

Publication list Helge Weman (chronological)

Date: June 22, 2014

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,
J. Vac. Sci. and Technol. **B 9**, 3479-3482 (1991).
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,
Phys. Rev. B **45**, 6263-6266 (1992).
23. [Impact ionization of free and bound excitons in AlGaAs/GaAs quantum wells](#)
H. Weman, G.M. Treacy, H.P. Hjalmarson, K.K. Law, J.P. Bergman, J.L. Merz, and A.C. Gossard,
Semicond. Sci. Technol. **7**, B517-B519 (1992).
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,
J. Vac. Sci. and Technol. **A 10**, 697-700 (1992).
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,
J. Appl. Phys. **71**, 2397-2402 (1992).
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,
Appl. Phys. Lett. **60**, 1676-1678 (1992).
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,
Phys. Rev. Lett. **68**, 3656 (1992).
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,
Superlattices and Microstructures **13**, 5-9 (1993).

30. [Optical properties of quantum wire arrays in \(Al,Ga\)As serpentine superlattices](#)
H. Weman, M.S. Miller, C.E. Pryor, Y.J. Li, P. Bergman, P.M. Petroff, and J.L. Merz,
Phys. Rev. B **48**, 8047-8060 (1993).
31. [Observation of confined exciton states in serpentine superlattices by linear polarized excitation spectroscopy](#)
H. Weman, C.E. Pryor, M.S. Miller, and J.L. Merz,
Journal de Physique IV **3**, 143-146 (1993).
32. [Optical detection of cyclotron resonance in serpentine superlattice quantum wire arrays](#)
K. Swiatek, **H. Weman**, M.S. Miller, P.M. Petroff and J.L. Merz,
Acta Phys. Polonica A **84**, 583 (1993).
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,
Superlattices and Microstructures **16**, 143 (1994).
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,
Superlattices and Microstructures **17**, 61 (1995).
35. [Size dependence of lateral confinement effects of optical response in \$\text{In}_{0.53}\text{Ga}_{0.47}\text{As}/\text{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 \$\text{InAs}_x\text{P}_{1-x}/\text{InP}\$ quantum wires](#)
M. Notomi, J. Hammersberg, **H. Weman**, S. Nojima, H. Sugiura, M. Okamoto, T. Tamamura, and M. Potemski,
Phys. Rev. B **52**, 11 147-11 158 (1995).
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,
Phys. Rev. B **53**, 6959-6962 (1996).
38. [Magneto-optical properties of self-organized strained InGaAs quantum disks](#)
H. Weman, H. Kamada, M. Potemski, J. Temmyo, R. Nötzel, and T. Tamamura,
Solid State Electronics **40**, 379-382 (1996).
39. [Dimensionality effects on strain for lattice-mismatched InAsP/InP quantum wires: Relationship between strain and 2D quantum confinement](#)
M. Notomi, J. Hammersberg, **H. Weman**, M. Potemski, H. Sugiura, M. Okamoto, and T. Tamamura,
Solid State Electronics **40**, 579-582 (1996).
40. [Relationship between non-parabolicity and confinement energies in \$\text{In}_{0.53}\text{Ga}_{0.47}\text{As}/\text{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. Tamamura,
J. Appl. Phys. **79**, 8456-8464 (1996).
42. [Investigation of interface quality in \(Al,Ga\)As serpentine superlattice quantum wires by microwave modulation of exciton luminescence](#)
K. Swiatek, **H. Weman**, M.S. Miller, P.M. Petroff, and J.L. Merz,
Electron Technology **29**, 305-308 (1996).

43. [Quantum wire self-ordered growth seeded by electron-beam lithography](#)
B. Dwir, F. Reinhardt, **H. Weman**, A. Gustafsson, and E. Kapon,
Microelectronic Engineering **35**, 269 (1997).
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,
Jpn. J. Appl. Phys. **36**, 1933 (1997).
45. [Polarization and broken symmetry due to anisotropic "tri-axial" strain in lattice-mismatched quantum wires](#)
M. Notomi, J. Hammersberg, J. Zeman, **H. Weman**, M. Potemski, H. Sugiura, and T. Tamamura,
Phys. Rev. Lett. **80**, 3125 (1998).
46. [Tunneling and coupling between one-dimensional states in double quantum wires](#)
H. Weman, D.Y. Oberli, M.-A. Dupertuis, F. Reinhardt, A. Gustafsson, and E. Kapon,
Phys. Rev. B **58**, 1150 (1998).
47. [Selective carrier injection into V-groove quantum wires](#)
H. Weman, E. Martinet, A. Rudra, and E. Kapon,
Appl. Phys. Lett. **73**, 2959 (1998).
48. [Quantum confined Stark effect in quantum wires: Wave function splitting and cascading](#)
M.-A. Dupertuis, E. Martinet, **H. Weman**, and E. Kapon,
Europhys. Lett. **44**, 759 (1998).
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,
Physica B **251**, 171-174 (1998).
50. [Light scattering from self-assembled quantum disks](#)
P. Hawrylak, M. Potemski, D.J. Lockwood, H.J. Labbé, H. Kamada, **H. Weman**, J. Temmyo, and T. Tamamura,
Physica E **2**, 652 (1998).
51. [Band-mixing and coupling in single and double quantum wire structures](#)
M.A. Dupertuis, F. Vouilloz, D.Y. Oberli, **H. Weman**, and E. Kapon,
Physica E **2**, 940 (1998).
52. [Structure and optical properties of V-groove quantum wire superlattices](#)
Y. Ducommun, E. Martinet, **H. Weman**, G. Biasiol, A. Gustafsson, and E. Kapon,
Physica E **2**, 954 (1998).
53. [Controlling inter-chain and intra-chain excitations of a poly\(thiophene\) derivative in thin films](#)
M. Berggren, P. Bergman, J. Fagerström, O. Inganäs, M. Andersson, **H. Weman**, M. Granström, S. Stafström,
O. Wennerström, and T. Hjertberg,
Chem. Phys. Lett. **304**, 84 (1999).
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,
Appl. Phys. Lett. **74**, 2334 (1999).
55. [Carrier-induced effects on absorption and emission in V-groove quantum wire diodes](#)
H. Weman, E. Martinet, M.-A. Dupertuis, A. Rudra, and E. Kapon,
phys. stat. sol. (a) **178**, 249 (2000).
56. [Efficient, narrow linewidth excitonic emission at room temperature from GaAs/AlGaAs V-groove quantum wire light emitting diodes](#)
H. Weman, M.-A. Dupertuis, E. Martinet, A. Rudra, and E. Kapon,
Appl. Phys. Lett. **79**, 4 (2001).

57. [Optical emission in a V-groove quantum wire laser diode under high magnetic fields](#)
L. Sirigu, **H. Weman**, K.F. Karlsson, D.Y. Oberli, A. Rudra and E. Kapon,
Physica E **13**, 881 (2002).
58. [High internal quantum efficiency, narrow linewidth InGaAs/GaAs/AlGaAs quantum wire light emitting diode](#)
H. Weman, L. Sirigu, K.F. Karlsson, K. Leifer, A. Rudra, and E. Kapon,
Appl. Phys. Lett. **81**, 2839 (2002).
59. [Electroluminescence and photoluminescence excitation study of asymmetric coupled GaAs/AlGaAs V-groove quantum wires](#)
K.F. Karlsson, **H. Weman**, M.-A. Dupertuis, K. Leifer, A. Rudra, and E. Kapon,
Phys. Rev. B **70**, 045302, (2004).
60. [Fractional-dimensional excitonic absorption theory applied to real V-groove quantum wires](#)
K.F. Karlsson, M.-A. Dupertuis, **H. Weman**, and E. Kapon,
Phys. Rev. B **70**, 153306, (2004).
61. [Polarization-resolved optical absorption in single V-groove quantum wires](#)
S. Palmgren, **H. Weman**, A. Schoenberg, K.F. Karlsson, M.-A. Dupertuis, K. Leifer, A. Rudra, and E. Kapon,
Appl. Phys. Lett. **89**, 191111 (2006).
62. [Influence of long-range substrate roughness on disorder in V-groove quantum wire structures](#)
H. Reichardt, K. Leifer, E. Pelucchi, F. Karlsson, **H. Weman**, A. Rudra, and E. Kapon,
J. Appl. Phys. **100**, 123509, (2006).
63. [Strongly reduced exciton transfer between parallel quantum wires](#)
K.F. Karlsson, **H. Weman**, K. Leifer, A. Rudra, E. Kapon, and S.K. Lyo,
Appl. Phys. Lett. **90**, 101108, (2007).
64. [Zinc blende GaAsSb nanowires grown by molecular beam epitaxy](#)
D.L. Dheeraj, G. Patriarche, L. Largeau, H.L. Zhou, A.T.J. van Helvoort, F. Glas, J.C. Harmand, B.-O. Fimland,
and **H. Weman**,
Nanotechnology **19**, 275 605 (2008).
65. [Growth and characterization of wurtzite GaAs nanowires with defect-free zinc blende GaAsSb inserts](#)
D.L. Dheeraj, G. Patriarche, H.L. Zhou, T.B. Hoang, A.F. Moses, S. Grønsberg, A.T.J. van Helvoort, B.-O.
Fimland, and **H. Weman**,
Nano Lett. **8**, 4459 (2008).
66. [Semiconductor quantum-wires and nano-wires for optoelectronic applications](#)
H. Weman, S. Palmgren, K.F. Karlsson, A. Rudra, E. Kapon, D.L. Dheeraj, B.-O. Fimland, and J.C.
Harmand,
J. Mater. Sci.: Mater. Electron. **20**, S94 (2009)
67. [Observation of free exciton photoluminescence emission from single wurtzite GaAs nanowires](#)
T.B. Hoang, H. Zhou, A.F. Moses, D.L. Dheeraj, B.-O. Fimland, and **H. Weman**,
Appl. Phys. Lett. **94**, 133105 (2009).
68. [Growth and structural characterization of GaAs/GaAsSb axial heterostructured nanowires](#)
D.L. Dheeraj, G. Patriarche, H. Zhou, J.C. Harmand, **H. Weman**, and B.-O. Fimland,
J. Cryst. Growth. **311**, 1847 (2009).
69. [Wurtzite GaAs/AlGaAs core-shell nanowires grown by molecular beam epitaxy](#)
H. Zhou, T.B. Hoang, D.L. Dheeraj, A.T.J. van Helvoort, L. Liu, J.C. Harmand, B.-O. Fimland, and **H. Weman**
Nanotechnology **20**, 415 701 (2009).
70. [Engineering parallel and perpendicular polarized photoluminescence from a single semiconductor nanowire by crystal phase control](#)
T.B. Hoang, A.F. Moses, L. Ahtapodov, H.L. Zhou, D.L. Dheeraj, A.T.J. van Helvoort, B.-O. Fimland,
and **H. Weman**,
Nano Lett. **10**, 2927 (2010).

