

List of Publications of Prof. Chennupati Jagadish (5 Nov 2025)

*Prof. Jagadish's papers are cited according to Web of Science (Google Scholar) more than 21000+ (40000+) times and his h index is: 77 (93). In addition to 800+ refereed journal papers, he has published 280+ papers in refereed conference proceedings.

US and Australian Patents:

1. M. Buda, H.H. Tan, M.F. Aggett and C. Jagadish, Low divergence diode laser, US Patent No. 6, 882, 670 (April 19, 2005)
2. L. Fu, H.H. Tan and C. Jagadish, Method of disordering quantum well heterostructures, US Patent No. 6, 936, 526 (August 30, 2005)
3. M. Buda, J. Hay, H.H. Tan and C. Jagadish, Thin clad diode laser, US Patent No. 6, 993, 053 (January 31, 2006)
4. C. Jagadish and M.I. Cohen, A Vertical Cavity Surface Emitting Laser, US Patent No. 7, 110, 428 (September 19, 2006)
5. M. Buda, H.H. Tan, L. Fu, L. Josyula, M.F. Aggett and C. Jagadish, A single mode optical device, US Patent No. 7, 251, 381 (July 31, 2007).
6. M. Rahmani, D. Neshev, H.H. Tan, C. Jagadish, Y.S. Kivshar and F. Karouta, Frequency conversion of electromagnetic radiation, Australian Patent No. 2017203205 (May 12, 2017).
7. M. Rahmani, D.N. Neshev, H.H. Tan, C. Jagadish, Y. Kivshar and F. Karouta, "*Frequency conversion of electromagnetic radiation*", US Patent No. 10,698,293 B2 (June 30, 2020).
8. D. Neshev, M. Rahmani, H.H. Tan, C. Jagadish, Y. Kivshar, F. Karouta, A. Solentsev, Lei Xu, Guiseppe Marino, A. Sukhorukov, Frequency conversion device and process, US Patent No. 11137663, (October 5, 2021).
9. S. Karuturi, C. Jagadish, B. Gupta and J.Y. Soo, Method of fabricating a catalyst on a substrate, US Patent Application US-20240417872-A1 (Dec 19, 2024)

Authored Book:

1. H.L. Hartnagel, A.L. Dawar, A. Kumar and C. Jagadish, Semiconducting Transparent Thin Films, Institute of Physics Publishing Ltd, Bristol, UK 1995, pp.358.

Edited Books:

1. C. Jagadish and S.J. Pearton (Eds), Zinc Oxide Bulk, Thin films, Nanostructure: Processing, Properties and Applications, Elsevier Ltd, Oxford, 2006, pp 589.
2. E.H. Lee, L. Eldada, M. Razeghi and C. Jagadish (Eds), VLSI Micro and Nanophotonics: Science, Technology, and Applications, Taylor and Francis/CRC Press, 2011, pp. 632.
3. S. D. Gunapala, D.R. Rhiger and C. Jagadish (Eds), Advances in Infrared Photodetectors, Semiconductors and Semimetals Book Series, Academic Press/Elsevier, vol. 84, 2011, pp. 341.

4. J.J. Coleman, A.C. Bryce and C. Jagadish (Eds), Advances in Semiconductor Lasers, Semiconductors and Semimetals Book Series, Academic Press/Elsevier, vol. 86, 2012, pp. 500.
5. B.G. Svensson, S.J. Pearton and C. Jagadish (Eds), Oxide Semiconductors, Semiconductors and Semimetals Book Series, Academic Press/Elsevier, vol. 88, 2013, pp 384.
6. Lucia Romano, Vittorio Privitera and C. Jagadish (Eds), Defects in Semiconductors, Semiconductors and Semimetals Book Series, Academic Press/Elsevier, vol. 91, 2015, pp. 445.
7. A. Fontcuberta I Morral, S. Dayeh and C. Jagadish (Eds), Semiconductor Nanowires I: Growth and Theory, Semiconductors and Semimetals Book Series, Academic Press/Elsevier vol. 93, 2015, pp. 296.
8. S. Dayeh, A. Fontcuberta I Morral and C. Jagadish (Eds), Semiconductor Nanowires II: Properties and Applications, Semiconductors and Semimetals Book Series, Academic Press/Elsevier, vol. 94, 2016, pp. 382.
9. F. Iacopi, J. Boeckel and C. Jagadish (Eds), 2D Materials, Semiconductors and Semimetals Book Series, Academic Press/Elsevier, vol. 95, 2016, pp.358.
10. Z. Mi and C. Jagadish (Eds), Nitride Semiconductor Optoelectronics, Semiconductors and Semimetals Book Series, Academic Press/Elsevier, vol. 96, 2017, pp. 492.
11. Z. Mi, L. Wang and C. Jagadish (Eds), Semiconductors for Photocatalysis, Semiconductors and Semimetals Book Series, Academic Press/Elsevier, vol. 97, 2017, pp. 477.
12. S. Mokkalapati and C. Jagadish (Eds), Nanowires for Energy Applications, Elsevier, 2018, pp. 552.
13. S. Lourdudoss, R.T. Chen and C. Jagadish (Eds), Silicon Photonics I, Elsevier, 2018, pp. 228.
14. S. Lourdudoss, J.E. Bowers and C. Jagadish (Eds), Future Directions in Silicon Photonics, Elsevier, 2019, pp. 442.
15. C.Z. Tong and C. Jagadish (Eds), Nanoscale Semiconductor Lasers, Elsevier, 2019, pp. 498.

Edited Conference Proceedings:

1. R.J. Egan and C. Jagadish (Editors), "1993 Australian Compound Optoelectronic Materials and Devices Conference Proceedings", Australian Materials Research Society, Canberra 1994, pp. 205
2. C. Jagadish (Editor), "1996 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings", IEEE Publishing Co., Piscataway, NJ, USA, 1997, pp. 501.
3. C. Jagadish and N.J. Welham (Editors), "2000 International Semiconducting and Insulating Materials Conference Proceedings", IEEE Publishing Co., Piscataway, NJ, USA, 2000, pp.360.
4. B.D. Weaver, M.O. Manasreh, C. Jagadish and S. Zollner (Editors), Progress in Semiconductors II-Electronic and Optoelectronic Applications, Materials

