

Publication list Helge Weman (chronological)

Date: December 4, 2010

Internationally refereed journal papers (with interactive links)

1. [Neutral carbon-related complex defects and the annealing of thermal donors in p-type Czochralski silicon](#)
H. Weman, B. Monemar, and P-O. Holtz,
Appl. Phys. Lett. **47**, 1110-1112 (1985).
2. [Deep-level transient spectroscopy and photoluminescence studies of electron-irradiated Czochralski silicon](#)
O.O. Awadelkarim, H. Weman, B.G. Svensson, and J.L. Lindström,
J. Appl. Phys. **60**, 1974-1979 (1986).
3. [Thermal donors and carbon-oxygen defects in silicon](#)
J.L. Lindström, H. Weman, and G. Oehrlein,
phys. stat. sol. (a) **99**, 581-591 (1987).
4. [Impact ionization of excitons and electron-hole droplets in silicon](#)
H. Weman, Q.X. Zhao, and B. Monemar,
Phys. Rev. B **36**, 5054-5057 (1987), Rapid Communication.
5. [Impact ionization and electric field quenching of photoluminescence in silicon](#)
H. Weman, Q.X. Zhao, and B. Monemar,
Solid-St. Electron. **31**, 791-794 (1988).
6. [Luminescence in silicon in electric and magnetic fields](#)
Q.X. Zhao, H. Weman, and B. Monemar,
J. Lumin. **40&41**, 151-152 (1988).
7. [Electric field induced quenching of shallow and deep bound excitons in silicon](#)
H. Weman, Q.X. Zhao, and B. Monemar,
Phys. Rev. B **38**, 6185-6190 (1988).
8. [Impact ionization of free excitons and electron-hole droplets in silicon in weak electric and magnetic fields](#)
Q.X. Zhao, H. Weman, and B. Monemar,
Phys. Rev. B **38**, 8529-8532 (1988), Rapid Communication.
9. [Optical detection of microwave-induced impact ionization of bound excitons in silicon](#)
H. Weman, M. Godlewski, and B. Monemar,
Phys. Rev. B **38**, 12 525-12 530 (1988).
10. [Spontaneous oscillations and chaos in Si induced by excitonic impact ionization](#)
H. Weman, A. Henry, and B. Monemar,
Solid St. Electron. **32**, 1563-1566 (1989).
11. [Electrical and optical properties of gold doped n-type silicon](#)
H. Weman, A. Henry, T. Begum, B. Monemar, O.O. Awadelkarim, and J.L. Lindström,
J. Appl. Phys. **65**, 137-145 (1989).
12. [On the core concentration and the formation kinetics of thermal donors in silicon](#)
J.L. Lindström, Dan-Xia Xu, H. Weman, and B.G. Svensson,
Radiation Effects and Defects in Solids **111&112**, 249-255 (1989).
13. [Optically detected magnetic resonance of a thermally induced deep center in electron-irradiated silicon](#)
W.M. Chen, O.O. Awadelkarim, H. Weman, and B. Monemar,
Phys. Rev. B **40**, 10 013-10 016 (1989), Rapid Communication.
14. [Photoluminescence of defects introduced by deuterium plasmas in silicon](#)
H. Weman, J.L. Lindström, and G. Oehrlein,
Materials Science and Engineering **B4**, 461-465 (1989).

15. [Reactive-ion- and plasma-etching-induced extended defects in silicon studied with photoluminescence](#)
H. Weman, J.L. Lindström, G.S. Oehrlein, and B.G. Svensson,
J. Appl. Phys. **67**, 1013-1021 (1990).
16. [Defect annealing in irradiated boron-doped silicon](#)
O.O. Awadelkarim, W.M. Chen, **H. Weman**, and B. Monemar,
Phys. Rev. B **41**, 1019-1027 (1990).
17. [Strain-induced quantum confinement of carriers due to extended defects in silicon](#)
H. Weman, B. Monemar, G.S. Oehrlein, and S.J. Jeng,
Phys. Rev. B **42**, 3109-3112 (1990).
18. [Intensity of exciton luminescence in silicon in a weak magnetic field](#)
W.M. Chen, O.O. Awadelkarim, **H. Weman**, and B. Monemar,
Phys. Rev. B **42**, 5120-5125 (1990).