71. [Model for reflection transmission matrices of nanowire end facets](#)
G.S. Svendsen, **H. Weman**, and J. Skaar
J. Appl. Phys. **109**, 103101 (2011).
72. [Correlated micro-photoluminescence and electron microscopy studies of the same individual heterostructured semiconductor nanowires](#)
J. Todorovic, A.F. Moses, T. Karlberg, P. Olk, D.L. Dheeraj, B.O. Fimland, **H. Weman**, and A.T.J. van Helvoort,
Nanotechnology **22**, 325 707 (2011).
73. [Effect of substrate annealing on the Au-catalyzed growth of ZnO nanostructures](#)
C.C. Weigand, D. Skåre, C. Ladam, J. Grepstad, and **H. Weman**,
Nanoscale Research Letters **6**, 566, (2011)
74. [On the formation of ZnO nanosheets grown by catalyst-assisted pulsed laser deposition](#)
C.C. Weigand, M.R. Bergren, C. Ladam, J. Tveit, R. Holmestad, P.E. Vullum, J.C. Walmsley, Ø. Dahl, T.E. Furtak, R.T. Collins, J. Grepstad, and **H. Weman**,
Crystal Growth and Design **11**, 5298 (2011).
75. [Investigations of Bragg reflectors in nanowire lasers](#)
G.S. Svendsen, **H. Weman**, and J. Skaar
J. Appl. Phys. **111**, 123102 (2012).
76. [Epitaxial relationship of ZnO nanostructures grown by Au-assisted pulsed laser deposition on c- and a-plane sapphire](#)
C.C. Weigand, J. Tveit, C. Ladam, R. Holmestad, J. Grepstad, and **H. Weman**,
J. Cryst. Growth. **355**, 52 (2012).
77. [Vertically aligned GaAs nanowires on graphite and few-layer graphene: Generic model and epitaxial growth](#)
A.M. Munshi, D.L. Dheeraj, V.T. Fauske, D.C. Kim, A.T.J. van Helvoort, B.O. Fimland, and **H. Weman**,
Nano Lett. **12**, 4570 (2012).
78. [A story told by a single nanowire: Optical properties of wurtzite GaAs](#)
L. Ahtapodov, J. Todorovic, P. Olk, T. Mjåland, P. Slåttnes, D.L. Dheeraj, A.T.J. van Helvoort, B.O. Fimland, and **H. Weman**,
Nano Lett. **12**, 6090 (2012).
79. [Comparison of Be-doped GaAs nanowires grown by Au- and Ga-assisted molecular beam epitaxy](#)
D.L. Dheeraj, A.M. Munshi, O.M. Christoffersen, D.C. Kim, G. Signorello, H. Riel, A.T.J. van Helvoort, **H. Weman**, and B.O. Fimland,
J. Cryst. Growth **378**, 532 (2013).
80. [Compositional characterization of GaAs/GaAsSb nanowires by quantitative HAADF-STEM](#)
H. Kauko, T. Grieb, R. Bjørge, M. Schowalter, A.M. Munshi, **H. Weman**, A. Rosenauer, A.T.J. van Helvoort,
Micron **44**, 254 (2013).
81. [Controlling crystal phases in GaAs nanowires grown by Au-assisted molecular beam epitaxy](#)
D.L. Dheeraj, A.M. Munshi, M. Scheffler, A.T.J. van Helvoort, **H. Weman**, and B.O. Fimland,
Nanotechnology **24**, 015601 (2013).
82. [Polarization dependent photocurrent spectroscopy of single wurtzite GaAs/AlGaAs core-shell nanowires](#)
D.C. Kim, D.L. Dheeraj, B.O. Fimland, and **H. Weman**,
Appl. Phys. Lett. **102**, 142107 (2013).
83. [Crystal phase engineering in self-catalyzed GaAs and GaAs/GaAsSb nanowires grown on Si\(111\)](#)
A. M. Munshi, D.L. Dheeraj, J. Todorovic, A.T.J. van Helvoort, **H. Weman**, and B.O. Fimland,
J. Cryst. Growth **372**, 163 (2013).
84. [Advances in semiconductor nanowires grown on graphene](#)
A.M. Munshi and **H. Weman**,
Phys.Status Solidi RRL (Review article in focus issue on “Semiconductor Nanowires”), **7**, 713 (2013).

85. [Electrical, optical and structural properties of Al-doped ZnO thin films grown on GaAs\(111\)B substrates by pulsed laser deposition](#)
C.C. Weigand, R. Crisp, C. Ladam, T.E. Furtak, R.T. Collins, J. Grepstad, and **H. Weman**,
Thin Solid Films **545**, 124 (2013).
86. [The effects of Sb concentration variation on the optical properties of GaAsSb/GaAs heterostructured nanowires](#)
J. Todorovic, H. Kauko, L. Ahtapodov, A.F. Moses, P. Olk, D.L. Dheeraj, B.O. Fimland, **H. Weman**, and
A.T.J. van Helvoort,
Semiconductor Science and Technology **28**, 115004, (2013).
87. [Self-catalyzed MBE grown GaAs/GaAsSb core-shell nanowires in ZB and WZ crystal structures](#)
S.G. Ghalamestani, A. M. Munshi, D.L. Dheeraj, B.O. Fimland, **H. Weman**, and K.A. Dick,
Nanotechnology **24**, 405601 (2013).
88. [Position controlled uniform GaAs nanowires on silicon using nanoimprint lithography](#)
A. M. Munshi, D.L. Dheeraj, V.T. Fauske, D.C. Kim, J. Huh, J.F. Reinertsen, L. Ahtapodov, K.D. Lee, B.
Heidari, A.T.J. van Helvoort, B.O. Fimland, and **H. Weman**,
Nano Lett. **14**, 960 (2014).
89. [Inducing a direct-to-pseudodirect bandgap transition in wurtzite GaAs nanowires with uniaxial stress](#)
G. Signorello, E. Lörtscher, P.A. Khomyakov, S. Karg, D.L. Dheeraj, B. Gotsmann, **H. Weman** and H. Riel,
Nature Communications **5**, 4655 (2014).

Conference presentations and proceedings

90. [Photoluminescence of carbon-oxygen related complex defects in annealed Czochralski silicon](#)
H. Weman, B. Monemar, and P.-O. Holtz,
Proc. 12th Nordic Semiconductor Meeting, Jevnaker, Norway, June 8-12, 1986, 321-324 (1986).
91. [Electronic structure of neutral complex defects in silicon](#)
B. Monemar, U. Lindefelt, W.M. Chen, Q.X. Zhao, and **H. Weman**,
Proc. 14th Int. Conf. on Defects in Semiconductors, Paris, France, Aug. 18-22, 1986, Edited by H. J. von
Bardeleben, Materials Science Forum Volumes **10-12**, Pt. 1, 97-102 (1986).
92. [Luminescence in silicon in electric and magnetic fields](#)
Q.X. Zhao, **H. Weman**, and B. Monemar,
Proc. International Conference on Luminescence, Beijing, China, Aug. 1987.
93. [Spectroscopy of impurities and complex defects in silicon in electric and microwave fields](#)
M. Godlewski, **H. Weman**, F.P. Wang, B. Monemar, W.M. Chen, and Q.X. Zhao,
Materials Res. Soc. 1987 Fall Meeting, Boston, USA, Nov. 30 - Dec. 4, 1987, Mat. Res. Soc. Symp. Proc.
"Defects in Electronic Materials", Eds. M. Stavola S.J. Pearton and G. Davies, Vol. **104**, 117-120 (1988).
94. [Electric field effects on photoluminescence in silicon](#)
H. Weman and B. Monemar,
Proc. 13th Nordic Semiconductor Meeting, Saltsjöbaden, Sweden, June 5-8, 1988, Ed. M. Östling, 248 (1988).
95. [Optical detection of microwave-induced impact ionization of bound excitons in silicon and GaAs](#)
H. Weman, F.P. Wang, M. Godlewski, B. Monemar, and M. Ahlström,
Proc. 19th Int. Conf. on the Physics of Semiconductors, Warsaw, Poland, Aug. 15-19, 1988, Edited by W.
Zawadzki, Inst. of Physics Polish Academy of Sciences, Vol. **2**, 1347-1350 (1988).
96. [Oxygen related photoluminescence lines in 450°C annealed silicon](#)
A. Henry, **H. Weman**, and B. Monemar,
Proc. 3rd Int. Conf. on Shallow Impurities in Semiconductors, Linköping, Sweden, Aug. 10-12, 1988, Edited
by B. Monemar, The Institute of Physics Conference Series No. **95**, 227-232 (1989).
97. [Strain effects induced by gold diffusion in silicon](#)
A. Henry, **H. Weman**, O.O. Awadelkarim, and B. Monemar,

