



15th International Conference on Defects Recognition, Imaging and Physics in Semiconductors

September 15-19, 2013, Warsaw, Poland

Sunday, September 15	Monday, September 16			Tuesday, September 17			Wednesday, September 18			Thursday, September 19				
arrival	time	author presentation title	session	time	author presentation title	session	time	author presentation title	Chairman	time	author presentation title	session		
	9:00 - 9:20	Opening ceremony		9:00 - 9:40	Lutz Kirste (Fraunhofer Institute of Applied Solid State Physics) Analysis of the Defect Structure of Freestanding GaN Substrates by X-Ray Diffraction Techniques	NITRIDES - GROWTH AND CHARACTERISATION	Excursion			9:00 - 9:40	Matthew Phillips (University of Technology, Sydney) Radiative Deep Level Defects in Bulk and Nanostructured ZnO			
	9:20 - 10:00	Sébastien Duguay (CNRS France) Atom probe tomography and the analysis of semiconductors and insulators	NEW MEASUREMENT TECHNIQUES		9:40 - 10:00					Maciej Matys (Silesian University of Technology) Characterization of donor-like states at insulator/AlGaIn interface in metal/Al2O3/AlGaIn/GaN structures	9:40 - 10:00	Takashi Sekiguchi (National Institute for Materials Science) Focused Ion Beam Imaging of Defects in Si Materials for Photovoltaic and Semiconductor Use	PHOTOVOLTAICS	
	10:00 - 10:20	Paul Montgomery (Icube) Parallel optical profilometry assisted conception of an opto-electronic illuminator using a VCSEL and diffractive optics			10:00 - 10:20					Łucja Marona (Institute of High Pressure Physics PAS) Cathodoluminescence study on defects in partially strained InGaIn quantum wells grown on semi-polar (20-21) GaN substrate	10:00 - 10:20	Yutaka Yoshida (Shizuoka Institute of Science and Technology) Fe mapping in mc-Si solar cell by Mössbauer spectroscopic microscope		
	10:20 - 10:40	Michael Mannsberger (Thermo Fisher Scientific) XPS Characterization of Organic and Inorganic Semiconductors			10:20 - 10:40					Kunihiko Nakamura (Osaka University) Variation of local residual strain and twist angle in growth direction of AlN films on trench-patterned 6H-SiC substrates	10:20 - 10:40	Mowafak Al-Jassim (NREL) Luminescent, structural and chemical properties of defects in MBE- and CSS-grown CdTe films for solar cell applications		
	10:40 - 11:00 coffee break				10:40 - 11:00					Bartosz Radkowski (LABSOFT) Operation based on PeakForce Tapping technology in atomic force microscopes	10:40 - 11:00	Jens Ohlmann (Fraunhofer ISE) Defect analysis of metamorphic buffer structures for III-V multi-junction solar cells		
	11:00 - 11:40				11:00 - 11:20 coffee break					11:00 - 11:20 coffee break				
	11:40 - 12:00	Tetsuo Hatakeyama (ADPERC, AIST) Deep-level transient Spectroscopy Characterization of Defects at the SiO2/4H-SiC Interface	SiC	11:20 - 12:00	Anna Mogilatenko (FBH Germany) Defect analysis in III-nitride layers using transmission electron microscopy	NITRIDES				11:20 - 11:40	Jens W. Tomm (Max-Born-Institut) Imaging of the degradation of 980 nm emitting single-spatial-mode lasers during ultrahigh power operation	PHOTONIC DEVICES		
	12:00 - 12:20	Kazuya Konishi (Mitsubishi Electric Corporation) Investigation of Stacking Fault Expansion from Basal Plane Dislocations within High Doped 4H-SiC Epilayers		12:00 - 12:20	Ute Zeimer (FBH Germany) The impact of the surface morphology of AlN/sapphire templates on the structural and optical properties of AlGaInAlGaIn multiple quantum wells					11:40 - 12:00	Martin Hempel (Max-Born-Institut) Temperature Kinetics during Catastrophic Optical Damage of Diode Laser			
