

Talks

- [1] A. Al-Samaneh, M.T. Haidar, D. Wahl, and R. Michalzik, “Polarization-stable single-mode VCSELs for Cs-based miniature atomic clocks”, *Conf. on Lasers and Electro-Optics Europe, CLEO/Europe 2011*, Munich, Germany, May 2011.
- [2] A. Bergmann, A. Kroner, and R. Michalzik, “Towards VCSEL-based integrated microfluidic sorting systems”, poster at *1st EOS Conference on Optofluidics, EOSOF 2011*, Munich, Germany, May 2011.
- [3] A. Bergmann, D. Wahl, and R. Michalzik, “Integration of VCSEL-based optical traps with microfluidic channels”, poster at *10th Int. Symposium on Scanning Probe Microscopy & Optical Tweezers in Life Sciences*, Berlin, Germany, Oct. 2011.
- [4] M. Fikry, M. Madel, I. Tischer, K. Thonke, and F. Scholz, “Epitaxial GaN around ZnO nanopillars”, *DPG Spring Meeting*, Dresden, Germany, March 2011.
- [5] M. Fikry, M. Madel, I. Tischer, K. Thonke, and F. Scholz, “Position control and luminescence properties of coaxial GaN/InGaN/GaN heterostructures”, poster at *XIV European Workshop on Metalorganic Vapor Phase Epitaxy*, Wroclaw, Poland, June 2011.
- [6] K. Forghani, M. Gharavipour, F. Scholz, B. Neuschl, T. Meisch, I. Tischer, K. Thonke, O. Klein, and U. Kaiser, “Si doping studies in AlGa_N”, *DPG Spring Meeting*, Dresden, Germany, March 2011.
- [7] K. Forghani, M. Gharavipour, F. Scholz, K. Thonke, O. Klein, U. Kaiser, I. Tischer, B. Neuschl, L. Kirste, and R. Gutt, “Detailed studies of Si-doped AlGa_N films grown by MOVPE”, poster at *9th International Conference on Nitride Semiconductors*, Glasgow, UK, July 2011.
- [8] K. Forghani, M. Gharavipour, F. Scholz, B. Neuschl, T. Meisch, I. Tischer, and K. Thonke, “Studies on Si-doped AlGa_N epilayers”, *DPG Spring Meeting*, Dresden, Germany, March 2011.
- [9] K. Forghani, M. Gharavipour, M. Klein, F. Scholz, B. Neuschl, T. Meisch, I. Tischer, K. Thonke, O. Klein, and U. Kaiser, “On the growth of AlGa_N for UV LED applications: defect reduction and doping”, *Heimbach Workshop*, Heldrungen, Germany, Sept. 2011.
- [10] A. Hein, F. Demaria, and P. Unger, “Efficient optically pumped semiconductor disk lasers: layer design and characterization”, poster at *CIOMPOSA International Summer Session “Lasers and Their Applications”*, Changchun, China, Aug. 2011.
- [11] D. Heinz, R.A.R. Leute, K. Thonke, F. Lipski, T. Meisch, T. Wunderer, J. Wang, and F. Scholz, “Epitaktische Herstellung nitridischer photonischer Kristalle durch selektive MOVPE”, *26th DGKK Workshop*, Stuttgart, Germany, Dec. 2011.

- [12] A. Kern, D. Wahl, S. Paul, M.T. Haidar, R. Blood, W. Schwarz, and R. Michalzik, "7 Gbit/s data transmission over 500 m multimode fiber with monolithically integrated bidirectional VCSEL-based transceiver chips", *Conf. on Lasers and Electro-Optics, CLEO 2011*, Baltimore, MD, USA, May 2011.
- [13] A. Kern, D. Wahl, S. Paul, M.T. Haidar, R. Blood, W. Schwarz, and R. Michalzik, "Up to 9 Gbit/s data transmission with monolithically integrated VCSELs and PIN photodiodes", *Conf. on Lasers and Electro-Optics Europe, CLEO/Europe 2011*, Munich, Germany, May 2011.