- Proc. 15th Int. Conf on Defects in Semiconductors, Budapest, Hungary, Aug. 22-26, 1988, Edited by G. Ferenczi, Materials Science Forum Volumes **38-41**, Pt. 2, 747-752 (1989).
98. *Photoluminescence of defects introduced by deuterium plasmas in silicon*
H. Weman, J.L. Lindström, and G. Oehrlein,
Proc 1989 Spring Meeting of the European Materials Society: Science and Technology of Defects in Silicon, Strassbourg, France, May 30-June 2, 1989.
99. *Spontaneous oscillations and chaos in Si induced by excitonic impact ionization*
H. Weman, A. Henry, and B. Monemar,
Proc. 6th Int. Conf. on Hot Carriers in Semiconductors, Scottsdale, AZ, USA, July 23-28, 1989.
100. *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,
Proc. 5th Int. Conf. on Superlattices and Microstructures, Berlin, Germany, Aug. 13-16, 1990.
101. *Serpentine superlattice: Concept and first results*
M.S. Miller, C.E. Pryor, **H. Weman**, L.A. Samoska, H. Kroemer, and P.M. Petroff,
Proc 6th Int. Conf. on Molecular Beam Epitaxy, La Jolla, CA, USA, Aug. 27-31, 1990.
102. *Strain induced intrinsic quantum wells as the origin of broad band photoluminescence in silicon containing extended defects*
H. Weman and B. Monemar, Proc. of Materials Research Society 1989 Fall Meeting, Boston, USA, Nov. 27 - Dec. 2, 1989, Materials Res. Soc. Symp. Proc. "Impurities, Defects and Diffusion in Semiconductors: Bulk and Layered Structures", Eds.: E. Bernholc, E. E. Haller, and D. J. Woford, Vol. **163**, 257-260 (1990).
103. *Parallel electric field effects on the photoluminescence from AlGaAs/GaAs quantum wells*
H. Weman, G.M. Treacy, H.P. Hjalmarson, K.K. Law, J.L. Merz, and A.C. Gossard,
Materials Research Society 1990 Fall Meeting, Boston, USA, Nov. 26 - Nov. 30, 1990, Materials Res. Soc. Symposium B, "Electronic, Optical and Device Properties of Layered Structures", Eds. M. S. Hybertsen, J. Hayes, E. R. Weber, Vol. **EA-21**, 125-129 (1990).
104. *Optical properties of AlGaAs/GaAs quantum well wires grown on GaAs vicinal substrates*
H. Weman, M.S. Miller, H. Kroemer, P.M. Petroff, and J.L. Merz,
Materials Research Society 1990 Fall Meeting, Boston, USA, Nov. 26 - Nov. 30, 1990, Materials Res. Soc. Symposium Y, "Nanostructures: Fabrication and Physics", Eds. T.P. Smith III, D. Kern, S.D. Berger, and H. Craighead, Vol. **EA-26**, 119-122 (1990).
105. *Serpentine superlattice: Concept and first results*
M.S. Miller, C.E. Pryor, **H. Weman**, L.A. Samoska, H. Kroemer, and P.M. Petroff,
Proc. 20th Int. Conf. on the Physics of Semiconductors, Thessaloniki, Greece, Aug. 6-10, 1990, Eds. E.M. Anastassakis and J.D. Joannopoulos, World Scientific Publ., Singapore, 1717-1720 (1991).
106. *Photoluminescence study of quantum wire arrays in AlGaAs/GaAs tilted superlattice structures*
H. Weman, M.S. Miller, P.M. Petroff, H. Kroemer, and J.L. Merz,
March 1991 Meeting of the American Physical Society, Cincinnati, Ohio, USA, March 18-22, 1991, Bulletin of the American Physical Society, **36**, 824 (1991).
107. *Structure and photoluminescence of AlGaAs serpentine -superlattice quantum wire arrays*
M.S. Miller, **H. Weman**, C.E. Pryor, H. Kroemer, P.M. Petroff and J.L. Merz,
March 1991 Meeting of the American Physical Society, Cincinnati, Ohio, USA, March 18-22, 1991, Bulletin of the American Physical Society, **36**, 361 (1991).
108. *Optical transitions in rectangular quantum wires*
C.R. McIntyre, L.J. Sham, and **H. Weman**,
March 1991 Meeting of the American Physical Society, Cincinnati, Ohio, USA, March 18-22, 1991, Bulletin of the American Physical Society, **36**, 824 (1991).
109. *Effects of intense far-infrared radiation on the photoluminescence from AlGaAs/GaAs quantum wells*
S. M. Quinlan, A. Nikroo, M.S. Sherwin, M. Sundaram, **H. Weman**, A.C. Gossard,

- March 1991 Meeting of the American Physical Society, Cincinnati, Ohio, USA, March 18-22, 1991, Bulletin of the American Physical Society, **36**, 757-758 (1991).
110. *Electronic structure and optical properties of (Ga,Al)As quantum wire arrays formed by serpentine-superlattices*
M.S. Miller, C.E. Pryor, **H. Weman**, Y. Li, M. Krishnamurthy, P.M. Petroff, H. Kroemer, A.C. Gossard, and J.L. Merz, Optical Properties of Mesoscopic Semiconductor Structures, Snowbird, USA, April 23-26, 1991.
 111. *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,
Proc. 35th Int. Symp. on Electron, Ion, and Photon Beams, Seattle, WA, USA, May 28-31, 1991.
 112. *Impact ionization of free and bound excitons in AlGaAs/GaAs quantum wells*
H. Weman, G.M. Treacy, H.P. Hjalmarson, K.K. Law, J.P. Bergman, J.L. Merz, and A.C. Gossard,
Proc. 7th Int. Conf. on Hot Carriers in Semiconductors, Nara, Japan, July 1-5, 1991.
 113. *Optical properties of (Ga,Al)As serpentine quantum wire arrays grown on GaAs vicinal substrates*
H. Weman, M.S. Miller, C. Pryor, M. Krishnamurthy, P.M. Petroff, H. Kroemer, and J.L. Merz,
Post-deadline paper PD-14 presented at 9th Int. Conf. on Electronic Properties of Two-Dimensional Systems, Nara, Japan, July 8-12, 1991.
 114. *Confinement of excess arsenic incorporated in thin layers of MBE-grown low-temperature GaAs*
J.P. Ibbetson, C.R. Bolognesi, **H. Weman**, A.C. Gossard, and U.K. Mishra,
Proc. 18th International Symposium on Gallium Arsenide and Related Compounds, Seattle, Washington, USA, Sept. 9-12, 1991, The Institute of Physics Conference Series Vol. **120**, 37-42 (1992).
 115. *Properties of GaAs-AlGaAs quantum wire superlattices grown by molecular beam epitaxy*
P.M. Petroff, M. Miller, S. Chalmers, **H. Weman**, M. Wassermeier, M. Krishnamurthy, A.C. Gossard, H. Kroemer, and J. Merz,
Science and Technology of Mesoscopic Structures, Nara, Japan, Nov. 4-8, 1991, Springer Verlag 1992.
 116. *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,
Proc. 38th National Symp. of the American Vacuum Society, Seattle, WA, USA, Nov. 10-15, 1991.
 117. *MBE growth of tilted superlattices of (Al,Ga)As on vicinal GaAs (110)*
M. Krishnamurthy, M. Wassermeier, **H. Weman**, J.L. Merz and P.M. Petroff,
Proc. Materials Research Society 1991 Fall Meeting, Boston, USA, Dec. 2-6, 1991, Materials Res. Soc. Symposium on Interface Dynamics and Growth, Vol. **237**, 473-478 (1992).
 118. *Epitaxial growth of GaAs/AlGaAs quantum wire superlattices on vicinal surfaces*
P.M. Petroff, M. Krishnamurthy, M. Wassermeier, M.S. Miller, **H. Weman**, H. Kroemer, and J.L. Merz,
Invited talk at MRS 1991 Fall Meeting, Boston, USA, Dec. 2-6, 1991, Symposium on Interface Dynamics and Growth, Eds. K.S. Liang, M.P. Anderson, R.F. Bruinsma, and G. Scoles, Vol. **237**, 467-472 (1992).
 119. *Optical properties of (Al,Ga)As serpentine superlattice quantum wires*
H. Weman, M.S. Miller, C.E. Pryor, P.M. Petroff, H. Kroemer, and J.L. Merz
Proc. International Workshop on "Quantum-Effect Physics, Electronics and Applications", Luxor, Egypt, Jan. 6-10, 1992, The Institute of Physics Conf. Ser. Vol. **127**, 205-208 (1992).
 120. *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,
March 1992 Meeting of the American Physical Society, Indianapolis, Indiana, USA, March 16-20, 1992.
 121. *Electronic confinement from magnetic field dependence of optical transitions in quantum wires*
C.R. McIntyre, H.P. Hjalmarson, **H. Weman**, E.D. Jones, M.S. Miller,
March 1992 Meeting of the American Physical Society, Indianapolis, Indiana, USA, March 16-20, 1992, Bulletin of the American Physical Society, **37**, 343 (1992).
 122. *Variation of the optical properties of serpentine superlattice quantum wire arrays with geometry and composition*
M.S. Miller, **H. Weman**, C. E. Pryor, M. Krishnamurthy, Y.J. Li, H. Kroemer, P.M. Petroff, and J.L. Merz,

