

Publications 2010 (People in TEM Gemini Centre are highlighted)

26 journal publications

Anawati, Graver, B., **Nordmark, H.**, Zhao, Z., Frankel, G. S., **Walmsley, J. C.** and Nisancioglu, K., "[Multilayer Corrosion of Aluminum Activated by Lead](#)." *Journal of the Electrochemical Society*, 157, C313-C320, 2010.

Andersen, S. J., **Marioara, C. D.**, **Vissers, R.**, **Torsæter, M.**, **Bjørge, R.**, **Ehlers, F.** and **Holmestad, R.**, "[The dual nature of precipitates in Al-Mg-Si alloys](#)." *Materials Science Forum*, 638-642, 390-395, 2010.

Bjørge, R., **Marioara, C. D.**, **Andersen, S. J.** and **Holmestad, R.**, "[Germanium network connecting precipitates in an Mg-rich Al-Mg-Ge alloy](#)." *Journal of Electron Microscopy*, 59, S129-S133, 2010.

Bjørge, R., **Marioara, C. D.**, **Andersen, S. J.** and **Holmestad, R.**, "[Precipitation in Two Al-Mg-Ge Alloys](#)." *Metallurgical and Materials Transactions A*, 41, 1907-1916, 2010.

Chen, Y. J., **Li, Y. J.**, **Walmsley, J. C.**, Dumoulin, S. and Roven, H. J., "[Deformation Structures of Pure Titanium during Shear Deformation](#)." *Metallurgical and Materials Transactions A*, 41, 787-794, 2010.

Chen, Y. J., **Li, Y. J.**, **Walmsley, J. C.**, Dumoulin, S., Skaret, P. C. and Roven, H. J., "[Microstructure evolution of commercial pure titanium during equal channel angular pressing](#)." *Materials Science and Engineering A*, 527, 789-796, 2010.

Dheeraj, D. L., Zhou, H. L., Moses, A. F., Hoang, T. B., **Van Helvoort, A. T. J.**, Fimland, B. O. and Weman, H., "[Growth of heterostructured III-V nanowires by molecular beam epitaxy for photonic applications](#)." *Proceedings of SPIE, the International Society for Optical Engineering*, 7608, 76081C_76081-76081C_76086, 2010.

Diplas, S., Løvvik, O. M., **Nordmark, H.**, Kepaptsoglou, D. M., Graff, J. M., Ladam, C., Tyholdt, F., **Walmsley, J. C.**, Gunnæs, A. E., Fagerberg, R. and Ulyashin, A., "[Characterization of thin and ultrathin transparent conducting oxide \(TCO\) films and TCO-Si interfaces with XPS, TEM and ab initio modelling](#)." *Surface and Interface Analysis*, 42, 874-877, 2010.

Ehlers, F. and **Holmestad, R.**, "[Direct Approach to Atomistic Ab Initio Studies of Precipitate Growth in Alloys](#)", proceeding Fall Meeting MRS 2009, Paper #: 1229-LL02-09, DOI: 10.1557/PROC-1229-LL02-09

Enger, B.C., Lødeng, R., **Walmsley, J.** Holmen, A., "[Inactive aluminate spinels as precursors for design of CPO and reforming catalysts](#)" *Applied Catalysis A*, 383, 119-127, 2010.

Graver, B., **van Helvoort, A. T. J.** and Nisancioglu, K., "[Effect of heat treatment on anodic activation of aluminium by trace element indium](#)." *Corrosion Science*, 52, 3774-3781, 2010.

Gulbrandsen-Dahl, S., Moen, K.E., **Ehlers, F., Marioara, C.D.**, Pedersen, K.O., Marthinsen, K., "[Matrix Coherency Strain and Hardening of Al-Mg-Si](#)", *Materials Science Forum*, 638-642, 229-234, 2010.

Håkonsen, S. F., **Walmsley, J. C.** and Holmen, A., "[Ethene production by oxidative dehydrogenation of ethane at short contact times over Pt-Sn coated monoliths.](#)" *Applied Catalysis A*, 378, 1-10, 2010.

Hoang, T. B., Moses, A. F., Ahtapodov, L., Zhou, H., Dheeraj, D. L., **van Helvoort, A. T. J.**, Fimland, B. O. and Weman, H., "[Engineering Parallel and Perpendicular Polarized Photoluminescence from a Single Semiconductor Nanowire by Crystal Phase Control.](#)" *Nano Letters*, 10, 2927-2933, 2010.

