268

Surface investigations of selected materials by low-energy ion scattering technique

Goc -Jaglo, Danuta; Sitko, Dorota; N.-T.H.Kim-Ngan, ; Soszka, Waldemar
Pedagogical University, Institute of Physics, Krakow, Poland

SSP2-269

Influence of the oxidation process on the molecular surface adsorption in maghemite nanoparticles

Alcântara, Gustavo¹; Viali, Wesley²; Sartoratto, Patricia²; Soler, Maria Aparecida¹; da Silva, Sebastião¹; Garg, Vijayendra¹; Oliveira, Aderbal¹; Morais, Paulo¹
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SSP2-270

The surface oxidation of austenitic stainless steel studied by photoelectron spectroscopy employing synchrotron radiation

Jussila, Petri¹; Hirsimäki, Mika¹; Lahtonen, Kimmo¹; Lampimäki, Markus¹; Nommiste, Ergo²; Valden, Mika¹
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SSP2-271

Mechanism of dry oxidation on Si(100) at the very initial stage

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SSP2-272

Preparation, stability and activity of CeO_x-based model catalysts

Weststrate, Kees-Jan; Resta, Andrea; Andersen, Jesper N.; Westerström, Rasmus; Mikkelsen, Anders; Lundgren, Edvin
Lund University, Physics/ Synchrotron radiation research, Lund, Sweden

SSP2-272B

Oxide ultra-thin films on metals: structural, electronic and adsorption properties from DFT calculations

Livia, Giordano; Umberto, Martinez; Fabrizio, Cinquini; Gianfranco, Pacchioni
Università di Milano-Bicocca, Dipartimento di Scienza dei Materiali, Milano, Italy

SSP2-272C

Adsorption on graphite in density functional theory with dispersion interactions

Borck, Oyvind; Schröder, Elsebeth; Chakarova-Käck, Svetla D.; Kleis, Jesper; Cooper, Valentino R.; Hyltdgaard, Per; Langreth, David C.; Lundqvist, Bengt I.
Chalmers University of Technology, Department of Applied Physics, Göteborg, Sweden

On the stabilization of composite coatings: A density functional theory based study*Cecilia Århammar¹; Araujo, C. Moyses²; Ahuja, Rajeev³*¹The Royal Institute of Technology (KTH), Department of Materials Science and Engineering, Stockholm, Sweden; ²Uppsala University, Department of Physics, Uppsala, Sweden; ³Uppsala Universitet, Physics Department, Uppsala, Sweden**TF/SE: Fundamentals of Thin Film Growth (Nucleation and Growth, Experimental and Modeling)**

TFSEP2-273

Topotaxial growth of Ti₂AlN by solid state reaction in AlN/Ti(0001) multilayer thin films*Höglund, C.¹; Beckers, M.¹; Birch, J.¹; v. Borany, J.²; Hultman, L.¹*¹Linköping University, IFM, Linköping, Sweden; ²Forschungszentrum Dresden-Rossendorf, Dresden, Germany

TFSEP2-274

Characterization of nanoporous alumina films using small-angle x-ray scattering*Yakovleva, Natalia¹; Denisov, Artem²; Yakovlev, Alexandr³*¹Karelian State Pedagogical University, Theoretical Physics Dept, Petrozavodsk, Russian Federation; ²Karelian State Pedagogical University, Research Lab: Physics of Nanomaterials, Petrozavodsk, Russian Federation; ³Petrozavodsk State University, General Physics Dept, Petrozavodsk, Russian Federation

TFSEP2-275

Fullerene-like phospho-carbide compounds*Furlan, Andrej; Gueorguiev, Gueorgui Kostov; Högberg, Hans; Stafström, Sven; Hultman, Lars**Linköping University, Department of Physics, Chemistry and Biology - IFM, Linköping, Sweden*

TFSEP2-276

Ab initio studies of adsorption and diffusion processes on -Al₂O₃ (0001) surfaces*Wallin, Erik; Andersson, Jon M.; Münger, Peter; Chirita, Valeriu; Helmersson, Ulf**Linköping University, Department of Physics, Chemistry and Biology (IFM), Linköping, Sverige*

TFSEP2-277

Kinetic roughening inherent in physical vapor deposited films*Vasco, Enrique¹; Polop, Celia²; Sacedon, Jose Luis¹*¹Instituto de Ciencia de Materiales de Madrid, Consejo Superior de Investigaciones Científicas, Madrid, Spain; ²Universidad Autónoma de Madrid, Física de la Materia Condensada, Madrid, Spain

