

Talks and Conference Contributions

- [1] M. Caliebe, T. Meisch, M. Madel, Z. Cheng, B. Neuschl, J. Helbing, K. Thonke, and F. Scholz, "Surface roughness optimization of (11-22) oriented GaN grown by MOVPE", poster at *17th International Conference on Metalorganic Vapor Phase Epitaxy, ICMOVPE*, Lausanne, Switzerland, July 2014.
- [2] M. Caliebe, "Influence of sapphire miscut and MOVPE parameters on (11-22) oriented GaN grown on prestructured substrates", seminar talk, *PolarCoN, Summer School*, Bensheim, Germany, September 2014.
- [3] M. Caliebe, T. Meisch, F. Scholz, M. Hocker, K. Thonke, Y. Han, and C. Humphreys, "Growth of semipolar GaN on patterned sapphire wafers", *Solid State Lighting (SSL) Symposium*, Lund University, Lund, Sweden, November 2014.
- [4] Z. Cheng, "MOVPE growth of (11-22) oriented GaN on deep UV lithography structured r-plane sapphire substrates", seminar talk, *PolarCoN, Summer School*, Bensheim, Germany, September 2014.
- [5] M. Daubenschütz, P. Gerlach, and R. Michalzik, "Electro-thermal characteristics of VCSELs: simulations and experiments", poster at *SPIE Photonics Europe, Conf. on Semiconductor Lasers and Laser Dynamics VI*, Brussels, Belgium, April 2014.
- [6] D. Heinz, O. Rettig, F. Huber, M. Madel, M. Asad, J. Jakob, I. Tischer, M. Hocker, S. Jenisch, K. Thonke, and F. Scholz, "GaInN nanowires for optical hydrogen sensing", poster at *8th Nanowires Growth Workshop, Nanowires 2014*, Eindhoven, Netherlands, August 2014.
- [7] N.I. Khan, A. Bergmann, and R. Michalzik, "Miniaturized VCSEL modules for optical manipulation of microparticles", *8th Int. Conf. on Electr. and Computer Engin., ICECE*, Dhaka, Bangladesh, December 2014.
- [8] M. Klein, T. Meisch, A. Aida, N. Aota, H. Takeda, K. Koyama, and F. Scholz, "The influence of prebowed sapphire wafers on self separated GaN layers in hydride vapor phase epitaxy", poster at *International Workshop on Nitride Semiconductors, IWN*, Wroclaw, Poland, August 2014.
- [9] R.A.R. Leute, J. Wang, T. Meisch, B. Neuschl, K. Thonke, and F. Scholz, "Light emitters based on GaN nano-stripes with semipolar quantum wells", *DPG Spring Meeting*, Dresden, Germany, March 2014.
- [10] R.A.R. Leute, J. Wang, T. Meisch, M. Caliebe, M. Klein, and F. Scholz, "Growth of semipolar gallium nitride structures on sapphire" (invited), *International Symposium on Growth of III Nitrides, ISGN-5*, Atlanta, GA, USA, June 2014.
- [11] R.A.R. Leute, D. Heinz, J. Wang, T. Meisch, J. Biskupek, U. Kaiser, F. Huber, O. Rettig, K. Thonke, and F. Scholz, "GaN nanostripes with semipolar quantum wells", *PolarCoN Summer School 2014*, Bensheim, Germany, September 2014.