Kvande, I., Zhu, J., Zhao, T. J., Hammer, N., Rønning, M., Raaen, S., **Walmsley, J. C.** and Chen, D., "[Importance of Oxygen-Free Edge and Defect Sites for the Immobilization of Colloidal Pt Oxide Particles with Implications for the Preparation of CNF-Supported Catalysts.](#)" *Journal of Physical Chemistry C*, 114, 1752-1762, 2010.

Larsen, M. H., **Walmsley, J. C.**, Lunder, O. and Nisancioglu, K., "[Effect of Excess Silicon and Small Copper Content on Intergranular Corrosion of 6000-Series Aluminium Alloys.](#)" *Journal of the Electrochemical Society*, 157, C61-C68, 2010.

Li, Y. J., Chen, Y. J., **Walmsley, J. C.**, Mathinsen, R. H., Dumoulin, S. and Roven, H. J., "[Faceted interfacial structure of {10\(-1\)1} twins in Ti formed during equal channel angular pressing.](#)" *Scripta Materialia*, 62, 443-446, 2010.

Lögberg, S., Lualdi, M., Järås, S., **Walmsley, J. C.**, Blekkan, E. A., Rytter, E. and Holmen, A., "[On the selectivity of cobalt-based Fischer-Tropsch catalysts: Evidence for a common precursor for methane and long-chain hydrocarbons.](#)" *Journal of Catalysis*, 274, 84-98, 2010.

Ramachandran, A., **Tucho, W. M.**, Mejdell, A. L., Stange, M., Venvik, H. J., **Walmsley, J. C.**, **Holmestad, R.**, Bredesen, R. and Borg, A., "[Surface characterization of Pd/Ag₂₃ wt% membranes after different thermal treatments.](#)" *Applied Surface Science*, 256, 6121-6132, 2010.

Sæterli R., Rørvik P.M., You C.C., **Holmestad R.**, Tybell T., Grande T., **van Helvoort A.T.J.**, and Einarsrud M.-A., "[Change in polarization direction and structure of ferroelectric PbTiO₃ nanorods during heat treatment](#)", *Journal of Applied Physics*, 108, 124320, 2010.

Sæterli, R., Selbach, S. M., Ravindran, P., Grande, T. and **Holmestad, R.**, "[Electronic structure of multiferroic BiFeO₃ and related compounds: Electron energy loss spectroscopy and density functional study.](#)" *Physical Review B*, 82, 2010.

Torsæter, M., **Hasting, H. S.**, Lefebvre, W., **Marioara, C. D.**, **Walmsley, J. C.**, **Andersen, S. J.** and **Holmestad, R.**, "[The influence of composition and natural aging on clustering during pre-aging in Al-Mg-Si alloys.](#)" *Journal of Applied Physics*, 108, 073527, 2010.

Tucho, W. M., Mauroy, H., **Walmsley, J. C.**, Deledda, S., **Holmestad, R.** and Hauback, B. C., "[The effects of ball milling intensity on morphology of multiwall carbon nanotubes.](#)" *Scripta Materialia*, 63, 637-640, 2010.

van Helvoort, A. T. J., Dheeraj, D. L., Zhou, H., **Grønsberg, S.**, Patriarche, G., Fimland, B. O. and Weman, H., "[Dark field transmission electron microscopy techniques for structural characterization of semiconductor nanowire heterostructures.](#)" *Journal of Physics - Conference Series*, 241, 012084, 2010.

Walmsley, J. C., Albertsen, J. Z., **Friis, J.** and Mathiesen, R. H., "[The evolution and oxidation of carbides in an Alloy 601 exposed to long term high temperature corrosion conditions](#)", *Corrosion Science*, 52, 4001-4010, 2010.

Zhou, D., **Vullum, P. E.**, Sharma, G., Thomassen, S. F., **Holmestad, R.**, Reenaas, T. W. and Fimland, B. O., "[Positioning effects on quantum dot solar cells grown by molecular beam epitaxy.](#)" *Applied Physics Letters*, 96, 2010.

