

Monday, August 23rd

09:00		Opening
09:30 - 10:15	PL 1	Molecular Beam Epitaxy: Then, Now and Tomorrow Pierre Petroff
10:45 - 11:30	PL 2	Ferromagnetic III-V Semiconductor Spintronics Hideo Ohno
11:30 - 12:15	PL 3	Semiconductor microcavity: when light and matter behave as one Nicolas Grandjean
14:30 - 16:30		Poster Session 1 (Nanostructures)

Antimonides - James Harris

17:00	Mon A1.1	2~2.5µm mid infrared light sources using InGaAs/GaAsSb "W" type quantum wells on InP substrates Chien Hung Pan
17:20	Mon A1.2	MBE growth of highly tensile strained Ga(In)As/GaSb quantum wells Alban Gassenq
17:40	Mon A1.3	Strain Relaxation by misfit dislocation array at the GaSb/GaP interface Salim El Kazzi
18:00	Mon A1.4	AlGaAsSb superlattice buffer layer for p-channel GaSb quantum well on GaAs substrate Vadim Tokranov
18:20	Mon A1.5	Electron Scattering by Structural Defects in InSb Quantum Wells Ted Mishima

Group IV Materials - Friedrich Schaffler

16:50	Mon B1.1	Growth and characterization of C60/GaAs interfaces and C60 doped GaAs Jiro Nishinaga
17:20	Mon B1.2	Growth modification of Ge/Si quantum dots by Antimony Alexander Tonkikh
17:40	Mon B1.3	Strain engineering in Si by deposition of ordered SiGe islands on patterned Si(001) substrates Jianjun Zhang
18:00	Mon B1.4	High quality, high Sn-concentration GeSn alloys using low-temperature MBE growth Robert Chen
18:20		

19:00 User Meeting Veeco

Nanowires 1 - Jim Speck

08:40	Tue A1.1	Nucleation and growth of collector-induced and self-induced GaN nanowires - a comparison Lutz Geelhaar
09:10	Tue A1.2	Correlation of structural, chemical and optical characterization of luminescent CdSe quantum dots inserted in ZnSe nanowires Martien den Hertog
09:30	Tue A1.3	Molecular Beam Epitaxy of Catalyst-free InGaN/GaN Nanowires and Nanowire White Light Emitting Diodes on (001) Silicon Pallab Bhattacharya
09:50	Tue A1.4	Light-emitting diode based on catalyst- and mask-free grown GaN nanorods Gerd Kunert
10:10	Tue A1.5	Mn Accumulation at the lateral Sidewalls of (Ga,Mn)N Nanowires grown on Si(111) by Molecular Beam Epitaxy Arne Urban

Nanowires 2 - Lucia Sorba

11:00	Tue A2.1	III-V nanowires fabricated with modulated fluxes: a method to investigate the chronology of their growth Fauzia Jabeen
11:30	Tue A2.2	Au-assisted Vapor-Liquid-Solid nucleation of GaAs on Si(111) - Growth evolution from traces to nanowires Steffen Breuer
11:50	Tue A2.3	Controlling crystal phases in GaAs nanowires grown by Au-assisted molecular beam epitaxy Dheeraj Dasa
12:10	Tue A2.4	Catalyst consumption and structural changes during the growth of self catalysed GaAs nanowires Stefano Ambrosini
12:30	Tue A2.5	X-ray characterization of Au-free grown GaAs nanowires on Si Andreas Biermanns

Devices 1 (Interband Lasers) - Martin Walther

08:50	Tue B1.1	Comparison of InP- and GaSb-based VCSELs emitting at 2.3 μm suitable for CO detection Boehm Gerhard
09:10	Tue B1.2	MBE growth of low threshold GaSb-based lasers with emission wavelengths in the range of 2.5 to 2.7 μm Kristijonas Vizbaras
09:30	Tue B1.3	Systematic Growth Investigation of Antimonide-Based Interband Cascade Light Emitting Diodes Targeted at Lambda = 3.2 microns at 300K Chadwick Canedy
09:50	Tue B1.4	VCSELs with monolithically integrated photodiodes for single-fiber bidirectional data transmission in the Gbit/s range Dietmar Wahl
10:10	Tue B1.5	MBE growth of VCSELs for high volume applications Roland Jäger