- Research Society Symposium Proceedings vol. 744, Materials Research Society, Warrendale, Pa, USA, 2003, pp. 680.
5. C. Jagadish, K.D. Choquette, B. Eggleton, B.D. Nener and K.A. Nugent (Editors), *Photonics: Design, Technology and Packaging*, Proceedings of SPIE, vol. 5277, Bellingham, WA, USA, 2004, pp.416.
 6. J.C. Chiao, A.S. Dzurak, C. Jagadish and D.V. Thiel (Editors), *Device and Process Technologies for Microelectronics, MEMS and Photonics IV*, Proceedings of SPIE, vol. 6037, Bellingham, WA, USA, 2006, pp. 568.
 7. C. Jagadish and G.Q. Max Lu (Editors), *2006 International Conference on Nanoscience and Nanotechnology Proceedings*, IEEE Publishing Co., Piscataway, NJ, USA, 2006, pp. 724.
 8. J.C. Chiao, A.S. Dzurak, C. Jagadish and D.V. Thiel (Editors), *Micro and Nanotechnology: Materials, Processes, Packaging and Systems III*, MEMS and Photonics IV, Proceedings of SPIE, vol. 6415, Bellingham, WA, USA, 2007, pp. 444.
 9. J. Christen, C. Jagadish, D.C. Look, T. Yao and F. Bertram, *Zinc Oxide and Related Materials*, Materials Research Society Symposium Proceedings, vol. 957, Materials Research Society, Warrendale, Pa, USA, 2007, pp.440.
 10. H.H. Tan, J.C. Chiao, L. Faraone, C. Jagadish, J.S. Williams and A.R. Wilson, *Device and Process Technologies for Microelectronics, MEMS, Photonics and Nanotechnology IV*, Proceedings of SPIE, vol. 6800, Bellingham, WA, USA, 2008.
 11. D.P. Norton, C. Jagadish, I. Buyanova and G.C. Yi (Eds), *Zinc Oxide and Related Materials—2007*, Materials Research Society Symposium Proceedings, vol. 1035E, Warrendale, PA, USA, 2008 (electronic only - online).
 12. L. Faraone, M. Cortie, A. Cuevas, J. Dell, C. Jagadish, M. Kocan, B. Luther-Davies, M. Martyniuk, G. Parish, A. Rakic, M. Simmons and S. Betts (Eds), *Proceedings of 2008 Conference on Optoelectronic and Microelectronic Materials and Devices*, IEEE Publishing Co., Piscataway, NJ, 2008, pp 319.
 13. J.J. Boeckl, R.N. Candler, F.W. DelRio, A. Fontcuberta I Morral, C. Jagadish, C. Keimel, H. Silva, T. Voss, Q. Xiong (eds), *Micro- and Nanoscale Systems – Novel Materials, Structures and Devices*, Materials Research Society Proceedings, vol 1659, Warrendale, PA, USA, 2014, pp.235.

Guest Editor of Special Issues of Journals:

- 1 C. Jagadish, D.G. Deppe, S. Noda, T.F. Krauss and O.J. Painter, *Nanotechnologies for Communications*, Special issue of IEEE Journal on Selected Areas in Communications, Vol. 23 (7), pp 1305-1432 (2005).
2. C. Jagadish, A. Hill and P. Majewski, *Nanotechnology in Australia*, Special issue of International Journal of Nanotechnology vol. 4 (2), pp.161-392 (2008).
3. Yi Luo, D.G. Deppe and C. Jagadish, *Nano-Optoelectronics and Applications*, IEEE/OSA Journal of Lightwave Technology, 26 (11), pp. 1363-1555 (2008).
4. C. Jagadish, M. Sasaki and Andrew Yeh, *Optical MEMS and Nano-Photonics*, Special issue of Journal of Optics A: Pure and Applied Optics, 10(4), 040201-044017 (2008).

5. A.C. Bryce, C. Jagadish and J.J. Coleman, **Semiconductor Photonic Materials**, IEEE Journal of Selected Topics in Quantum Electronics, 14 (4), 977-1161 (2008).
6. C. Jagadish, **Semiconductor Nanowires**, Topical Issue of Semiconductor Science and Technology, 25 (2), 020301-024017 (2010). (17 papers, 172 pages).
7. C. Jagadish, K. Dick-Thelander, R. LaPierre, J. Motohisa, **Nanowires**, IEEE Journal of Selected Topics in Quantum Electronics, 17, 761-1132 (2011).
8. C. Jagadish, P.D. Dapkus, L. Mawst and A. Helmy, **Optoelectronic Device Integration**, IEEE Journal of Quantum Electronics, 48, 83-298 (2012).
9. C. Jagadish, G. Rodriguez and D. Kane, Special Issue in honor of J. Gary Eden on **Plasma Photonics**, IEEE Journal of Quantum Electronics 48, 735-835 (2012).
10. C. Jagadish, **Special Issue in honor of J. Gary Eden**, Progress in Quantum Electronics, 36, 1-271 (2012).
11. P.J. Reece and C. Jagadish, **Semiconductor Nanostructure Optoelectronics**, Materials Science and Engineering B, 177, 695-770 (2012).
12. L. Fu, H.H. Tan and C. Jagadish, **Nanostructured Photovoltaics**, J. Phys. D: Appl. Phys. 46 (2), 024001-24008 (2013).
13. B. Dieny and C. Jagadish, **Non-volatile Memories**, J. Phys. D: Appl. Phys. 46(7), 070301-074006 (2013).
14. C. Jagadish, L. Geelhaar and S. Gradecak, **Semiconductor Nanowires**, Physica Status Solidi: Rapid Research Letters, 7, 683-925 (2013).
15. A. Fontcuberta I Morral and C. Jagadish, **Semiconductor Nanowires**, J. Phys. D: Appl. Phys. 47, 390301-394017 (2014).
16. M. Dawson, H. Jelinkova, D.P. Tsai and C. Jagadish, **Special Issue in honor of the 70th birthday of Professor Sir Peter Knight**, Progress in Quantum Electronics, 54, 1-45 (2017).
17. M. Rahmani and C. Jagadish, **Light-Matter Interaction on the Nanoscale**, Beilstein Journal of Nanotechnology, (2018 online).
18. A. Alu, Hilmi Volkan Demir and C. Jagadish, **Active Nanophotonics**, IEEE Proceedings, Vol. 108, No. 5, May2020.
19. D.D. Sarma, B.V.R. Chowdari, S. Hearne. M. Fitzsimmons and C. Jagadish, **Prof. CNR Rao Special Issue**, Applied Materials Today, March 2021
20. D.D. Sarma, B.V.R. Chowdari, S. Hearne. M. Fitzsimmons and C. Jagadish, **Prof. CNR Rao Special Issue**, Journal of Solid State Chemistry, July 2021.
21. R. Nair, F. Wang, Y. Xusan and C. Jagadish, **Photonic Materials: From Fundamentals to Applications**, European Journal of Science and Technology (EPJST), 2022.
22. S. Chakraborti, S. Karuturi and C. Jagadish, **Energy Materials**, EPJST, 2022.
23. S.P. DenBaars, H.J. Joyce and C. Jagadish, **Semiconductor Optoelectronic Materials and Devices, a special issue in honour of Prof. P. Daniel Dapkus**, IEEE Journal of Quantum Electronics, July 2022.
24. X.Q. Wang, L. Fu, C. Jagadish and H. Wang, **Recent Advances in Semiconductor Materials and Devices**, Phy. Stat. Sol: Rapid Research Letter, 18, 7, DOI: 10.1002/pssr.202400198 (2024).
25. D. Smirnova and C. Jagadish. **Quantum Metamaterials**, Applied Physics Reviews 13, 010401 (2026).