- March 1992 Meeting of the American Physical Society, Indianapolis, Indiana, USA, March 16-20, 1992, Bulletin of the American Physical Society, **37**, 323-324 (1992).
123. *Luminescence polarization anisotropy in (Al,Ga)As serpentine quantum wire arrays*
H. Weman, M.S. Miller, C.E. Pryor, P.M. Petroff, H. Kroemer, and J.L. Merz,
SPIE's 1992 Symp. on Compound Semiconductor Physics and Devices, "Quantum Well and Superlattice Physics IV", Somerset, New Jersey, USA, March 23-24, 1992, Vol. **1675**, 120-127 (1992).
 124. *Implementation of a polarization modulation technique in a photoluminescence and photoluminescence excitation measurement setup*
M. Wassermeier, **H. Weman**, M.S. Miller, P.M. Petroff, and J.L. Merz,
SPIE 1992 Symp. on Comp. Semiconductor Physics and Devices, "Spectroscopic Characterization Techniques for Semiconductors", Somerset, New Jersey, USA, March 25-26, 1992, Vol. **1678**, 69-80 (1992).
 125. *Photoluminescence lifetime of serpentine superlattice quantum wire arrays*
J.C. Yi, **H. Weman**, M.S. Miller, N. Dagli, P.M. Petroff, and J.L. Merz,
Proc. 18th Int. Quantum Electronics Conf., Vienna, Austria, June 14-19, 1992.
 126. *Direct growth of quantum wire superlattices: Growth and optical properties*
H. Weman, (invited talk)
6th Int. Conf. on Superlattices and Microstructures, Xian, China, Aug. 4-7, 1992.
 127. *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,
Proc. 6th Int. Conf. on Superlattices and Microstructures, Xian, China, Aug. 4-7, 1992.
 128. *Photoluminescence study of serpentine superlattice quantum wire arrays*
H. Weman, M.S. Miller, C.E. Pryor, P.M. Petroff, and J. L. Merz,
Proc. 21st Int. Conf. on the Physics of Semiconductors, Beijing, China, Aug. 10-14, 1992, Eds. P. Jiang and H-Z. Zheng, World Scientific Publishing (Singapore), Vol. **2**, 1495-1498 (1993).
 129. *Impact ionization of excitons and donors in center-doped $Al_{0.3}Ga_{0.7}As/GaAs$ quantum wells*
H. Weman, (invited talk)
NATO Advanced Research Workshop on "Negative Differential Resistance and Instabilities in 2D Semiconductors", Il Ciocco-Lucca, Tuscany, Italy, Sept. 20-25, 1992. Eds. N. Balkan, B.K. Ridley, and A.J. Vickers, NATO ASI series B, Plenum Press, New York, Vol. **307**, 409-419 (1993).
 130. *Serpentine superlattice quantum wires: Fabrication and fundamental properties*
M.S. Miller, **H. Weman**, M. Wassermeier, P.M. Petroff, and J.L. Merz,
Proc. 2nd Int. Symposium on "New Phenomena in Mesoscopic Structures", Maui, HI, USA, Dec. 7-11, 1992.
 131. *Direct growth of quantum wire superlattices: Fabrication and optical properties*
H. Weman, M.S. Miller, C.E. Pryor, P.M. Petroff, and J.L. Merz,
Swedish Symposium on Materials Science and Technology, Linköping, Sweden, Jan. 25-27, 1993.
 132. *Optical detection of cyclotron resonance in serpentine superlattice quantum wire arrays*
K. Swiatek, **H. Weman**, M.S. Miller, P.M. Petroff and J.L. Merz,
Proc. 22nd Int. School on Physics of Semiconducting Compounds, Jaszowiec, Poland, May 22-28, 1993.
 133. *Observation of confined exciton states in serpentine superlattices by linear polarized excitation spectroscopy*
H. Weman, C.E. Pryor, M.S. Miller, and J.L. Merz,
Proc. 3rd Int. Conf. on Optics of Excitons in Confined Systems, Montpellier, France, Aug. 30-Sep. 2, 1993.
 134. *Lateral confinement effects on the Landau-level dispersion in InGaAs/InP quantum wires*
J. Hammersberg, **H. Weman**, M. Notomi, and T. Tamamura,
Proc. 6th Int. Conf. on InP and Related Materials, Santa Barbara, CA, USA, March 28-31, 1994, IEEE Catalog #94 CH3369-6, 447-450.
 135. *Magneto-luminescence study of lateral confinement effects in InGaAs/InP quantum wires*
H. Weman, J. Hammersberg, M. Notomi, and T. Tamamura,
Proc. Spring Meeting of the Japanese Society of Applied Physics, Tokyo, Japan, March 1994.

136. Microwave-induced modulation of excitons in serpentine superlattice quantum wires
H. Weman, K. Swiatek, M.S. Miller, P.M. Petroff, and J.L. Merz,
 Proc. 22th Int. Conf. on the Physics of Semiconductors, Vancouver, Canada, Aug. 15-19, 1994, Ed. D.J. Lockwood, World Scientific Publishing (Singapore), Vol. **2**, 1663-1666 (1995).
137. Polarized excitation spectroscopy of magneto-excitons in (Al,Ga)As quantum wire superlattices
H. Weman, M. Potemski, M.E. Lazzouni, M.S. Miller, and J.L. Merz,
 Proc. 22th Int. Conf. on the Physics of Semiconductors, Vancouver, Canada, Aug. 15-19, 1994, Ed. D.J. Lockwood, World Scientific Publishing (Singapore), Vol. **2**, 1703-1706 (1995).
138. 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,
 7th Int. Conf. on Superlattices, Microstructures and Microdevices, Banff, Alberta, Canada, Aug. 22-26, 1994.
139. 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,
 7th Int. Conf. on Superlattices, Microstructures and Microdevices, Banff, Alberta, Canada, Aug. 22-26, 1994.
140. Magneto-luminescence study of strain and confinement effects in InAsP/InP quantum well wires
 J. Hammersberg, M. Notomi, **H. Weman**, M. Potemski, H. Sugiura, M. Okamoto, and T. Tamamura,
 Proc. 7th Int. conf. on Indium Phosphide and Related Materials, Sapporo, Japan, May 9-13, 1995, IEEE Catalog #95 CH35720, 315-318 (1995).
141. Confinement effect on excitons in self-organized InGaAs quantum disks
H. Weman, H. Kamada, M. Potemski, J. Temmyo, R. Nötzel, and T. Tamamura,
 19th Conf. on Compound Semiconductor Devices, Stockholm, Sweden, May 21-24, 1995.
142. Magneto-optical properties of self-organized strained InGaAs quantum disks
H. Weman, H. Kamada, M. Potemski, J. Temmyo, R. Nötzel, and T. Tamamura,
 Proc. 7th Int. Conf. on Modulated Semiconductor Structures, Madrid, Spain, July 10-14, 1995.
143. Dimensionality effects on strain for lattice-mismatched InAsP/InP quantum wires: Relationship between strain and 2D quantum confinement
 M. Notomi, J. Hammersberg, **H. Weman**, M. Potemski, H. Sugiura, M. Okamoto, and T. Tamamura,
 Proc. 7th Int. Conf. on Modulated Semiconductor Structures, Madrid, Spain, July 10-14, 1995.
144. Magneto-excitons and Landau level states in quantum wire superlattices
H. Weman, M. Potemski, M.E. Lazzouni, M.S. Miller, and J.L. Merz,
 Proc. 22nd Int. Symposium on Compound Semiconductors, Cheju Island, South Korea, Aug. 28-Sept. 2, 1995. The Institute of Physics Conf. Ser. No **145**: 931-934 (1996).
145. Optical properties of self-assembled quantum wires and dots
 J.L. Merz, P.M. Petroff, **H. Weman**, and S. Fafard,
 Proc. 3rd Int. Symposium on Quantum Confinement: Quantum Wires and Dots, Chicago, IL, USA, Oct. 8-13, 1995. The Electrochemical Society Vol. **95-2**, 366 (1995).
146. Strain and lateral quantum confinement effects in n-type modulation doped lattice-mismatched quantum wires
 J. Hammersberg, M. Notomi, **H. Weman**, M. Potemski, H. Sugiura, M. Okamoto, and T. Tamamura,
 Proc 3rd Int. Symposium on Quantum Confinement: Quantum Wires and Dots, Chicago, IL, USA, Oct. 8-13, 1995. The Electrochemical Society Vol. **95-2**, 399 (1995).
147. Spin-splitting reversal in InGaAs/InP quantum-wires in high magnetic field
 J. Hammersberg, M. Notomi, **H. Weman**, M. Potemski, T. Tamamura, M. Okamoto, and H. Sugiura.
 Proc. 1996 Int. Conf. on Solid State Devices and Materials, Yokohama, Japan, Aug. 26-29, 1996, p. 196.
148. Quantum wire self-ordered growth seeded by electron-beam lithography
 B. Dwir, F. Reinhardt, **H. Weman**, A. Gustafsson, and E. Kapon,
 Proc. Int. Conf on Micro- and Nano- Engineering, Glasgow, Scotland, UK, Sept. 22-26, 1996.