9 journal publications accepted/published online 2010

Eberg E, van Helvoort A.T.J., Takahashi R., Gass M., Mendis B., Bleloch A., **Holmestad R.**, and Tybell T., "EELS investigation of Pb and Ti hybridization with O at the PbTiO₃/SrTiO₃ interface", *Journal of Applied Physics*, 109, 034104, 2011.

Lögdberg, S., Boutonnet, M., **Walmsley, J.C.**, Järås, S., Holmen, A., Blekkan, E.A., "Effect of water on the space-time yield of different supported cobalt catalysts during Fischer-Tropsch synthesis", *Applied Catalysis A: General*, 393, 109-121, 2011.

Madaro F., **Sæterli R.**, Tolchard J.R., Einarsrud M.-A., **Holmestad R.** and Grande T., "Molten salt synthesis of K₄Nb₆O₁₇, K₂Nb₄O₁₁ and KNb₃O₈ crystals with needle- or plate-like morphology", *Cryst. Eng. Comm*, 13, 1304-1313, 2011.

Vullum P.E., Pitt, M.P., **Walmsley, J.C.**, Hauback, B.C., **Holmestad, R.**, "TEM characterization of pure and transition metal enhanced NaAlH₄" *Journal of Alloys and Compounds*, 509, 281-289, 2011.

Nagayoshi H., **Nordmark H.**, Nishimura S., Terashima K., **Marioara C. D.**, **Walmsley J. C.**, **Holmestad R.** and A. Ulyashin, "Vapour-Solid-Solid Si Nano-Whiskers Growth Using Pure Hydrogen as Source Gas", *Thin Solid Films*, in Press, doi:10.1016/j.tsf.2011.01.321.

Nordmark, H., Ulyashin, A.G., **Walmsley, J.C.** and **Holmestad, R.** "H-initiated extended defects from plasma treatment: Comparison between c-Si and mc-Si", accepted for publication in *Journal of Physics: Conference series*.

Syverud, K., Xhanari, K., Chinga-Carrasco, G., **Yu, Y.**, and Stenius, P. J., "Films made of cellulose nanofibrils: surface modification by adsorption of a cationic surfactant and characterization by computer-assisted electron microscopy", *Journal of nanoparticle research*, in press, doi: 10.1007/s11051-010-0077-1.

Sæterli, R., Flage-Larsen, E., **Friis, J.**, Løvvik, O.M., Pacaud, J., Marthinsen, K., **Holmestad, R.**, "Experimental and theoretical study of electron density and structure factors in CoSb₃", *Ultramicroscopy*, In Press, doi:10.1016/j.ultramic.2010.08.002.

Torsæter M., Lefebvre W., **Marioara C. D.**, **Andersen S. J.**, **Walmsley J. C.** and **Holmestad R.**, “Study of intergrown L and Q’ precipitates in Al-Mg-Si-Cu alloys”, *Scripta Materiala*, 64, 817-820, 2011. doi:10.1016/j.scriptamat.2011.01.008.

1 book chapter

Dheeraj D. L., Zhou H. L., Moses A. F., Hoang T.B., **van Helvoort A. T. J.**, Fimland B.O. and Weman H., ”Heterostructured III-V Nanowires with Mixed Crystal Phases Grown by Au-assisted Molecular Beam Epitaxy”, in "Nanowires", edited by: Paola Prete, ISBN 978-953-7619-79-4.

Proceedings of 5th Japan-China-Norway Cooperative Symposium on Nanostructure of Advanced Materials and Nanotechnology (JCNC2010), Edited by T. Kawabata and T. Hashizume, ISBN 978-4-9903248-2-7, Toyama, 12-15 September, 2010: (All below were invited)

Andersen S. J., **Marioara C. D.**, **Holmestad R.** “*Precipitates in Al-Mg-Si alloys. Relation to Zintl-phases and polar intermetallics*”, pp. 39-42.

Holmestad J., **Marioara C.D.**, **Andersen S.J.** and **Holmestad R.**, “*The Effect of Ag on Hardness and Microstructure during Overageing of Al-Mg-Si-Cu Alloys*”, pp. 53 – 56.

Marioara C. D., **Andersen S. J.**, **Bjørge R.**, **Holmestad R.** “*Si/Ge network connecting precipitates in Al-Mg-Si/Ge-Cu(-Ag)*”, pp 49-52.