Invited / Review Journal Papers:

1. G. Li and C. Jagadish, Recent Progress in delta doping of III-V semiconductors grown by metal organic vapour phase epitaxy, *Solid State Electronics*, 41, 1207-1225 (1997).
2. Shu Yuan, C. Jagadish, Yong Kim, Y. Chang, H. H. Tan, R. M. Cohen, M. Petracic, L. V. Dao, M. Gal, M. C. Y. Chan, E. H. Li, J. S. O, and P. S. Zory, Anodic Oxide Induced Intermixing of GaAs/AlGaAs Quantum Well and Quantum Wire Structures, *IEEE Journal of Special Topics in Quantum Electronics*, 4, 629-635 (1998).
3. H.H. Tan, K. Sears, S. Mokkaapati, L. Fu, Y. Kim, P. McGowan, M. Buda and C. Jagadish, Quantum dots and nanowires for optoelectronic device applications, *IEEE J. Selected Topics in Quantum Electronics* 12, 1242-1254 (2006).
4. A. Ashrafi and C. Jagadish, Review of Zincblende Zinc Oxide: Stability of Metastable Phases, *J. Appl. Phys.* 102, 071101 (12 pages) (2007). (*Applied Physics Reviews – Focused Review*).
5. W. Lei and C. Jagadish, Lasers and photodetectors for mid-infrared 2-3 um applications, *J. Appl. Phys.* 104, 091101 (11 pages) (2008) (*Applied Physics Reviews – Focused Review*).
6. J.A. Davis and C. Jagadish, Ultrafast spectroscopy of ZnO/ZnMgO quantum wells, *Laser and Photonics Reviews*, 3, 85-96 (2009).
7. Sudha Mokkaapati and C. Jagadish, III-V compound semiconductor optoelectronic devices, *Materials Today* 12 (4), 22-32 (2009).
8. S. Barik, H.H. Tan, J. Wong-Leung and C. Jagadish, Growth and characterization of self-assembled InAs/InP quantum dot structures, *J. Nanoscience and Nanotechnology* 10, 1525-1536 (2010).
9. L.M. Smith, J. Yarrison-Rice, H.E. Jackson and C. Jagadish, Insights into single semiconductor nanowire heterostructures using time resolved photoluminescence, *Semiconductor Sci. and Technol.* 25, 024010 (2010) (13 pages).
10. Q. Gao, H.H. Tan, C. Jagadish, J. Zou, L.M. Smith, H.E. Jackson, J. M. Yarrison-Rice, Growth and properties of III-V compound semiconductor heterostructure nanowires, *Semicond. Sci. Technol.* 26, 014035 (2011) (10 pages).
11. H.J. Joyce, Q. Gao, H.H. Tan, C. Jagadish, Y. Kim, J. Zou, L.M. Smith, H.E. Jackson, J.M. Yarrison-Rice, P. Parkinson and M.B. Johnston, III-V semiconductor nanowires for optoelectronic device applications, *Progress in Quantum Electronics* 35, 23-75 (2011).
12. S. Mokkaapati and C. Jagadish, Review of photonic properties of nanowires for photovoltaics, *Optics Express*, 24, 17345-17358 (2016).
13. P. Yu, J. Wu, S.T. Liu, J. Xiong, C. Jagadish and Z.M. Wang, Design and fabrication of silicon nanowires towards efficient solar cells, *Nano Today*, 11, 704-737 (2016).
14. X.M. Yuan, J.B. Yang, J. He, H.H. Tan and C. Jagadish, Role of surface energy in nanowire growth, *J. Phys. D: Appl. Phys.* 51, 283002 (2018).
15. Z.Y. Li, H.H. Tan, C. Jagadish and L. Fu, III-V semiconductor single nanowire solar cells: a review, *Adv. Mater. Technol.* 3, 1800005 (2018).

16. P. Yu, L.V. Besteiro, Y.J. Huang, J. Wu, L. Fu, H.H. Tan, C. Jagadish, G.P. Wiederrecht, A.O. Govorov and Z.M. Wang, Broadband metamaterial absorbers, *Adv. Opt. Mater.* 7, 1800995 (2019).
17. J. Wong-Leung, I. Yang, Z.Y. Li, S.K. Karuturi, L. Fu, H.H. Tan and C. Jagadish, Engineering III-V semiconductor nanowires for device applications, *Advanced Materials*, 1904359 (2019).
18. Vidur Raj, Hark Hoe Tan, Chennupati Jagadish, Non-epitaxial carrier selective contacts for III-V solar cells: A review, *Appl. Materials Today*, 18, 100503 (2020).
19. Z.Y. Li, J. Allen, M. Allen, H.H. Tan, C. Jagadish and L. Fu, Review on III-V semiconductor single nanowire-based room temperature infrared photodetectors, *Materials* 13, 1400 (2020).
20. V. Raj, C. Jagadish and V. Gautam, Understnading, engineering and modulating the growth of neural networks: An interdisciplinary approach, *Biophysics Reviews* 2, 021303 (2021).
21. D. Zhang, J.Z. Soo, H.H. Tan, C. Jagadish, K. Catchpole and S.K. Karuturi, Earth-Abundant Amorphous Electrocatalysts for Electrochemical Hydrogen Production: A Review. *Advanced Energy and Sustainability Research*, 2, 2000071 (2021).
21. X.M. Yuan, D. Pan, Y.J. Zhou, X.T. Zhang, K. Peng, B.J. Zhao, M.T. Deng, J. He, H.H. Tan and C. Jagadish, Selective area epitaxy of III-V nanostructure arrays and networks: Growth, applications, and future directions, *Appl. Phys. Rev.* 8, 021302 (2021).
22. V. Raj, T Haggren, WW Wong, HH Tan, C Jagadish, Topical Review: Pathways toward cost-effective single-junction III-V solar cells - *Journal of Physics D: Applied Physics*, 2021.
23. W.W. Wong, C. Jagadish and H.H. Tan, III-V Semiconductor Whispering-Gallery Mode Micro-Cavity Lasers: Advances and Prospects, *IEEE Journal of Quantum Electronics*, 58, 2000618 (2022).
24. Z.Y. Li, Z.Y. He, C.Y. Xi, F.L. Zhang, L.S.B. Huang, Y. Yu, H.H. Tan, C. Jagadish and L. Fu, Review on III-V semiconductor nanowire array infrared photodetectors, *Adv. Mater. Technol.* 13, 2202126 (2023).
25. S.Y. Wei, Z. Li, B. Karawdeniya, C.H. Chen, H.H. Tan, C. Jagadish, L.Z. Qiu and L. Ful, III-V compound semiconductor nanowire arrays for sensor applications-a review, *ACS Sensors*, DOI 10.1021/acssensors.5c00526 (2025).
26. H.N. Tran, A.J. O'Connor, C. Jagadish and V. Gautam, Vertical nanostructures as novel interfaces for brain research, *Advanced Mater. Interf.* e00209 (2025).

Book Chapters

1. H.H. Tan, S. Yuan, M. Gal and C. Jagadish, Quantum Well Intermixing by Ion Implantation and Anodic Oxidisation, in "Semiconductor Quantum Wells Intermixing", Ed. E. Herbert Li, Gordon and Breach, Amsterdam (2000), pp.307-338.
2. X.Q. Liu, X.L. Wang, C. Jagadish and M. Ogura, Semiconductor Quantum Wires, *Encyclopedia of Nanoscience and Nanotechnology*, American Scientific Publishers, vol. IX, (2004), pp. 763-773.