19. [Novel approaches in 2 and 3 dimensional confinement structures: Processing and properties](#)
P.M. Petroff, K. Ensslin, M. Miller, S. Chalmers, **H. Weman**, J. Merz, H. Kroemer, and A.C. Gossard,
Superlattices and Microstructures **8**, 35-39 (1990).
20. [Serpentine superlattice: Concept and first results](#)
M.S. Miller, C.E. Pryor, **H. Weman**, L.A. Samoska, H. Kroemer, and P.M. Petroff,
J. Cryst. Growth. **111**, 323-327 (1991).
21. [Optical properties of quantum structures fabricated by focused Ga ion beam implantation](#)
W. Beinstingl, Y.J. Li, **H. Weman**, J. Merz, and P.M. Petroff,
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22. [Impact ionization of excitons and donors in \$Al_xGa_{1-x}As/\(n\text{-type GaAs}\):Si\$ quantum wells](#)
H. Weman, G.M. Treacy, H.P. Hjalmarson, K.K. Law, J.L. Merz, and A.C. Gossard,
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23. [Impact ionization of free and bound excitons in AlGaAs/GaAs quantum wells](#)
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24. [InGaAs quantum well wires grown on patterned GaAs substrates](#)
R. Mirin, I.H. Tan, **H. Weman**, M. Leonard, T. Yasuda, J.E. Bowers, and E. Hu,
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25. [Measuring linear polarization of photoluminescence and photoluminescence excitation using a photoelastic modulation technique](#)
M. Wassermeier, **H. Weman**, M.S. Miller, P.M. Petroff, and J.L. Merz,
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26. [Photoluminescence study of lateral confinement and compositional intermixing in \(Al,Ga\)Sb lateral superlattices](#)
S.A. Chalmers, **H. Weman**, J.C. Yi, H. Kroemer, J.L. Merz and N. Dagli,
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27. [Serpentine superlattice quantum-wire arrays of \(Al, Ga\)As grown on vicinal GaAs substrates](#)
M.S. Miller, **H. Weman**, C.E. Pryor, M. Krishnamurthy, P.M. Petroff, H. Kroemer, and J.L. Merz,
Phys. Rev. Lett. **68**, 3464-3467 (1992).
28. [Optical anisotropy in a quantum-well-wire array with two-dimensional quantum confinement-Comment](#)
H. Weman, M.S. Miller, and J.L. Merz,
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29. [Magneto-luminescence study of quantum wire arrays in \(Al,Ga\)As serpentine superlattice structures](#)
H. Weman, E.D. Jones, C.R. McIntyre, M.S. Miller, P.M. Petroff, and J.L. Merz,
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K. Swiatek, **H. Weman**, M.S. Miller, P.M. Petroff and J.L. Merz,
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33. [Magneto-luminescence study of quasi-one-dimensional electron-hole plasmas in lattice matched InGaAs/InP quantum wires](#)
J. Hammersberg, **H. Weman**, M. Notomi, and T. Tamamura,
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34. [Temperature dependent effects on luminescence polarization and recombination lifetime in serpentine superlattice quantum wires](#)
H. Weman, C.I. Harris, J.P. Bergman, M.S. Miller, J.C. Yi, and J.L. Merz,
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35. [Size dependence of lateral confinement effects of optical response in \$In_{0.53}Ga_{0.47}As/InP\$ quantum wires](#)
M. Notomi, S. Nojima, M. Okamoto, H. Iwamura, T. Tamamura, J. Hammersberg, and **H. Weman**,
Phys. Rev. B **52**, 11 073-11 088 (1995).
36. [Dimensionality effects on strain and quantum-confinement in lattice-mismatched \$InAs_xP_{1-x}/InP\$ quantum wires](#)
M. Notomi, J. Hammersberg, **H. Weman**, S. Nojima, H. Sugiura, M. Okamoto, T. Tamamura, and M.
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37. [Magneto-optical determination of exciton binding energies in quantum wire superlattices](#)
H. Weman, M. Potemski, M.E. Lazzouni, M.S. Miller, and J.L. Merz,
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38. [Magneto-optical properties of self-organized strained InGaAs quantum disks](#)
H. Weman, H. Kamada, M. Potemski, J. Temmyo, R. Nötzel, and T. Tamamura,
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40. [Relationship between non-parabolicity and confinement energies in \$In_{0.53}Ga_{0.47}As/InP\$ quantum wires](#)
J. Hammersberg, **H. Weman**, M. Notomi, T. Lundström, M. Potemski, and T. Tamamura,
Phys. Rev. B **54**, 4835-4842 (1996).
