Talks and Conference Contributions

[1] S. Bader, P. Gerlach, and R. Michalzik, "Novel oxide-free VCSEL with optically controlled current confinement", *Conf. on Lasers and Electro-Optics Europe, CLEO/ Europe 2015*, Munich, Germany, June 2015.

[2] M. Caliebe, Y. Han, M. Hocker, T. Meisch, C. Humphreys, K. Thonke, and F. Scholz, "Studies with marker layers on semipolar (11-22) oriented GaN grown on (10-12) pre-structured sapphire substrates", poster at *16th European Workshop on Metalorganic Vapor Phase Epitaxy (EWMOVPE XVI)*, Lund, Sweden, June 2015.

[3] M. Caliebe, Y. Han, T. Meisch, C. Humphreys, and F. Scholz, "Growth and coalescence studies with marker layers on (11-22) oriented GaN on pre-structured sapphire substrates", *PolarCoN Winterschool*, Reisensburg, Günzburg, Germany, March 2015.

[4] M. Caliebe, S. Tandukar, Z. Cheng, T. Meisch, D. Heinz, F. Scholz, A. Plettl, Y. Han, C. Humphreys, M. Hocker, S. Bauer, F. Huber, and K. Thonke, "Influence of trench period and depth on MOVPE grown (11-22) GaN on patterned r-plane sapphire substrates", *30th DGKK Workshop Epitaxie von III-V-Halbleitern*, Göttingen, Germany, December 2015.

[5] M. Daubenschüz, P. Gerlach, and R. Michalzik, "Epitaxy-based electro-thermal simulation approach for vertical-cavity surface-emitting laser structures", poster at *Conf. on Lasers and Electro-Optics Europe, CLEO/Europe 2015*, Munich, Germany, June 2015.

[6] S. Faraji, "Epitaxy and characterisation of semipolar (10-11) and (20-21) GaN on patterned sapphire substrates", *PolarCoN Winterschool*, Reisensburg, Günzburg, Germany, March 2015.

[7] D. Heinz, R.A.R. Leute, M. Fikry, L. Wu, D. Wu, F. Huber, O. Rettig, M. Asad, S. Bauer, M. Hocker, I. Tischer, T. Aschenbrenner, M. Schowalter, D. Hommel, A. Rosenauer, K. Thonke, and F. Scholz, "GaN-based nanostructures as novel optical sensor elements" (invited), *Recent Advances in Nano Science and Technology (RAINSAT-2015)*, Chennai, India, July 2015.

[8] D. Heinz, O. Rettig, F. Huber, M. Madel, M. Asad, J. Jakob, S. Bauer, M. Hocker, S. Jenisch, K. Thonke, and F. Scholz, "Ga(In)N nanostructures as optical sensing elements", poster at *Forschungstag Baden-Württemberg Stiftung*, Stuttgart, Germany, July 2015.

[9] M. Klein, D. Heinz, T. Meisch, F. Lipski, and F. Scholz, "Ferrocene doping in hydride vapor phase epitaxy", *6th International Symposium on Growth of III-Nitrides (ISGN-6)*, Hamamatsu, Japan, November 2015.

[10] M. Klein, R. Leute, T. Meisch, F. Lipski, and F. Scholz, "Properties of selective area growth patterns for gallium-nitride self-separation in hydride vapor phase epitaxy", *6th International Symposium on Growth of III-Nitrides (ISGN-6)*, Hamamatsu, Japan, November 2015.

[11] R.A.R. Leute, D. Heinz, J. Wang, T. Meisch, F. Scholz, O. Rettig, F. Huber, K. Thonke, S. Jenisch, and S. Strehle, "GaN nanostripes with sub-200-nm periodicity", *PolarCoN Winterschool*, Reisensburg, Günzburg, Germany, March 2015.

[12] T. Meisch, K. Alkhouly, G. Gahramanova, R. Zeller, S. Schörner, K. Thonke, L. Kirste, T. Fuchs, M. Caliebe, and F. Scholz, "Planar semipolar (11-22) green InGaN/GaN LEDs grown on patterned sapphire subtrates", *11th International Conference on Nitride Semiconductors (ICNS 2015)*, Beijing, China, September 2015.

[13] T. Meisch, K. Alkhouly, G. Gahramanova, R. Zeller, S. Schörner, K. Thonke, L. Kirste, T. Fuchs, M. Caliebe, and F. Scholz, "Planar semipolar (11-22) green InGaN/GaN LEDs grown on patterned sapphire subtrates", *30th DGKK Workshop Epitaxie von III-V-Halbleitern*, Göttingen, Germany, December 2015.