149. Direct observation of coupling in asymmetric double quantum wires
H. Weman, D.Y. Oberli, M.-A. Dupertuis, F. Reinhardt, A. Rudra, A. Gustafsson, L. Sagalowicz, and E. Kapon, Quantum Electronics and Laser Science Conf., Baltimore, MD, USA, May 18-23, 1997. Optical Society of America Technical Digest Series, Volume **12**, 61-62 (1997).
150. Optical studies of self-assembled quantum disks
M. Potemski, D.J. Lockwood H.J. Labbé, P. Hawrylak, H. Kamada, **H. Weman**, J. Temmyo, and T. Tamamura, 4th Int. Symposium on "Quantum Confinement: Nanoscale Materials, Devices, and Systems", Montreal, Canada, May 4-9, 1997. The Electrochemical Society Vol. **97-11**, 155-161 (1997).
151. Structure and optical properties of V-groove quantum wire superlattices
Y. Ducommun, E. Martinet, **H. Weman**, G. Biasiol, A. Gustafsson, and E. Kapon, Proc. 8th Int. Conf. on Modulated Semiconductor Structures, Santa Barbara, CA, USA July 14-18, 1997.
152. Band-mixing and coupling in single and double quantum wire structures
M.A. Dupertuis, F. Vouilloz, D.Y. Oberli, **H. Weman**, and E. Kapon, Proc. 8th Int. Conf. on Modulated Semiconductor Structures, Santa Barbara, CA, USA, July 14-18, 1997.
153. Light scattering from self-assembled quantum disks
P. Hawrylak, M. Potemski, D.J. Lockwood, H.J. Labbé, H. Kamada, **H. Weman**, J. Temmyo, and T. Tamamura, 8th Int. Conf. on Modulated Semiconductor Structures, Santa Barbara, USA, July 14-18, 1997.
154. Optical studies of self-assembled $Ga_{0.8}In_{0.2}As$ quantum disks
D.J. Lockwood, M. Potemski, H.J. Labbé, P. Hawrylak, H. Kamada, **H. Weman**, J. Temmyo, and T. Tamamura, 6th Int. Conf. on Luminescent Materials, Paris, France, Aug. 31-Sept. 5, 1997. The Electrochemical Society Vol. **97-29**, 120-128 (1997).
155. 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, 12th Int. Conf. on Electronic Properties of Two-dimensional Structures, Tokyo, Japan, Sept. 22-26, 1997.
156. Optical studies of self-organized $Ga_{0.8}In_{0.2}As$ quantum disks
D.J. Lockwood, M. Potemski, P. Hawrylak, H.J. Labbé, **H. Weman**, H. Kamada J. Temmyo, and T. Tamamura, Proc. March Meeting of American Physical Society, Los Angeles, USA, March 16-20, 1998.
157. Single dot magneto-optical micro-photoluminescence excitation spectroscopy
M. Notomi, M. Potemski, E. Renar, **H. Weman**, J. Temmyo, and T. Tamamura, Proc. Spring meeting of the Japanese Society of Applied Physics, Tokyo, Japan, March 1998.
158. Wave-function splitting due to a 2D quantum confined Stark effect in quantum wires
H. Weman, E. Martinet, M.-A. Dupertuis, A. Rudra, K. Leifer, and E. Kapon, **Invited talk** at 21st Int. Quantum Electronics Conf., San Francisco, CA, USA, May 3-8, 1998. Optical Society of America Technical Digest Series, Volume **7**, 85-86 (1998).
159. Electric field effects in forward- and reverse-biased V-groove quantum wire diodes
H. Weman, E. Martinet, M.-A. Dupertuis, A. Rudra, K. Leifer, and E. Kapon, Proc. 18th Nordic Semiconductor meeting, Linköping, Sweden, June 8-10, 1998.
160. Can selective current injection, wavefunction splitting and triaxial strain make unique quantum wire devices?
H. Weman, (invited talk)
2nd Sweden-Japan Q-Nano workshop at Särö, Sweden, June 16-18, 1998.
161. Self-ordered AlGaAs vertical quantum wells: formation mechanisms, structure and optical properties
G. Biasiol, E. Martinet, A. Gustafsson, **H. Weman**, Y. Ducommun, F. Reinhardt, and E. Kapon, Proc. 40th Electronic Materials Conf., Charlottesville, Virginia, USA, June 22-24, 1998.
162. Selective current injection in V-groove quantum wire light emitting diodes
H. Weman, E. Martinet, M.-A. Dupertuis, A. Rudra, K. Leifer, and E. Kapon, Proc. 24th Int. Conf. on the Physics of Semiconductors, Jerusalem, Israel, Aug. 2-7, 1998.

163. Observation of two dimensional quantum confined Stark effect in V-groove quantum wires
H. Weman, E. Martinet, M.-A. Dupertuis, A. Rudra, K. Leifer, and E. Kapon,
Proc. 24th Int. Conf. on the Physics of Semiconductors, Jerusalem, Israel, Aug. 2-7, 1998.
164. Wavefunction splitting in two-dimensional quantum confined Stark structures
M.-A. Dupertuis, E. Martinet, **H. Weman**, and E. Kapon,
Proc. 24th Int. Conf. on the Physics of Semiconductors, Jerusalem, Israel, Aug. 2-7, 1998.
165. Valence band mixing and 1D-miniband formation in V-groove quantum wire superlattices
Y. Ducommun, M.-A. Dupertuis, E. Martinet, **H. Weman**, G. Biasiol, A. Gustafsson, and E. Kapon,
Proc. 24th Int. Conf. on the Physics of Semiconductors, Jerusalem, Israel, Aug. 2-7, 1998.
166. Demonstration of anisotropic triaxial nature of strain in polarization and Zeeman splitting for strained quantum wires with a strong magnetic field
M. Notomi, J. Hammersberg, J. Zeman, **H. Weman**, M. Potemski, H. Sugiura, and T. Tamamura,
Proc. 24th Int. Conf. on the Physics of Semiconductors, Jerusalem, Israel, Aug. 2-7, 1998.
167. 2D quantum confined Stark effects in asymmetric V-groove quantum wires
E. Martinet, **H. Weman**, M.-A. Dupertuis, A. Rudra, K. Leifer, A. Condo, and E. Kapon,
Proc. 17th General meeting of Condensed Matter Division of European Physical Society, Grenoble, France, Aug. 25-29, 1998.
168. Theoretical study of electronic states in quantum wire structures
M.A. Dupertuis, Y. Ducommun, E. Martinet, D. Oberli, **H. Weman**, and E. Kapon,
17th General Conf. of the Condensed Matter Division of European Physical Society, Grenoble, France, Aug. 25-29, 1998.
169. Quantum confined Stark effect and phase-space exciton quenching in quantum wires
H. Weman, E. Martinet, M.-A. Dupertuis, A. Rudra, A.M. Condo, and E. Kapon,
Quantum Electronics and Laser Science Conf., Baltimore, MD, USA, May 23-28, 1999. Optical Society of America Technical Digest Series, 53-54 (1999).
170. Highly selective carrier injection in V-groove quantum wire light-emitting diodes
H. Weman, E. Martinet, A. Rudra, and E. Kapon,
Proc. 3rd Pacific Rim Conf. on Lasers and Electro-Optics, Seoul, South Korea, Aug. 30-Sept. 3, p. 1099, 1999. Optical Society of America Technical Digest Series, Vol. 4, p. 1099, (1999).
171. Carrier-induced effects on absorption and emission in V-groove quantum wire diodes
H. Weman, E. Martinet, M.-A. Dupertuis, A. Rudra, and E. Kapon,
Proc. 6th Int. Conf. on Optics of Excitons in Confined Systems, Ascona, Switzerland, Aug. 30 - Sep. 2, 1999.
172. Nano-photonics emitters and modulators based on V-groove quantum wires and V-shaped waveguides
H. Weman, (invited talk)
3rd Sweden-Japan Q-Nano workshop, Kyoto, Japan, Dec. 13-14, 1999.
173. Optical absorption and carrier-induced effects in V-groove quantum wire waveguides
E. Martinet, **H. Weman**, M.-A. Dupertuis, A. Rudra, and E. Kapon,
Proc. 18th General Conf. of the Condensed Matter Division of European Physical Society, Montreux, Switzerland, March 13-17, p. 353, (2000).
174. Coulomb correlation and tunneling effects in single and double V-groove quantum wire LEDs
H. Weman, E. Martinet, M.-A. Dupertuis, A. Rudra, K. Leifer, and E. Kapon,
Quantum Electronics and Laser Science Conf., San Francisco, CA, USA, May 7-12, 2000. Optical Society of America Technical Digest Series, pp. 76-77 (2000).
175. Magneto-electroluminescence study of single and double V-groove quantum wires: Coulomb correlation, tunneling efficiency and spin-polarization
H. Weman, S. Jullian, M.-A. Dupertuis, M. Potemski, A. Rudra, and E. Kapon,
Proc. 25th Int. Conf. on the Physics of Semiconductors, Osaka, Japan, Sept. 17-22, 2000. Springer Proceedings in Physics, Eds. N. Miura and T. Ando, Springer Verlag, Vol. 87, pp. 1119-1120 (2001).