- [12] R.A.R. Leute, T. Meisch, J. Wang, J. Biskupek, U. Kaiser, M. Müller, P. Veit, F. Bertram, J. Christen, and F. Scholz, “GaN nano-stripes for laser devices”, *European Semiconductor Laser Workshop, ESLW 2014*, Paris, France, September 2014.
- [13] R.A.R. Leute, “LEDs — Herausforderungen für die Zukunft” (invited), *Ringvorlesung Ulmer 3-Generationen Universität u3gu*, Ulm, Germany, October 2014.
- [14] R.A.R. Leute, D. Heinz, O. Rettig, T. Meisch, S. Jenisch, S. Strehle, and F. Scholz, “Selective area epitaxy of GaN stripes with sub-200-nm periodicity”, *29th DGKK Workshop Epitaxie von III/V-Halbleitern*, Magdeburg, Germany, December 2014.
- [15] T. Meisch, M. Alimoradi-Jazi, B. Neuschl, M. Klein, I. Tischer, K. Thonke, and F. Scholz, “(20-21) GaN growth on 2” patterned sapphire substrates”, *SPIE Photonics West, Conf. on Gallium Nitride Materials and Devices IX*, San Francisco, CA, USA, February 2014.
- [16] T. Meisch, S. Schörner, J. Wang, K. Thonke, and F. Scholz, “InGaN/GaN LEDs grown on 2” patterned sapphire substrates”, *DPG Spring Meeting*, Dresden, Germany, April 2014.
- [17] F. Scholz, M. Caliebe, T. Meisch, M. Alimoradi-Jazi, Z. Cheng, and M. Klein, “Large area semipolar GaN-GaInN hetero structures grown on foreign substrates” (invited), *225th Meeting of the Electrochemical Society*, Orlando, FL, USA, May 2014.
- [18] F. Scholz, T. Meisch, M. Caliebe, B. Neuschl, and K. Thonke, “Semipolar GaN-based optoelectronic structures on large area substrates” (invited), *CIMTEC 6th Forum on New Materials*, Montecatini Terme, Italy, June 2014.
- [19] F. Scholz, T. Meisch, M. Alimoradi, M. Caliebe, M. Klein, M. Hocker, B. Neuschl, I. Tischer, and K. Thonke, “Current status of semipolar and nonpolar GaN” (invited), *International Workshop on Nitride Semiconductors, IWN*, Wroclaw, Poland, August 2014.
- [20] F. Scholz, “Nobles Licht revolutioniert nicht nur die Beleuchtungstechnologie” (invited), *Physikalisches Kolloquium*, University Ulm, Germany, November 2014.
- [21] F. Scholz, M. Caliebe, T. Meisch, M. Alimoradi-Jazi, M. Klein, M. Hocker, B. Neuschl, I. Tischer, and K. Thonke, “Large area semipolar GaN heterostructures grown on patterned sapphire wafers” (invited), *MRS Fall Meeting*, Boston, USA, December 2014.
- [22] J. Wang, D. Zhang, and F. Scholz, “Improvement of $\{10\bar{1}1\}$ InGaN/GaN LEDs via optimization of InGaN MOVPE growth conditions”, *17th International Conference of Metalorganic Vapor Phase Epitaxy*, Lausanne, Switzerland, July 2014.
- [23] S. Bauer, M. Hocker, L. Hiller, F. Lipski, F. Scholz, and K. Thonke, “Micro-photoluminescence and micro-Raman studies on strained polar GaN layers”, *DPG Spring Meeting*, Dresden, Germany, April 2014.

