Preliminary program : subject to changes

Invited talks	**25 min including questions / answers**
Regular talks	**15 min including questions / answers**

MONDAY 17th		
08:30-8:40	**Opening Ceremony**	
SESSION 1 : GaN power devices - Chair : J. Würfl		
08:40-10:15	**T. Oka, Toyoda Gosei, Japan (Invited)**	Recent Progress of Vertical GaN Power Devices on GaN Substrates
	E. Bahat Treidel, FBH Berlin, Germany (Invited)	Review of vertical GaN-based FETs
	M. Borga, Uni. Padova, Italy, *student presentation*	GaN-on-Silicon buffer decomposition experiment: analysis of the vertical leakage current
	A. Tajalli, Uni. Padova, Italy	Superlattice GaN-on-silicon heterostructures with low trapping in 1200 V
	J. Asubar, Uni. Fukui, Japan	Impact of regrown AlGaN layer on the properties of Al2O3/AlGaN/GaN metal-insulator-semiconductor structures
10:15-10:45	**Coffee Break**	
SESSION 2 : RF GaN devices - Chair : D. Pavlidis		
10:45-12:15	**P. Altuntas, 3-5 Lab Thales, France**	Evaluation of 100 nm T-gate technology for InAlGaN/GaN HEMTs on SiC substrate
	K. Harrouche, IEMN-CNRS, France, *student presentation*	Scaling of AlN/GaN HEMT for millimeter-wave power applications
	M. Irekti, IEMN, France, *student presentation*	Development of AlGaN/GaN RF HEMT technology on Free-Standing GaN substrate
	N. EL Bondry, 3-5 Lab Thales, France, *student presentation*	AlGaN/GaN and InAlGaN/GaN HEMTs with non-alloyed ohmic contacts
	Y. Cordier, CRHEA-CNRS, France	MOVPE growth of buffer layers on 3C-SiC/Si(111) templates for AlGaN/GaN High Electron Mobility Transistors with low RF losses
	N. Defrance, IEMN, France	Co-integration of Enhancement and Depletion Modes of GaN-based Transistors for Next Generation RF Communication Circuits
12:15-13:45	**Lunch**	
SESSION 3 : Novel device and circuit concepts I - Chair : R. Franklin		
13:45-15:00	**R. Winik, MIT, US (Invited)**	Progress and Challenges for Engineering Superconducting Qubits
	D. Pavlidis, Uni. Boston, US	Device Approaches for Vacuum Nanoelectronics
	JY Duboz, CRHEA-CNRS, France	GaN Schottky diodes for proton beam monitoring
	K. Zekentes, FORTH, Greece	4H-SiC Nanowire arrays formation by nanoimprint lithography, plasma etching and sacrificial oxidation
SESSION 4 : Optoelectronic devices and modelling - Chair : JY Duboz		
15:00-16:15	**H. Hartnagel, Uni. Darmstadt, Germany**	Negative differential resistance in non-polar m-plane ZnO/ZnMgO resonant tunneling diodes with double and triple quantum barriers
	H. Maxime, CRHEA-CNRS, France	ZnO : from material assessment to quantum cascade detectors
	H. Hartnagel, Uni. Darmstadt, Germany	The selection of optimized metal contacts for the ZnSe-based metal-semiconductor-metal ultraviolet photodetector
	K. Horio, Shibaura Inst., Japan	Dependence of Breakdown Voltage on Gate-to-Drain Distance of AlGaN/GaN HEMTs with High-k Passivation Layer
	A. Chvala, Uni. Bratislava, Slovakia	Characterization of Monolithic InAlN/GaN NAND and NOR Logic Gates Supported by Circuit and Device Simulations
16:15-16:50	**Coffee Break**	
SESSION 5 : 2D materials and devices - Chair : K. Zekentes		
16:50-18:00	**M. V.Costache, ICN2 (Invited)**	Graphene and 2D materials
	W.Yao, Uni. of Hong Kong (Invited)	2D semiconductors
	E. Pallecchi, IEMN, France	Graphene devices for high frequency applications
19:00-21:00	**Welcome Reception**	