176. Electro-absorption modulation by electron transfer in a single V-groove quantum wire waveguide structure
H. Weman, L. Sirigu, E. Martinet, S. Palmgren, A. Rudra, and E. Kapon,
Proc. 10th European Conf. on Integrated Optics, Paderborn, Germany, April 4-6, 2001. Ed. W. Sohler, pp. 98-101, (2001).
177. Efficient nano-photonic devices based on self-ordered growth on V-grooved GaAs substrates
H. Weman, (invited talk)
1st International Workshop on Quantum Nonplanar Nanostructures & Nanoelectronics, July 2-4, 2001, Tsukuba, Japan. Eds. M. Ogura and K. Matsumoto, pp. 59-64 (2001).
178. Optical emission in a V-groove quantum wire laser diode under high magnetic fields
L. Sirigu, **H. Weman**, F. Karlsson, D.Y. Oberli, A. Rudra and E. Kapon,
Proc. 10th Int. Conference on Modulated Semiconductor Structures, Linz, Austria, July 23-27, 2001.
179. Electro-absorption modulation by electron transfer in a single V-groove quantum wire waveguide structure
S. Palmgren, **H. Weman**, L. Sirigu, E. Martinet, A. Rudra, and E. Kapon,
2nd Int. Symposium on Nanostructures at Surfaces and Interfaces, Villigen, Switzerland, April 8-11, 2002.
180. Efficient, narrow linewidth emission from InGaAs/AlGaAs V-groove quantum wire light-emitting diodes
H. Weman, L. Sirigu, K. Leifer, K.F. Karlsson, A. Rudra, and E. Kapon,
Proc. 14th Int. Conf. on Indium Phosphide and Related Materials, Stockholm, Sweden, May 12-16, 2002.
181. Enhancement of excitonic effects in quantum wire light emitters
E. Kapon, L. Sirigu, **H. Weman**, D.Y. Oberli, M.-A. Dupertuis, and A. Rudra,
Proc. Quantum Electronics and Laser Science Conf., Moscow, Russia, June 22-28, 2002.
182. Quantum wire light emitters: Physics and technology
H. Weman, L. Sirigu, D.Y. Oberli, M.-A. Dupertuis, and A. Rudra, and E. Kapon,
Invited talk at 2nd International Workshop on Quantum Nonplanar Nanostructures & Nanoelectronics, Sept. 9-11, 2002, Tsukuba, Japan. Eds. M. Ogura and K. Matsumoto, pp. 29-31 (2002).
183. Electroluminescence from asymmetric coupled GaAs/AlGaAs V-groove quantum wires
K.F. Karlsson, **H. Weman**, M.-A. Dupertuis, K. Leifer, A. Rudra, and E. Kapon,
Proc. 29th Int. Symposium on Compound Semiconductors, Lausanne, Switzerland, Oct. 7-10, 2002. Inst. Phys. Conf. Ser. No **174**, 183-186 (2003).
184. Use of quantitative EELS and cathodoluminescence for study of carrier confinement and diffusion in self organized vertical quantum wells
K. Leifer, S. Mautino, **H. Weman**, A. Rudra, E. Pelucchi, F. Bobard, A. Wyser, and E. Kapon,
13th Int. Conf. on Microscopy of Semiconducting Materials, Cambridge, United Kingdom, March 31-April 3, 2003. Inst. Phys. Conf. Ser. No **180**, 131-134 (2003).
185. Single quantum wire waveguide modulator with high on/off ratio and low voltage swing
S. Palmgren, **H. Weman**, A. Rudra, and E. Kapon,
Proc. 11th European Conf. on Integrated Optics, Prague, Czech, April 2-4, 2003. Ed. J. Ctyroky, p. 149 (2003).
186. Electron and hole transfer between two separated GaAs/AlGaAs V-groove quantum wires
K.F. Karlsson, **H. Weman**, M.-A. Dupertuis, K. Leifer, A. Rudra, and E. Kapon,
Proc. 11th Int. Conf. on Modulated Semiconductor Structures, Nara, Japan, July 14-18, 2003.
187. The fractional-dimensional excitonic absorption theory applied to real V-groove quantum wires
K.F. Karlsson, M.-A. Dupertuis, **H. Weman**, and E. Kapon,
Proc. 27th Int. Conf. on the Physics of Semiconductors, Flagstaff, Arizona, USA, July 26-30, 2004. AIP Conf. Proc. **772**, 881 (2005).
188. Carrier tunneling between parallel GaAs/AlGaAs quantum wires
K.F. Karlsson, **H. Weman**, K. Leifer, A. Rudra, and E. Kapon,
Proc. 27th Int. Conf. on the Physics of Semiconductors, Flagstaff, Arizona, USA, July 26-30, 2004. AIP Conf. Proc. **772**, 919 (2005).

189. V-groove quantum wire laser optimisation
H. Reichardt, K. Atlasov, **H. Weman**, L. Sirigu, P. Clausen, and E. Kapon,
Proc. Monte Verita Summer School on Semiconductor Quantum dots: Physics and Devices, Ascona,
Switzerland, Sept. 5-10, 2004.
190. Absorption in a V-groove quantum wire waveguide
S. Palmgren, **H. Weman**, A. Schoenberg, A. Rudra, and E. Kapon,
Proc. Monte Verita Summer School on Semiconductor Quantum Dots: Physics and Devices, Ascona,
Switzerland, Sept. 5-10, 2004.
191. GaAs V-groove quantum wire LEDs and lasers.
H. Weman, H. Reichardt, L. Sirigu, K.F. Karlsson, and E. Kapon,
Proc. of the Swedish Optical Society Conf. on Optics in Sweden 2004, Linköping, Sweden, Nov. 9-10, 2004.
192. Optical modes and absorption in a V-shaped AlGaAs waveguide with a single GaAs quantum wire
S. Palmgren, **H. Weman**, A. Schoenberg, and E. Kapon,
Proc. of the Swedish Optical Society Conf. on Optics in Sweden 2004, Linköping, Sweden, Nov. 9-10, 2004.
193. V-groove quantum wire waveguide devices
S. Palmgren, H. Reichardt, **H. Weman**, A. Schoenberg, E. Pelucchi, A. Rudra, K. F. Karlsson, K. Leifer and E. Kapon,
11th European Workshop on Metalorganic Vapour Phase Epitaxy, Lausanne, Switzerland, June 5-8, 2005.
194. Strongly reduced carrier/exciton transfer efficiency between parallel quantum wires: a comparison with quantum wells
K.F. Karlsson, **H. Weman**, S.K. Lyo, A. Rudra, and E. Kapon,
12th Int. Conf. on Modulated Semiconductor Structures, Albuquerque, New Mexico, USA, July 10-15, 2005
195. V-groove quantum wire devices
H. Weman, S. Palmgren, H. Reichardt, A. Schoenberg, E. Pelucchi, A. Rudra, K. F. Karlsson, K. Leifer and E. Kapon, 1st Int. Symposium on Semiconductor Nanowires, Lund, Sweden, Oct. 5-6, 2005.
196. Fabrication and characterization of nanophotonic structures and devices
H. Weman, (invited talk)
1st NTNU Nanoscience & Nanotechnology workshop, Jaegt volden, Norway, March 9-10, 2006.
197. Exciton energy transfer between asymmetric quantum wires
S.K. Lyo, K.F. Karlsson, **H. Weman**, A. Rudra, and E. Kapon,
March 2006 Meeting of the American Physical Society, Baltimore, MD, USA, March 13-17, 2006, Bulletin of the American Physical Society.
198. Semiconductor quantum-wires and nano-wires for photonics
H. Weman, (invited talk)
Nanoscience-Nanotechnology seminar, Trondheim, Norway, May 30, 2006.
199. 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.
200. 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.
201. 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.
202. 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.

203. *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.
204. *Semiconductor quantum-wires and nano-wires for optoelectronic applications*
H. Weman, (invited talk)
2nd Int. Conf. on Optical and Optoelectronic Properties of Materials and Applications, London, UK, July 30 - Aug. 3, 2007.
205. *Importance of initial growth conditions during the growth of III-V nanowires by molecular beam epitaxy*
D.L. Dheeraj, C. Sartet, 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.
206. *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.
207. *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.
208. *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.
209. *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.
210. *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.
211. *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.
212. *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.
213. *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.
214. *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.
215. *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.
216. *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.

217. [Growth and characterization of heterostructured III-V nanowires grown 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.
218. [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.
219. [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.
220. [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.
221. [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**,
Materials Res. Soc. 2008 Fall Meeting, Symposium LL: Nanowires - Synthesis, Properties, Assembly, and Applications, Boston, USA, Dec. 1-5, 2008. Proceedings **Vol. 1144**, p. LL02-02, (2009). DOI: 10.1557/PROC-1144-LL02-02.
222. [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.
223. [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.
224. [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
225. [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.
226. [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
227. [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).
228. [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**,
Spring Meeting of the European Materials Society: Semiconductor nanostructures towards electronic and optoelectronic device applications II, Strasbourg, France, June 8-12, 2009. IOP Conf. Ser.: Mater. Sci. Eng. **6**. 012001 (2009).

229. *Heterostructured wurzite GaAs and zinc blende GaAsSb nanowires- New possibilities for heterostructure engineering*
D.L. Dheeraj, T.B. Hoang, A.F. Moses, H.L. Zhou, A.T.J. van Helvoort, B.O. Fimland and **H. Weman**,
23rd Nordic semiconductor meeting, Reykjavik, Iceland, June 14-17, 2009.
230. *Modeling of electronic and optical properties of semiconductor nanowires*
G.K. Svendsen, M.-A. Dupertuis, **H. Weman**, and J. Skaar,
NANOMAT Conference, Lillehammer, Norway, June 15-17, 2009.
231. *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**,
NANOMAT Conference, Lillehammer, Norway, June 15-17, 2009.
232. *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**,
NANOMAT Conference, Lillehammer, Norway, June 15-17, 2009.
233. *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, NANOMAT Conference, Lillehammer, Norway, June 15-17, 2009.
234. *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.
235. *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,
GDR Semiconductor Nanowires and Nanotubes, Autrans, France, June 30-July 3, 2009.
236. *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.
237. *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**
EMAG 2009 Microscopy at the nanoscale and beyond, Sheffield, UK, Sept. 8-11, 2009.
Journal of Physics, Conference Series, **241**, 012084 (2010)
238. *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.
239. *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.
240. *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.
241. *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.