3. V.A. Coleman and C. Jagadish, Basic Properties and Applications of ZnO, Zinc Oxide Bulk, Thin Films and Nanostructures: Processing, Properties and Applications, C.Jagadish and S.J.Pearton (eds), Elsevier, Oxford (2006), pp.1- 20.
4. S.O. Kucheyev and C. Jagadish, Ion implantation into ZnO, Zinc Oxide Bulk, Thin Films and Nanostructures: Processing, Properties and Applications, Elsevier, C. Jagadish and S.J. Pearton (Eds), Oxford (2006), pp285-312.
5. K. Sears, S. Mokkaapati, H.H. Tan and C. Jagadish, In(Ga)As/GaAs quantum dots grown by MOCVD for optoelectronic device applications, Self-Assembled Quantum Dots, Z.M. Wang (Ed), Springer-Verlag (2008) pp. 359-404.
6. S. Mokkaapati, H.H. Tan and C. Jagadish, Quantum Dot Integrated Optoelectronic Devices, VLSI Micro and Nanophotonics: Science, Technology, and Applications, Taylor and Francis/CRC Press, 11-1 to 11-34 (2011).
7. L. Fu, S. Mokkaapati, S. Barik, M. Buda, H.H. Tan and C. Jagadish, Disorder of quantum wells/dots for optoelectronic device integration, in Comprehensive Semiconductor Science and Technology, Elsevier, vol. 5, pp. 584-625 (2011).
8. J. Davies and C. Jagadish, Semiconductors and their nanostructures, Optical Techniques for Solid State Materials Characterization, Eds. R.P. Prasankumar and A.J. Taylor, Taylor and Francis/CRC Press, pp. 39-77 (2011).
9. J. Davies and C. Jagadish, Optical properties of ZnO/ZnMgO quantum wells, GaN and ZnO-based materials and Devices, S.J. Pearton (Ed), Springer, pp.413-434 (2012).
10. L. Lunardi, S. Mokkaapati, C. Jagadish, Optoelectronic Devices, Guide to the State of the Art Electron Devices, Wiley-IEEE Press, pp.265-274 (2013).
11. S. Mokkaapati, D. Saxena, H.H. Tan and C. Jagadish, Semiconductor nanowire optoelectronic devices, Semiconductor Nanowires II: Properties and Applications, Academic Press/Elsevier, vol. 94, pp 1-16 (2016).
12. R. Yew, S. Karuturi, H.H. Tan and C. Jagadish, Nanostructured photoelectrodes via template assisted fabrication, Semiconductors for Photocatalysis, vol. 97, 289-313 (2017).
13. X. Chen, C. Jagadish, J.D. Ye, Fundamental Properties and Power Electronic Device Progress of Gallium Oxide, Oxide Electronics, Samit Ray (Ed), Chapter 9, Wiley (2021).

Refeered Journal Papers:

1. A.L. Dawar, C. Jagadish, K.V. Ferdinand, P. Kumar and P.C. Mathur, The effect of hydrogen on the electrical properties of p-type $Pb_{0.9}Cd_{0.1}Te$ thin films, J. Phys. Chem. Solids, 44, 453-455 (1983).
2. A.L. Dawar, K.V. Ferdinand, C. Jagadish, P. Kumar and P.C. Mathur, Electrical properties of Te-rich, Cd-rich and hydrogen exposed CdTe thin films, J.Phys.D: Appl. Phys., 16, 2349 (1983).
3. K.V. Narasimham, J.C. Joshi, K.N. Chopra, C. Jagadish and A.L. Dawar, Optical properties of epitaxial p-type PbTe thin films, Infrared Phys., 23, 349-353 (1983).
4. A.L. Dawar, K.V. Ferdinand, C. Jagadish, P. Kumar and P.C. Mathur, Effect of hydrogen on the electrical properties of CdTe thin films, Mater. Chem. Phys., 10, 343-355 (1984).

5. P. Sikka, K.V. Ferdinand, C. Jagadish and P.C. Mathur, Effect of vacuum and H₂S annealing on the electrical properties of CdS thin films, *J. Mater. Sci.*, 20, 246–254 (1985).
6. A.L. Dawar, C. Jagadish, K.V. Ferdinand, P. Kumar, A. Kumar and P.C. Mathur, Field effect studies on MIS structures and effect of laser annealing on the structural, electrical and optical properties of Pb_{0.8}Sn_{0.2}Te thin films, *Surf. Sci.*, 152/153, 1273-1285 (1985).
7. A.L. Dawar, K.V. Ferdinand, C. Jagadish, A. Kumar and P.C. Mathur, Field effect studies on MIS structures of n-type Pb_{0.8}Sn_{0.2}Te thin films, *Appl. Surf. Sci.*, 22/23, 781-791 (1985).
8. A.L. Dawar, C. Jagadish, K.V. Ferdinand, A. Kumar and P.C. Mathur, Effect of laser annealing on the structural, electrical and optical properties of CdTe thin films, *Appl. Surf. Sci.*, 22/23, 846-858 (1985).
9. A.L. Dawar, C. Jagadish and P.C. Mathur, Pulsed laser induced changes in structural and electrical properties of Pb_{0.8}Sn_{0.2}Te thin films, *J. Appl. Phys.*, 60, 2994-2996 (1986).
10. V.K. Gandotra, K.V. Ferdinand, C. Jagadish, A. Kumar and P.C. Mathur, Effect of excess copper on the electrical properties of polycrystalline thin films of CuInSe₂, *Phys. Stat. Sol. (a)* 98, 595-603 (1986).
11. A.L. Dawar, C. Jagadish and P.C. Mathur, Field effect studies on metal-insulator-semiconductor structures of laser annealed n-type Pb_{0.8}Sn_{0.2}Te epitaxial thin films, *Int. J. Electron.*, 62, 691-705 (1987).
12. V.K. Gandotra, P.C. Mathur, K.V. Ferdinand, C. Jagadish and A. Kumar, Effect of excess indium on the electrical properties of polycrystalline thin films of CuInSe₂, *Mater. Chem. Phys.*, 15, 535-551 (1987).
13. C. Jagadish, A.L. Dawar and P.C. Mathur, Donor action of indium and bismuth in Pb_{0.8}Sn_{0.2}Te thin films, *Solid State Commun.*, 64, 603-604 (1987).
14. S. Nigli, C. Jagadish and G.K. Chadha, X-ray, optical and electrical study of melt-grown CdI₂ single crystals, *Cryst. Res. Technol.*, 22, K219-K223 (1987).
15. A.L. Dawar, C. Jagadish, P.K. Shishodia, S. Sharma, S.K. Kapoor, B.K. Sachar and P. C. Mathur, Effect of hydrogen on the electrical properties of p-type Pb_{0.8}Sn_{0.2}Te epitaxial thin films, *J. Phys. Chem. Solids*, 49, 113-114 (1988).
16. C. Jagadish, A.L. Dawar and P.C. Mathur, Effect of indium on the electrical transport properties of Pb_{0.8}Sn_{0.2}Te thin films, *Mater. Res. Bull.*, 23, 99-106 (1988).
17. C. Jagadish, A.L. Dawar and P.C. Mathur, Electrical transport properties of thallium doped Pb_{0.8}Sn_{0.2}Te thin films, *J. Mater. Sci.*, 23, 1002-1008 (1988).
18. C. Jagadish, A.L. Dawar and P.C. Mathur, Effect of antimony on the electrical properties of Pb_{0.8}Sn_{0.2}Te thin films, *Infrared Physics*, 28, 55-60 (1988).
19. C. Jagadish, A.L. Dawar, S. Nigli and G.K. Chadha, Effect of bismuth on the electrical properties of Pb_{0.8}Sn_{0.2}Te thin films, *Z. Physik B, Condensed Matter*, 70, 469-472 (1988).
20. C. Jagadish, A.L. Dawar, S. Sharma, P.K. Shishodia, K.N. Tripathi and P.C. Mathur, Effect of hydrogen annealing on the electrical and optical properties of SnO₂ thin films, *Mater. Lett.*, 6, 149-151 (1988)

