

**Progress in Applied Surface, Interface and Thin Film Science
Solar Renewable Energy News
(SURFINT – SREN V)
November 20 – 23, 2017, Florence, Italy**

**Scientific Programme of the SURFINT-SREN V
Florence, Italy
Auditorium al Duomo, 20 - 23 November 2017**



Monday, 20 November 2017			
7:00 – 9:00	Registration of participants in the Auditorium al Duomo (hotel Laurus)		
Chairman:	Prof. Kazuyuki Edamoto , <i>Department of Chemistry, College of Science, Rikkyo University, Tokyo, Japan</i>		
9:00 – 9:15	Dr. Simone Giometti	OPENING	Secretary General of Fondazione Romualdo Del Bianco, Florence, Italy
9:15 – 9:55	IL1 Hikaru Kobayashi	Surface characteristics of Si nanopowder and its application	Institute of Scientific and Industrial Research and CREST, Osaka University, Japan
9:55 – 10:35	IL2 Harri Lipsanen	Wafer-scale transfer of CVD graphene for flexible electronics	Aalto University, Department of Micro- and Nanosciences, Micronova, Finland
10:35 – 10:50	Coffee and tea break		
Chairman:	Prof. Hikaru Kobayashi, <i>Institute of Scientific and Industrial Research and CREST, Osaka University, Japan</i>		
10:50 – 11:30	IL3 Katsuhiko Akimoto	Upconversion in NaYF ₄ :Er Nanocrystals by Off-Resonant Excitation	University of Tsukuba, Japan
11:30 – 11:55	1 Joong Kee Lee	Enhanced interfacial characteristics of porous silicon modified with thermolytic grafting method	Korea University of Science and Technology, Republic of Korea
11:55 – 12:20	2 José Carlos Piñero	Direct bandgap measurement of thin Al ₂ O ₃ layers in diamond-MOS interfaces	Universidad de Cádiz, Spain
12:20– 13:40	Lunch		
Chairman:	Prof. Harri Lipsanen, <i>Aalto University, Department of Micro- and Nanosciences, Micronova, Finland</i>		
13:40 – 14:20	IL4 Kazuyuki Edamoto	Surface electronic structures of transition metal phosphides: Soft X-ray photoelectron spectroscopy and X-ray absorption spectroscopy studies	Department of Chemistry, College of Science, Rikkyo University, Tokyo, Japan
14:20 – 15:00	IL5 Nour-eddine Gabouze	Porous silicon membranes for lithium- ion batteries	Unite De Development Technologie Silicium, Algeria
15:00 – 15:25	3 Michal Švantner	Active thermography methods for near-surface layers inspection	University of West Bohemia, Czech Republic
15:25 – 15:40	Coffee and tea break		
Chairman:	Prof. Marco Fanciulli, <i>Dipartimento di Scienza dei Materiali, Università degli Studi di Milano Bicocca, Italy</i>		
15:40 – 16:20	IL6 Duncan Allsopp	Surface and electrical characterisation of indium-free transparent conducting oxide ohmic contacts on GaN-based light emitting diodes	Department of Electronics and Electrical Engineering, University of Bath, United Kingdom
16:20 – 17:00	IL7 Salvatore A. Lombardo	Performance Instabilities in Amorphous Si Based Solar Cells	Energy Conversion Device Group, CNR-IMM, Italy
17:00– 17:40	IL8 Edmund Dobročka	Non-conventional scans in high-resolution X-ray diffraction analysis of epitaxial systems	Institute of Electrical Engineering SAS, Bratislava, Slovakia
19:00 – 22:00	Welcome party		

Tuesday, 21 November 2017			
7:00 – 8:30	Breakfast		
Chairman:	Prof. Renato Gonnelli, <i>Department of Applied Science and Technology, Politecnico di Torino, Italy</i>		
8:30 – 9:10	IL9 Dietrich R.T. Zahn	Tip-enhanced Raman Scattering of Semiconducting Nanostructures and 2D Materials	Technische Universität Chemnitz, Chemnitz, Germany
9:10 – 9:50	IL10 Vitaly L. Alperovich	Photoemission from GaAs(Cs,O) with positive and negative electron affinity	Institute of Semiconductor Physics, Novosibirsk, Russia
9:50 – 10:30	IL11 Eubica Stuchlíková	Study of charge capture and emission in perspective semiconductor structures by Deep Level Transient Spectroscopy	Institute of Electronics and Phototonics, Slovak University of Technology, Slovak Republic
10:30 – 10:45	Coffee and tea break		
Chairman:	Prof. Eubica Stuchlíková, <i>Institute of Electronics and Phototonics, Slovak University of Technology, Slovak Republic</i>		
10:45– 11:25	IL12 Bert Stegemann	Advanced laser and wet-chemical processes for contact preparation in high-efficiency and thin-film solar cells	HTW Berlin, University of Applied Sciences, Germany
11:25– 12:05	IL13 Jozef Novak	Nanorods and Nanocones for Advanced Sensor Applications	Institute of Electrical Engineering SAS, Slovak Republic
12:05 – 13:30	Lunch		
Chairman:	Dr. Nour-eddine Gabouze, <i>Unite De Development Technologie Silicium, Algeria</i>		
13:30 – 14:10	IL14 Thomas Chassé	Organic Films for Electronics and Optoelectronics – Reactions, Structures, Interfaces	Institut für Physikalische und Theoretische Chemie, Universität Tübingen, Germany
14:10 – 14:50	IL15 Shigeru Masuda	Local electronic properties at pentacene - metal interface studied by UPS, MAES, and first-principles calculation	The University of Tokyo, Japan
14:50 – 15:15	5 Syed Ansar Md. Tofail	Surface analyses of new chemical phases in rodent pineal gland concretions	1Department of Physics and Bernal Institute, University of Limerick, Ireland
15:15 – 15:30	Coffee and tea break		
Chairman:	Prof. Dietrich R.T. Zahn, <i>Technische Universität Chemnitz, Chemnitz, Germany</i>		
15:30 – 16:10	IL16 Marco Fanciulli	Investigation of the Si/SiO ₂ interface in silicon nanowires and its role in donor deactivation and charge transport	Dipartimento di Scienza dei Materiali, Università degli Studi di Milano Bicocca, Italy
16:10 – 16:50	IL17 Alexander Šatka	Characterization of advanced GaN structures using CL and EBIC methods	Faculty of Electrical Engineering and Information Technology STU in Bratislava, Slovak Republic
17:00 – 19:00	POSTER Session I with refreshment, coffee, tea, etc.		