Manganese containing Materials - Hideo Ohno

11:30	Tue B2.1	Resonant Tunneling in a GaMnAs Surface Quantum Well and Its Valence-Band Picture Shinobu Ohya
11:50	Tue B2.2	Anisotropic Structure and Ferromagnetic Properties of Epitaxial GeMnTe Mahmood Hassan
12:10	Tue B2.3	MBE growth of self-catalysed GaMnAs/GaAs and MnAs/GaAs nanowires on silicon Janusz Sadowski
12:30	Tue B2.4	Spin Dynamics of Mn in Nanostructures Joel Cibert

14:00 - 16:00 **Poster Session 2 (MBE Fundamentals, III-V Materials and SiGe, Decives and MBE in Production)**

Nanowires 3 - Lutz Geelhaar

16:20	Tue A3.1	Self-catalyzed free-standing InAs nanowires on Si (111) by molecular beam epitaxy Gregor Koblmüller
16:40	Tue A3.2	Surface morphology of InAs-InSb heterostructured nanowires Lorenzo Lugani
17:00	Tue A3.3	Position-controlled growth of InAs nanowires on Si (111) by molecular beam epitaxy Simon Hertenberger
17:20	Tue A3.4	Pd-assisted Growth of InAs Nanowires Lucia Sorba
17:40	Tue A3.5	Formation and Application of Patterned III-V Nanopillar Arrays Diana Huffaker

Novel Devices - Joel Cibert

16:10	Tue B3.1	Mechanical to electrical energy transduction using a micromechanical 2DES cantilever Hiroshi Yamaguchi
16:40	Tue B3.2	MBE of mid-infrared microdisk lasers operating continuous wave above 0° C Martin Eibelhuber
17:00	Tue B3.3	Growth and structural properties of ZnTe on GaAs, InP, InAs and GaSb substrates for electronic and optoelectronic device applications Jin Fan
17:20	Tue B3.4	Molecular Beam Epitaxy and Structure Analysis of Phase Change Materials Ferhat Katmis
17:40	Tue B3.5	Effects of AlGaAsSb electron supply layer for InGaAs/InAlAs metamorphic HEMTs on GaAs substrates Hirotaka Geka

19:00 User Meeting Riber (Park Inn)

Nanowires 4 - Raffalla Calarco

08:30	Wed A1.1	Au-, Mn- and self-catalysed growth of InAs nanowires: a common picture Faustino Martelli
09:10	Wed A1.2	Direct Integration of gold-free GaAs / GaAsSb nanowires on Si by MBE Sébastien Plissard
09:30	Wed A1.3	p-Doping mechanism for catalyst-free MBE grown GaAs nanowires Carlo Colombo
09:50	Wed A1.4	Strains in GaAs-MnAs core-shell nanowires grown by molecular beam epitaxy Maria Hilse
10:10	Wed A1.5	Zeeman Spin Splitting In Hole Quantum Wires De fined From GaAs/AlGaAs(100) Heterostructures Kirill Trunov

Quantum Dots 2 - Maria Losurdo

11:00	Wed A2.1	Wide-band emissions from highly stacked quantum dot structure grown using strain-compensation technique Kouichi Akahane
11:30	Wed A2.2	Composition uniformity of site-controlled InAs/GaAs quantum dots Giorgio Biasiol
11:50	Wed A2.3	Self-assembled nanohole templates for the growth of large area low density quantum dots and quantum dot molecules Paola Atkinson
12:10	Wed A2.4	Atomic Mapping of InAs Quantum Dots: Whither the Wetting Layer? Roy Clarke
12:30	Wed A2.5	Mechanism and applications of local droplet etching Christian Heyn

