

Selected presentations: Dr. rer. nat. Alexander Franke (as of Jan. 2017)

2016

A. Franke, F. Kaess, M.P. Hoffmann, J. Tweedie, R. Kirste, M. Bobea-Graziano, E. Sachet, J.-P. Maria, M. Gerhold, R. Collazo, Z. Sitar, "*AlGaN DBR and microcavities for deep UV vertical emitting laser*", International Workshop on Nitride Semiconductors 2016, Orlando, USA

A. Franke, D. Alden, R. Kirste, J. Tweedie, F. Kaess, M.P. Hoffmann, M. Gerhold, R. Collazo, Z. Sitar, "*Nitride micro-columnar DBR and monolithic microcavities for the UV-C spectral range*", International Workshop on Nitride Semiconductors 2016, Orlando, USA

A. Franke, "*Laser: Conquer the dark side of the force*", "Science on stage", North Carolina Museum of Natural Sciences, Raleigh, USA

A. Franke, L. Hernandez, F. Kaess, M.P. Hoffmann, I. Bryan, Z. Bryan, M. Bobea, J. Tweedie, R. Kirste, E. Sachet, J.-P. Maria, M. Gerhold, R. Collazo, Z. Sitar, "*Strain engineered high reflectivity DBRs and microcavities in the deep UV*", SPIE Photonics West, San Francisco, USA

2015

A. Franke, M.P. Hoffmann, I. Bryan, Z. Bryan, M. Bobea, J. Tweedie, F. Kaess, R. Kirste, L. Hernandez, M. Gerhold, R. Collazo, Z. Sitar, "*Strain optimized high reflective Nitride DBRs for Deep-UV applications*", 6th International Symposium on Growth of III-Nitrides, Hamamatsu, Japan

A. Franke, M.P. Hoffmann, I. Bryan, Z. Bryan, M. Bobea, J. Tweedie, F. Kaess, R. Kirste, C. Shelton, J.-P. Maria, M. Gerhold, R. Collazo, and Z. Sitar, "*All nitride confinement structures for deep UV microcavity laser*", SPIE Photonics West, San Francisco, USA

2014

A. Franke, M.P. Hoffmann, I. Bryan, Z. Bryan, M. Bobea, J. Tweedie, F. Kaess, R. Kirste, C. Shelton, J.-P. Maria, M. Gerhold, R. Collazo, Z. Sitar, "*AlN/AlGaN Distributed Bragg Reflectors for the Deep UV Spectral Range*", International Workshop on Nitride Semiconductors 2014, Wrocław, Poland

A. Franke, M.P. Hoffmann, I. Bryan, Z. Bryan, M. Bobea, J. Tweedie, F. Kaess, R. Kirste, C. Shelton, J.-P. Maria, M. Gerhold, R. Collazo, and Z. Sitar, "*High reflectivity AlN/AlGaN DBR suitable for vertical UV emitting laser structures*", Materials Research Society (MRS) Fall Meeting, Boston, USA

2011

A. Franke, B. Bastek, O. August, S. Sterling, T. Hempel, J. Christen, P. Moser, J. Bläsing, Ch. Berger, A. Dadgar, and A. Krost, "*Optical and structural characterization of a GaN based semi-microcavity with AlInN/GaN bottom distributed Bragg mirror*", 11th International Conference on Physics of Light-Matter Coupling in Nanostructures, Berlin, Germany

A. Franke, B. Bastek, S. Petzold, J. Christen, P. Moser, C. Berger, J. Bläsing, A. Dadgar, and A. Krost, "*Optical characterization of a hybrid InGaN/GaN microcavity with epitaxial AlInN/GaN bottom DBR*", Materials Research Society (MRS) Fall Meeting, Boston, USA

2010

A. Franke, B. Bastek, J. Krimmling, T. Hempel, J. Christen, P. Moser, A. Dadgar, and A. Krost, “*Optical characterization of a hybrid InGaN/GaN microcavity consisting of an epitaxial grown bottom and dielectric top distributed Bragg mirror*”, International Nano-Optoelectronics Workshop 2010, Beijing and Changchun, China

A. Franke, B. Bastek, J. Krimmling, J. Christen, P. Moser, A. Dadgar, and A. Krost, “*Optical investigation of a hybrid GaN based microcavity with AlInN/GaN bottom and dielectric top distributed Bragg mirrors*”, 10th International Conference on Physics of Light-Matter Coupling in Nanostructures, Cuernavaca, Mexico

A. Franke, S. Sterling, J. Christen, P. Moser, A. Dadgar, A. Krost, “*Characterization of a hybrid GaN microcavity structure with an AlInN/GaN bottom DBR and an InGaN/GaN MQW active region*”, International Workshop on Nitride Semiconductors 2010, Tampa, USA

2008

A. Franke, J. Krimmling, B. Bastek, T. Hempel, J. Christen, P. Moser, A. Dadgar, and A. Krost, “*Luminescence characterization of a hybrid GaN/InGaN microcavity structure confined between AlInN/GaN and dielectric Bragg reflectors*”, International Workshop on Nitride Semiconductors, Montreux, Switzerland

A. Franke, J. Krimmling, M. Noltemeyer, J. Christen, A. Dadgar, A. Krost, V.K.X. Lin, S.L. Teo, S. J. Chua, S. Tripathy, “*Optical Characterization of photonic crystal GaN LED structures on SOI substrate*”, International Workshop on Nitride Semiconductors, Montreux, Switzerland

A. Franke, F. Bertram, J. Christen, A. Dadgar, A. Krost, X.K. Lin, S.L. Teo, S. Tripathy, “*Microscopic luminescence characterization of InGaN/GaN micro-disk LEDs on silicon: 3D stress distribution and optical confinement*”, 8th International Conference on Physics of Light-Matter Coupling in Nanostructures, Tokyo, Japan

2007

A. Franke, B. Bastek, M. Noltemeyer, F. Bertram, J. Christen, M. Wieneke, A. Dadgar, A. Krost, R. Kirste, U. Harboeck, A. Hoffmann, “*Optical Properties of High Quality MOVPE Grown Non-Polar a-Plane GaN Epilayers*”, 7th International Conference on Nitride Semiconductors, Las Vegas, USA

2006

A. Franke, S. Petzold, T. Hempel, F. Bertram, J. Christen, E. Felten, N. Grandjean, “*Observation of coupled exciton-photon mode splitting in nitride semiconductor microcavities*”, 6th International Conference on Physics of Light-Matter Coupling in Nanostructures, Magdeburg, Germany

A. Franke, A. Diez, S. Petzold, B. Diez, T. Hempel, J. Christen, A. Dadgar, A. Krost, “*Ta₂O₅ / SiO₂ dielectric DBR mirrors for realization of ZnO VCSEL structures*”, 6th International Conference on Physics of Light-Matter Coupling in Nanostructures, Magdeburg, Germany

A. Franke, A. Diez, S. Petzold, B. Diez, T. Hempel, J. Christen, A. Dadgar, A. Krost, “*ZnO VCSEL structures with Ta₂O₅ / SiO₂ dielectric DBR mirrors*”, 4th International Workshop on ZnO and related Materials, Giessen, Germany