J. Nakamura, **K. Matsuda**, **S. Kenji**, **T. Sato**, **C.D. Marioara**, **S.J. Andersen**, **R. Holmestad**, **S. Ikeno**, “*Effect of Silver addition on crystal structure for beta' phase in Al-Mg-Si alloy*”, pp. 135-136.

Torsæter M., Lefebvre W., **Marioara C. D.**, **Andersen S. J.**, **Walmsley J. C.**, **Holmestad R.**, “*The study of clustering in Al-based alloys by APT*”, pp. 45-50.



JCNC2010 12~15 SEPT. 2010, TOYAMA, JAPAN

Calin Marioara, Sigmund Andersen, Malin Torsæter and Jon Holmestad from the TEM Gemini Centre participated in JCNC2010.

Proceedings of the 12th International Conference on Aluminium Alloys (ICAA), Yokohama, 5-9 September, 2010: Aluminium Alloys, Ed. by S. Kumai, O. Umezawa, Y. Takayma, T. Tsuchida and T. Sato (ISBN 978-4-905829-11-9, Japan Institute of Light Metals, 2010).

Andersen S.J., Marioara C.D., Torsæter M., Bjørge R., Ehlers F.J.H., Holmestad R., Reiso O., Røyset J. *Behind Structure and Relation of Precipitates in Al-Mg-Si and Related Alloys*, (invited) pp. 1391-1396.

Bjørge R., Nakashima P.N.H., **Marioara C.D., Andersen S.J.,** Muddle B.C., Etheridge J., **Holmestad R.** *Precipitate/Matrix Interface in an Al-Mg-Ge Alloy Studied by Annular Dark-Field Scanning Transmission Electron Microscopy*, pp. 1391-1395.

Dons A.L., Li Y. "Universal" Laws for the Density of Dispersoids after the Homogenisation Heat Treatment of Aluminium, pp. 270-275.

Ehlers F.J.H., Andersen S.J., Marioara C.D., Holmestad R. *Atomistic Ab Initio Studies of Precipitate/Host Lattice Interfaces*, pp. 1432-1437.

Holmestad J., Marioara C.D., Andersen S.J., Holmestad R. *Microstructure of Two Overaged Al-Mg-Si-Cu Alloys*, pp. 1021 – 1026.

Holmestad R., Marioara C.D., Ehlers F.J.H., Torsæter M., Bjørge R., Røyset J., Andersen S.J., *Precipitation in xxx Aluminium Alloys* (invited), pp. 30-39.

Jia Z., Friis J., Forbord B., Solberg J. K. and Marthinsen K., "The Effect of Alloying Elements on the Metastable Zr Solid Solubility and Precipitation of L12 Al₃Zr Precipitates in Aluminium Alloys", pp. 2096-2101.

Marioara C.D., Andersen S.J., Boothroyd C.B., Holmestad R. *Disordered Precipitates in an Al-Mg-Si-Cu-Ag Alloy*, pp. 424-429.

Lefebvre W., Vurpillot F., Torsæter M., De Geuser F., *The study of clustering in Al-based alloys by APT*, pp. 1379-1384.

Li Y., Furu T., Kahl S., Olsen A., *A TEM Study on α -Al(Mn,Fe)Si Dispersoids Precipitated in AA3003 Alloy*, pp. 498-503.

Nakamura J., Matsuda K., Sato T., Marioara C.D., Andersen S.J., Holmestad R., Ikeno S. *The Effect of Ag Addition on Transition of Crystal Structure for β' -phase in Al-Mg-Si Alloy*, pp. 1057-1060.

Teichmann K., Marioara C.D., Pedersen K.O., Gulbrandsen-Dahl, S. Kolar M., Andersen S.J., Marthinsen K. *The Effect of Deformation on the Precipitation Behaviour of an AlMgSi Alloy A HRTEM Study*, pp. 1027-1032.

Torsæter M., Lefebvre W., Andersen S.J., Marioara C.D., Walmsley J.C., Holmestad R. *Clustering Behaviour in Al-Mg-Si Alloys Investigated by APT*, pp. 1385-1390.