21. S. Nigli, C. Jagadish and G.K. Chadha, Surface morphology of melt grown CdI₂ single crystals, *Cryst. Res. Technol.* 23, K74-K76 (1988).
22. R.S. Gupta, G.K. Chilana, C. Jagadish and G.P. Srivastava, A method to determine surface doping and substrate doping profile of n-channel MOSFETs, *Phys. Stat. Sol. (a)* 110, 671-675 (1988)
23. C. Jagadish and A.L. Dawar, Effect of Q-switched Nd:YAG laser irradiation on the structural and electrical properties of n-type Pb_{0.8}Sn_{0.2}Te thin films, *Phil. Mag. B*, 58, 559-568 (1988).
24. C. Jagadish, A. L. Dawar, P.K. Shishodia, S. Nigli and P.C. Mathur, Acceptor action of thallium and antimony in Pb_{0.8}Sn_{0.2}Te thin films, *J. Mater. Sci. Lett.*, 8, 1300-1301 (1989).
25. C. Jagadish, L. Clapham and D. L. Atherton, Effect of bias field and stress on Barkhausen Noise in Pipeline steel, *NDT International*, 22, 297-301 (1989).
26. C. Jagadish, L. Clapham and D.L. Atherton, The influence of stress on surface Barkhausen noise generation in pipeline steels, *IEEE Trans. Magnetics*, MAG-25, 3452 –3454 (1989).
27. C. Jagadish, L. Clapham and D.L. Atherton, The effect of stress and magnetic field orientation on surface Barkhausen noise in pipeline steel, *IEEE Trans. Magnetics*, MAG-26, 262-265 (1990).
28. D. L. Atherton, C. Jagadish, P. Larsen, V. Storm, F. Ham and B. Scharfenberger, Pipeline inspection tool speed alters Magnetic Flux Leakage signals, *Oil & Gas Journal* , 88 (5), 84-86 (1990).
29. C. Jagadish, L. Clapham and D.L. Atherton, Surface Barkhausen Noise Investigations of Stress and Leakage Flux signals in the line pipe, *Review of Progress in Quantitative NDE*, 9B, 1871 (1990).
30. C. Jagadish, L. Clapham and D.L. Atherton, Orientation effects of Anisotropy, Stress, Excitation, Bias and Residual Fields on Barkhausen Noise Generation in Pipeline Steel, *J. Phys. D: Appl. Phys.* 23, 443-448 (1990).
31. C. Jagadish, L. Clapham and D.L. Atherton, Influence of elastic stress on the power spectrum and pulse height distribution of Barkhausen noise in pipeline steel, *IEEE Trans. on Magnetics*, MAG-26, 1160-1163 (1990).
32. C. Jagadish, L. Clapham and D.L. Atherton, Influence of Sweep Rate on the Power Spectrum and Pulse Height Distribution of Barkhausen Noise in Pipeline Steel, *Nondestructive Testing & Evaluation*, 5, 271-275 (1990).
33. A.L. Dawar, P.K. Shishodia, G. Chauhan, C. Jagadish and P.C. Mathur, Effect of hydrogen annealing on structural and optical properties of ZnSe thin films, *J. Cryst. Growth.*, 100, 281-285 (1990).
34. A.L. Dawar, P.K. Shishodia, G. Chauhan, J.C. Joshi, C. Jagadish and P.C. Mathur, Effect of UV exposure on optical properties of amorphous As₂S₃ thin films, *Appl. Optics*, 29, 1971-1973 (1990).
35. L. Clapham, C. Jagadish and D.L. Atherton, The Influence of Pearlite on Barkhausen Noise Generation in Plain Carbon Steels, *Acta Metallurgica*, 39, 1555-1562 (1991).
36. L. Clapham, C. Jagadish, D.L. Atherton and J.D. Boyd, The Influence of Controlled Rolling on Pulse Height Distribution of Barkhausen Noise in Steels, *Mater. Sci. & Eng.*, A145, 233-241 (1991)

37. A. Dhar, C. Jagadish and D.L. Atherton, The effect of sample size on magneto acoustic emission, *NDT International*, 24, 15-19 (1991).
38. P.J. Schultz, C. Jagadish, M.C. Ridgway, R.G. Elliman and J.S. Williams, Crystalline to amorphous transition for Si ion irradiation of Si (100), *Phys. Rev. B*, 44, 9118-9121 (1991).
39. M.C. Ridgway, C. Jagadish, T.D. Thompson and S.T. Johnson, Electrical activation of group IV elements implanted at MeV energies in InP, *J. Appl. Phys.* 71, 1708-1712 (1992).
40. R.G. Elliman, M.C. Ridgway, C. Jagadish, S.J. Pearton, F. Ren, J. Lothian, T.R. Fullowan, C.R. Abernathy and R.F. Kopf, Single energy, MeV implant isolation of multi-layer III-V device structures, *J. Appl. Phys.*, 71, 1010-1013 (1992).
41. S.J. Pearton, F. Ren, J.R. Lothian, T.R. Fullowan, A. Katz, P.W. Wisk, C.R. Abernathy, R.F. Kopf, R.G. Elliman, M.C. Ridgway, C. Jagadish and J.S. Williams, Use of MeV O^+ ion implantation for isolation of GaAs/ AlGaAs heterojunction bipolar transistors, *J. Appl. Phys.* 71, 4949-4954 (1992).
42. T.S. Rao, Y. Horikoshi, C. Jagadish, R.G. Elliman and J.S. Williams, Characterization of GaAs/Si/GaAs heterostructures, *Jpn. J. Appl. Phys.* 31, 3282-3286 (1992).
43. M.C. Ridgway, C. Jagadish, R.G. Elliman and N. Hauser, Single step implant isolation of P^+ -InP with 5 MeV O ions, *Appl. Phys. Lett.* 60, 3010-3012 (1992).
44. A. Dhar, C. Jagadish and D.L. Atherton, Barkhausen noise measurements for magnetic anisotropy determination, *Mater. Evaluation* 50, 1139-1141 (1992).
45. C. Jagadish, B.G. Svensson, N. Hauser and J.S. Williams, Deep level transient spectroscopy study of defects in MeV Ge-ion implanted silicon, *Thin Solid Films* 222, 173-175(1992).
46. C. Jagadish, B.G. Svensson, and N. Hauser, Point defects in n-type silicon implanted with low doses of MeV boron and silicon ions, *Semicond. Sci. & Technol.*, 8, 481-487 (1993).
47. B.G. Svensson, C. Jagadish and J.S. Williams, Generation rate of point defects in silicon irradiated by MeV ions, *Nucl. Instrum. Methods*, B80/81, 583-586 (1993).
48. J.S. Williams, R.G. Elliman, M.C. Ridgway, C. Jagadish, B. G. Svensson, S. Ellingboe, W.C. Wong, Z. Dezhang, M. Petravic, E. Nygren, MeV Ion Beam Processing of Semiconductors, *Nucl. Instr. Methods B* , 80/81, 507-513 (1993).
49. J.S. Williams, C. Jagadish, A. Clark, G. Li and C.A. Larsen, Damage Accumulation and Amorphization in GaAs/AlGaAs structures, *Nucl. Inst. Methods B*, 74, 80-83 (1993).
50. C. Jagadish, A. Clark, G. Li, C.A. Larsen, N. Hauser, M. Petravic, T.D. Thompson, T. Halstead and J.S. Williams, Characterization of III-V multilayers grown by low-pressure metal organic vapour phase epitaxy, *Aust. J. Phys.* 46, 435-445 (1993).
51. G. Li, C. Jagadish, A. Clark, C. A. Larsen and N. Hauser, Si delta doped layers of GaAs by low pressure metal organic vapour phase epitaxy (LP-MOVPE), *J. Appl. Phys.* 74, 2131-2133 (1993).
52. B.G. Svensson, C. Jagadish and J.S. Williams, Generation of point defects in crystalline silicon by MeV heavy ions: dose rate and temperature dependence, *Phys. Rev. Lett.*, 71, 1860-1863 (1993).

