

Scientific programme

8th international conference Solid state surfaces and interfaces
25-28 November 2013, Smolenice Castle, Slovakia

Sunday, 24 November 2013			
Registration of participants (in the castle Smolenice): 13:00 – 23:00			
Monday, 25 November 2013			
7:30 – 11:00	Registration of participants (it will continue during whole day in the SSSI Registration office)		
8:30	Departure of conference buses from Central Railway Station Bratislava		
10:30 – 10:50	Official opening of the event by representatives of organizing institutions		
Moderator:	Dr. Heike Angermann		
10:50 – 11:30	IL Hikaru Kobayashi	Chemical methods to improve conversion efficiencies of crystalline Si solar cells	Institute of Scientific and Industrial Research, Osaka University and CREST, Japan
11:30 – 12:10	IL Thomas Chassé	Ultrathin molecular films on metals – Interactions and charge transfer at metal phthalocyanine / metal interfaces	Universität Tübingen, Institut für Physikalische und Theoretische Chemie, Tübingen, Germany
12:10 – 13:30	Lunch		
Moderator:	Prof. Taketoshi Matsumoto		
13:30 – 14:10	IL Jacek Szuber	Surface properties of the 1D and 2D SnO ₂ nanostructures	Silesian University of Technology, Institute of Electronics, Gliwice, Poland
14:10 – 14:50	IL Jie Li	Growth and physical properties of [110] La ₂ /3Ca ₁ /3MnO ₃ /YBa ₂ Cu ₃ O _{7-δ} heterostructures	Institute of Physics, The Chinese Academy of Sciences Beijing National Laboratory for Condensed Matter Physics, Beijing, China
14:50 – 15:10	Coffee Break		
15:10 – 15:50	IL Ratiba Outemzabet	Interplay between oxidised and hydrogenated HF/Silicon interface under anodic polarisation	Faculty of Physics USTHB, B.P 32 El-Alia Bab-Ezzouar Algiers Algeria
15:50 – 16:30	IL Aarne Kasikov	Ellipsometric characterization of the growth of ALD TiO ₂ films	Institute of Physics, University of Tartu, Tartu, Estonia
16:30 – 16:55	Martin Drabik	Properties and aging of C:H:O plasma polymer films deposited from acetone vapors	Empa, St. Gallen Switzerland
16:55 – 17:15	Violeta Simic-Milosevic	New milestones in scanning probe microscopy	SPECS Surface Nano Analysis GmbH, Berlin, Germany
17:15 – 19:15	Poster Session I (Nos. 1 – 30) with refreshment		
19:30 – 22:30	Welcome party with live folk music (music group Červeník)		

