

Program DGKK Workshop 2017

Thursday, 07.12.2017

from 9:00	Company registration opens			
11:30	Regular registration opens			
12:00	<i>Light lunch available for all, Foyer Aula</i>			
12:45	Opening of the workshop and company exhibition			
Room: Aula (ground floor)			Room: Forum III (third floor)	
Time	Name	Title	Name	Title
13:00	K. Möller	Invited talk: Innovative III-V Solar Cells and Optoelectronics - markets, concepts and technology challenges		
13:30	S. Müller	Invited talk: Lateral GaN Power Devices: Epitaxy and Processing		
Session 1a: 3D Growth I & Magnetron Sputter Deposition			Session 1b: Antimonides Characterization & Simulation	
14:15	J. Große	Epitaxial Growth, Processing and Characterization of Deterministic Quantum Dot Microlenses for Single-Photon Emission at 1.3 μm	O. Ostinelli	MOVPE growth and characterization of GaInAsSb:C layers for DHBT applications
14:30	M. Steidl	Impact of rotational twin boundaries and lattice mismatch on III-V nanowire growth	F. Predan	Hall Characterizations of Lattice-Matched Grown Antimonides utilizing pn-Junctions
14:45	A. Nägelein	Resistance profiling along tapered nanowires: Multi-tip-technique vs. transmission line method	S. Birner	Modeling of epitaxially grown heterostructures with the nextnano software
15:00	F. Hörich	Growth of AlN by pulsed reactive magnetron sputter deposition	L. Grieger	Fully automated measurement and analysis of reciprocal space maps
15:15-16:30	<i>Coffee Break and Company Exhibition (sponsored by CS CLEAN SOLUTION), Foyer Forum III</i>			
Session 2a: Patterned Substrates & Selected Area Growth			Session 2b: Novel Material and Epitaxial Methodes	
16:30	S. Walde	AlN growth on nano-patterned sapphire substrates	F. Scholz	Investigation of epitaxially grown AlBGaN layers on AlN templates
16:45	S. Hagedorn	Low threading dislocation density AlN/sapphire templates by high temperature annealing	B. Jenichen	Structure of Fe3Si/Ge/Fe3Si thin film stacks on GaAs(001)
17:00	C. Blumberg	Site-controlled MOVPE of GaN nanorods by governing the Local Polarity of AlN on Si(111)	M. Marx	Influence of MOVPE Reactor Pressure and Temperature on the Nucleation and Lateral Growth of 2D MoS2
17:15	G. Schmidt	Direct comparison of structural and optical properties of GaN fin LED microstructure with nonpolar sidewalls	A. Ratajczak	Twin domains suppression in MOVPE grown Ge1Sb2Te4 thin films
17:30	E. Gini	Regrowth of current blocking layers in buried heterostructure quantum cascade lasers	A. Karg	Tin-assisted MBE-growth of ϵ -Ga2O3
17:45	A. Kaganskiy	Single-photon sources based on site-controlled quantum dots with a record-high extraction efficiency	F. Schubert	Control of unintentional oxygen incorporation in GaN
19:00	<i>Dinner "Historisches Kaufhaus" (sponsored by AIXTRON, AZUR and UMCORE)</i>			
End 00:00				
Friday, 08.12.2017				
Room: Aula (ground floor)			Room: Forum III (third floor)	
Time	Name	Title	Name	Title
9:00	B. Kunert	Invited talk: Selective area growth of III/V on (001) Si		
Session 3a: 3D Growth II			Session 3b: Phosphides	
9:45	B. Sheng	Correlation of structural and optical properties of GaN/AlN quantum disks embedded in nanowires grown by MBE using highly spatially cathodoluminescence microscopy	M. Nandy	<i>In-situ</i> study of AlxGa1-xP nucleation on As-modified Si(100) 2 ⁿ surfaces
10:00	S. Blumenthal	MBE-grown cubic GaN quantum dot pairs	R. Bek	Direct orange emission from a semiconductor membrane laser
10:15	H. Zhou	Insights into (1-100) nonpolar GaN shell layers of core-shell microrod structures	J. Markert	MOVPE growth of GaInP Rear-Hetero Junction Solar Cells
10:30	H. Schürmann	Investigation of Desorption Induced GaN Quantum Dot Formation Using Cathodoluminescence Microscopy		
10:45-11:30	<i>Coffee Break and Company Exhibition (sponsored by DOCKWEILER CHEMICALS), Foyer Aula and Foyer Forum III</i>			
11:30	End of company exhibition (dismantling)			
Session 4a: Arsenides			Session 4b: Nitrides	
11:30	R. Sittig	MOVPE grown InGaAs Metamorphic Buffers for InAs Quantum Dots in the Telecom C-Band	J. Shahbaz	InGaN Heterostructures as Gas Sensors
11:45	J. E. Ruiz	Dilute Nitride GaInNAs Growth with Low Decomposition Temperature Precursors by MOVPE	A. Fariza	Comparison of C- and Fe- doped GaN buffer layers and HEMT structures
12:00	R.B. Kohlhaas	Transition metal doping in MBE-grown InGaAs: Ultrafast THz emitters and detectors for 1550 nm optical excitation	C. Berqer	Towards AlGaN-free III-nitride laser diodes with GaN:Ge claddings and tunnel junction
12:15	R. Lang	Effect of GaAs Growth Rates above 60 $\mu\text{m/hr}$ on MOVPE Growth Homogeneity and Minority Carrier Diffusion Length	S. Neugebauer	MOVPE of GaN tunnel junctions for large area InGaN LEDs
12:30	A. Paszuc	Study of As-modified Si(100) surfaces for III-V-on-Si heteroepitaxy in CVD ambient	P. Horenburg	Microscopic interface and composition analysis of lattice-matched AlInN
12:45			M. Heuken	MOCVD Reactor Development for Cost Effective Micro LED Display Processing
13:00	Closing Remarks of the Workshop			
<i>Lunch (sponsored by OSRAM), Foyer Aula; from 13:30 Taxis leave for Tour at Fraunhofer ISE</i>				
14:00-15:00	Guided Tour at Fraunhofer ISE			