



10th International conference Solid State Surfaces and Interfaces

**Preliminary Program of the SSSI
2018**

Smolenice Castle

Monday, 19 November 2018			
8:00 – 10:30	Registration of participants (it will continue during whole day in the SSSI Registration office)		
10:30 – 10:50	Opening		
Moderator:	Dr. Heike Angermann		
10:50 – 11:30	Prof. Thomas Chassé	Low Band Gap (LBG) Polymers for Electronics and Optoelectronics - Films, Interfaces, Degradation	Universität Tübingen, Germany
11:30 – 12:10	Assoc. Prof. Dario Daghero	Study of the energy gap in the noncentrosymmetric superconductor Mo ₃ Al ₂ C by point-contact Andreev-reflection spectroscopy	Politecnico di Torino , Italy
12:10 – 12:30	Mr. Takashi Kajimoto	Electronic structure of pentacene-metal interface studied by UPS, MAES, and first-principles calculation	The University of Tokyo , Japan
12:30– 13:30	Lunch		
13:30 – 13:55	Prof. Shigeru Masuda	Selective observation of π -derived states of picene crystalline film on Cu(111): A combined study by UPS, MAES, and first-principles calculation	The University of Tokyo , Japan
13:55 – 14:35	Prof. Jacek Szuber	Role Of Surface Properties Of Low-Dimensional Conductive Oxides Nanostructures For Their Potential Gas Sensors Application	Silesian University of Technology, Institute of Electronics, Gliwice, Poland
14:35 - 15:15	Assist. Prof. Kentaro Imamura	Toward 22% efficiency nanocrystalline Si layer/crystalline Si solar cells with graded band-gap structure	Osaka University, Japan
15:15 – 15:35	Coffee Break		
Moderator:	Prof. Harri Lipsanen		
15:35 – 16:15	Assoc. Prof. Jozef Novák	Electrical and photovoltaic characteristics of MoS ₂ /GaP p-n junctions	Institute of Electrical Engineering SAS, Bratislava, Slovakia
16:15 – 16:55	Prof. Wu Lu	Perovskite Oxide semiconductor Heterojunctions for Field Effect Transistor Applications	Department of Electrical and Computer Engineering, Ohio State University, USA
16:55 - 17:35	Dr. Takafumi Hatano	Recent developments in the study of iron-based superconductor NdFeAs(O,F) thin films	Department of Materials Physics, Nagoya University, Japan
17:35 – 17:55	Dr. Victor Kislyuk	NMR study of Au/Al bimetallic nanosystems in solution	G.V.Kurdyumov Institute of Metal Physics, National Academy of Sciences of Ukraine, Ukraine
18:30 – 21:30	Welcome party		

Tuesday, 20 November 2018			
7:30 – 9:00	Breakfast		
Moderator:	Prof. Thomas Chassé		
9:00 – 9:40	Prof. Dietrich R.T. Zahn	Spectroscopy on Novel Cd-free Semiconductor Quantum Dots	Chemnitz University of Technology, Germany
9:40 – 10:20	Prof. Harri Lipsanen	Semiconductor nanowires for photonics	Aalto University, Finland
10:20 – 10:40	Coffee break		
10:40 – 11:20	Prof. Grzegorz Jung	Meyer-Neldel rule in the conductivity of low doped manganite systems	Ben Gurion University of the Negev, Beer-Sheva, Israel
11:20 – 12:00	Dr. Dušan Korytár	Surface quality, subsurface damage and mechanisms of material removal in nanomachining of brittle materials	Institute of Electrical Engineering SAS, Bratislava, Slovakia
12:00 – 12:40	Dr. Matej Jergel	Surface Finishing of X-ray Crystal Optics After Nanomachining	Institute of Physics SAS, Bratislava, Slovakia
12:40 – 13:40	Lunch		
Moderator:	Prof. Dietrich R.T. Zahn		
13:40 – 14:20	Dr. Nadia Saoula	Deposition of ZrO ₂ thin films by magnetron sputtering : Effect of plasma parameters	Centre de Developpement des Technologies Avancees, Alger, Algeria
14:20 – 15:00	Dr. Aarne Kasikov	Dispersion of ALD Cr ₂ O ₃ films in UV-VIS Region	Institute of Physics, University of Tartu , Estonia
15:00 – 15:40	Dr. Daniel Franta	Temperature dependent dispersion models applicable in solid state physics	Faculty of Science, Masaryk University, Brno, Czech Republic
15:40 – 16:00	Dr. Peter Stano	Theory and modeling of gated quantum dot qubits in GaAs: orbital and spin effects of the magnetic field	RIKEN, Center for Emergent Matter Science, Japan
16:00 – 16:20	Dr. Martin Hulman	Horizontally and vertically aligned thin MoS ₂ films: a GIWAXS and Raman study	Institute of Electrical Engineering SAS, Slovakia
16:20 – 16:40	Coffee break		
16:40 – 23:30	Visit of Opera in Slovak National Theatre, Bratislava: opera of Giuseppe Verdi: La Traviatta		
16:40 – 17:20	Dr. Joanna Bauer	Functional hybrid nanostructures in chemoresistance cancer therapy	Wroclaw University of Science and Technology, Poland
17:20 – 18:00	Prof. Ratiba Outemzabet		Université des Sciences et de la Technologie Houari Boumedienne Faculté de Physique, Alger, Algeria
18:00 – 18:40	Assoc. Prof. Giovanni Piero Pepe		Universita di Napoli 'Federico II', Napoli, Italy
18:40 – 21:00	Dinner		