1 PhD thesis in 2010



Ragnhild K. Sæterli, *Electronic structure of thermoelectric and ferroelectric materials – Advanced transmission electron microscopy studies* Department of Physics, September 2010

Ragnhild K. Sæterli (middle) with her opponents professors Eva Olsson (Chalmers) and Rik Brydson (Leeds University) after her defense

8 Master/project theses using TEM in 2010

Jan Fredrik Helgaker, “High temperature stability of Al-Mg-Si-Cu alloys” (Master, June 2010).

Astrid Marie Muggerud, “Microstructure studies of multicrystalline silicon solar cell materials” (Master, July 2010).

Johannes Tveit, “Characterization of ZnO nanostructures to be utilized in organic/inorganic solar cells” (Master, June 2010).

Tadelle Haddush Abriha, “SEM microstructure study and hardness evaluation of Al-Mg-Si(Ge) (6xxx) alloys” (International Master, June 2010).

Martin Ervik, “TEM and SEM studies of Al-Mg-Si alloys with respect to corrosion“(Project work, December 2010).

Vidar Tonaas Fauske, “Electron Microscopy Characterization of the Interface between Semiconductor Nanowires and Substrate” (Project work, December 2010).

Fredrik Martinsen, “The effect of natural aging on precipitation hardening in Al-Mg-Si alloys“(Project work, December 2010).

Magnus Nord, “Transmission electron microscopy characterisation of quantum dot intermediate band solar cell materials“(Project work, December 2010).

1 popular science contribution

Adresseavisen, in the series ‘Kunnskapsjakten’; Interview with **Randi Holmestad**, ‘Ser innover i nanoverdenen’, 12. October 2010.

42 conference talks/posters/seminars/meetings in 2010

(presenter underlined)

Bjørge, R, Nakashima, P.N.H., **Marioara**, C. D., **Andersen**, S. J., Muddle B.C., Etheridge J., **Holmestad**, R., “ β' precipitate in an Al-Mg-Ge alloy studied by Cs-corrected STEM”. ESTEEM Workshop on Aberration-Corrected STEM; Daresbury, UK, 3-5 July 2010 [Poster]

Chinga-Carrasco, G. and **Yu, Y.**, “Quantitative microscopy of cellulose fibres and nanofibrils”, 17th International Microscopy Congress - IMC 2010, Rio de Janeiro, Brazil, 19-24 September 2010. [Poster].

Dasa L.N., Zhou H., Anthonyamy F.M., Hoang, T.B., **Van Helvoort A.T.J.**, Fimland B-O, and Weman H., “Growth of heterostructured III-V nanowires by molecular beam epitaxy for photonic applications”. Photonics West; San Fransico, USA., 23-28 January 2010. [Talk]

Dasa, L.N., Zhou H., Hailong, Anthonyamy, F. M., Hoang, T.B., **Van Helvoort, A.T.J.**, Fimland, B.-O. and Weman, H., “Tuning of the crystal phase in III-V nanowires grown by

Au-assisted molecular beam epitaxy”, MRS Spring meeting, (Late abstract), San Francisco, USA., 5-7 April 2010. [Talk]

Dehghan-Niri, R, Hansen, TW, Wagner, JB, Birkedal, Holmen, A, Rytter, E, Borg, Ø, **Walmsley, JC**, “In-situ reduction of cobalt oxide supported on alumina in an environmental transmission electron microscope”, Sixth Tokyo Conference on Advanced Catalytic Science and Technology & Fifth Asia Pacific Congress on Catalysis (TOCAT6/APCAT5) "Innovation driven by catalysis"; 18-23 July 2010 [Talk]

Dehghan-Niri R., Hansen T. W., Wagner J. B., Holmen A., Rytter E., Borg Ø., **Holmestad R.**, **Walmsley J. C.**, “Using environmental transmission electron microscope to study the in-situ reduction of Co_3O_4 supported on $\alpha\text{-Al}_2\text{O}_3$ ”, 17th International Microscopy Congress - IMC 2010, Rio de Janeiro, Brazil, 19-24 September 2010. [Poster]

Dheeraj D.L., **Van Helvoort A.T.J.**, Fimland B.O., and Weman H., “Growth of heterostructured III-V semiconductor nanowires by molecular beam epitaxy”, Nano-network workshop 2010, 31st May – 2nd June, Tønsberg, Norway. [Talk]

