# Presentation list Dr. rer. nat. Alexander Franke (selected, as of Jan. 2016)

#### 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 microcavites 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
- C. Berger, A. Dadgar, J. Bläsing, G. Schmidt, P. Veit, F. Bertram, T. Hempel, A. Lesnik, **A. Franke**, A. Hoffmann, J. Christen, A. Krost, and A. Strittmatter, "Growth and characterization of blue VCSEL structures based on AlInN/GaN distributed Bragg reflectors", International Workshop on Nitride Semiconductors 2014, Wrocław, Poland

## 2011

- **A. Franke**, B. Bastek, O. August, S. Sterling, T. Hempel, J. Christen, P. Moser, J. Blaesing, 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

- **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 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 hybride 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. Feltin, 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, " $Ta_2O_5 / SiO_2$  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 Ta*<sub>2</sub> $O_5$  /  $SiO_2$  dielectric DBR mirrors", 4<sup>th</sup> International Workshop on ZnO and related Materials, Giessen, Germany