41. [Strain and quantum confinement energies in n-type modulation doped lattice-mismatched InAsP quantum wires](#)
J. Hammersberg, M. Notomi, **H. Weman**, T. Lundström, M. Potemski, H. Sugiura, M. Okamoto and T.
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42. [Investigation of interface quality in \(Al,Ga\)As serpentine superlattice quantum wires by microwave modulation of exciton luminescence](#)
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44. [Reversal of Zeeman splitting in InGaAs/InP quantum-wires in high magnetic field](#)
J. Hammersberg, M. Notomi, **H. Weman**, M. Potemski, T. Tamamura, M. Okamoto, and H. Sugiura,
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47. [Selective carrier injection into V-groove quantum wires](#)
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49. [Polarization anisotropy and Zeeman splitting in strained quantum-wires: Dimensional crossover effect on strain](#)
M. Notomi, J. Hammersberg, J. Zeman, **H. Weman**, M. Potemski, H. Sugiura, and T. Tamamura,
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O. Wennerström, and T. Hjertberg,
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54. [Two dimensional quantum-confined-Stark-effect in V-groove quantum wires: Excited state spectroscopy and theory](#)
H. Weman, E. Martinet, M.-A. Dupertuis, A. Rudra, K. Leifer, and E. Kapon,
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55. [Carrier-induced effects on absorption and emission in V-groove quantum wire diodes](#)
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K.F. Karlsson, **H. Weman**, K. Leifer, A. Rudra, E. Kapon, and S.K. Lyo,
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64. [Zinc blende GaAsSb nanowires grown by molecular beam epitaxy](#)
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71. *Photoluminescence of carbon-oxygen related complex defects in annealed Czochralski silicon*
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72. *Electronic structure of neutral complex defects in silicon*
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73. *Luminescence in silicon in electric and magnetic fields*
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74. *Spectroscopy of impurities and complex defects in silicon in electric and microwave fields*
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75. *Electric field effects on photoluminescence in silicon*
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80. *Spontaneous oscillations and chaos in Si induced by excitonic impact ionization*
H. Weman, A. Henry, and B. Monemar,
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81. *Novel approaches in 2 and 3 dimensional confinement structures: Processing and properties*
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82. *Serpentine superlattice: Concept and first results*
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84. *Parallel electric field effects on the photoluminescence from AlGaAs/GaAs quantum wells*
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87. *Photoluminescence study of quantum wire arrays in AlGaAs/GaAs tilted superlattice structures*
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88. *Structure and photoluminescence of AlGaAs serpentine -superlattice quantum wire arrays*
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90. *Effects of intense far-infrared radiation on the photoluminescence from AlGaAs/GaAs quantum wells*
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91. *Electronic structure and optical properties of (Ga,Al)As quantum wire arrays formed by serpentine-superlattices*
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March 2006 Meeting of the American Physical Society, Baltimore, MD, USA, March 13-17, 2006, Bulletin of the American Physical Society.
179. *Semiconductor quantum-wires and nano-wires for photonics*
H. Weman, (invited)
Nanoscience-Nanotechnology seminar, Trondheim, Norway, May 30, 2006.
180. *Photonic V-groove quantum wire devices*
H. Weman, S. Palmgren, H. Reichardt, K.F. Karlsson, A. Rudra and E. Kapon,
Northern Optics, Bergen, Norway, 2006, June 14-16, 2006.
181. *Optical absorption spectra in V-groove quantum wires: Experiment and theory*
S. Palmgren, **H. Weman**, A. Schoenberg, K.F. Karlsson, A. Rudra and E. Kapon,
Northern Optics, Bergen, Norway, 2006, June 14-16, 2006.
182. *Exciton transfer efficiency between asymmetric coupled GaAs V-groove quantum wires*
H. Weman, K. F. Karlsson, K. Lyo, K. Leifer, A. Rudra, and E. Kapon,
Norwegian Physical Society meeting, Gålå, Norway, Sept. 13-15, 2006.