TFSEP2-278

Phenomenological model for quantum size effect on epitaxial growth of nanometer-thick thin films*Ristolainen, Heikki; Koponen, Ismo T.**University of Helsinki, Department of Physics, Helsinki, Finland*

TFSEP2-279

Influence of C-type defects on nucleation and growth of one-dimensional In rows on Si(100) surface*Javorsky, J.¹; Setvin, M.¹; Pudl, J.¹; Kocan, P.¹; Sobotik, P.¹; Ostadal, I.¹; Kotrla, M.²*¹Charles University, Department of Surface and Plasma Science, Praha, Czech Republic; ²Institute of Physics of the ASCR, Praha, Czech Republic

TFSEP2-280

Germanium growth on the H/Si(113) surface*Yoshimura, Masamichi; Mamiya, Kohei; Ueda, Kazuyuki**Toyota Technological Institute, Nagoya, Japan*

TFSEP2-281

Abstract withdrawn

TFSEP2-282

Influence of the heating rate upon the growth of carbon nanotubes by SiC surface decomposition method*Yamauchi, Takashi¹; Ueda, Taishi¹; Naitoh, Masamichi¹; Nishigaki, Satoshi¹; Kusunoki, Michiko²*¹Kyushu Institute of Technology, Electrical, Electronic and Computer Engineering, Fukuoka, Japan; ²Japan Fine Ceramics Center, Nagoya, Japan

TFSEP2-283

Oriental dependence of heteroepitaxial growth of Ni films on Pd

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TFSEP2-284

First nucleation steps during deposition of SiO₂ thin films by plasma enhanced chemical vacuum deposition

Dudeck, Damian¹; Yanguas, Angel²; Yubero, Francisco²; Cotrino, Jose²; Espinos, Juan Pedro²; Gonzalez-Eljpe, Agustin R.²

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TFSEP2-285

Development of texture and morphology in Cu-Ag thin nanocomposite films on Si

Misják, Fanni; Horváth, E. Zsolt; Barna, B. Péter; Radnóczy, György

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TFSEP2-286

Initial growth of Se_{100-x}Te_x alloy thin films deposited on Au(111) surfaces

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TFSEP2-287

Thermally induced phase transformations in nanoporous alumina films

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TFSEP2-288

Effective film thickness influence on self-organization of Ge islands on Si(100) substrates

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TFSEP2-289

GISAXS study of Ge-refractory metals (Nb,Mo,Ta,W) thin films

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TFSEP2-290

In-situ electrical resistance monitoring of Mg thin films during growth and evaporation from MgO substrates

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TFSEP2-291

In-situ electrical characterization of ultra thin Pt films grown by dc magnetron sputtering on SiO₂

Agustsson, J. S.¹; Ingason, A. S.²; Gylfason, K. B.³; Johnsen, K.¹; Gudmundsson, J. T.⁴; Olafsson, S.²

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TFSEP2-292

Effect of deposition time on surface roughness evolution of electrodeposited thin films

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TFSEP2-293

Surface roughness of Al nanolayer thin film with respect to various deposition rate and substrate temperature

Zendehnam, Akbar; Mashayekhi, Mahnaz; Mirzaei, Mahmood

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TFSEP2-294

Comparison of surface roughness and correlation length of Al and Cu thin film with respect to sputtering deposition rate

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TFSEP2-295

Thin films of immiscible Ag-W system

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TFSEP2-296

Fundamental atomic-scale processes in Si film growth by plasma-enhanced chemical-vapor deposition from ab initio and classical molecular dynamics simulations

Cereda, Silvia¹; Zipoli, Federico¹; Ceriotti, Michele¹; Rondanini, Maurizio²; Cavallotti, Carlo²; Bernasconi, Marco¹; Miglio, Leo¹; Montalenti, Francesco¹

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TFSEP2-297

Temperature behavior of the growth mechanism during layer epitaxial growth

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TFSEP2-298

Substrate and orientation thin films of solid solution Cu-Pd

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TFSEP2-299

X-ray study of Ge nanocrystals formation in Ge:SiO₂/SiO₂ multilayers

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VST - Outgassing and Adsorption/Desorption Phenomena

VSTP2-300

A study of co-solvent cleaning processes for stainless steel for ultra-high vacuum