242. *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.
243. *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.
244. *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.
245. *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).
246. *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.
247. *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.
248. *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.
249. *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.
250. *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.
251. *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.
252. *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.
253. *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.
Proc. AIP Conference Proceedings Volume 1399, 429 (2011).
254. *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.

- Proc. AIP Conference Proceedings Volume 1399, 559 (2011).
255. 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.
 256. 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.
 257. 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.
 258. Heterostructured III-V nanowires grown by Au-assisted molecular beam epitaxy
H. Weman, (invited talk),
Heraeus workshop on “III-V Nanowires”, Bad Honnef, Germany, Feb. 21-23, 2011.
 259. 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**, Heraeus workshop on “III-V Nanowires”, Bad Honnef, Germany, Feb. 21-23, 2011.
 260. Correlated micro-photoluminescence and electron microscopy studies of individual heterostructured semiconductor nanowires
J. Todorovic, A.F. Moses, T. Karlberg, D.L. Dheeraj, P. Olk, B.O. Fimland, **H. Weman** and A.T.J. van Helvoort, 17th Int. Conf. on Microscopy of Semiconducting Materials, Cambridge, UK, April 4-7, 2011.
Journal of Physics, Conference Series 326, 012043 (2011).
 261. Consecutive photoluminescence and transmission electron microscopy studies of single GaAs/AlGaAs core-shell nanowires with a GaAsSb insert
A.F. Moses, J. Todorovic, T. Karlberg, A.T.J. van Helvoort, D.L. Dheeraj, P. Olk, B.O. Fimland, and **H. Weman**, Materials Res. Soc. 2011 Spring Meeting, Symposium EE: Semiconductor Nanowires- From Fundamentals to Applications”, San Francisco, CA, USA, April 26-29, 2011.
 262. Insights into growth mechanisms of self-catalyzed GaAs nanowires grown by molecular beam epitaxy
A.M. Munshi, D.L. Dheeraj, J. Todorovic, A.T.J. van Helvoort, B.O. Fimland and **H. Weman**,
Materials Res. Soc. 2011 Spring Meeting, Symposium EE: Semiconductor Nanowires- From Fundamentals to Applications”, San Francisco, CA, USA, April 26-29, 2011.
 263. Semiconductor nanowire based solar cells-A Nordic top-level research initiative
H. Weman, 24th Nordic semiconductor meeting, Fuglsøcenter, Denmark, June 19-22, 2011.
 264. III-V nanowires for high-efficiency solar cells
H. Weman, (invited talk)
Norway-China Workshop on “Nanotechnology for renewable energy materials”, Trondheim, Norway, Aug. 31-Sept. 1, 2011.
 265. Heterostructured III-V nanowires grown by Au- and self-assisted molecular beam epitaxy
H. Weman, (invited talk),
PDI Topical Workshop on MBE-grown arsenide nanowires, Berlin, Germany, Sept. 8-9, 2011.
 266. Growth of ZnO nanostructures on c- and a-plane sapphire by Au-assisted pulsed laser deposition
C. Weigand, D. Skåre, J. Tveit, C. Ladam, R. Holmestad, J. Grepstad, **H. Weman**,
GDR Semiconductor Nanowires and Nanotubes, Porquerolles, France, Oct. 17-21, 2011.
 267. Optical properties of Wurtzite GaAs nanowires
L. Ahtapodov, P. Olk, J. Todorovic, M. Eriksson, D.L. Dheeraj, A.T.J. van Helvoort, P. Bergman, B.O. Fimland, and **H. Weman**,
GDR Semiconductor Nanowires and Nanotubes, Porquerolles, France, Oct. 17-21, 2011.

268. Periodic arrays of self-catalyzed heterostructured GaAs nanowires on Si substrates grown by molecular beam epitaxy
A.M. Munshi, D.L. Dheeraj, D.C. Kim, A.T.J. van Helvoort, B.O. Fimland, and **H. Weman**,
GDR Semiconductor Nanowires and Nanotubes, Porquerolles, France, Oct. 17-21, 2011.
269. Contacting of single nanowires by confocal photodeposition of metal
P. Olk, T. Härtling, D.C. Kim, and **H. Weman**,
GDR Semiconductor Nanowires and Nanotubes, Porquerolles, France, Oct. 17-21, 2011.
270. All-optical contacting of single nanowires by confocal photodeposition of metal
P. Olk, T. Härtling, D.C. Kim, and **H. Weman**,
Materials Res. Soc. 2011 Fall Meeting, Symposium BB: Functional Nanowires and Nanotubes, Boston, MA, USA, Nov. 27 - Dec. 2, 2011.
271. Wurtzite versus zincblende GaAs – A thorough comparison
L. Ahtapodov, J. Todorovic, P. Olk, D.C. Kim, T. Mjåland, M. Eriksson, D.L. Dheeraj, A.T.J. van Helvoort, P. Bergman, B.O. Fimland, **H. Weman**,
Materials Res. Soc. 2012 Spring Meeting, San Francisco, CA, USA, Apr. 9 - Apr. 13, 2012.
272. Characterization of the interface between GaAs nanowires and a 111-Si substrate
V.T. Fauske, A.M. Munshi, D.L. Dheeraj, D.C. Kim, B.O. Fimland, **H. Weman**, and A.T.J. van Helvoort,
Materials Res. Soc. 2012 Spring Meeting, San Francisco, CA, USA, Apr. 9 - Apr. 13, 2012.
273. Zinc blende and wurtzite GaAs nanowires grown by self-catalyzed molecular beam epitaxy
A.M. Munshi, D.L. Dheeraj, D.C. Kim, A.T.J. van Helvoort, B.O. Fimland, and **H. Weman**,
Materials Res. Soc. 2012 Spring Meeting, San Francisco, CA, USA, Apr. 9 - Apr. 13, 2012.
274. Semiconductor nanowire based solar cells -A Nordic top-level research initiative
D.C. Kim, A.M. Munshi, D.L. Dheeraj, C.G. Lim, V.T. Fauske, A.T.J. van Helvoort, B.O. Fimland,
and **H. Weman**, Technoport conference, Trondheim, Norway, Apr. 16 – Apr. 18, 2012.
275. III-V nanowire solar cells
H. Weman, (invited talk),
2012 meeting of Norwegian Research Center for Solar Cell Technology, Trondheim, Norway, May 23, 2012.
276. Correlation of optical and structural properties of single semiconductor heterostructured nanowires
J. Todorovic, A.F. Moses, L. Ahtapodov, D.L. Dheeraj, B.O. Fimland, **H. Weman**, and A.T.J. van Helvoort,
Scandem 2012, Bergen, Norway, June 13 – June 15, 2012.
277. Combined micro-photoluminescence and electron microscopy investigation of single GaAs nanowires
L. Ahtapodov, P. Olk, J. Todorovic, D.C. Kim, T. Mjåland, P. Slåttnes, D.L. Dheeraj, A.T.J. van Helvoort,
B.O. Fimland, and **H. Weman**,
31st Int. Conf. on the Physics of Semiconductors, Zurich, Switzerland, July 29 – Aug. 3, 2012.
278. Investigation of wurtzite GaAs nanowires by polarization dependent photocurrent spectroscopy
D.C. Kim, D.L. Dheeraj, B.O. Fimland, and **H. Weman**,
31st Int. Conf. on the Physics of Semiconductors, Zurich, Switzerland, July 29 – Aug. 3, 2012.
279. Site-specific, cross-sectional TEM samples of as-grown nanowires by FIB
V.T. Fauske, A.M. Munshi, D.L. Dheeraj, D.C. Kim, B.O. Fimland, **H. Weman**, and A.T.J. van Helvoort,
15th EMC conference, Manchester, UK, Sept. 16 – Sept. 21, 2012.
280. Crystal phase tuning in self-catalyzed GaAs nanowires induced by Ga-droplet contact angle
A.M. Munshi, D.L. Dheeraj, J. Todorovic, A.T.J. van Helvoort, B.O. Fimland, and **H. Weman**,
17th Int. Conference on Molecular Beam Epitaxy, Nara, Japan, Sept. 23 – Sept. 28, 2012.
281. A generic model and experimental demonstration of epitaxial growth of GaAs nanowires on graphene layers
A.M. Munshi, D.L. Dheeraj, V.T. Fauske, D.C. Kim, A.T.J. van Helvoort, B.O. Fimland, and **H. Weman**,
17th Int. Conference on Molecular Beam Epitaxy, Nara, Japan, Sept. 23 – Sept. 28, 2012.

