

# GMe-Workshop 2006

13. Oktober 2006

## Veranstaltungsprogramm

09.00 – 10.00	Registrierung, Poster-Aufbau; Kaffee
10.00 – 10.15	Begrüßung
10.15 – 11.00	Karl Eberl: „ <i>GaAs based High Power Laser Diodes from Lumics</i> “
11.00 – 11.30	M. Böberl, M. Kovalenko, J. Roither, T. Fromherz, G. Springholz, W. Heiss: „ <i>Narrow-band lead salt photodetectors and solution-processible nanocrystal photodetectors for the midinfrared</i> “
11.30 – 12.00	K. Unterrainer, F.F. Schrey et al.: „ <i>Optical properties of IR quantum dots</i> “
12.00 – 13.30	Mittagspause
13.30 – 14.15	Silke Christiansen: „ <i>Semiconductor nanowires: properties and applications</i> “
14.15 – 14.45	A. Lugstein, C. Schöndorfer, E. Bertagnoli: „ <i>Synthesis of nanowires in room temperature ambient with a focused ion beam</i> “
14.45 – 15.15	G. Chen, H. Lichtenberger, G. Bauer, W. Jantsch, F. Schäffler: „ <i>Initial stage of the 2D-3D transition of a strained Ge layer on a pit-patterned Si(001) template – Progress in Quantum Dot Array (QDA)</i> “
15.15 – 15.45	S. Kostner, M. J. Vellekoop: „ <i>On-Chip Cytometric Detection of Single Biological Cells Using Integrated Photodiodes</i> “
15.45 – 16.00	Kaffee
16.00 – 18.00	Poster-Session
18.00	Verabschiedung

# Posterpräsentationen

## Optoelektronik:

1. S. Golka, G. Pozzovivo, W. Schrenk, G. Strasser, C. Skierbiszewski, M. Siekacz, I. Grzegory, S. Porowski: „*GaN/AlGaN double-barrier diodes grown on bulk GaN*“
2. M. Austerer, C. Pflügl, S. Schartner, W. Schrenk, A. M. Andrews, T. Roch, G. Strasser: „*Second-harmonic emission from quantum cascade lasers*“
3. S. Schartner, M. Austerer, S. Golka, C. Pflügl, T. Roch, A.M. Andrews, W. Schrenk, G. Strasser: „*Far field investigations on quantum cascade lasers*“
4. A.M. Andrews, T. Roch, A. Benz, G. Fasching, W. Schrenk, K. Unterrainer, G. Strasser: „*MBE Growth Parameters for GaAs-based THz Quantum Cascade Lasers*“
5. T. Gebhard, P. L. Souza, F. F. Schrey, G. Strasser, K. Unterrainer, M. P. Pires, S. M. Landi, J. M. Villas-Boas and N. Studart: „*Polarization Dependence of Photocurrent in Quantum-Dot Infrared Photodetectors*“
6. R. Holly, K. Hingerl, R. Merz, P. Hudek, S. Neve, S. Partel, T. Auer: „*Fabrication of silicon vertical taper structures for fiber to chip coupler by KOH anisotropic etching*“
7. S. Pichler, J. Roither, M.V. Kovalenko, W. Heiss, P. Feichuk, O. Panchuk, J. Al-lam and B.N. Murdin: „*Two and One Dimensional Light Propagation and Optical Gain in Colloidal Nanocrystal Waveguides*“

## Analytik:

8. S. Özcan, T. Roch, G. Strasser, J. Smoliner, R. Franke, T. Fritz: „*Ballistic electron emission microscopy/spectroscopy on Au/titanylphthalocyanine/GaAs heterostructures*“
9. C. Simbrunner, K. Schmidegg, A. Bonanni, A. Kharchenko, J. Bethke, K. Lischka and H. Sitter: „*In-situ x-ray diffraction during MOCVD of III-nitrides: an optimized wobbling compensated evaluation algorithm*“

## Technologie:

10. S. Abermann, G. Sjöblom, J. Efavi, M. Lemme, J. Olsson, E. Bertagnolli: „*The impact of TiN, and Mo metal gates on MOCVD-grown HfO<sub>2</sub> and ZrO<sub>2</sub> high-k dielectrics for CMOS technology*“
11. K. Forberich, T. Fromherz, M. Morana, K. Hingerl et. al.: „*Structuring organic semiconductors by optical lithography*“

## **Nanodots, Nanowires und Nanokristalle:**

12. C. Schoendorfer, A. Lugstein, and E. Bertagnolli: „*Focused Ion Beam induced Nanodot and Nanowire Growth*“
13. E. Auer, M. Steinmair, T. Köck, A. Lugstein, E. Bertagnolli: „*Growth of Si-Nanowires – VLS and SLS*“
14. M. Niedermayr, G. Pillwein, W. Heiss, G. Brunthaler: „*Fabrication of narrow split contacts for nano-crystal investigations*“
15. B. Mandl, J. Stangl, T. Mårtensson, M. Brehm, T. Fromherz, G. Bauer, L. Samuelson, W. Seifert: „*Metal-free growth and characterisation of  $\text{InAs}_{1-x}\text{P}_x$  nanowires*“
16. M. Simma, D. Lugovyy, T. Fromherz, G. Springholz, G. Bauer: „*Strain induced modifications of optoelectronic properties of PbSe nanostructures*“

## **Si/SiGe:**

17. D. Pachinger, H. Lichtenberger, F. Schäffler: „*Stranski-Krastanov Growth of Tensely Strained Si on Ge (001) Substrates*“
18. T. Berer, D. Pachinger, G. Pillwein, M. Mühlberger, H. Lichtenberger, G. Brunthaler, F. Schäffler: „*Lateral Quantum Dots in strained Si/SiGe Heterostructures*“

## **Sensorsysteme:**

19. G. Hairer, D. Graschopf, M. Mansfeld, Ch. Nöhammer, M. J. Vellekoop, „*PCR microsystem for fast cycling*“
20. A. Jachimowicz, J. Schalko, J. Kuntner, F. Kohl, and B. Jakoby, „*Bridge-based microsensor for determining the thermal properties of liquids*“
21. Ch. Riesch, E. Reichel, F. Keplinger, B. Jakoby, „*Measurement of Liquid Properties with Resonant Cantilevers*“
22. F. Keplinger, J. Kuntner, A. Jachimowicz, F. Kohl, „*Sensitive Measurement of Flow Velocity and Flow Direction using a Circular Thermistor Array*“