Wednesday, 22 November 2017			
7:00 – 8:30	Breakfast		
8:00	Trip to Siena, San Gimignano and Greve in Chianti		
Chairman	Dr. Jozef Novák, Institute of Electrical Engineering SAS, Bratislava, Slovakia		
8:30 – 9:10	IL18 Renato Gonnelli	Electronic phases in ion-gated MoS ₂ ultrathin layers: Multi-valley superconductivity and possible charge-density wave	Department of Applied Science and Technology, Politecnico di Torino, Italy
9:10 – 9:50	IL19 Arik Yochelis	Photo-oxidation on Hematite Electrodes: A Tale of Two Sites	Department of Solar Energy and Environmental Physics, Blaustein Institutes for Desert Research (BIDR), Ben-Gurion University of the Negev, Israel
9:50 – 10:30	IL20 Miroslav Mikolašek	Perspective silicon and metal oxide based structures for photo-electrochemical water splitting	Institute of Electronics and Photonics, Slovak University of Technology, Slovak Republic
10:30 – 10:45	Coffee and tea break		
Chairman:	Dr. Salvatore A. Lombardo, Energy Conversion Device Group, CNR-IMM, Italy		
10:45 – 11:25	IL21 Shira Yochelis	Utilizing the Chiral Induced Spin Selective Effect (CISS) to Realize Simple Spintronics Devices	Applied Physics department, Center for Nano Science and Nano Technology, the Hebrew University, Edmond J. Safra Campus Givat Ram, Israel
11:25 – 12:05	IL22 Stanislav Jurecka	Investigation of morphological and optical properties of nanostructured layers formed on Si surface	Zilina University, Slovak Republic
12:05 – 13:30	Lunch		
Chairman:	Prof. Thomas Chassé, Institut für Physikalische und Theoretische Chemie, Universität Tübingen, Germany		
13:30 – 14:10	IL23 Kentaro Imamura	High conversion efficiency black Si solar cells formed by use of surface structure chemical transfer (SSCT) method	The Institute of Scientific and Industrial Research (ISIR) Osaka University, Japan
14:10 – 14:50	IL24 Joanna Bauer	Antimicrobial Photodynamic Therapy as a potential tool for managing a hospital-acquired infections	Wroclaw University of Technology, Poland
14:50 – 15:05	Coffee and tea break		
Chairman:	Prof. Shigeru Masuda, The University of Tokyo, Japan		
15:05 – 15:45	IL25 Jun Xu	Size-dependent Phosphorus doping effect in nanocrystalline-Si-based multilayers	Nanjing University, China
15:45 - 16:25	IL26 Andrea Šagatová	From single GaAs detector to sensor for radiation imaging camera	Slovak University of Technology in Bratislava, Slovak Republic
16:25 – 16:50	6 František Dubecký	Electronic Performance Study of Mg-Based Electrode on Semi-Insulating GaAs	Institute of Electrical Engineering, SAS, Slovak Republic
17:00 – 19:00	POSTER Session II with refreshment, coffee, tea, etc.		

Thursday, 23 November 2017			
7:00 – 8:30	Breakfast		
Chairman	Prof. Alexander Šatka, <i>Institute of Electronics and Photonics, Slovak University of Technology, Bratislava, Slovakia</i>		
8:30 – 9:10	IL27 Dario Daghero	Control of bulk superconductivity by surface charge doping in a BCS superconductor	Department of Applied Science and Technology, Politecnico di Torino, Italy
9:10 – 9:50	IL28 Dagmar Gregušová	III-V-based high electron mobility transistor properties influenced by a capping layer modified heterostructure surface	Institute of Electrical Engineering, SAS, Slovak Republic
Chairman	Prof. Dario Daghero, <i>Department of Applied Science and Technology, Politecnico di Torino, Italy</i>		
9:50 – 10:05	Coffee and tea break		
10:05 – 10:45	IL29 Martin Kopani	Effect of etching time on structure of p-type and n-type porous silicon	Institute of Medical Physics, Biophysics, Informatics and Telemedicine MF CU, Slovak Republic
10:45 – 11:10	IL30 Yuki Kobayashi	Hydrogen generation by reaction of Si nanopowder with neutral water and medical application	Osaka University, Japan
11:10 – 11:35	7 Samir Meziani	Photoluminescence and optical absorption properties of Silicon nanocrystals embedded in silicon nitride matrix	Research Center en Semiconductors Technology for Energetics , Algeria
11:35 – 12:00	Conclusion – results of competition of works of young researchers		
12:00 – 13:00	Lunch		
13:00 – 21:00	Trip to <i>Pisa</i>		