- [14] A. Kern, S. Paul, D. Wahl, A. Hein, R. Rösch, W. Schwarz, and R. Michalzik, "6 Gbit/s full-duplex multimode fiber link with monolithic VCSEL-PIN transceiver chips", *37th Europ. Conf. on Opt. Commun., ECOC 2011*, Geneva, Switzerland, Sept. 2011.
- [15] A. Kern, D. Wahl, and R. Michalzik, "Multi-Gbit/s full-duplex data transmission over standard multimode fiber with butt-coupled transceiver chips", poster at *European Semiconductor Laser Workshop*, Lausanne, Switzerland, Sept. 2011.
- [16] M. Klein, F. Lipski, and F. Scholz, "The effect of MoN_x on the local V-III ratio in hydride vapor phase epitaxy", *26. DGKK Workshop*, Stuttgart, Germany, Dec. 2011.
- [17] F. Lipski, X. Yao, M. Klein, and F. Scholz, "Reduction of the wafer bow of freestanding GaN substrates by wet chemical etching", *EMRS Spring Meeting*, Nice, France, May 2011.
- [18] R.A.R. Leute, K. Forghani, F. Lipski, F. Scholz, I. Tischer, B. Neuschl, and K. Thonke, "Growth of AlGa_N stripes with semipolar side facets as waveguide claddings for semipolar laser structures", *DPG Spring Meeting*, Dresden, Germany, March 2011.
- [19] R.A.R. Leute, F. Lipski, K. Forghani, I. Tischer, K. Thonke, and F. Scholz, "Selective area growth of AlGa_N for epitaxially realized waveguides of semipolar Ga_N based laser diodes", poster at *XIV European Workshop on Metalorganic Vapor Phase Epitaxy*, Wroclaw, Poland, June 2011.
- [20] R.A.R. Leute, K. Forghani, F. Lipski, F. Scholz, I. Tischer, K. Thonke, and B. Witzigmann, "Selective epitaxy of 3 D AlGa_N/Ga_N waveguides for semipolar laser structures", *EMRS Spring Meeting*, Nice, France, May 2011.
- [21] R.A.R. Leute, D. Heinz, M. Dickel, K. Thonke, F. Lipski, T. Meisch, and F. Scholz, "Selektive Epitaxie von Ga_N-basierten Nanopyramiden mit semipolaren Quantenfilmen durch Laser-Interferenz-Lithographie und MOVPE", *26. DGKK Workshop*, Stuttgart, Germany, Dec. 2011.
- [22] T. Meisch, K. Forghani, F. Lipski, B. Neuschl, M. Feneberg, U. Röder, F. Scholz, and K. Thonke, "Optical studies on the valence band structure of AlGa_N", *9th International Conference on Nitride Semiconductors*, Glasgow, UK, July 2011.

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- [23] T. Meisch, F. Lipski, K. Forghani, B. Neuschl, M. Feneberg, F. Scholz, and K. Thonke, “Optical investigation on the valence band structure of AlGa_N with low Al content”, poster at *DPG Spring Meeting*, Dresden, Germany, March 2011.
- [24] R. Michalzik, A. Kern, M. Stach, F. Rinaldi, and D. Wahl, “Bidirectional data transmission over multimode fiber using integrated transceiver chips” (invited), *SPIE Photonics West 2011, Optical Metro Networks and Short-Haul Systems III*, San Francisco, CA, USA, Jan. 2011.
- [25] R. Michalzik, A. Kern, and D. Wahl, “VCSEL integration with high-speed photodiodes”, *VCSEL Day 2011*, Toulouse, France, May 2011.
- [26] R. Michalzik, P. Debernardi, and W. Schwarz, “Optical modes of an optofluidic microparticle VCSEL sensor”, *European Semiconductor Laser Workshop*, Lausanne, Switzerland, Sept. 2011.
- [27] F. Scholz, T. Wunderer, S. Schwaiger, and R.A.R. Leute, “Semipolar GaInN quantum well structures on large area substrates” (invited), *2011 German-Japanese-Spanish Joint Workshop on Frontier Photonic and Electronic Materials and Devices*, Granada, Spain, March 2011.