[14] T. Meisch, R. Zeller, S. Schörner, and F. Scholz, "Doping behavior of (11-22) GaN grown on PSS", *PolarCoN Winterschool*, Reisensburg, Günzburg, Germany, March 2015.

[15] T. Pusch, M. Lindemann, N.C. Gerhardt, M.R. Hofmann, and R. Michalzik, "Increasing the birefringence of VCSELs beyond 250 GHz", *Conf. on Lasers and Electro-Optics Europe, CLEO/Europe 2015*, Munich, Germany, June 2015.

[16] O. Rettig, D. Heinz, S. Jenisch, F. Huber, M. Madel, S. Bauer, M. Hocker, K. Thonke, and F. Scholz, "GaN-nanowires for sensor applications", *30th DGKK Workshop Epitaxie von III-V-Halbleitern*, Göttingen, Germany, December 2015.

[17] F. Scholz, "GaN-based LEDs: promises and challenges" (invited), *EBV Lighting Academy*, Munich, Germany, March 2015.

[18] F. Scholz, "GaN-based LEDs and laser diodes: promises and challenges", seminar talk at *IMTEK, University of Freiburg*, Freiburg, Germany, November 2015.

[19] F. Scholz, "LEDs statt Glühbirnen: Wie funktioniert's? Was bringt's?", *25th Anniversary of the Faculty of Engineering and Computer Science*, Ulm University, Germany, June 2015.

[20] F. Scholz, D. Heinz, K. Thonke, F. Huber *et al.*, "GaN-based hetero and nanostructures for chemical sensing and UV light emission", *The International Symposium on Bio & Nano Interface*, Suzhou, China, November 2015.

[21] F. Scholz, M. Caliebe, M. Fikry, D. Heinz, R.A.R. Leute, T. Meisch, O. Rettig, and J. Wang, "Epitaxially grown GaN-based micro- and nanostructures for optoelectronic applications", *Sino-German Workshop on Photonic Manufacturing, Manipulation and Measurement (PMMM 2015)*, Changchun, China, July 2015.

[22] J. Wang, T. Meisch, R. Zeller, and F. Scholz, "Internal quantum efficiency and carrier injection efficiency of c-plane, {10-11} and {11-22} InGaN/GaN-based LEDs", *PolarCoN Winterschool*, Reisensburg, Günzburg, Germany, March 2015.

[23] M. Lindemann, H. Höpfner, N.C. Gerhardt, M.R. Hofmann, T. Pusch, and R. Michalzik, "Ultrafast polarization dynamics with controlled polarization oscillations in vertical-cavity surface-emitting lasers", *SPIE Photonics West 2015*, Conf. on *Vertical-Cavity Surface-Emitting Lasers XIX*, San Francisco, CA, USA, Feb. 2015.

[24] M. Lindemann, H. Höpfner, N.C. Gerhardt, M.R. Hofmann, T. Pusch, and R. Michalzik, "Controlling the frequency of ultra-fast polarization oscillations in spin-VCSELs", poster at *79th Annual Meeting of the German Physical Society (DPG) and DPG Spring Meeting*, Berlin, Germany, March 2015.

[25] M. Lindemann, T. Pusch, N.C. Gerhardt, M.R. Hofmann, and R. Michalzik, "Tuning the frequency of polarization oscillations in spin-VCSELs by mechanical strain induction", *Conf. on Lasers and Electro-Optics Europe, CLEO/Europe 2015*, Munich, Germany, June 2015.

[26] M. Lindemann, T. Pusch, N.C. Gerhardt, M.R. Hofmann, and R. Michalzik, "Towards high frequency operation of polarization oscillations in spin vertical-cavity surface-emitting lasers" (invited), *SPIE Optics + Photonics 2015*, Conf. on *Spintronnics VIII*, San Diego, CA, USA, Aug. 2015.

[27] M. Lindemann, H. Höpfner, N.C. Gerhardt, M.R. Hofmann, T. Pusch, and R. Michalzik, "Controlled switching and frequency tuning of polarization oscillations in vertical-cavity surface-emitting lasers", poster at *SPIE Optics + Photonics 2015*, Conf. on *Spintronnics VIII*, San Diego, CA, USA, Aug. 2015.