Dheeraj D.L., Munshi A.M., **van Helvoort A.T.J.**, Fimland B.O., and Weman H., “Controlling crystal phases in GaAs nanowires grown by Au-assisted molecular beam epitaxy”, MBE2010, Berlin, 22-27 August. [Talk]

Dheeraj D.L., Munshi A.M., **van Helvoort A.T.J.**, Fimland B.O., and Weman H., “Tuning of the crystal phases in GaAs nanowires grown by Au-assisted molecular beam epitaxy”, 5th NTNU Nanolab usermeeting, Trondheim, Norway, 10 September 2010. [Talk]

Dheeraj D.L., Munshi A.M., **van Helvoort A.T.J.**, Fimland B.O., and Weman H., “Control of wurtzite and zinc blende crystal phases in single GaAs nanowires grown by Au-assisted molecular beam epitaxy” 5th Nanowire growth workshop, Rome, Italy, 4-5 November 2010. [Poster]

Eberg E., **van Helvoort ATJ**, Takahashi R, Gass M, Mendis B, **Holmestad R** and Tybell T, “Evidence of Change in Ti/Pb-O Hybridization at the PbTiO_3 / SrTiO_3 Interfaces”, MRS Spring meeting, M: Structure-Function Relations at Perovskite Surfaces and Interfaces, San Fransico, U.S.A., 5-7 April 2010. [Talk]

Giri, R. **Solberg, J. K.** and Hoel, R., ”Electron microscopy of pulsed plasma nitrided AISI 316L stainless steel”, International Conference on Advances in Electron Microscopy and Related Techniques & XXXI, Mumbai, India, 8-11 March 2010. [Talk]

Hasting HS, **Frøseth AG**, **Andersen SJ**, **Vissers R**, **Walmsley JC**, **Marioara CD**, Lefebvre W, Danoix F and **Holmestad R**, “Composition of β ” precipitates in Al-Mg-Si alloys by atom probe tomography and first principles calculations”, 'Solid-Solid Phase Transformations in Inorganic Materials, Palais des Papes, Avignon, 6-11 June 2010. [Talk]

van Helvoort A.T.J., **Holmestad R.** and **Walmsley J.C.**, “TEM as tool in nanotechnology at NTNU”, 5th NTNU Nanolab user meeting, Trondheim, Norway, 10 September 2010. [Talk]

Holmestad R, **Marioara CD**, **Ehlers FJH**, **Torsæter M**, **Bjørge R**, Røyset J and **Andersen SJ**, Precipitate Structure Determination in 6xxx Aluminium Alloys, 17th International Microscopy Congress - IMC 2010, Rio de Janeiro, Brazil, 19-24 September 2010. [Talk]

Holmestad R, “Physics in Aluminium?!” Friday colloquium, Department of Physics, NTNU, 5 November 2010 [Talk].

Lögberg, S, **Luaidi**, M, **Di Carlo**, G, **Järås**, S, **Boutonnet**, M, **Walmsley**, **JC**,; **Blekkam**, EA, **Rytter**, E, and **Holmen**, A, “On the selectivity of Cobalt-based Fischer-Tropsch catalysts”, 14th Nordic Symposium on Catalysis, 29-31 August 2010 [Talk]

Løvvik, OM, **Flage-Larsen**, E, **Sagvolden**, E, and **Vullum**, **PE**, “Solid state hydrogen storage and interfaces in PV solar cells: Different meeting points between modelling and experiments”, TYC Workshop, Energy materials: electro- and photo-chemical interfaces, 7-9 September 2010 [Talk]

Moses A.F., **Ahtapodov L.**, **Hoang T.B.**, **Dheeraj D.L.**, **van Helvoort A.T.J.**, **Fimland B.-O.** and **Weman H.**, “Micro-photoluminescence spectroscopy and imaging of single axial and radial heterostructured III-V nanowires”, Norwegian electro-Optics meeting, Ålesund, April 7-9 2010. [Talk]

Moses A.F., **Hoang T.B.**, **Ahtapodov L.**, **Dheeraj D.L.**, **van Helvoort A.T.J.**, **Fimland B.O.**, and **Weman H.**, “Photoluminescence polarization anisotropy in a single heterostructured III-V nanowire with mixed crystal phases”, 30th International Conference on the Physics of Semiconductors (ICPS 2010), Seoul, Korea, July 25 - 30, 2010. [Poster]