282. Comparison of Be-doped GaAs nanowires grown by Au- and Ga-assisted molecular beam epitaxy
D.L. Dheeraj, A.M. Munshi, O.M. Christoffersen, D.C. Kim, G. Signorello, H. Riel, A.T.J. van Helvoort, **H. Weman**, and B.O. Fimland,
17th Int. Conference on Molecular Beam Epitaxy, Nara, Japan, Sept. 23 – Sept. 28, 2012.
J. Cryst. Growth **378**, 532 (2013).
283. Commercialization of nanotechnology
H. Weman, (invited talk),
2nd Annual Top-level Research Initiative meeting, Helsinki, Finland, Oct. 30, 2012.
284. III-V nanowires for high-efficiency solar cells
H. Weman, (invited talk),
Transatlantic Science Week on "Nano-enabling technologies", Houston, TX, USA, Nov. 14, 2012.
285. Epitaxial growth of high quality vertical GaAs nanowires on graphene by molecular beam epitaxy
A.M. Munshi, D.L. Dheeraj, V.T. Fauske, D.C. Kim, A.T.J. van Helvoort, B.O. Fimland, and **H. Weman**,
Materials Res. Soc. 2012 Fall Meeting, Symposium FF: Semiconductor Nanowires-Optical and Electronic Characterization and Applications, Boston, MA, USA, Nov. 25 – Nov. 30, 2012.
286. Semiconductor nanowires on graphene for next generation ICT
H. Weman, (invited talk),
ITovation day 2012, Trondheim, Norway, Nov. 27, 2012.
287. GaAs/AlGaAs core-shell nanowires for novel solar cell applications
H. Kauko, A.M. Munshi, C.G. Lim, D.C. Kim, D.L. Dheeraj, B.O. Fimland, A.T.J. van Helvoort and **H. Weman**,
Norwegian solar cell conference 2013, Oppdal, Norway, March 13-15, 2013.
288. Epitaxial growth of vertical III-V semiconductor nanowires on graphene
D.L. Dheeraj, A.M. Munshi, V.T. Fauske, D.C. Kim, A.T.J. van Helvoort, B.O. Fimland, and **H. Weman**,
Graphene 2013, Bilbao, Spain, April 23-26, 2013.
289. Epitaxial growth of vertical III-V semiconductor nanowires on graphene
J. Nam, D.C. Kim, P.C. Andersen, S.J. Park, D.J. Dae, A.M. Munshi, D.L. Dheeraj, B.O. Fimland, and **H. Weman**,
Korean Physical Society spring meeting, April 24-26, 2013.
290. Epitaxial growth of vertical III-V semiconductor nanowires on graphene
H. Weman (invited talk)
Int. conf. on Crystal Growth, Cancun, Mexico, June 10-13, 2013.
291. Self-catalyzed MBE grown GaAs/GaAsSb core-shell nanowires in ZB and WZ crystal structures
S.G. Ghalamestani, A.M. Munshi, D.L. Dheeraj, B.O. Fimland, **H. Weman**, and K.A. Dick,
7th Nanowire growth workshop, Lausanne, Switzerland, June 10-12, 2013.
292. Limitations of self-catalytic growth in controlling diameter of GaAs nanowires on Si substrates
A.M. Munshi, D.L. Dheeraj, V. T. Fauske, A.T.J. van Helvoort, B.O. Fimland, **H. Weman**,
7th Nanowire growth workshop, Lausanne, Switzerland, June 10-12, 2013.
293. Epitaxial growth and characterization of vertical III-V semiconductor nanowires on graphene
D.L. Dheeraj, A.M. Munshi, V.T. Fauske, D.C. Kim, A.T.J. van Helvoort, B.O. Fimland, and **H. Weman**,
7th Nanowire growth workshop, Lausanne, Switzerland, June 10-12, 2013.
294. Semiconductor nanowires grown on graphene
H. Weman (invited talk)
4th annual Nano network workshop, Bergen, Norway, June 17-19, 2013.
295. Mechanical and electrical characterization of nanowire-substrate interfaces
V.T. Fauske, D.C. Kim, A.M. Munshi, D.L. Dheeraj, B.O. Fimland, **H. Weman**, and A.T.J. van Helvoort
4th annual Nano network workshop, Bergen, Norway, June 17-19, 2013.
296. Novel solar cells based on GaAs/AlGaAs core-shell nanowires
H. Kauko, A.M. Munshi, C.G. Lim, D.C. Kim, D.L. Dheeraj, B.O. Fimland, A.T.J. van Helvoort and

- H. Weman**, 4th annual Nano network workshop, Bergen, Norway, June 17-19, 2013.
297. *Electrical properties of III-V semiconductor nanowires for solar cell applications*
J. Huh, D.C. Kim, H. Yun, A.M. Munshi, D.L. Dheeraj, G.T. Kim, A.T.J. van Helvoort, S.W. Lee, B.-O. Fimland, and **H. Weman**,
4th annual Nano network workshop, Bergen, Norway, June 17-19, 2013.
 298. *GaAs nanowires grown on silicon and graphene for solar cell applications*
A.M. Munshi, D.L. Dheeraj, V.T. Fauske, D.C. Kim, J. Todorovic, J. Huh, S. Sandell, A.T.J. van Helvoort, B.O. Fimland, and **H. Weman**, 4th annual Nano network workshop, Bergen, Norway, June 17-19, 2013.
 299. *Numerical analysis and device optimization of radial p-n junction GaAs/AlGaAs core-shell nanowire solar cells*,
C.G. Lim and **H. Weman**, 13th Int. Conf. on Numerical simulations of optoelectronic devices, Vancouver, Canada, Aug. 19-22, 2013. IEEE Xplore <http://dx.doi.org/10.1109/NUSOD.2013.6633099>.
 300. *In-situ electrical and structural characterization of individual GaAs nanowires*
V.T. Fauske, D.C. Kim, A.M. Munshi, D.L. Dheeraj, B.O. Fimland, **H. Weman**, and A.T.J. van Helvoort
EMAG 2013, York, UK, Sept. 2-6, 2013.
 301. *Epitaxial growth of semiconductor nanowires on graphene: Generic model and potential device applications*
H. Weman (invited talk)
Crystal growth and graphene science, Boston, MA, USA, Sept. 4-5, 2013.
 302. *Optical properties of self-catalyzed GaAs nanowires with axial GaAsSb inserts*
L. Ahtapodov, H. Kauko, A.M. Munshi, A.T.J. van Helvoort, B.O. Fimland, and **H. Weman**,
Nanowires 2013, Rehovot, Israel, Nov. 13-15, 2013.
 303. *Design guidelines for radial p-n junction GaAs/AlGaAs core-shell nanowire solar cells*
C.G. Lim and **H. Weman**,
Nanowires 2013, Rehovot, Israel, Nov. 13-15, 2013.
 304. *Effects on compositional variation on the electrical property of GaAsSb nanowires*
J. Huh, D.C. Kim, H. Yun, A.M. Munshi, D.L. Dheeraj, H. Kauko, A.T.J. van Helvoort, S.W. Lee, B.-O. Fimland, and **H. Weman**, Materials Res. Soc. 2013 Fall Meeting, Symposium SS: Nanowires and Nanotubes–Novel Materials, Advanced Heterostructures, Doping and Devices, Boston, MA, USA, Dec. 2 - Dec. 5, 2013.
 305. *Inducing a direct-to-pseudodirect bandgap transition in wurtzite GaAs nanowires with uniaxial stress*
G. Signorello, E. Lörtscher, P.A. Khomyakov, S. Karg, D.L. Dheeraj, B. Gotsmann, **H. Weman** and H. Riel,
Materials Res. Soc. 2014 Spring Meeting, Session UU: Semiconductor Nanowires-Synthesis, Properties and Applications, San Francisco, CA, USA, Apr. 21 - Apr. 25, 2014.
 306. *Position Controlled GaAs Nanowires on Si Wafers using Nanoimprint Lithography*
A. M. Munshi, D.L. Dheeraj, D.C. Kim, J. Huh, J.F. Reinertsen, L. Ahtapodov, B.O. Fimland, **H. Weman**,
V.T. Fauske, A.T.J. van Helvoort, K.D. Lee, and B. Heidari,
Materials Res. Soc. 2014 Spring Meeting, Session UU: Semiconductor Nanowires-Synthesis, Properties and Applications, San Francisco, CA, USA, Apr. 21 - Apr. 25, 2014.
 307. *Enhancing the light-matter interactions in radial p-n junction core-shell nanowire solar cells above the planar junction limit for highly efficient semiconductor nanowire solar cells*
C.G. Lim and, **H. Weman**,
Materials Res. Soc. 2014 Spring Meeting, Session F: Controlling the Interaction between Light and Semiconductor Nanostructures for Energy Applications, San Francisco, CA, USA, Apr. 21 - Apr. 25, 2014.
 308. *How a Norwegian university project became the nanotech spin-off CrayoNano*
H. Weman (invited talk), International Forum on the Nanotechnology Commercialization,
Seoul, Korea, June 11-12, 2014.
 309. *Towards flexible high-efficiency semiconductor nanowire/graphene solar cells*
H. Weman (invited talk), Nanofair 2014, 10th Int. Nanotechnology Symposium "New ideas for industry",
Dresden, Germany, July 1-3, 2014.

310. *Towards low-cost, high-efficiency semiconductor nanowire/graphene solar cells*
H. Weman (invited talk)
1st Int. Symposium on Energy Challenges and Mechanics, Aberdeen, Scotland, July 8-10, 2014.

Book chapters and Reviews

311. *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 the book “Nanowires”, ed. Paola Prete, IN-TECH, Vienna, Austria, 2010 (26 pages),
ISBN 978-953-7619-79-4. <http://sciyo.com/books/show/title/nanowires>
312. *III-antimonide nanowires*
H. Weman and D.L. Dheeraj
Chapter 5 in the book “Advances in III-V Semiconductor Nanowires and Nanodevices”, eISBN 978-1-60805-052-9, Ed. Jianye Li, Deli Wang and Ray R. LaPierre, Bentham science publishers, Ch. 5, pp. 89-104, 2011.
313. *Advances in semiconductor nanowires grown on graphene*
A.M. Munshi and **H. Weman**,
Phys.Status Solidi RRL (Review article in focus issue on “Semiconductor Nanowires”), 7, 713 (2013).