- [24] M. Bou Sanayeh, A. Bergmann, and R. Michalzik, “Simultaneous optical manipulation of multiple particles inside microfluidic channels using one rectangular-shaped VCSEL”, poster at *SPIE Photonics Europe, Conf. on Biophotonics: Photonic Solutions for Better Health Care III*, Brussels, Belgium, April 2014.
- [25] F. Brunner, D. Prasai, W. John, M. Caliebe, F. Scholz, O. Krüger, and M. Weyers, “Semipolar (11-22) GaN templates grown on 100 mm trench-patterned r-plane sapphire”, *International Workshop on Nitride Semiconductors, IWN*, Wroclaw, Poland, August 2014.
- [26] E.R. Buss, U. Rossow, H. Bremers, T. Meisch, F. Scholz, and A. Hangleiter, “Growth and characterization of non- and semipolar AlInN and possibilities for relaxed buffer layer engineering”, *DPG Spring Meeting*, Dresden, Germany, April 2014.
- [27] D.V. Dinh, M. Hocker, T. Meyer, M. Caliebe, M. Pristovsek, K. Thonke, F. Scholz, C.J. Humphreys, and P.J. Parbrook, “Luminescence Properties of semipolar (11-22) InGaN single quantum wells”, poster at *International Workshop on Nitride Semiconductors, IWN*, Wroclaw, Poland, August 2014.
- [28] Y. Han, M. Caliebe, M. Kappers, F. Scholz, and C. Humphreys, “Structural characterisation of semi-polar (11-22) GaN templates grown on pre-structured r-plane sapphire substrates”, poster at *International Workshop on Nitride Semiconductors, IWN*, Wroclaw, Poland, August 2014.
- [29] C.R. Head, A. Hein, E.A. Shaw, A.P. Turnbull, P. Unger, and A.C. Tropper, “Femtosecond mode-locked VECSEL from widely cw-tunable gain chips”, poster at *Conf. on Lasers and Electro-Optics, CLEO 2014*, San Jose, CA, USA, June 2014.
- [30] L. Hiller, P. Schustek, M. Hocker, S. Bauer, M. Caliebe, T. Meisch, F. Scholz, and K. Thonke, “Analysis of semipolar gallium nitride layers by micro-Raman spectroscopy”, poster at *DPG Spring Meeting*, Dresden, Germany, March 2014.
- [31] M. Hocker, I. Tischer, B. Neuschl, J. Helbing, J. Wang, F. Scholz, and K. Thonke, “Cathodoluminescence mapping on differently inclined semipolar InGaN facets”, *DPG Spring Meeting*, Dresden, Germany, April 2014.
- [32] M. Knab, M. Hocker, I. Tischer, J. Wang, F. Scholz, and K. Thonke, “Development of a dedicated low noise EBIC measurement system”, poster at *DPG Spring Meeting*, Dresden, Germany, April 2014.
- [33] G. Kozlowski, D.V. Dinh, S. Presa, P.P. Maaskant, P.J. Parbrook, M. Caliebe, F. Scholz, and B. Corbett, “Chemical-mechanical polishing of semi-polar (11-22) GaN templates for use in LEDs”, *International Workshop on Nitride Semiconductors, IWN*, Wroclaw, Poland, August 2014.
- [34] C. Laurus, T. Aschenbrenner, E. Zakizadeh, S. Figge, D. Hommel, J. Wang, and F. Scholz, “Growth and characterisation of InGaN quantum dots on AlGaN-Templates”, *DPG Spring Meeting*, Dresden, Germany, April 2014.

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- [35] S. Metzner, F. Bertram, T. Hempel, T. Meisch, S. Schwaiger, F. Scholz, and J. Christen, “Correlation of optical properties and defect structures of semipolar GaN on pre-patterned sapphire substrates using cathodoluminescence microscopy”, *SPIE Photonics West, Conf. on Gallium Nitride Materials and Devices IX*, San Francisco, CA, USA, February 2014.
- [36] S. Metzner, M. Müller, G. Schmidt, B. Max, P. Veit, S. Petzold, F. Bertram, R.A.R. Leute, D. Heinz, J. Wang, F. Scholz, and J. Christen, “Optical and structural nano-characterization of GaN based LED structures with semipolar sub- μm patterned InGaN QWs”, *DPG Spring Meeting*, Dresden, Germany, April 2014.
- [37] M. Müller, S. Metzner, G. Schmidt, P. Veit, S. Petzold, F. Bertram, J. Christen, R. Leute, D. Heinz, J. Wang, T. Meisch, and F. Scholz, “Nanoscale imaging of GaN-based LED structures with semipolar InGaN QWs using scanning transmission electron microscope cathodoluminescence”, *SPIE Photonics West, Conf. on Gallium Nitride Materials and Devices IX*, San Francisco, CA, USA, February 2014.
- [38] B. Neuschl, J. Helbing, M. Knab, H. Lauer, T. Meisch, K. Forghani, F. Scholz, and K. Thonke, “Valence band order in *c*-oriented wurtzite AlGaIn layers”, *DPG Spring Meeting*, Dresden, Germany, April 2014.
- [39] I. Tischer, M. Frey, M. Hocker, R.A.R. Leute, F. Scholz, H. Groiss, E. Müller, D. Gerthsen, W. v. Mierlo, J. Biskupek, U. Kaiser, and K. Thonke, “Direct identification of luminescence from II type basal plane stacking faults in semipolar AlGaIn layers with low Al content”, *DPG Spring Meeting*, Dresden, Germany, April 2014.