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VSTP2-301

Study of ozone water cleaning for aluminum alloy chambers

Chan, Che-Kai¹; Hsiung, Gao-Yu¹; Yang, Jia-Ying¹; Cheng, Chia-Mu¹; Chen, Rouge¹; Chang, Chin-Chun¹; Chen, Ching-Lung¹; Hsueh, Hsin-Pai¹; Hsu, Shen-Nung¹; Liu, Ivan²; Chen, June-Rong³

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VSTP2-302

Effect of chemical polishing in titanium materials for low outgassing

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VSTP2-303

Reduction of hydrogen content in pure Ti

Ogiwara, Norio¹; Sugauma, Kazuaki¹; Hikichi, Yusuke¹; Sukenobu, Satoru²

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VSTP2-304

Low temperature and low pressure molecular hydrogen adsorption on MWCTs

Barone, Pasquale; Barberio, Marianna; Vasta, Roberta; Bonanno, Assunta; Papagno, Luigi; Xu, Fang
Università della Calabria-INFN, Physics, Arcavacata di Rende Cosenza, Italy

VSTP2-305

Pumping of H₂ and He by carbon fiber cryosorber at temperatures in the range from 10K to 20K

Anashin, Vadim; Dostovalov, Rodion; Krasnov, Alexandre
Budker Institute of Nuclear Physics, Vacuum Lab., Novosibirsk, Russian Federation

VSTP2-306

In situ analysis of adsorption process from residual gases during thin film deposition

Giedraitis, Audrius¹; Tamulevicius, Sigita¹; Slapikas, Kestutis²; Gudaitis, Rimantas²; Juraitis, Algimantas²
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VSTP2-307

Hydrogen gas-driven permeation through the membrane with asymmetric surface conditions

Pisarev, Alexander
Moscow Engineering and Physics Institute, Moscow, Russian Federation

VSTP2-308

Measurement of gas interaction with nanocrystalline metals at low pressures

Ulman, Radek; Reppa, Petr
Charles University, Praha, Czech Republic

VSTP2-309

Measurement of air diffusion through a Viton gasket

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VST - Vacuum Measurement and Calibration

VSTP2-310

Reducing reference leak rate of permeation leaks

Chen, Xu; Yang, Fan; Cha, Liangzhen
Tsinghua University, Department of Electronic Engineering, Beijing, China

VSTP2-311

The long term stability of the ultra sensitive MSLD system

CHEN, Xu; HAN, Yan; CHA, Liangzhen
Tsinghua University, Department of Electronic Engineering, Beijing, China

VSTP2-312

Counter flow gauge

Urano, Toshio¹; Ikeda, Tomohiro¹; Kanaji, Toru¹; Tanaka, Makoto²
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VSTP2-313

Pirani vacuum gauge for J-PARC 3GeV synchrotron vacuum system

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VSTP2-314

Capacitance Diaphragm Gauges using MEMS

Miyashita, Haruzo¹; Ide, Yosuke¹; Iizuka, Kyuma¹; Sugiyama, Masayuki¹; Lechemia, Eric²
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VSTP2-315

Modelling of temperature influence on Spinning Rotor Gauge offset correction - a multiple neural network approach

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VSTP2-316

The stability of the vacuum standards at MIKES

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Centre for Metrology and Accreditation (MIKES), Espoo, Finland

VSTP2-317

The basic performance and the stability of the small quadrupole mass spectrometer for total and partial pressure measurements over 0.01Pa

Mastumoto, Yoshikazu; Takahashi, Naoki; Yamamuro, Kazuhiro; Mizutani, Naoki; Yuyama, Junpei

ULVAC, Inc., Kanagawa, Japan

VSTP2-318

Laser interferometric oil manometer as the primary standard for absolute pressure in the range 1 - 1000 Pa

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VSTP2-319

An additional uncertainty of the throughput generated by the constant pressure gas flowmeter

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VSTP2-320

Constant pressure gas flowmeter using diaphragm bellows in construction of the volume displacer

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VSTP2-321

Design and fabrication of a two-stage flow dividing system for vacuum gauge calibration

Yoshida, Hajime; Arai, Kenta; Akimichi, Hitoshi; Hirata, Masahiro

AIST / NMIJ, Pressure and Vacuum Standard Laboratory, Tsukuba, Ibaraki, Japan

VSTP2-322

Development of UHV/XHV calibration apparatus

Li, Detian; Li, Zhenghai; Guo, Meiru; Cheng, Yongjun; Zhang, Dixin; Feng, Yan

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VSTP2-323

Present research activities at vacuum center of the KRISS in Korea

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VSTP2-323B

High vacuum rheology actuators for the multicoordinate positioning

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