53. P. Kraisingdecha, C. Shwe, M. Gal, H.H. Tan and C. Jagadish, Optical measurement of the distribution of damage in ion implanted GaAs, *Semicond. Sci. & Technol.* 9, 1489-1492 (1994).
54. K. Sreenivas, I. Reaney, T. Maeder, N. Setter, C. Jagadish and R.G. Elliman, Investigation of Pt/Ti bilayer metallization on silicon for ferroelectric thin film integration, *J. Appl. Phys.* 75, 232-239 (1994).
55. P. Kringhoj, J.S. Williams and C. Jagadish, Electrically active sub threshold damage in Si ion implanted with Si, Ge and Sn, *Appl. Phys. Lett.* , 65, 2208-2210 (1994).
56. C. Jagadish, A.A. Allerman, N. Hauser, C.C. Hsu and M. Gal, Growth and characterisation of 2DEG InGaP/GaAs heterostructures grown by LP-MOCVD using TBA and TBP, *J. Cryst. Growth* 145, 953-957 (1994).
57. J. Lalita, B.G. Svensson and C. Jagadish, Point defects observed in crystalline silicon implanted by MeV Si ions at elevated temperatures, *Nucl. Instrum. & Methods B*, 96, 210-214 (1995).
58. P. Kaisingdecha, M. Gal, H.H. Tan, C. Jagadish and J.S. Williams, Measurement of the distribution of damage in ion implanted GaAs by differential reflectance spectroscopy, *Nucl. Instrum. Methods B*, 96, 109-112 (1995).
59. H.H. Tan, J.S. Williams, C. Jagadish, A. Skirowski, Z. Jin and D.J.H. Cockayne, Ion damage buildup and amorphization processes in AlGaAs, *J. Appl. Phys.*, 77, 87-94 (1995).
60. A.A. Allerman, W. Xu, N. Hauser and C. Jagadish, Non-Ohmic behaviour of the high field magnetoresistances in AlGaAs/GaAs heterostructures, *J. Appl. Phys.* 77, 2052-2055 (1995).
61. P. Hawker, A.J. Kent, N. Hauser and C. Jagadish, Heat pulse studies of the phonon emission by a heated 2DEG in a GaAs/AlGaAs quantum well structure, *Semicond. Sci. & Technol.*, 10, 601-605 (1995).
62. P. Hawker, N. Hauser, G. Li, C. Jagadish and M.R. Melloch, Suppression of deformation potential electron-acoustic phonon coupling in Si delta doped GaAs structures, *Phys. Rev. B* 52, 13738-13741 (1995).
63. G. Li, M. Petracic, C. Jagadish, Zn delta doped AlGaAs grown by low pressure metal organic vapour phase epitaxy, *J. Appl. Phys.*, 78, 3546-3548 (1995).
64. G. Li and C. Jagadish, Growth of Si delta doped GaAs by low pressure metal organic vapour phase epitaxy, *Mater. Sci. & Eng. B* 33, 182-187 (1995).
65. H.H. Tan, J.S. Williams and C. Jagadish, Characterization of deep levels and carrier compensation created by proton irradiation in undoped GaAs, *J. Appl. Phys.*, 78, 1481-1487 (1995).
66. A. Krotkus, S. Marcinkevicius, J. Jasinski, M. Kaminska, H.H. Tan and C. Jagadish, Picosecond carrier life time in GaAs implanted with high doses of As ions - an alternative material to low temperature GaAs for optoelectronic applications, *Appl. Phys. Lett.* 66, 3304-3306 (1995).
67. C. Jagadish, H.H. Tan, J. Jasinski, M. Paczewska, M. Kaminska, A. Krotkus and S. Marcinkevicius, High resistivity and picosecond carrier life time of GaAs implanted with MeV Ga ions at high doses, *Appl. Phys. Lett.* 67, 1724-1726(1995).
68. G. Li, M. Linnarson and C. Jagadish, Zn delta doped GaAs grown by metal organic vapour phase epitaxy, *J. Crystal Growth* 154, 231-239 (1995).

69. G. Li, W. Xu, P. Hawker, A.A. Allerman, N. Hauser and C. Jagadish, Nonlinear electron transport in Si delta doped GaAs, *Superlattices & Microstructures* 17, 55-59 (1995).
70. P. Kringhoj, S. Fatima, J.S. Williams and C. Jagadish, The residual electrically active damage in Si implanted Si, *Nucl. Instrum. Methods B* 106, 248-251 (1995).
71. J. Lalita, C. Jagadish and B.G. Svensson, Silicon implanted with MeV 12C and 16O ions; temperature dependence of defect formation at low doses, *Nucl. Instrum. Methods B* 106, 237-241 (1995).
72. H.H. Tan, J.S. Williams and C. Jagadish, A comparative study of deep levels created by H, O, Si ion implanted GaAs using capacitance-voltage profiling and deep level transient spectroscopy, *Nucl. Instrum. Methods B* 106, 313-317 (1995).
73. B.G. Svensson, C. Jagadish, J. Lalita, A. Hallen, Point defects in ion implanted Silicon, *Nucl. Instrum. Method. B* 106, 183-190 (1995).
74. A. Kurpiewski, K.P. Korona, M. Kaminska, C. Jagadish, J. Williams, Electrical and Optical properties of non-stoichiometric GaAs, *Acta Physica Polonica A* 87, 518-522 (1995).
75. R.J. Egan, A. Clark, C. Jagadish and J.S. Williams, An AlAs/AlGaAs reflection modulator for visible wavelengths, *Electronics Letters*, 31, 1270-1271 (1995).
76. C.T. Chou, D.J.H. Cockayne, J. Zou, P. Kringhoj and C. Jagadish, {111} defects in 1 MeV Silicon ion implanted Silicon, *Phys. Rev. B* 52, 17223-17230 (1995).
77. J. Jasinski, A. Kurpiewski, K.P. Korona, M. Kaminska, M. Palczewska, A. Krotkus, S. Marcinkevicius, Z. Liliental-Weber, H.H. Tan and C. Jagadish, Role of arsenic antisite defects in non-stoichiometric gallium arsenide, *Acta Phys. Polonica A*, 88, 747-750 (1995).
78. A. Krotkus, S. Marcinkevicius, C. Jagadish and M. Kaminska, Femtosecond electron relaxation in non-stoichiometric III-V materials, *J. Luminescence* 66/67, 455-461 (1995).
79. G. Li and C. Jagadish, Si delta doped AlGaAs/GaAs heterostructures grown by LP-MOVPE, *Mater. Chem. & Phys.* 43, 25-30 (1996).
80. G. Li and C. Jagadish, Growth of Zn delta doped AlGaAs by MOVPE, *Appl. Surf. Sci.* 92, 138 -141 (1996).
81. S. Marcinkevicius, A. Krotkus, V. Jasutis, K. Bertulis, H.H. Tan, C. Jagadish and M. Kaminska, Time and spatially resolved photoluminescence measurements of non-stoichiometric GaAs, *Appl. Phys. Lett.* 68, 397-399 (1996).
82. G. Li, M. Petravic and C. Jagadish, Very high Carbon delta doping concentration in AlGaAs grown by metal organic vapour phase epitaxy using trimethylaluminium as a dopant source, *J. Appl. Phys.* 79, 3554-3558 (1996).
83. V. Jasutis, D. Lescinskas, S. Marcinkevicius, K. Bertulis, A. Krotkus, H.H. Tan and C. Jagadish, Relation between structural and carrier recombination properties in As-rich GaAs, *Diffusion and Defect Data : Solid State Phenomena*, 47-48, 443-448 (1996).
84. G. Li and C. Jagadish, Confinement and concentration of electrons in Si delta doped AlGaAs ($x = 0$ and 0.35) grown by metal organic vapour phase epitaxy, *J. Cryst. Growth*, 167, 421-428 (1996).