	12:20 - 12:40	Koji Nakayama (Kansai Electric Power Co., Inc.) Observations of overlapped single Shockley stacking faults in 4H-SiC pin diode		12:20 - 12:40	Ewa Grzanka (Institute of High Pressure Physics PAS) Structural and chemical characterization of the InGaInGaIn multi-quantum wells grown on different substrates using HR-XRD pattern and XPS					12:00 - 12:20	Kamil Pierscinski (ITE) Evaluation of performance of mid-IR quantum cascade lasers by means of TR imaging			
	12:40 - 13:00			12:40 - 13:00	Piotr Dumania (Institute of Electron Technology) SMART FRAME- empowering innovative business in Central Europe					12:20 - 12:40	Agata Bojarska (Institute of High Pressure Physics PAS) Cavity - free Optical Lasing in InGaIn Heterostructures			
	13:00 - 14:00 lunch			13:00 - 14:00 lunch			13:00 - 14:00 lunch			13:00 - 14:00 lunch				
	15:00 - 15:40	Robert Dwiliński (AMMONO Poland) Bulk GaN substrates grown by ammonothermal method		15:00 - 15:40	Wlodek Strupinski (ITME Poland) Graphene: Epitaxial vs exfoliated		15:00 - 15:40	Shiro Tsukamoto (ANAN NCT Japan) In-situ atomic-level 3D imaging of InAs quantum dot formation process on GaAs(001) during molecular beam epitaxy growth		SiC & NITRIDES	departure			
	15:40 - 16:00	Dawid Kot (IHP GmbH) Development of a Storage Getter Test for Cu Contaminations in Silicon Wafers Based on ToF-SIMS Measurements	SiC & NITRIDES	15:40 - 16:00	Pawel Kaminski (Institute of Electronic Materials Technology) Transformations of deep-level defects in the semi-insulating 4H-SiC substrate induced by the growth of epitaxial graphene	15:40 - 16:00	Cesare Frigeri (CNR-IMEM Institute) A structural characterization of GaAs MBE grown on Si pillars							
	16:00 - 16:20	Michio Tajima (ISAS/JAXA) Relation between deep-level photoluminescence and structure of small-angle grain boundaries in multicrystalline Si		16:00 - 16:20	Sébastien Duguay (CNRS France) Electrical and physical characterization of AlGaIn/GaN power HEMTs after thermal storage	16:00 - 16:20	Paloma Tejedor (Instituto de Ciencia de Materiales de Madrid, CSIC) Surface self-organization and structure of highly doped n-InGaAs ultra-shallow junctions							
	16:20 - 16:40	Gen Kato (ISAS/JAXA) Photoluminescence Analysis of Oxygen Precipitation around Small-Angle Grain Boundaries in Multicrystalline Silicon Wafers		16:20 - 16:40	Martina Baeumler (Fraunhofer-Institut für Angewandte Festkörperphysik) Electroluminescence investigation of the lateral field distribution in AlGaIn/GaN HEMTs for power applications	16:20 - 16:40	Juan Jiménez (University of Valladolid) Raman spectrum of SiGe NWs. Compositional and electromagnetic amplification aspects							
	16:40 - 17:00	Peng Dong (State Key Lab. of Silicon Mat., Zhejiang University) Correlation between copper precipitation and grown-in oxygen precipitates in 300 mm Czochralski Silicon wafer		16:40 - 17:00 coffee		16:40 - 17:00	Jean-Pierre Landesman (University Rennes-1) Intermixing in InP-based quantum well photonic structures induced by the dry-etching process: a spectral imaging cathodoluminescence study							
	17:00 - 17:20 coffee			17:20 - 19:00 Poster session			17:00 - 17:20 coffee							
							17:20 - 17:50	Emilien Leonhardt (Hirox Ltd.) 3D Digital Microscope: HIROX KH-8700 Full HD Visual Inspection With 2D and 3D Measurement Easy, Fast, High Quality						
17:00 - Welcome glass of wine						19:00 - 22:00 Conference Dinner								



