

## Talks and Conference Contributions

- [1] K.J. Ebeling and R. Michalzik, “VCSEL research at Ulm revisited”, *International Symposium on VCSELs and Integrated Photonics — Celebrating the 30th Anniversary of VCSEL*. Tokyo, Japan, Dec. 2007.
- [2] J. Hertkorn, P. Brückner, S. B. Thapa, T. Wunderer, F. Scholz, M. Feneberg, K. Thonke, R. Sauer, M. Beer, and J. Zweck, “Optimization of nucleation and buffer layer growth for improved GaN quality and device performance”, poster at *12<sup>th</sup> European Workshop on MOVPE*, Bratislava, Slovakia, June 2007.
- [3] J. Hertkorn, P. Brückner, C. Gao, and F. Scholz, “Transport properties in n-type AlGa<sub>0.2</sub>N/AlN/GaN-superlattices”, poster at *7<sup>th</sup> Int. Conf. on Nitride Semiconductors*, Las Vegas, Nevada, USA, Sept. 2007.
- [4] J. Hertkorn, “Modulation doped AlGa<sub>0.2</sub>N/(AlN)/Ga<sub>0.2</sub>N heterostructures for high brightness LEDs”, New Jersey Institute of Technology, Newark, NJ, USA, Oct. 2007.
- [5] J. Hertkorn, “Modulation doped n- and p-type AlGa<sub>0.2</sub>N/(AlN)/Ga<sub>0.2</sub>N heterostructures for improved current spreading in high power LEDs”, *Söllnerhaus-Seminar*, Riezlern, Austria, Oct. 2007.
- [6] J. Hertkorn, “Modulation doped AlGa<sub>0.2</sub>N/(AlN)/Ga<sub>0.2</sub>N heterostructures for high brightness LEDs”, Seminar “*Neue Materialien*”, Universität Magdeburg, Nov. 2007.
- [7] A. Kroner, F. Rinaldi, R. Rösch, and R. Michalzik, “Densely packed VCSEL arrays tailored for optical particle manipulation”, *Conf. on Lasers and Electro-Optics Europe, CLEO/Europe 2007*, paper CB4-1-TUE. Munich, Germany, June 2007.
- [8] F. Lipski, “Freestanding GaN by HVPE”, *Söllnerhaus-Seminar*, Riezlern, Austria, Oct. 2007.
- [9] F. Lipski, P. Brückner, and F. Scholz, “Si-Dotierung von GaN-Schichten bei der Hydrid-Gasphasen-Epitaxie”, *DGKK-Workshop III-V-Epitaxie*, Marburg, Germany, Dec. 2007.
- [10] R. Michalzik, “Vertical-cavity surface-emitting lasers for optical interconnection” (in German), *Electrical Engineering Colloquium*, Ulm University, Faculty of Engineering and Computer Sciences, Ulm, Germany, July 2007.
- [11] R. Michalzik, M. Stach, F. Rinaldi, and S. Lorch, “Novel VCSEL-based transceiver chips for bidirectional optical interconnects using butt-coupled multimode fibers”, in Proc. 5. ITG-Workshop *Photonische Aufbau- und Verbindungstechnik*, pp. 33–37. Berlin, Germany, Mar. 2007.
- [12] R. Michalzik, M. Stach, F. Rinaldi, and S. Lorch, “Monolithic integration of VCSELs and MSM photodiodes for bidirectional multimode fiber communications” (invited), *SPIE Photonics West 2007*, Conf. on *Vertical-Cavity Surface-Emitting Lasers XI*. San Jose, CA, USA, Jan. 2007.