85. G. Li and C. Jagadish, Parametric studies of Zn incorporation during delta of AlGaAs grown by metal organic vapour phase epitaxy, *Mater. Sci. & Eng. B40*, 24-30 (1996).
86. C. Jagadish, H.H. Tan, A. Krotkus, S. Marcinkevicius, K.P.Korona and M. Kaminska, Ultrafast carrier trapping in high energy ion implanted GaAs, *Appl. Phys. Lett.* 68, 2225-2227 (1996).
87. H.H. Tan, C. Jagadish, J.S. Williams, Z. Jin, D.J.H. Cockayne, A. Skirowski, Ion damage and amorphization process in GaAs/AlGaAs multilayers, *J. Appl. Phys.* 80, 2691-2701 (1996).
88. H.H. Tan, J.S. Williams, C. Jagadish, P.T. Burke and M. Gal, Large energy shift in GaAs-AlGaAs quantum wells by proton irradiation induced intermixing, *Appl. Phys. Lett.* 68, 2401-2403 (1996).
89. J. Jasinski, Y. Chen, J. Washburn, Z. Liliental-Weber, H.H. Tan, C. Jagadish and M. Kaminska, Recrystallization of high energy As implanted GaAs studied by TEM, *Appl. Phys. Lett.* 68, 1501-1503 (1996).
90. G. Li, J. Antoszewski, W. Xu, N. Hauser and C. Jagadish, A study of electronic subband structure of Si delta doped GaAs using magnetotransport in tilted magnetic fields and mobility spectrum analysis, *J. Appl. Phys.* 79, 8482-8487 (1996).
91. P. Hawker, C. Jagadish and M.R. Melloch, Effects of confinement on electron-phonon coupling for the two dimensional electron gas in a GaAs/AlGaAs quantum well, *Physica B* 219/220, 62-64 (1996).
92. R. Leon, Y. Kim, C. Jagadish, M. Gal, J. Zou and D.J.H.Cockayne, Effects of interdiffusion on the luminescence of InGaAs/GaAs quantum dots, *Appl. Phys. Lett.* 69, 1888-1890 (1996).
93. S. Marcinkevicius, A. Krotkus, R. Adomavicius, R. Leon and C. Jagadish, Carrier dynamics in InP with metallic precipitates, *Appl. Phys. Lett.* 69, 3554-3556 (1996).
94. G. Li, C. Jagadish, M.B. Johnston and M. Gal, Growth of Si and C delta-doped nipi doping superlattices in GaAs by metal organic vapor phase epitaxy., *Appl. Phys. Lett.* 69, 4218-4220 (1996).
95. Y. Kim, S. Yuan, R. Leon, C. Jagadish, M. Gal, M.B. Johnston, M.R. Phillips, M.A. Stevens Kalceff, J. Zou and D.J.H. Cockayne, Effects of anodic oxide induced intermixing on the structural and optical properties of quantum wire structure grown on nonplanar GaAs substrate, *J. Appl. Phys.* 80, 5014-5020 (1996).
96. G. Li and C. Jagadish, Effect of low temperature post-annealing on hole density of C delta doped GaAs and Al_{0.3}Ga_{0.7}As, *Appl. Phys. Lett.* 69, 2551-2553 (1996).
97. J. Lalita, A. Hallen, N. Keskitalo, C. Jagadish and B.G. Svensson,, Defect evolution in MeV ion implanted Silicon, *Nucl. Instrum. Methods B* 120, 27-32 (1996).
98. K.P. Korona, J. Jasinski, A. Kurpiewski, M. Kaminska, C. Jagadish, H.H. Tan, A. Krotkus and S. Marcinkevicius, Ultrafast carrier trapping and high resistivity of MeV energy ion implanted GaAs, *Acta Physica Polonica* 90, 851-854 (1996).
99. H.H. Tan, C. Jagadish, K.P. Korona, J.Jasinski, R. Viselga, S. Marcinkevicius and A. Krotkus, Ion implanted GaAs for subpicosecond optoelectronic applications, *IEEE Journal of Selected Topics in Quantum Electronics* 2, 636-642 (1996).
100. A. Stalnionis, R. Adomavicius, A. Krotkus, S. Marcinkevicius, R. Leon and C. Jagadish, Transient photoconductivity and photoluminescence in InP:Cu, *Acta Physica Polonica A* 90, 931-934 (1996).

101. S. Yuan, Y. Kim, C. Jagadish, P.T. Burke, M. Gal, J. Zou, D.Q. Cai, D.J.H. Cockayne and R.M. Cohen, Novel impurity-free interdiffusion in GaAs/AlGaAs quantum wells by anodization and rapid thermal annealing, *Appl. Phys. Lett.* 70, 1269 – 1271 (1997).
102. G. Li and C. Jagadish, Effect of illumination on subband electronic of Si delta doped GaAs, *Appl. Phys. Lett.* 70, 90-92 (1997).
103. A. Clark, R.J. Egan and C. Jagadish, Design and optimisation of AlGaAs/AlGaAs multilayer structures for visible wavelength applications, *J. Crystal Growth*, 170, 424-427 (1997).
104. A. Babinski, G. Li and C. Jagadish, The persistent photoconductivity effect in modulation Si delta doped pseudomorphic InGaAs quantum well structure, *Appl. Phys. Lett.* 71, 1664-1666 (1997).
105. B.G. Svensson, C. Jagadish, A. Hallen and J. Lalita, Generation of vacancy type defects in single collision cascades during swift ion-bombardment of silicon, *Phys. Rev. B* 55, 10498-10507 (1997).
106. S. Marcinkevicius, A. Krotkus, R. Viselga, U. Olin and C. Jagadish, Non-thermal photoexcited electron distributions in non-stoichiometric GaAs, *Semicond. Sci. and Technol.* 12, 396 (1997).
107. J. Jasinski, Z. Liliental-Weber, J. Washburn, H.H. Tan, C. Jagadish, A. Krotkus, S. Marcinkevicius and M. Kaminska, Structural, electrical and optical studies of GaAs implanted with MeV As or Ga ions, *J. Electron. Mater.* 26,449–458 (1997).
108. G. Li, M. Petravic and C. Jagadish, Electrical activation of carbon delta doped (AlGa)As grown by metal organic vapour phase epitaxy, *J. Cryst. Growth* 173, 302-306 (1997).
109. J. Lalita, B.G. Svensson, C. Jagadish and A. Hallen, Annealing studies of point defects in low dose MeV ion implanted silicon, *Nucl. Instrum. Methods B* 127/128, 69-73 (1997).
110. M.B. Johnston, M. Gal, G. Li and C. Jagadish, Photoluminescence study of the dynamical properties of GaAs sawtooth superlattices, *J. Appl. Phys.* 82, 5748-5752 (1997).
111. R. Leon, T.J. Senden, Y. Kim, C. Jagadish and A. Clark, Nucleation transitions for InGaAs islands on vicinal (100) GaAs, *Phys. Rev. Lett.* 78, 4942-4945 (1997).
112. G. Li, A. Babinski and C. Jagadish, Subband electron densities of Si delta doped pseudomorphic InGaAs/GaAs heterostructures, *Appl. Phys. Lett.* 70, 3582-3584 (1997).
113. M. Lederer, B. Luther-Davies, H.H. Tan and C. Jagadish, GaAs based anti-resonant Fabry-Perot saturable absorber fabricated by metal organic vapour phase epitaxy and ion implantation, *Appl. Phys. Lett.* 70, 3428-3430 (1997).
114. H.H. Tan and C. Jagadish, Wavelength shifting in GaAs quantum well lasers by proton irradiation, *Appl. Phys. Lett.* 71, 2680-2682 (1997).
115. G. Li and C. Jagadish, Achievement of a very high electron density in Si delta-doped GaAs grown by metal organic vapour phase epitaxy at 630 degrees C, *J. Cryst. Growth*, 179, 382-390 (1997).
116. L.V. Dao, M. Gal, G. Li and C. Jagadish, Dynamics of holes in n-doped InGaAs/GaAs single quantum well, *Appl. Phys. Lett.* 71, 1849-1851 (1997).