- [28] F. Scholz, T. Wunderer, S. Schwaiger, and R.A.R. Leute, “Semipolar GaInN quantum well structures on large area substrates” (invited), *3rd International Symposium on Advanced Plasma Science and its Applications for Nitrides and Nanomaterials, ISPlasma2011*, Nagoya, Japan, March 2011.
- [29] F. Scholz, “Nitride semiconductor research in Germany and Europe: Attempt of a short description” (invited), *10th Nitride Semiconductor Application Workshop, NSAW 2011*, Nagoya, Japan, March 2011.
- [30] F. Scholz, S. Schwaiger, J. Däubler, I. Tischer, K. Thonke, S. Neugebauer, S. Metzner, F. Bertram, J. Christen, and R.A.R. Leute, “Semipolar GaInN quantum well structures on large area substrates”, *9th International Conference on Nitride Semiconductors*, Glasgow, UK, July 2011.
- [31] F. Scholz, F. Lipski, X.Yao, and M. Klein, “Studies about wafer bow of freestanding GaN substrates grown by hydride vapor phase epitaxy”, *American Conference on Crystal Growth and Epitaxy*, Monterey, CA, USA, Aug. 2011.
- [32] F. Scholz, S. Schwaiger, J. Däubler, I. Tischer, K. Thonke, S. Neugebauer, S. Metzner, F. Bertram, J. Christen, H. Lengner, J. Thalmair, and J. Zweck, “Semipolar GaInN quantum well structures on large area substrates”, seminar talk, *PARC*, Palo Alto, CA, USA, July 2011.
- [33] K. Forghani, M. Gharavipour, F. Scholz, B. Neuschl, T. Meisch, I. Tischer, K. Thonke, O. Klein, and U. Kaiser, “MOVPE of undoped and Si-doped AlGa_N epilayers”, seminar talk, *PARC*, Palo Alto, CA, USA, July 2011.

- [34] F. Scholz, “Semipolare Nitrid-Strukturen: Effizientere Leuchtdioden?“, seminar talk, *Hochschule Regensburg*, Regensburg, Germany, Oct. 2011.
- [35] W. Schwarz, A.J. Márquez del Pino, D. Rimpf, F. Rinaldi, T. Mappes, and R. Michalzik, “Hybrid-integrated optofluidic microparticle sensor using a vertical-extended-cavity surface-emitting laser“, *4th EOS Topical Meeting on Optical Microsystems (OpS’11)*, Capri, Italy, Sept. 2011.
- [36] P. Unger, “Physics and technology of edge-emitting high-power semiconductor lasers” (invited), *CIOMPOSA International Summer Session “Lasers and Their Applications”*, Changchun, China, Aug. 2011.
- [37] P. Unger, “Vertical-cavity surface-emitting lasers (VCSELs) and semiconductor disk lasers” (invited), *CIOMPOSA International Summer Session “Lasers and Their Applications”*, Changchun, China, Aug. 2011.
- [38] P. Unger, “Semiconductor disk lasers“, seminar talk, *Institut für Nanostrukturtechnologie und Analytik (INA)*, Universität Kassel, Kassel, Germany, Nov. 2011.
- [39] D. Wahl, A. Kern, S. Paul, R. Rösch, and R. Michalzik, “Herstellung von VCSELn mit monolithisch integriertem PIN-Photodetektor“, *Deutscher MBE-Workshop*, Berlin, Germany, Oct. 2011.
- [40] J. Wang, R.A.R. Leute, T. Wunderer, and F. Scholz, “Doping studies of inverse-pyramidal semipolar GaInN/GaN LEDs“, poster at *XIV European Workshop on Metalorganic Vapor Phase Epitaxy*, Wroclaw, Poland, June 2011.
- [41] B. Westenfelder, J.C. Meyer, S. Kurasch, X. Lin, A. Gross, C.E. Krill, F. Scholz, and U. Kaiser, “Aberration-corrected in-situ TEM investigation under extreme heat: Atomically resolved adsorbates of gold and hydrocarbon on graphene“, poster at *25th International Winterschool on Electronic Properties of Novel Materials, IWEPNM 2011*, Kirchberg, Austria, March 2011.