183. *Fabrication and characterization of GaAs nanowires grown by molecular beam epitaxy*
D.L. Dheeraj, O.C. Tvedt, T.A. Nilsen, B.-O. Fimland, and **H. Weman**,
2nd NTNU Nanoscience & Nanotechnology workshop, Trondheim, Norway, March 7, 2007.
184. *Fabrication and structural characterization of GaAs nanowires grown by molecular beam epitaxy*
D.L. Dheeraj, T.A. Nilsen, T.J. van Helvoort, B.-O. Fimland, and **H. Weman**,
International NANOMAT Conference, Bergen, Norway, June 6-7, 2007.
185. *Semiconductor quantum-wires and nano-wires for optoelectronic applications*
H. Weman, (invited)
2nd Int.Conf. on Optical and Optoelectronic Properties of Materials and Applications, London, UK, July 30 - Aug. 3, 2007.
186. *Importance of initial growth conditions during the growth of III-V nanowires by molecular beam epitaxy*
D.L. Dheeraj, C. Sartel, L. Travers, J.C. Harmand, G. Patriarche, B.-O. Fimland, and **H. Weman**,
2nd International Conf. on One-dimensional Nanomaterials, Malmö, Sweden, Sept. 26-29, 2007.
187. *Exciton energy transfer in confined systems: Effect of the dimensionality*
S. K. Lyo, K. F. Karlsson, **H. Weman**, K. Leifer, A. Rudra, and E. Kapon,
International Complex Adaptive Materials Workshop, Santa Fe, New Mexico, USA, Dec. 3, 2007.
188. *Photoluminescence study of GaAs-based nanowires grown by molecular beam epitaxy*
A.F. Moses, D.L. Dheeraj, B.-O. Fimland, **H. Weman**, K.F. Karlsson, and P.O. Holtz,
3rd NTNU Nanoscience & Nanotechnology workshop, Trondheim, Norway, March 6, 2008.

189. Pulsed laser deposition growth of ZnO nanostructures for electron transport in hybrid inorganic/organic solar cells
C. Weigand, K. Valset, R. Fagerberg, C. Ladam, J.K. Grepstad, **H. Weman**, C.G. Allen, D.J. Baker, T.E. Furtak, and R.T. Collins,
3rd NTNU Nanoscience & Nanotechnology workshop, Trondheim, Norway, March 6, 2008.
190. Modeling of modal properties of nanowire lasers
G.K. Svendsen, **H. Weman**, and J. Skaar,
Norwegian Electro-Optics, Hurtigruten ship Midnatsol, Tromsø-Trondheim, Norway, March 26-28, 2008.
191. Investigation of the structural and optical properties of single GaAs/GaAsSb/GaAs nanowire quantum dots
A.F. Moses, T.B. Hoang, D.L. Dheeraj, B.-O. Fimland, **H. Weman**, K.F. Karlsson, and P.O. Holtz,
17th Int. Laser Physics Workshop, Trondheim, Norway, June 30 - July 4, 2008.
192. Modal reflection properties of nanowire waveguides
G.K. Svendsen, **H. Weman**, and J. Skaar,
17th Int. Laser Physics Workshop, Trondheim, Norway, June 30 - July 4, 2008.
193. Micro-photoluminescence study of heterostructured GaAs/AlGaAs and GaAs/GaAsSb nanowires grown by molecular beam epitaxy
A.F. Moses, D.L. Dheeraj, B.-O. Fimland, **H. Weman**, K.F. Karlsson, and P.O. Holtz,
29th Int. Conf. on the Physics of Semiconductors, Rio de Janeiro, Brazil, July 27-Aug. 1, 2008.
194. Growth and characterization of GaAs nanowires with GaAsSb inserts grown by molecular beam epitaxy
D.L. Dheeraj, G. Patriarche, H.L. Zhou, A.F. Moses, J.C. Harmand, B.-O. Fimland, and **H. Weman**,
15th Int. Conference on Molecular Beam Epitaxy, Vancouver, Canada, Aug. 3-8, 2008.
195. Radiative emission from a type-II GaAsSb segment in a single GaAs nanowire
A.F. Moses, D.L. Dheeraj, B.-O. Fimland, **H. Weman**, K.F. Karlsson, and P.O. Holtz,
15th Int. Conf. on Superlattices, Nanostructures and Nanodevices, Natal, Brazil, Aug. 4-8, 2008.