Tuesday, 26 November 2013			
7:30 – 8:30	Breakfast		
Moderator:	Prof. Alexander Šatka		
8:30 – 9:10	IL D.R.T. Zahn	Growth and Doping of Ultrathin Semiconducting Molecular Films	Semiconductor Physics Research Group, Chemnitz University Technology, Physics Department / Semiconductor Physics, Chemnitz, Germany
9:10 – 9:50	IL Heike Angermann	Conditioning of Silicon substrates by wet-chemical etching and oxidation	Helmholtz-Zentrum, Institut für Silizium-Photovoltaik, Berlin, Germany
9:50 – 10:10	Coffee Break		
10:10 – 10:50	IL Zsolt J. Horváth	Simulation - tool for understanding memory behaviour of non-volatile structures	Obuda University, Kando Kalman Faculty of Electrical Engineering, Institute of Microelectronics and Technology, Budapest, Hungary
10:50 – 10:15	Daniel Haško	Atomic force microscopy investigations of amorphous ZnO layers grown by pulsed laser deposition.	International Laser Centre, Bratislava, Slovakia
11:15 – 11:40	Tomasz Giel	The investigation of high temperature tungsten oxide phases and their transitions with LEEM microscopy	Jerzy Haber Institute of Catalysis and Surface Chemistry, Polish Academy of Sciences Kraków, Poland
11:40 – 12:05	Marián Marton	Nanostructuring of diamond thin films by DC and RF plasma etching	Faculty of Electrical Engineering and Information Technology, Slovak University of Technology, Bratislava, Slovakia
12:05 – 12:25	Mamadou Seck	Characterization of the degradation process of Si-PCPDTBT:PC ₇₀ BM(1:2) blend layers deposited on ITO/glass substrate	International Laser Centre, Bratislava, Slovakia
12:25 – 13:30	Lunch		
Moderator:	Prof. Ladislav Harmatha		
13:30 – 13:55	Roman Ďurikovič	Modelling the Spectral BRDF Based on the Spectral Measurements of Metallic Paints	Faculty of Mathematics, Physics and Informatics, Comenius University, Bratislava, Slovakia
13:55 – 14:20	Anatoli Evtukh	Enhanced Field Emission Current due to Reconstruction of the Nanosize Carbon Cathodes	V. Lashkaryov Institute of Semiconductor Physics, Kiev, Ukraine
14:20 – 14:45	Stanislav Jurečka	Investigation of tunneling current in MOS devices with ultrathin gate oxide	Institute of Aurel Stodola, FEE University of Žilina, Liptovský Mikuláš, Slovak Republic
14:45 – 15:10	Jaroslav Kováč	Study of ZnO nanoclusters grown by a hydrothermal process on GaP/ZnO nanowires	Institute of Electronics and Photonics, Slovak University of Technology, Bratislava, Slovakia
15:10 – 15:35	Emil Pincik	About optical properties of black silicon	Institute of Physics SAS, Bratislava, Slovakia
15:35 – 15:55	Coffee break		
15:55 – 16:20	Vladimir Litovchenko	Enhanced Field Emission Current due to Reconstruction of the Nanosize Carbon Cathodes	V. Lashkaryov Institute of Semiconductor Physics, Kiev, Ukraine
16:20 - 16:45	Bohuslav Rezek	Microscopic morphology of epithelial cells on functionalized diamond and glass	Institute of Physics ASCR, Prague, Czech Republic
16:45 – 17:10	Jiří Vondrák	Capacity of carbon electrode in aprotic anhydrous solvents	Department of Electrotechnology FEEC VUT Brno, Czech Republic
17:10 – 17:30	Martin Schaefer	Company presentation	Schaefer Technologie GmbH; Langen, Deutschland and Kvant s.r.o., Bratislava, Slovakia
17:30 – 19:30	Poster session II (Nos. 31 – 60) with refreshment		
19:30 – 21:30	Conference dinner in suitable representative spaces of the castle		
15:30 – 23:30	Visit of Opera in Slovak National Theatre, Bratislava: opera of Giuseppe Verdi		

