Publication list:

I. Publications in international journals and conference proceedings with referee system


II. Presentations (presenter underlined):

a. Conference contributions - talks:


Dasa, Lakshmi Narayana; Zhou, Hailong; Anthonysamy, Fervin Moses; Hoang, Thang Ba; Van Helvoort, Antonius; Finland, Bjørn-Ove; Weman, Helge, “Tuning of the crystal phase in III-V nanowires grown by Au-assisted molecular beam epitaxy”, MRS Spring meeting, (Late abstract), San Francisco, U.S.A., 5-7 April 2010.

Dasa, Lakshmi Narayana; Zhou, Hailong; Anthonysamy, Fervin Moses; Hoang, Thang Ba; Van Helvoort, Antonius; Finland, Bjørn-Ove; Weman, Helge. Growth of heterostructured III-V nanowires by molecular beam epitaxy for photonic applications”. Photonics West; San Fransico, U.S.A., 23-28 Januari 2010.

Van Helvoort, Antonius ; Dasa, Lakshmi Narayana; Grønsberg, Sondre; Patriarche, G.; Zhou, Hailong; Finland, Bjørn-Ove; Weman, Helge. “Dark field transmission electron microscopy techniques for structural characterization of semiconductor nanowire heterostructures”. IoP-EMAG 2009; Sheffield 8-11 September 2009.

Hoang, Thang Ba; Anthonysamy, Fervin Moses; Zhou, Hailong; Dasa, Lakshmi Narayana; Van Helvoort, Antonius; Finland, Bjørn-Ove; Weman, Helge. “Crystal phase dependent photoluminescence polarization in single semiconductor nanowires”. 3rd International conf. on One-dimensional Nanomaterials (ICON2009), Atlanta, U.S.A., December 7-9, 2009.

Hoang, Thang Ba; Anthonysamy, Fervin Moses; Zhou, Hailong; Dasa, Lakshmi Narayana; Van Helvoort, Antonius; Finland, Bjørn-Ove; Weman, Helge. “Polarized micro-photoluminescence imaging of single GaAs/AlGaAs core-shell nanowires with GaAsSb inserts”. Materials Research Society 2009 Fall Meeting, Symposium O: Excitons and Plasmon Resonances in Nanostructures II; Boston 29 November – 4 December 2009.


Dasa, Lakshmi Narayana; Rogstad, Espen; Scheffler, Martha; Van Helvoort, Antonius ; Zhou, Hailong; Patriarche, G.; Harmand, J.C.; Finland, Bjørn-Ove; Weman, Helge. “Diffusion-limited growth of GaAs nanowires by Au-assisted molecular beam epitaxy”, 4th GDR meeting; Corps (Isère), France 30 June – 3 July 2009.

Zhou, Hailong; Hoang, Thang Ba; Dasa, Lakshmi Narayana; Anthonysamy, Fervin Moses; Van Helvoort, Antonius; Finland, Bjørn-Ove; Weman, Helge; Patriarche, G; Harmand, J.C.. “Self-organized wurtzite AlGaAs core-shell nanowires with GaAsSb inserts grown by molecular beam epitaxy”, 4th GDR meeting; Corps (Isère), France 30 June – 3 July 2009. [Lecture]


Hasting HS; van Helvoort ATJ; Walmsley JC; Marioara CD; Andersen SJ; Holmestad R, "Precipitation phases in AlMgSiCu alloys studied by Z-contrast STEM", Scandem 2007, Finland, 14-16 juni 2007


b. Conference contributions – posters


VT Fauske, AM Munshi, DL Dheeraj, DC Kim, B-O Finland, H Weman, and ATJ van Helvoort, “Site-specific, cross-sectional TEM samples of as-grown nanowires by FIB”, 15th European Microscopy Congress (EMS2012), Manchester, UK, 16-21 September 2012.


III. Others:


van Helvoort ATJ, Knowles KM, Fernie JA, ”$\gamma$-Al$_2$O$_3$ Nanocrystalline Structures Formed During Electrostatic Bonding of Aluminium to Pyrex™”, Poster for internal use Inorganic Microstructure Group, Materials Science Department, Cambridge University/TWI, 2002.


van Helvoort ATJ, First prize 2001 IoM Lecture Competition , Graduate Class, region East-Anglia, UK.
IV. In preparation/Submitted/Others:

Accepted:


Submitted:


In preparation:


Scheduled conferences:


V. Supervision:

a. PhD students:


- Vidar Trond Fauske, “Understanding and optimizing III-V nanowire nucleation and growth on different substrates for device applications”, start date September 2011, planned submission October 2015.


Various:

- Muliggjørende teknologier (Nanoteknologi), "Building-on and Connecting at the nanoscale: Devices based on novel 1D and 2D nanomaterials”, (Co-supervisor), NN, planned starting date September 2014.


b. Master students

- Christian Fink, “Characterization of Digital Cameras in TEM-laboratories at NTNU Trondheim” (Exchange student), submitted July 2005

- Nora Borghildur Kristjansdottir, “TEM characterization of nanometer scale K$_3$Nb$_2$O$_7$ structures” (project), submitted December 2007.


- Ingrid Snustad, “Correlated μ-PL and TEM characterization of self-catalyzed GaAs/AlGaAs core-shell nanowires”, (project), submitted December 2012.
- Ingrid Snustad, “Selective examination of optically and structurally separable parts within GaAs/AlGaAs core-shell nanowires by micro-photoluminescence and transmission electron microscopy”, (diploma), submitted June 2013.
- Andrea Klubicka, “TEM study of GaAs/GaAsSb core-shell Nanowires”, (diploma/International MSc), submitted June 2013.
- Julie Stene Nilsen, “Position controlled growth of GaAs/AlGaAs core-shell nanowires - more uniform structural and optical properties?”, (diploma), submitted June 2014.
- Aleksander B. Mosberg “TEM characterization of Ga-nitride nanowires”, (project), Start August 2014.

VI. Lecturing:

- TFY4330 Nanoverktøy (Nanotools), 2nd year Nanotechnology (altered to 4th years course from 2011/2012)
- TFY3114/TFY14 Functional Materials, 4th years Physics
- FY8102 Electron diffraction and advanced TEM, PhD course
- Introduction to TEM, 7 lectures introduction & overview of current applications
- FIB module in PhD course nanostructuring (FE8135)