15th International Conference on Defects Recognition, Imaging and Physics in Semiconductors

September 15-19, 2013, Warsaw, Poland

List of posters (alphabetical order)

Poster session: Tuesday, September 17, 17:20 – 19:00

Noor Alhuda Al Saqri	University of Nottingham	Electrical characterization of defects using Deep Level Transient Spectroscopy (DLTS) technique in InGaAs quantum wires intermediate-band solar cells
Mohsin Aziz	University of Nottingham	Studies of interface related traps on Interfacial Misfit GaSb/GaAs heterostructures by Deep level transient spectroscopy (DLTS) and admittance spectroscopy Techniques.
Waseem Ahmed Bhutto	Xiamen University	Observation and Control of Interfacial Defects by introducing coherent layer of ZnSe in Type II ZnO/ZnSe Coaxial Nanowires
Katsunori Danno	Toyota Motor Corporation	Solution Growth on 4H-SiC(1-100) for Lowering Density of Threading Dislocations
Alina Domanowska	Silesian University of Technology	In-depth profiles of element distribution at insulator/SiC interface from Auger electron spectromicroscopy
Piotr Edelman	SemilabSDI LLC	Kelvin force microscopy characterization of corona charged dielectric surfaces
Cesare Frigeri	CNR-IMEM Institute	Effect of stress on defect transformation in B ⁺ and Ag ⁺ implanted HgCdTe/CdZnTe structure A structural characterization of GaAs MBE grown on Si pillars
Magdalena Garlińska	Military University of Technology, Warsaw, Poland	Theoretical studies of free-space optical systems applying quantum cascade laser
Dler Jameel	University of Nottingham, UK	Defects study in PANI grown on normal and high index GaAs planes using Current-Voltage, Conductance and Deep Level Transient Spectroscopy
Yukako Kato	National Institute of Advanced Industrial Science and Technology	X-ray Topographic Study of Homoepitaxial Diamond Layer
Justyna Kubacka-Traczyk	Institute of Electron Technology	High-resolution X-ray characterization of mid-IR Al _{0.45} Ga _{0.55} As/GaAs QCL structure
Oscar Martínez	University of Valladolid	Correlation between residual strain and electrically active defects in mc-Si solar cells Raman study of multicrystalline Silicon wafers produced by the RST process
Hideharu Matsuura	Osaka Electro-Communication University	Electrical Behavior of Mg in Mg-Implanted 4H-SiC Layer
Filip Janiak	Institute of Physics Wrocław University of Technology	Influence of arsenic on the interface quality in type II InAs/Ga In(As)Sb quantum wells
Kei Nomura	University of Miyazaki	Output estimation of concentrator photovoltaic using mappings of environmental factors and performance ratio
Dorota Pierscinska	Institute of Electron Technology	CCD Thermoreflectance for thermal characterization of optoelectronic devices
Mariusz Pluska	Institute of Electron Technology	Effect of secondary electroluminescence on cathodoluminescence and other luminescence measurements
Beata Rutecka	Military University of Technology	Application of explosive concentrators to QC laser absorption spectroscopy systems.
Iwona Sankowska	Institute of Electron Technology	High resolution X-ray diffraction analysis of the InAlAs layers on InP substrates
Takashi Sekiguchi	National Institute for Materials Science	Dislocation generation and propagation across the grain boundaries and seed interfaces in cast Si
Mariusz Sochacki	Warsaw University of Technology	Investigation on the mechanisms of nitrogen shallow implantation influence on trap properties of SiO ₂ /n-type 4H SiC interface
Lubica Stuchlikova	Slovak University of Technology in Bratislava	Deep Level Transient Spectroscopy Study of Pentacene Diode
Marek Suproniuk	Military University of Technology	Effect of deep-level defects on transient photoconductivity of semi-insulating 4H-SiC
Andrzej Taube	Faculty of Physics, Warsaw University of Technology	Fabrication and characterization of molybdenum disulfide monolayers
Dominika Urbańczyk	Institute of Electron Technology	The study of heat transport in photonic periodic nanostructures using optical spectroscopy methods