Wednesday, 27 November 2013			
7:30 – 8:30	Breakfast		
Moderator:	Prof. Thomas Chassé		
8:30 – 9:10	IL Yossi Paltiel	Surface proximity effects in hybrid superconductor/organiclinker/nanoparticle systems	School of Engineering and Computer Science, Faculty of Science, The Hebrew University, Jerusalem, Israel
9:10 – 9:50	IL Grzegorz Jung	Universal crackling charge dynamics on semiconducting surfaces covered with 2D molecular layers.	Ben Gurion University of the Negev, Beer Sheva, Israel
9:50 – 10:10	Coffee break		
10:10 – 10:50	IL Andrej Pleceník	Gas sensors based on TiO ₂ thin films	FMPI Comenius University, Bratislava, Slovakia
10:50 – 11:30	IL Ikuta Hiroshi	Study of Thin Film Growth of Iron Based Superconductors and Their Characterization	Department of Crystalline Materials Science, Nagoya University, Nagoya, Japan
11:30 – 11:55	Jozef Novák	Columnar microstructure of the ZnO shell nanowire layer	Institute of Electrical Engineering, Slovak Academy of Sciences, Bratislava, Slovak Republic
11:55 – 12:20	Alexander Kromka	Diamond Growth on Germanium as Chemically and Temperature Sensitive Substrate	Institute of Physics of the ASCR, v.v.i., Praha, Czech Republic
12:20 – 13:30	Lunch		
Moderator:	Prof. Dietrich R. T. Zahn		
13:30 – 14:10	IL Miikhail Belogolovskii	Testing the universality aspects of charge transport across ultra-thin disordered insulating layers	Donetsk Institute for Physics and Engineering, Donetsk, Ukraine
14:10 – 14:50	IL Maeda Atsutaka	Synthesis of high-quality epitaxial thin films of Fe-chalcogenides superconductor and its physical properties	Department of Basics Sciences, University of Tokyo, Komaba, Tokyo, Japan
14:50 – 15:10	Coffee break		
15:10 – 15:50	IL Iida Kazumasa	Generic Fe-buffer layers for epitaxial Fe-based superconducting thin films	IFW Dresden, Germany
15:50 – 16:30	IL Daghero Dario	Advanced surface characterization of Co-doped Ba-122 thin films and fundamental study of their properties by point contact and transport measurements	Dipartimento di Scienza Applicata e Tecnologia (DISAT) Politecnico di Torino, Italy
16:30 – 16:55	Marián Trgala	Superconducting MoC thin films for coplanar waveguide resonators	Department of Experimental Physics, FMPI, Comenius University, Bratislava, Slovakia
16:55 – 17:20	Michał Ślęzak	Prospects of X-ray Photoemission Electron Microscopy at the first beamline of Polish synchrotron SOLARIS	1. Swiss Light Source, Paul Scherrer Institut, Switzerland 2. Faculty of Physics and Applied Computer Science, AGH, Kraków, Poland
17:20 – 19:20	Poster session III (Nos. 61 – 90), with refreshment		
19:30 – 21:30	Informal working meeting with dinner in spaces of the castle – e.g. in Jaeger Saloon		

Thursday, 28 November 2013			
7:30 – 8:30	Breakfast		
Moderator:	Prof. Jacek Szuber		
8:30 – 9:10	IL Taketoshi Matsumoto	Nitric acid oxidation of Si (NAOS) method for application to thin film transistors (TFT), eternal memory “digital Rosetta Stone”, and Si solar cells	Institute of Scientific and Industrial Research, Osaka University, Osaka, Mihogaoka, Ibaraki, Japan
9:10 – 9:50	IL Pavel Tomanek	Microstructure defect types in silicon solar cells	1) Brno University of Technology, FEEC, Czech Republic 2) South Dakota School of Mines and Technology, Rapid City, SD, USA
9:50 – 10:10	Coffee Break		
10:10 – 10:50	IL Štefan Chromik	LSMO thin films with high metal- insulator transition temperature on buffered SOI substrates for uncooled microbolometers	Institute of Electrical Engineering, Slovak Academy of Sciences, Bratislava, Slovakia
10:50 – 11:30	IL Peter Švec	Phase and orientation mapping of fine-grained structures by precession electron diffraction	Institute of Physics SAS, Bratislava, Slovakia
11:30 – 11:55	Tomáš Pleceník	Surface transport properties and degradation of Fe-based superconductors	Department of Experimental Physics, Faculty of Mathematics, Physics and Informatics, Comenius University, Bratislava Slovakia
11:55 – 12:20	Necmettin Kilinc	Electrical and structural characteristics of TiO ₂ nanotube - MPC heterojunctions	Gebze Institute of Technology, Science Faculty, Department of Physics, Gebze-Kocaeli, Turkey
12:20 – 12:30	Conclusion		
12:30 – 14:00	Lunch		
14:00	Conference bus departure to Bratislava (Central bus station and Central railway station)		
16:00 – 19:00	Excursion to Labs of Faculty of Mathematics, Physics, and Informatics of Comenius University in Bratislava		