Wednesday, 21 November 2018			
7:30 – 9:00	Breakfast		
Moderator:	Prof. Shigeru Masuda		
9:00 – 9:25	Prof. Katsuhiko Akimoto	Structural and Optical Properties of Rare Earth Doped GaN Grown by Molecular Beam Epitaxy	University of Tsukuba, Japan
9:25 – 10:05	Prof. Ivan Ohlídal	Optical properties of non-stoichiometric silicon nitride films	Department of Physical Electronics, Masaryk University, Czech Republic
10:05– 10:45	Prof. Ľubica Stuchlíková	Deep Level Transient Spectroscopy Study of Emission and Capture Processes in Nanostructured Porous Silicon	Institute of Electronics and Photonics, Slovak University of Technology in Bratislava, Slovakia
10:45– 11:05	Coffee Break		
11:05 – 11:45	Prof. Jarmila Müllerová	Optical properties of alkaline earth titanates: structural and compositional modifications	Institute of Aurel Stodola, Faculty of Electrical Engineering, University of Zilina, Slovakia
11:45 – 12:25	Assoc. Prof. Ján Minár	KKR-Green's function method—recent developments and applications to ARPES	University of West Bohemia, New Technologies - Research Centre, Plzeň, Czech Republic
12:25 – 12:50	Dr. Štefan Chromik	The influence of substrate and aging on properties of YBCO strips exposed to electron irradiation	Institute of Electrical Engineering SAS, Bratislava, Slovakia
12:50– 13:50	Lunch		
Moderator:	Prof. Dario Daghero		
13:50 – 14:30	Dr. Peter Šiffalovič	Real-Time Monitoring of thin film growth by means of X-ray scattering	Institute of Physics, Slovak Academy of Sciences, Bratislava, Slovakia
14:30 – 15:10	Dr. Marin Tadic	Iron oxide nanoparticles: synthesis, surface effects and magnetic properties	Institute of Nuclear Sciences, University of Belgrade, Serbia
15:10 – 15:50	Assoc. Prof. Martin Kopani	Effect of etching time on n-type black silicon	Faculty of Medicine, Comenius University, Bratislava, Slovakia
15:50 - 16:10	Dr. Emil Pinčík	About Optical Properties Of Catalytic Black Silicon And Porous Silicon Formed By The Standard Electrochemical Process	Institute of Physics SAS, Bratislava, Slovakia
16:10 – 16:30	Dr. Samira Sali	Synthesis and Characterization of TCOS (ZnO:Al and Nb: TiO ₂) thin film Deposited by Ultrasonic Spray Pulverization for Solar Cell Applications	DDCS Division, Centre de Recherche en Technologie des Semi-conducteurs pour l'Energétique (CRTSE), Algeria
16:30– 16:50	Coffee break		
16:50 – 19:00	Poster session with the refreshment		
18:30 – 21:00	Dinner		

Thursday, 22 November 2018			
7:30 – 9:00	Breakfast		
Moderator:	Prof. Andrej Pleceník		
9:00 – 9:40	Dr. Yuki Kobayashi	High amount of hydrogen generation by the reaction of Si composition with water in the body to prevent oxidative stress-induced diseases	Institute of Scientific and Industrial Research, Osaka University, Japan
9:40 – 10:20	Dr. Ján Ivančo	Solid-state sensors for detection of trace concentrations of acetone vapor	Institute of Physics SAS, Bratislava, Slovakia
10:20 – 10:40	Coffee Break		
10:40 – 11:20	Assoc. Prof. Stanislav Jurečka	Black silicon - correlation between microstructure and optical properties	Institute of Aurel Stodola, Faculty of Electrical Engineering, University of Zilina, Slovakia
11:20 – 12:00	Assoc. Prof. Tofail Syed	Piezoelectricity in Unpoled, Sr-doped hydroxyapatite	University of Limerick, Ireland
12:00 – 12:15	Conclusion – results of competition of works of young researchers		
12:15 – 13:00	Lunch		
13:00 – 18:00	Trip		