196. Characterization of ZnO thin films grown by pulsed laser deposition for hybrid inorganic/organic solar cells
C. Weigand, K. Valset, R. Fagerberg, C. Ladam, J.K. Grepstad, **H. Weman**, C.G. Allen, D.J. Baker, T.E. Furtak, and R.T. Collins,
23rd European Photovoltaic Solar Energy Conference, Valencia, Spain, Sept. 1-5, 2008.
197. Micro-photoluminescence study of heterostructured GaAs/AlGaAs and GaAs/GaAsSb nanowires grown by molecular beam epitaxy
A.F. Moses, D.L. Dheeraj, B.-O. Fimland, **H. Weman**, K.F. Karlsson, and P.O. Holtz,
1st Int. Nanosymposium@NTNU, Trondheim, Norway, Sept. 11-12, 2008.
198. Growth and characterization of heterostructured III-V nanowires by molecular beam epitaxy
D.L. Dheeraj, G. Patriarche, H. Zhou, A.F. Moses, H.B. Thang, A.T.J. van Helvoort, J.C. Harmand, B.-O. Fimland, and **H. Weman**,
1st Int. Nanosymposium@NTNU, Trondheim, Norway, Sept. 11-12, 2008.
199. Characterization of ZnO layers grown by pulsed laser deposition for hybrid inorganic/organic solar cells
C. Weigand, M. Bergren, K. Valset, D. Carey, R. Fagerberg, C. Ladam, J.K. Grepstad, **H. Weman**, T.E. Furtak, and R.T. Collins,
1st Int. Nanosymposium@NTNU, Trondheim, Norway, Sept. 11-12, 2008.
200. Growth, structural and optical characterizations of GaAs/AlGaAs core-shell nanowires
H. Zhou, D.L. Dheeraj, T.B. Hoang, A.F. Moses, B.-O. Fimland, **H. Weman**, A.T.J. van Helvoort, L. Liu and J.C. Harmand, 3rd Int. Workshop on Nanowire Growth Mechanisms, Duisburg, Germany, Sept. 15-16, 2008.
201. A novel effect of Sb on the crystalline structure of GaAs nanowires grown by MBE
D.L. Dheeraj, H. Zhou, B.-O. Fimland, **H. Weman**, G. Patriarche, and J.C. Harmand
3rd Int. Workshop on Nanowire Growth Mechanisms, Duisburg, Germany, Sept. 15-16, 2008.

202. [Optical properties of single wurtzite GaAs nanowires and GaAs nanowires with GaAsSb inserts](#)
T.B. Hoang, H. Zhou, A.F. Moses, D.L. Dheeraj, A.T.J. van Helvoort, B.-O. Fimland, and **H. Weman**,
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Applications, Boston, USA, Dec. 1-5, 2008. Proceedings **Vol. 1144**, p. LL02-02, (2009). DOI: 10.1557/PROC-
1144-LL02-02.
203. [Functionalized zinc oxide for improved organic photovoltaic systems](#)
D.J. Baker, C.G. Allen, J.M. Albin, H.E. Oertli, M.R. Bergren, T.D. Berman, T.E. Furtak, R.T. Collins, D.C.
Olson, M.S. White, D.S. Ginley, C. Ladam, C. Weigand, K. Valset, J. Grepstad, and **H. Weman**,
Materials Res. Soc. 2008 Fall Meeting, Symposium H: Physics and Technology of Organic Semiconductor
Devices, Boston, USA, Dec. 1-5, 2008.
204. [Structural and optical characterization of single hetero-structured III-V nanowires grown by MBE](#)
H. Weman, (Invited talk)
1st Int. Conf on Transport and Optical Properties of Nanomaterials, Allahabad, India, Jan.5-8, 2009.
205. [Heterostructured wurtzite/zinc-blende GaAs/GaAsSb nanowires: New possibilities for band-structure engineering in nanowire based photonic devices](#)
H. Weman, (Invited talk)
2009 RCIQE International Seminar on "Advanced Semiconductor Materials and Devices", Sapporo, Japan,
March 2-3, 2009
206. [Pulsed laser deposition of ZnO nanostructures for hybrid inorganic/organic solar cells](#)
D. Skåre, C. Weigand, A.-S. Vardøy, C. Ladam, Ø. Dahl, M. Bergren, R. Fagerberg, **H. Weman**, T. Furtak,
and R. Collins, Norwegian Photovoltaic workshop, Oppdal, Norway, March 19-21, 2009.