Quantum Dots 3 - Pierre Petroff

14:20	Wed A3.1	Shape design of complex GaAs nanostructures by Droplet Epitaxy Claudio Somaschini
14:40	Wed A3.2	The Unique Growth Properties of Ge on High-Indexed Si (11 10) Substrates: Reversible Nanofacetting and Ripple Formation Gunther Springholz
15:00	Wed A3.3	Magneto-Optical Studies of GaAs Quantum Dots in GaSb Ta-Chun Lin
15:20	Wed A3.4	Multi-color quantum dots grown in selective-areas for broadband light source Nobuhiko Ozaki

Special MBE Techniques - Gunther Springholz

08:50	Wed B1.1	Molecular-beam epitaxial growth of Ge/Si nanostructures under low-energy ion irradiation Zhanna Smagina
09:10	Wed B1.2	Epitaxial graphene on Si(111) substrates using solid source molecular beam epitaxy technique Apurba Laha
09:30	Wed B1.3	Growth of exciton-polariton microcavities controlled by in-situ spectral reflectivity measurements Klaus Biermann
09:50	Wed B1.4	Embedding GaN Quantum Dots in Free-Standing AlN Photonic Crystals Grown by Conformal MBE Sylvain Sergent
10:10	Wed B1.5	Crystallization of amorphous InxGa1-xAs films for wire-like quantum well formation on patterned GaAs(113)A substrates Rudolf Hey

Transport - David Ritchie

11:30	Wed B2.1	Long-range order and thermal stability of thin Co2FeSi films on GaAs(111)B Bernd Jenichen
11:50	Wed B2.2	Cu-doped nitrides: promising candidates for a nitride based spinaligner Philipp R. Ganz
12:10	Wed B2.3	Quantitative analysis of the scattering mechanisms in MBE-grown undoped GaAs/AlGaAs heterostructures Christine Nicoll
12:30	Wed B2.4	Spin Hall effects in HgTe Quantum Well Structures Christoph Brüne

Nitrides: Growth 1 - Depdeep Jena

14:20	Wed B3.1	Role of buried cracks/voids in mitigating strain in crack free GaN grown on Si (111) employing AlN interlayer schemes Haipeng Tang
14:40	Wed B3.2	Strain relaxation via misfit dislocation formation in semipolar GaN heterostructures Erin Young
15:00	Wed B3.3	Study of strain relaxation in GaN/AlGaIn superlattices for mid-infrared intersubband absorption Yulia Kotsar
15:20	Wed B3.4	Effect of high-temperature PA-MBE growth conditions on point defect concentrations and dislocation mediated reverse-bias leakage in (0001) GaN Gregor Koblmüller

Quantum Dots 1 - Nicolas Gandjean

08:50	Wed C1.1	Electrical Spin injection in InAs Quantum Dots from a Ferromagnetic Contact in Remanence at Room Temperature and Adjustment of the Emission Wavelength for Spintronic Applications Arne Ludwig
09:10	Wed C1.2	Ultrafast Optical Switching Using MBE Grown InAs Quantum Dots Mark Hopkinson
09:30	Wed C1.3	Two-photon Interference from Separate InAs Quantum Dots Glenn S Solomon
09:50	Wed C1.4	Short wavelength photoluminescence of (Al)GaInP quantum dots grown on GaP substrate by gas-source molecular beam epitaxy Sven Gerhard
10:10	Wed C1.5	MBE grown mid-infrared devices based on PbTe quantum dots in a CdTe matrix Astrid Hochreiner

Devices 2 (Quantum Cascade Lasers) - Eric Tournie

11:10	Wed C2.1	InGaAs/GaAsSb Quantum Cascade Lasers grown by MBE Hermann Detz
11:30	Wed C2.2	Band-to-band luminescence of as-grown THz QCL structures Yury Sadofyev
11:50	Wed C2.3	Short injector interband cascade lasers Adam Bauer
12:10	Wed C2.4	Short wavelength high power Quantum Cascade Lasers Xavier Marcadet

Analysis - Wolfgang Braun

14:10	Wed C3.1	Universal behavior of interface composition profiles in MBE grown III-V heterostructures Esperanza Luna
14:40	Wed C3.2	Atomic Structure of the InAs Wetting Layer Grown on GaAs(001)-c(4x4) Christopher Prohl
15:00	Wed C3.3	MBE - Growth processes on MgF2 (111) and (100) surfaces studied by UHV - Atomic Force Microscopy Patrick Meisner
15:20	Wed C3.4	Reflection high-energy electron diffraction ϕ scans for the in situ monitoring of the heteroepitaxial growth of Fe on GaN(0001) by molecular beam epitaxy Cunxu Gao