Moses A.F., **Hoang T.B.**, **Ahtapodov L.**, **Dheeraj D.L.**, **van Helvoort A.T.J.**, **Fimland B.-O.** and **Weman H.**, “Engineering photoluminescence polarization in a single semiconductor nanowire”, 5th NTNU Nanolab user meeting, Trondheim, Norway, 10 September 2010. [Talk]

Nagayoshi H., **Nordmark H**, **Nishimura S.**, **Terashima K.**, **Marioara C. D.**, **Walmsley J. C.**, **Holmestad R.** and **A. Ulyashin**, “Vapour-Solid-Solid Si Nano-Whiskers Growth Using Pure Hydrogen as Source Gas”, Sixth International Conference on Hot-Wire Chemical Vapor Deposition (Cat-CVD) Process (HWCVD6), Ecole Polytechnique, Paris, 13-17 September 2010. [Poster]

Nordmark, H., **Ulyashin, A.G.**, **Walmsley, J.C.** and **Holmestad, R.** “H-initiated extended defects from plasma treatment: Comparison between c-Si and mc-Si”, International Conference on Extended Defects in Semiconductors (EDS2010), Brighton, UK, 19-24 September 2010. [Talk -invited]

Reenaas, TW, **Vullum**, **PE**, **Song**, Y., **Sadeghi**, M., **Thomassen**, S, **Holmestad**, R, **Wang**, S., **Fimland**, B O, “Comparative study of spacer layers for InAs quantum dot stacks”, 22nd International Conference on Indium Phosphide and Related Materials, 31 May – 6 June 2010 [Talk]

Rørvik P-M, **Sæterli R**, **You CC**, **Holmestad R**, **Van Helvoort ATJ**, **Tybell T**, **Grande T**, **Einarsrud M-A**, “Annealing effect on the domain orientation in PbTiO₃ nanorods”. Electroceramics XII, Trondheim; 13-16 June 2010. [Talk]

Soleim BG, Sæterli R, Vullum PE, van Helvoort ATJ, “FIB TEM sample preparation”, NTNU NanoLab’s Seminar series, Trondheim, 13 April 2010. [Talk]

Soleim BG, Sæterli R, van Helvoort ATJ, “TEM sample preparation of surface nanostructures using Focused Ion Beam”, International Conference on Electroceramics XII, Trondheim, 13-16 June 2010. [Poster]

Soleim BG, Sæterli R, van Helvoort ATJ, “Comparing Several TEM Sample Preparation Techniques to Study Ferroelectric Lead Titanate Nanostructures”, 17th International Microscopy Congress - IMC 2010, Rio de Janeiro, Brazil, 19-24 September 2010. [Poster]

Torsæter M, Hasting H. S., Lefebvre W., Marioara C.D., Walmsley J. C., Andersen S. J., and Holmestad R., “The influence of composition and natural ageing on clustering during pre-ageing in Al-Mg-Si alloys”, SCANDEM conference, Stockholm, 8-11. June 2010. [Poster]

Torsæter M, Lefebvre W, Andersen SJ, Walmsley JC and Holmestad R, Investigation of clustering in Al-Mg-Si alloys by Atom Probe Tomography, 17th International Microscopy Congress - IMC 2010, Rio de Janeiro, Brazil, 19-24 September 2010. [Talk]

Walmsley, JC, Dehghan, R, Vullum, PE, Holmestad, R, Rønning, M, Holmen, A, Hauback, B., “TEM analysis of catalyst and energy storage materials”, International Symposium on Advanced Electron Microscopy for Catalysis and Energy Storage Materials, NTNU Trondheim, 17-20 January 2010 [Talk]

Walmsley J.C., Marioara C.D., Larsen M.H., Mathiesen R.H., Nisancioglu K., and Holmestad R., “Transmission Electron Microscope studies of aluminium alloys”, EMRS Spring meeting, Strasbourg, June 7-9 2010. [Talk – invited]

Weigand, CC, Grepstad, J, Weman, H, Ladam, C., Vullum, PE, Dahl, Ø, Bergren, M.R., Collins, R.T., Furtak, T.E., Tveit, J, and Holmestad, R., “ZnO nanosheets grown by pulsed laser deposition”, 5th nanowire growth workshop, 3-5 November 2010 [Poster]

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