207. [Cool, Small and Bright: cryogenic micro-photoluminescence for photovoltaic materials](#)
A. Røyset, R. Fagerberg, and **H. Weman**,
Norwegian Photovoltaic workshop, Oppdal, Norway, March 19-21, 2009
208. [Characterization of ZnO thin films and nanostructures grown by pulsed laser deposition](#)
C. Weigand, M. Bergren, A.-S. Vardøy, K. Valset, D. Carey, C. Ladam P.E. Vullum, J. Walmsley, R.
Fagerberg, T. Furtak, and R. Collins, J. Grepstad, **H. Weman**, Materials Res. Soc. 2009 Spring Meeting,
Symposium V: Functional Metal-Oxide Nanostructures, San Francisco, USA, April 14-17, 2009. Proceedings
Vol. **1174**, p. V07-09 (2009), DOI: 10.1557/PROC-1174-V07-09.
209. [Micro-photoluminescence study of GaAsSb/GaAs radial and axial heterostructured core-shell nanowires](#)
A.F. Moses, T.B. Hoang, H. Zhou, D.L. Dheeraj, B.O. Fimland, and **H. Weman**,
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optoelectronic device applications II, Strasbourg, France, June 8-12, 2009. IOP Conf. Ser.: Mater. Sci. Eng. **6**.
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210. [Modeling of electronic and optical properties of semiconductor nanowires](#)
G.K. Svendsen, M.-A. Dupertuis, **H. Weman**, and J. Skaar,
International NANOMAT Conference, Lillehammer, Norway, June 15-17, 2009.
211. [Structural characterization of semiconductor nanowire heterostructures using conventional transmission electron microscopy techniques](#)
A.T. J. van Helvoort, D.L. Dheeraj, S. Grønsberg, G. Patriarche, H. Zhou, T.B. Hoang, A.F. Moses, B.-O.
Fimland, and **H. Weman**,
International NANOMAT Conference, Lillehammer, Norway, June 15-17, 2009.
212. [Wurtzite GaAs and zinc blende GaAsSb nanowires: New possibilities for heterostructure engineering](#)
T.B. Hoang, A.F. Moses, H. Zhou, D.L. Dheeraj, A.T. J. van Helvoort, B.-O. Fimland, and **H. Weman**,
International NANOMAT Conference, Lillehammer, Norway, June 15-17, 2009.
213. [Nanostructured ZnO layers grown by pulsed laser deposition for hybrid inorganic/organic solar cells](#)
C. Ladam, C. Weigand, D. Skåre, A.-S. Vardøy, Ø. Dahl, M. Bergren, R. Fagerberg, **H. Weman**, T. Furtak,
and R. Collins, International NANOMAT Conference, Lillehammer, Norway, June 15-17, 2009.

214. [Diffusion-limited growth of GaAs nanowires by molecular beam epitaxy](#)
D.L. Dheeraj, E. Rogstad, M. Scheffler, H.L. Zhou, A.T.J. van Helvoort, B.O. Fimland, **H. Weman**, G. Patriarche, and J.C. Harmand,
Nanofils et Nanotubes Semiconducteurs, Autrans, France, June 30-July 3, 2009.
215. [Self-organized wurtzite AlGaAs core-shell nanowires with GaAs inserts grown by molecular beam epitaxy](#)
H.L. Zhou, T.B. Hoang, D.L. Dheeraj, A.F. Moses, A.T.J. van Helvoort, B.O. Fimland, **H. Weman**, G. Patriarche, and J.C. Harmand,
Nanofils et Nanotubes Semiconducteurs, Autrans, France, June 30-July 3, 2009.
216. [Modeling of optical and electronic properties of semiconductor nanowires](#)
G.K. Svendsen, M.-A. Dupertuis, **H. Weman**, and J. Skaar,
Northern Optics, Vilnius, Lithuania, Aug. 26-28, 2009.