- [13] J.M. Ostermann, P. Debernardi, and R. Michalzik, "Polarization stability of surface grating VCSELs under strong optical feedback", *Conf. on Lasers and Electro-Optics Europe, CLEO/Europe 2007*, paper CB7-1-WED. Munich, Germany, June 2007.
- [14] F. Rinaldi and D. Wahl, "MBE technology II", *Söllnerhaus-Seminar*, Riezlern, Austria, Oct. 2007.
- [15] F. Rinaldi, S. Li, S. Menzel, and D. Wahl, "Characterization of MBE grown VCSELs", *Deutscher MBE Workshop 2007*, Jülich, Germany, Oct. 2007.
- [16] H. Roscher, F. Rinaldi, A. Weigl, and R. Michalzik, "Record-low thermal resistance, 12.5 Gbit/s capable flip-chip bonded 850 nm wavelength 2-D VCSEL arrays", *Conf. on Lasers and Electro-Optics Europe, CLEO/Europe 2007*, paper CB4-4-TUE. Munich, Germany, June 2007.
- [17] S. Schwaiger, "Influence of strain on magnetic anisotropy in GaMnAs", *Söllnerhaus-Seminar*, Riezlern, Austria, Oct. 2007.
- [18] F. Scholz, "LEDs: Basic concepts and state of the art", Lumitronix, Hechingen, Germany, Apr. 2007.
- [19] F. Scholz, S. B. Thapa, and E. Angelopoulos, "Heteroepitaxial growth of GaN on ZnO by MOVPE", *Söllnerhaus-Seminar*, Riezlern, Austria, Oct. 2007.
- [20] W. Schwarz, "Approaches for vertical extended cavity lasers", *Söllnerhaus-Seminar*, Riezlern, Austria, Oct. 2007.
- [21] M. Stach, F. Rinaldi, J. Scharpf, S. Lorch, and R. Michalzik, "1 Gbit/s bidirectional optical data transmission over 50 m semi-GI PCS fiber with monolithically integrated transceiver chips", *EOS Conf. on Trends in Optoelectronics, Sub-conf. on Information and Communication*. Munich, Germany, June 2007.
- [22] M. Stach, F. Rinaldi, D. Wahl, D. Rimpf, S. Lorch, and R. Michalzik, "1 Gbit/s full-duplex bidirectional optical data transmission over 500 m of 50  $\mu\text{m}$ -core graded-index multimode fiber with novel monolithically integrated transceiver chips", *33rd Europ. Conf. on Opt. Commun., ECOC 2007*. Berlin, Germany, Sept. 2007.
- [23] M. Stach, F. Rinaldi, D. Wahl, D. Rimpf, S. Lorch, and R. Michalzik, "Monolithically integrated miniaturized transceiver chips for bidirectional graded-index fiber systems" (in German: "Monolithisch integrierte miniaturisierte Transceiver-Chips für bidirektionale Gradientenindexfaser-Systeme"), *14th ITG Symposium on Communication Cable Networks*, Köln, Germany, Dec. 2007.
- [24] S.B. Thapa, and F. Scholz, "AlN Growth by MOVPE", *Georgia Tech Lorraine*, Metz, France, Feb. 2007.
- [25] S.B. Thapa, J. Hertkorn, F. Scholz, G.M. Prinz, M. Feneberg, K. Thonke, and R. Sauer, "MOVPE Growth of High Quality AlN Layers and Effects of Si doping", poster at *12<sup>th</sup> European Workshop on MOVPE*, Bratislava, Slovakia, June 2007.

- [26] S.B. Thapa, E. Angelopoulos, J. Hertkorn, F. Scholz, A. Reiser, K. Thonke, R. Sauer, H. Hochmuth, M. Lorenz, and M. Grundmann, "Heteroepitaxial Growth of GaN on ZnO by MOVPE" poster at *12<sup>th</sup> European Workshop on MOVPE*, Bratislava, Slovakia, June 2007.
- [27] S.B. Thapa, F. Scholz, J. Hertkorn, G.M. Prinz, M. Feneberg, K. Thonke, and R. Sauer, "MOVPE Growth of High Quality AlN Layers and Effects of Si doping", *7<sup>th</sup> Int. Conf. on Nitride Semiconductors*, Las Vegas, Nevada, USA, Sept. 2007.
- [28] S.B. Thapa, "MOVPE Growth of High Quality AlN Layers and Effects of Si doping", *Sölllerhaus-Seminar*, Riezlern, Austria, Oct. 2007.
- [29] D. Wahl and F. Rinaldi, "MBE technology I", *Sölllerhaus-Seminar*, Riezlern, Austria, Oct. 2007.
- [30] T. Wunderer, F. Lipski, J. Hertkorn, P. Brückner, F. Scholz, M. Feneberg, M. Schirra, K. Thonke, A. Chuvilin, and U. Kaiser, "Bluish-green semipolar GaInN/GaN light emitting diode on  $\{1\bar{1}01\}$  GaN side facets", poster at *7<sup>th</sup> Int. Conf. on Nitride Semiconductors*, Las Vegas, Nevada, USA, Sept. 2007.
- [31] T. Wunderer, "Steps to the green LED", *Sölllerhaus-Seminar*, Riezlern, Austria, Oct. 2007.
- [32] T. Wunderer, "High-brightness GaN-based light emitting diodes", Physical Institute at Lomonosov Moscow State University, Moscow, Russia, Nov. 2007.
- [33] T. Wunderer, F. Lipski, J. Hertkorn, P. Brückner, F. Scholz, M. Feneberg, M. Schirra, K. Thonke, A. Chuvilin, U. Kaiser, I. Knoke, and E. Meissner, "Blau-grüne semipolare GaInN/GaN LEDs auf  $\{1\bar{1}01\}$  GaN-Seitenfacetten", *DGKK-Workshop III-V-Epitaxie*, Marburg, Germany, Dec. 2007.
- [34] M.V. Klymenko, I.M. Safonov, O.V. Shulika, I.A. Sukhoivanov, and R. Michalzik, "Effective-mass superlattice as an injector in quantum cascade lasers", *International Workshop on PHysics & Applications of SEMiconductor Lasers, PHASE 2007*. Supélec, Campus de Metz, Metz, France, March 2007.
- [35] B. Scherer, J. Wöllenstein, M. Weidemüller, W. Salzmann, J.M. Ostermann, F. Rinaldi, and R. Michalzik, "Oxygen measurements at high pressures using a low cost, polarization stabilized, widely tunable vertical-cavity surface-emitting laser", *SPIE Europe, Microtechnologies for the New Millennium, Conf. on Smart Sensors, Actuators and MEMS III*. Maspalomas, Gran Canaria, Spain, May 2007.