TUESDAY 18th		
SESSION 6 : Thermal and reliability aspects - Chair : G. Meneghesso		
08:45-10:30	**M. Kuball, Uni. of Bristol, UK (Invited)**	GaN-on-Diamond RF Device Technology – Latest Progress
	S. Kyatam, Inst. Telecom, Aveiro, Portugal, *student presentation*	Thermal management of photonic integrated circuits using diamond holders
	D. Mukherjee, Inst. Telecom, Aveiro, Portugal, *student presentation*	Fabrication of patterned diamond holders for electronic devices
	D. Keum, Uni. Hongik, South Korea, *student presentation*	Proton irradiation effects on time-dependent dielectric breakdown characteristics of normally-off AlGaN/GaN gate-recessed MISHFETs
	F. Yang, Uni. of Bristol, UK, *student presentation*	The impact of hot electrons and self-heating during hard-switching in AlGaN/GaN HEMTs
	F. Egyenes-Porsok, Uni. Bratislava, Slovakia, *student presentation*	Effect of bulk oxide trapping on threshold voltage instabilities in Al2O3/AlGaN/GaN MOS-HEMTs
10:30-11:00	**Coffee Break**	
SESSION 7 : Device processing - Chair : J. Catarina Mendes		
11:00-12:15	**R. Driad, IAF, Germany**	Effect of two-step thermal annealing on Mg activation and device characteristics of quasi-vertical GaN/Si PIN diodes
	N. Bickel, FBH Berlin, Germany	Thermal and plasma enhanced ALD of Al2O3 films on n-GaN for electronic devices
	B. Damilano, CRHEA-CNRS, France	Shaping of GaN using selective area sublimation
	G. Filip, Uni. Ghent, Belgium	Exploring the low-resistive Ti-Al-TiN Ohmic contacts on GaN-based heterostructures
	S. Aroulanda, 3-5 Lab Thales, France, *student presentation*	Normally-Off InAlGaN/GaN-on-SiC MOS-HEMTs by Atomic Layer Etching and Fluorine Implantation
12:15-13:45	**Lunch**	
SESSION 8 : Ultra-wide bandgaps - Chair : M. Kuball		
13:45-15:10	**J. Würfl, FBH Berlin, Germany (Invited)**	Towards Future Power Electronics: Technology and Perspectives of Gallium Oxide Devices
	J. Pernot, Inst. Néel CNRS, France (Invited)	Diamond based devices
	D. Araujo, Uni. Cadiz, Spain	Diamond/oxide interface issues to optimize MOSFET gate band setting
	I. Abid, IEMN-CNRS, France, *student presentation*	AlGaN/GaN High Electron Mobility Transistors with thin channel on Ultra Wide Bandgap AlN buffer
15:10-15:40	**Coffee Break**	
15:45-19:30	**Social Event Hotel entrance 15:45**	
20:00-22:00	**Gala Dinner**	

WEDNESDAY 19th		
SESSION 9 : Novel device and circuit concepts II - Chair : Y. Cordier		
08:30-10:00	**R. Franklin, Uni. of Minnesota, US (Invited)**	Magnetic Nanowire Characterization for Nanomedicine Applications
	A. Al-Khalidi, Uni. Glasgow, UK	Mm-wave/THz Multi-Gigabit Wireless Links Using Resonant Tunnelling Diodes
	G. Di Gioia, IEMN-CNRS, France, *student presentation*	GaN Schottky Diode for High Power THz Generation using Multiplier Principle
	C. Beckmann, Uni. Aachen, Germany, *student presentation*	Polarization-induced n- and p-doping in metal-polar compositionally graded AlGaN grown by metalorganic vapor phase epitaxy
	I. Harrysson Rodrigues, Uni. Chalmers, Sweden, *student presentation*	On the Angular Dependence of Cryogenic InP HEMTs in a Magnetic Field
10:00-10:30	**Coffee Break**	
SESSION 10 : Advanced characterization - Chair : E. Bahat Treidel		
10:30-12:15	**D. Planson, Uni. Lyon, France**	Effects of the laser beam size on the Optical induced Current (OBIC) for the study of Wide Band Gap (WBG) Semi-Conductor Devices
	L. Stuchlikova, Uni. Bratislava, Slovakia	Defect Analysis of InAlGaN/GaN/SiC HEMT heterostructures
	J. Drobný, Uni. Bratislava, Slovakia, *student presentation*	DLTFS study of emission and capture processes in GaN/AlGaN/GaN/SiC HEMT with different layer compositions
	G. Greco, CNR-IMM, Catania, Italy	Tungsten Carbide (WC) Schottky contacts in AlGaN/GaN heterostructures
	P. Fiorenza, CNR-IMM, Catania, Italy	Gate capacitance transient measurements to monitor charge trapping in Al2O3 films on recessed AlGaN/GaN heterostructures
	J. Marek, Uni. Bratislava, Slovakia	Electrical and DLTS Characterization of AlN buffers for GaN on Si technology
	D. Haško, Int. laser centre Bratislava, Slovakia	Semiconductor layers study using laser assisted scanning Kelvin probe microscopy
12:15-13:45	**Lunch**	
13:45-14:00	**Closing Ceremony**	