15:40
16:30 - 19:30

Excursion
Departure at Jannowitzbrücke/ Märkisches Ufer

Growth Fundamentals 1 - Kevin Prior

08:40	Thu A1.1	New insights into the chemistry and kinetics of interface and surface processing during the MBE growth of III nitrides exploiting real-time spectroscopic ellipsometry Maria Losurdo
09:10	Thu A1.2	Analysis of the atomic hydrogen effect on the terrace width distribution during GaAs (110) homoepitaxial growth using the "Wigner surmise" Beatriz Galiana
09:30	Thu A1.3	Growth temperature dependence of strain relaxation during InGaAs/GaAs(001) heteroepitaxy Takuo Sasaki
09:50	Thu A1.4	Threading Dislocation Blocking by Dilute Nitride in Metamorphic Structures on GaAs Grown by MBE Yuxin Song
10:10	Thu A1.5	Growth optimization of InAs/GaSb/InSb short-period super-lattices as active regions of mid-IR lasers Alban GASSENQ

10:30

Oxides - Mingwei Hong

11:00	Thu A2.1	Epitaxial systems combining oxides and semiconductors: monolithic integration of functional oxides and III-V on silicon Bertrand Vilquin, Guillaume Saint-Girons
11:30	Thu A2.2	Controlling the surface morphology of In₂O₃(001) epitaxial films on Y-stabilized ZrO₂(001) by plasma-assisted molecular beam epitaxy - smooth films, facets, and large islands Oliver Bierwagen
11:50	Thu A2.3	MBE Growth and Characterization of Wide Band Gap Novel Oxide Semiconductor Films Shizuo Fujita
12:10	Thu A2.4	EPITAXY OF Si NANOCRYSTALS BY MOLECULAR BEAM EPITAXY ON A CRYSTALLINE INSULATOR LaAlO₃ (001) Didier DENTEL
12:30	Thu A2.5	Nd-doped alpha-GaAl₂-xO₃ epitaxial films: New planar waveguide laser materials with compositional tuning between 1090 - 1096 nm Raveen Kumaran

12:50

14:00 -
16:00

Poster Session 3 (Nitrides and Wide Gap Semiconductors, Ferromagnets and Spintronics, Novel Materials)

Quantum Dots 4 - Hiro Munekata

16:20	Thu A3.1	Low optical degradation in InGaAsN/GaAs Quantum Dot p-i-n structures emitting from 1.1 to 1.55 μm Álvaro Guzmán
16:40	Thu A3.2	InAs/AlInAs quantum dash cascade structures with electroluminescence in the mid-infrared Valeria Liverini
17:00	Thu A3.3	ZnTe based microcavities containing CdTe QDs with a single Mn ion Wojciech Pacuski
17:20	Thu A3.4	Site-Controlled In(Ga)As/GaAs Quantum Dots for Integration into Optically and Electrically Operated Devices Alexander Huggenberger

17:40

19:00 -
22:00

Conference Dinner (Wasserwerk, Berlin)

Indium Gallium Nitride - Eva Monroy

08:50	Thu B1.1	Growth and characterization of polar (0001) and semipolar (11-22) InGaN/GaN quantum dots Aparna Das
09:10	Thu B1.2	InGaN Growth Using Droplet Elimination by Radical-beam Irradiation Method Tomohiro Yamaguchi
09:30	Thu B1.3	Epitaxial Lateral Overgrowth of InN on sapphire substrates with Mo striped patterns by rf-MBE Jumpei Kamimura
09:50	Thu B1.4	High Performance Tunnel Injection InGaN/GaN Quantum Dot Light Emitting Diodes Emitting in the Green ($\lambda=495\text{ nm}$) Pallab Bhattacharya