217. [Dark field transmission electron microscopy techniques for structural characterization of semiconductor nanowire heterostructures](#)
A.T.J. van Helvoort, D.L. Dheeraj, H.L. Zhou, S. Grønsberg, G. Patriarche, B.-O. Fimland, and **H. Weman**
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218. [Photonic nanowires for solar cell applications](#)
T.B. Hoang, A.F. Moses, H.L. Zhou, D.L. Dheeraj, A.T.J. van Helvoort, B.-O. Fimland, and **H. Weman**,
4th KIFEE Symp. on Environment, Energy, Materials and Education, Trondheim, Norway, Sept. 6-9, 2009.
219. [Optimization of heterointerfaces in axial heterostructured nanowires grown by molecular beam epitaxy](#)
D.L. Dheeraj, A.T.J. van Helvoort, A.F. Moses, H. Zhou, T.B. Hoang, B.-O. Fimland, **H. Weman**, and G. Patriarche, 4th Int. Workshop on Nanowire Growth Mechanisms, Paris, France, Oct. 26-27, 2009.
220. [Polarized micro-photoluminescence imaging of single GaAs/AlGaAs core-shell nanowires with GaAsSb inserts](#)
T.B. Hoang, A.F. Moses, H. Zhou, D.L. Dheeraj, A.T.J. van Helvoort, B.-O. Fimland, and **H. Weman**,
Materials Res. Soc. 2009 Fall Meeting, Symposium O: Excitons and Plasmon Resonances in Nanostructures II, Boston, MA, USA, Nov. 29 - Dec. 4, 2009.
221. [Effect of growth-interruption on structural and optical properties of GaAs/GaAsSb axial heterostructured nanowires](#)
D.L. Dheeraj, A.T.J. van Helvoort, A.F. Moses, H. Zhou, T.B. Hoang, B.-O. Fimland, and **H. Weman**,
Materials Res. Soc. 2009 Fall Meeting, Symposium M: Multifunction at the Nanoscale through Nanowires, Boston, MA, USA, Nov. 29 - Dec. 4, 2009.
222. [Growth and structural characterization of axial heterostructured GaAs/GaSb nanowires grown by molecular beam epitaxy](#)
D.L. Dheeraj, G. Patriarche, A.T.J. Van Helvoort, H.L. Zhou, B.O. Fimland, and **H. Weman**,
3rd International conf. on One-dimensional Nanomaterials, Atlanta, GA, Dec. 7-9, 2009.
223. [Crystal phase dependent photoluminescence polarization in single semiconductor nanowires](#)
T.B. Hoang, A.F. Moses, H.L. Zhou, D.L. Dheeraj, A.T.J. van Helvoort, B.-O. Fimland, and **H. Weman**
3rd International conf. on One-dimensional Nanomaterials, Atlanta, GA, Dec. 7-9, 2009.
224. [Heterostructured III-V nanowires with mixed crystal phases: New possibilities for band structure engineering](#)
H. Weman, Post dead line talk,
3rd International conf. on One-dimensional Nanomaterials, Atlanta, GA, Dec. 7-9, 2009.
225. [Growth of heterostructured III-V nanowires by molecular beam epitaxy for photonic applications](#)
D.L. Dheeraj, H.L. Zhou, A.F. Moses, T.B. Hoang, A.T.J. Van Helvoort, B.O. Fimland, and **H. Weman**
(invited talk)
SPIE Photonics West, Quantum Sensing and Nanophotonic Devices, San Francisco, CA, Jan. 24-28, 2010.
Proc. SPIE, Vol. **7608**, 76081C (2010); doi:10.1117/12.847030.
226. [Structural and optical probing of single III-V nanowires with different crystal phases](#)
H. Weman, (invited talk)
NorPRINS workshop, Oslo, Norway, March 4-5, 2010.

227. *Tuning of the crystal phase in III-V nanowires grown by Au-assisted molecular beam epitaxy*
D.L. Dheeraj, A.T.J. van Helvoort, A.F. Moses, T.B. Hoang, B.O. Fimland, **H. Weman**,
Materials Res. Soc. 2010 Spring Meeting, Symposium P: Semiconductor Nanowires: Growth, Physics,
Devices, and Applications, San Francisco, CA, USA, April 5-9, 2010.