- [42] B. Westenfelder, J.C. Meyer, X. Lin, A. Groß, C.E. Krill, F. Scholz, and U. Kaiser, “In-situ TEM investigation under extreme heat: Gold and hydrocarbon adsorbates on graphene“, poster at *DPG Frühjahrstagung*, Dresden, Germany, March 2011.
- [43] B. Westenfelder, J.C. Meyer, S. Kurasch, X. Lin, A. Gross, C.E. Krill, F. Scholz, and U. Kaiser, “Atomically resolved in-situ HRTEM study of high temperature-induced structural transformations on graphene substrates after Au deposition“, *Microscopy Conference, MC2011*, Kiel, Germany, Sept. 2011.
- [44] F. Gruet, L. Bimboes, D. Miletic, C. Affolderbach, G. Mileti, A. Al-Samaneh, D. Wahl, and R. Michalzik, “Spectral characterisation of VCSELs emitting at 894.6 nm for CPT-based miniature atomic clocks“, poster at *Conf. on Lasers and Electro-Optics Europe, CLEO/Europe 2011*, Munich, Germany, May 2011.

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- [45] H. Jönen, U. Rossow, H. Bremers, S. Schwaiger, F. Scholz, A. Hangleiter, A. Kruse, J. Thalmair, J. Zweck, L. Hoffmann, and M. Brendel, “Indium incorporation in GaInN quantum wells on various surface orientations: A comparative study by X-ray diffraction and photoluminescence”, *DPG Spring Meeting*, Dresden, Germany, March 2011.
- [46] C. Karbaum, F. Bertram, S. Metzner, J. Christen, T. Wunderer, and F. Scholz, “Spectrally resolved cathodoluminescence microscopy of an InGaN SQW on hexagonally inverted GaN pyramids”, *DPG Spring Meeting*, Dresden, Germany, March 2011.
- [47] T. Langer, A. Kruse, M. Göthlich, H. Jönen, H. Bremers, U. Rossow, S. Schwaiger, F. Scholz, and A. Hangleiter, “Nonradiative recombination in long-wavelength polar, nonpolar, and semipolar GaInN/GaN quantum wells”, *9th International Conference on Nitride Semiconductors*, Glasgow, UK, July 2011.
- [48] M. Lohr, J. Thalmair, M. Jetter, F. Scholz, and J. Zweck, “Locally resolved imaging of internal electric fields in GaN/GaInN quantum wells by differential phase contrast microscopy”, poster at *DPG Spring Meeting*, Dresden, Germany, March 2011.
- [49] S. Metzner, F. Bertram, J. Christen, T. Wunderer, F. Lipski, S. Schwaiger, and F. Scholz, “Temperature dependent microscopic energy relaxation in semipolar InGaN SQW imaged by spatio-spectrally-time resolved cathodoluminescence”, *DPG Spring Meeting*, Dresden, Germany, March 2011.
- [50] S. Metzner, F. Bertram, J. Christen, H. Jönen, T. Langer, U. Rossow, A. Hangleiter, S. Schwaiger, and F. Scholz, “Spatially, spectrally and time-resolved cathodoluminescence study of polarization-reduced InGaN quantum wells for long wavelength emission”, *9th International Conference on Nitride Semiconductors*, Glasgow, UK, July 2011.
- [51] S. Neugebauer, S. Metzner, F. Bertram, T. Hempel, J. Christen, S. Schwaiger, and F. Scholz, “Highly spatially and spectrally resolved cathodoluminescence microscopy of planar semipolar InGaN/GaN MQWs grown on pre-patterned sapphire substrate”, *DPG Spring Meeting*, Dresden, Germany, March 2011.
- [52] I. Tischer, M. Fikry, M. Madel, F. Scholz, and K. Thonke, “GaN-ZnO-InGaN/GaN core shell nanorods”, poster at *DPG Spring Meeting*, Dresden, Germany, March 2011.