10:10

Growth Fundamentals 2 - Tom Foxon

11:10	Thu B2.1	Growth by Molecular Beam Epitaxy of amorphous and crystalline GaNAs alloys with band gaps from 3.4eV to 0.8eV for solar energy conversion devices Sergei Novikov
11:30	Thu B2.2	Towards controlled molecular beam epitaxial growth of artificially layered Si structures Andreas Fissel
11:50	Thu B2.3	Selective area growth of GaN nanocolumns by rf-plasma-assisted MBE Ana Bengoechea-Encabo
12:10	Thu B2.4	Metastable II-VI sulphides: growth, characterization and stability Kevin Prior

12:40

Gallium Nitride Electronics - Yvon Cordier

16:10	Thu B3.1	Polarization-Engineered Nitride Heterostructure Devices: Tunneling & Doping Debdeep Jena
16:40	Thu B3.2	AlGaIn/GaN high electron mobility transistor grown on (111) single crystal diamond substrate Amélie Dussaigne
17:00	Thu B3.3	MBE Grown Ultra-thin Barrier (AlGa)N/AlN/GaN HEMTs Huili (Grace) Xing
17:20	Thu B3.4	Very high DC and RF performance of ultra-thin AlN/GaN HEMT structures grown by plasma-assisted MBE Amir Dabiran

17:50

III-V on Silicon - Thomas Block

08:40	Fri A1.1	Routes towards III-V based devices on 200 mm silicon wafers Mirja Richter
09:10	Fri A1.2	Low Thermal Budget III-V Nanostructured Active Layers on Si Sergio Bietti
09:30	Fri A1.3	Defect reduction in III-Sb semiconductors grown on Si(111) Andre Proessdorf
09:50	Fri A1.4	Novel buffer approach for GaN integration on Si(111) platform through Sc2O3 / Y2O3 buffer layers Lidia Tarnawska
10:10	Fri A1.5	Nano-crystalline Sb-based compound semiconductor formed on silicon Naokatsu Yamamoto
10:30		

Novel Materials - Joerg Osten

11:00	Fri A2.1	MBE - enabling technology beyond Si CMOS Mingweih Hong
11:30	Fri A2.2	Low Interfacial Trap Density in Absence of Peak Features Near Mid-gap of Ga2O3(Gd2O3)/In0.2Ga0.8As Gate Stacks Chun-An Lin
11:50	Fri A2.3	Surface Passivation Effects in III-V MOSFET Devices Christian Gerl
12:10	Fri A2.4	Epitaxial Strain Design in Rare-Earth Oxide Layers on Si(111) Frank Grosse
12:30	Fri A2.5	High-quality SrTiO3 films grown by hybrid MBE Bharat Jalan
12:50		
12:50		

Wide Band Gap Materials: Optics

08:50	Fri B1.1	Carrier-concentration dependent photoluminescence of InAsN films grown by RF-MBE Shigeyuki Kuboya
09:10	Fri B1.2	Monolithic blue-green and white light emitting diodes using a (Ga, In)N/GaN multiple quantum well light converter Benjamin Damilano
09:30	Fri B1.3	Plasma-assisted MBE of AlGaIn multi-quantum well structures for LEDs and optically pumped lasers of the UV spectral range 300-340 nm Valentin Jmerik
09:50	Fri B1.4	Homoepitaxy and characterization of (Zn,Mg)O/ZnO quantum well heterostructures grown on a-plane ZnO substrates Jean-Michel Chauveau
10:10	Fri B1.5	ZnSe-based lasers and laser diode converters Sergey Ivanov
10:40		

Nitrides: Growth 2 - Czeslaw Skierbiszewski

11:10	Fri B2.1	Growth of cubic InN and InGaIn films on YSZ(001) substrates by RF-MBE Keito Nakamura
11:30	Fri B2.2	Growth of cubic GaN on patterned 3C-SiC (001) substrates Ricarda Maria Kemper
11:50	Fri B2.3	Influence of nitrogen precursor and its flow rate on the quality of GaN based structures grown by molecular beam epitaxy Yvon Cordier
12:10	Fri B2.4	Pendeoepitaxial overgrowth and coalescence of GaN nanowires on Si(111) by molecular beam epitaxy Pinar Dogan
12:30		

Closing