228. *Surface modification of Zinc Oxide anodes in organic solar cells*
T. E. Furtak, D. J. Baker, C. C. Weigand, J. M. Adamson, C. G. Allen, A. E. Yocom, L. S. Patterson, **H. Weman**, C. Ladam, D. C. Olson, D. S. Ginley and R. T. Collins,
Materials Res. Soc. 2010 Spring Meeting, Symposium HH: Organic Photovoltaic Science and Technology, San Francisco, CA, USA, April 5-9, 2010.
229. *Modelling of reflection properties of nanowire lasers*
G.K. Svendsen, **H. Weman**, and J. Skaar,
Norwegian Electro-Optics meeting, Ålesund, Norway, April 7-9, 2010.
230. *Photoluminescence characterization of ZnO nanorods*
C. Ladam, and **H. Weman**, M. Vetaas Thomassen, C. Weigand, and A. Røyset,
Norwegian Electro-Optics meeting, Ålesund, Norway, April 7-9, 2010.
231. *Micro-photoluminescence spectroscopy and imaging of single axial and radial heterostructured III-V nanowires*
A.F. Moses, L. Ahtapodov, T.B. Hoang, D.L. Dheeraj, A.T.J. van Helvoort, B.O. Fimland and **H. Weman**,
Norwegian Electro-Optics meeting, Ålesund, Norway, April 7-9, 2010.
232. *ZnO nanorod hybrid organic/inorganic solar cells and the effect of surface modifications*
C. Weigand, D.J. Baker, J.M. Adamson, C.G. Allen, M.R. Bergren, K.X. Steirer, D.C. Olson, C. Ladam, D.S. Ginley, R.T. Collins, and T.E. Furtak, and **H. Weman**,
Renewable Energy Research Conference, Trondheim, Norway, June 7-10, 2010.
233. *Photocurrent spectroscopy of single wurtzite GaAs nanowires*
D.C. Kim, L. Ahtapodov, A.B. Boe, J.W. Choi, H. Ji, G.T. Kim, A.F. Moses, D.L. Dheeraj, B.O. Fimland, and **H. Weman**, 30th Int. Conf. on the Physics of Semiconductors, Seoul, South Korea, July 25-30, 2010.
234. *Photoluminescence polarization anisotropy in a single heterostructured III-V nanowire with mixed crystal phases*
A.F. Moses, L. Ahtapodov, T.B. Hoang, D.L. Dheeraj, A.T.J. van Helvoort, B.O. Fimland and **H. Weman**,
30th Int. Conf. on the Physics of Semiconductors, Seoul, South Korea, July 25-30, 2010.
235. *Controlling crystal phases in GaAs nanowires grown by Au-assisted molecular beam epitaxy*
D.L. Dheeraj, A.M. Munshi, A.T.J. van Helvoort, B.O. Fimland, and **H. Weman**,
16th Int. Conference on Molecular Beam Epitaxy, Berlin, Germany, Aug. 22-27, 2010.
236. *Control of wurtzite and zinc blende crystal phases in single GaAs nanowires grown by Au-assisted MBE*
D.L. Dheeraj, A.M. Munshi, A.T. J. van Helvoort, B.-O. Fimland, **H. Weman**,
5th Int. Workshop on Nanowire Growth Mechanisms, Rome, Italy, Nov. 4-5, 2010.
237. *ZnO nanosheets grown by pulsed laser deposition*
C. Weigand, J. Grepstad, **H. Weman**, C. Ladam, P.-E. Vullum, Ø. Dahl, R. Fagerberg, R.T. Collins, and T.E. Furtak, 5th Int. Workshop on Nanowire Growth Mechanisms, Rome, Italy, Nov. 4-5, 2010.

Book chapters

238. *Heterostructured III-V nanowires with mixed crystal phases grown by Au-assisted molecular beam epitaxy*
D.L. Dheeraj, H.L. Zhou, A.F. Moses, T.B. Hoang, A.T.J. Van Helvoort, B.O. Fimland, and **H. Weman**,
Chapter 2 in "Nanowires", ed. Paola Prete, IN-TECH, Vienna, Austria, 2010 (26 pages),
ISBN 978-953-7619-79-4. <http://sciyo.com/books/show/title/nanowires>
239. *III-antimonide nanowires*
H. Weman and D.L. Dheeraj
Title of the book: Advances in III-V Semiconductor Nanowires and Nanodevices
Edited by Jianye Li, Deli Wang and Ray R. LaPierre, Bentham science publishers (accepted).