117. S. Yuan, Y. Kim, H.H. Tan, C. Jagadish, P.T. Burke, L.V. Dao, M. Gal, M.C.Y. Chan, E.H. Li, J. Zou, D.Q. Cai, D.J.H. Cockayne and R.M. Cohen, Anodic oxide induced interdiffusion in GaAs/AlGaAs quantum wells, *J. Appl. Phys.* 83, 1305-1311 (1998).
118. C. Jagadish, G. Li, M.B. Johnston and M. Gal, Si and C delta doping of GaAs grown by metal organic vapour phase epitaxy for fabrication of nipi doping superlattices, *Mater. Sci. & Eng. B* 51, 103-105 (1998).
119. A. Babinski, G. Li and C. Jagadish, Magneto-transport measurements in pseudomorphic Si delta doped InGaAs/GaAs heterostructures, *Physica B* 246-247, 286-289 (1998).
120. G. Li, K.E. Prince, M. Petrvic, S.J. Chua and C. Jagadish, Substrate orientation effect on Zn delta doping in GaAs grown by metal organic vapour phase epitaxy, *J. Cryst. Growth* 191, 357-360 (1998).
121. L.V.Dao, M. Gal, H.H. Tan and C. Jagadish, Carrier capture into InGaAs/GaAs quantum wells via impurity mediated resonant tunnelling, *Appl. Phys. Lett.* 72, 2008–2010 (1998).
122. G. Li, A. Babinski, S.J. Chua and C. Jagadish, Electron transfer efficiency of Si delta modulation doped pseudomorphic GaAs/InGaAs/AlGaAs quantum wells, *Appl.Phys.Lett.* 72, 2322–2324 (1998).
123. S. Fatima, J. Wong-Leung, J. FitzGerald and C. Jagadish, Electrical characterisation of pre-amorphous damage in MeV ion implanted p-type Silicon, *Appl. Phys. Lett.* 72, 3044-3046 (1998).
124. M. Lederer, B. Luther-Davies, H.H. Tan and C. Jagadish, An anti-resonant Fabry Perot saturable absorber for passive mode-locking fabricated by MOCVD and ion implantation – design, characterisation and mode-locking, *IEEE J. Quantum Electronics* 34, 2150-2161 (1998).
125. A. Babinski, A. Wyszomolek, T. Tomaszewicz, J.M. Baranowski, R. Leon, C. Lobo and C. Jagadish, Electrically modulated photoluminescence in self organised InGaAs/GaAs quantum dots, *Appl. Phys. Lett.* 73, 2811-2813 (1998).
126. R. Adomavicius, A. Krotkus, R. Leon and C. Jagadish, Urbach tail in InP with nanometer metallic precipitates, *Phys. Stat. Sol. (a)* 168, 475-477 (1998).
127. L.V. Dao, M.B. Johnston, M. Gal, L. Fu, H.H. Tan and C. Jagadish, Improved carrier collection in intermixed InGaAs/GaAs quantum wells, *Appl. Phys. Lett.* 73, 3408-3410 (1998).
128. R.M.Cohen, G. Li, C. Jagadish, P.T. Burke and M. Gal, Native defect engineering of interdiffusion using thermally grown oxides of GaAs, *Appl. Phys. Lett.* 73, 803-805 (1998).
129. G.Li, M.B. Johnston, A. Babinski, S. Yuan, M. Gal, S.J. Chua and C. Jagadish, Si and C delta doping for device applications, *J. Cryst. Growth* 195, 54-57 (1998).
130. G. Li, S. Yuan, H.H. Tan, X.Q. Liu, S.J. Chua and C. Jagadish, InGaAs/GaAs quantum well laser with C doped cladding and Ohmic contact layers, *J. Electron. Mater.* 27, L61-L63 (1998).
131. S. Yuan, C. Jagadish, Y. Kim, Y. Chang, H.H. Tan, R.M. Cohen, M. Petrvic, L.V. Dao, M. Gal, M.C.Y. Chan, E.H. Li, J.S. O and P.S. Zory, Anodic-oxide induced intermixing in GaAs/AlGaAs quantum well and quantum wire structures, *IEEE J. Selected Topics in Quantum Electronics* 4, 629-635 (1998).

132. M.J. Lederer, B. Luther-Davies, H.H. Tan, C. Jagadish, M. Haiml, U. Siegner and U. Keller, Nonlinear optical absorption and temporal response of arsenic and oxygen implanted GaAs, *Appl. Phys. Lett.* 74, 1993-95 (1999).
133. S. Fatima, J. Wong-Leung, J. Fitz Gerald and C. Jagadish, Effect of ion mass on the evolution of extended defects during annealing of MeV ion implanted p-type Si, *Appl. Phys. Lett.* 74, 1141-1143 (1999).
134. L. Fu, H.H. Tan, M.B. Johnston, M. Gal and C. Jagadish, Proton irradiation induced intermixing in InGaAs/(Al)GaAs quantum wells and quantum well lasers, *J. Appl. Phys.* 85, 6786-6789 (1999).
135. X.Q.Liu, N. Li, X. Chen, W. Lu, W. Xu, X.Z.Yuan, N. Li, S.C. Shen, S. Yuan, H.H. Tan and C. Jagadish, Wavelength tuning of GaAs/AlGaAs quantum well infrared photodetectors by thermal interdiffusion, *Jpn. J. Appl. Phys.* 38 (pt. 1, no. 9A), 5044-5045 (1999).
136. S. Fatima, C. Jagadish, J. Lalita, B.G. Svensson and A. Hallen, Hydrogen interaction with implantation induced point defects in p-type silicon, *J. Appl. Phys.* 85, 2562-2567 (1999).
137. M. J. Lederer, B. Luther-Davies, H. H. Tan, C. Jagadish, N. N. Akhmediev and J. M. Soto-Crespo, Multi-pulse Operation of a Ti:Sapphire Laser Mode-locked by an Ion-implanted Saturable Absorber Mirror, *J. Opt. Soc. America B* 16, 895-904 (1999).
138. F. Karouta, H.H. Tan, C. Jagadish and B.H. van Roy, Vertical Integration of Dual Wavelength Index Guided GaAs-Lasers, *Electronics Letters* 35, 815-817 (1999).
139. H.H. Tan, C. Jagadish, M. Lederer, B. Luther-Davies, J. Zou, D.J.H. Cockayne, M. Haiml, U. Siegner and U. Keller, Role of implantation induced defects on the response time of semiconductor saturable absorbers, *Appl. Phys. Lett.* 75, 1437-1439 (1999).
140. G. Iordache, M. Buda, G. A. Acket, T. G. van de Roer, L. M. F. Kaufmann, F. Karouta, C. Jagadish and H.H. Tan, Continuous wave operation of low confinement asymmetric structure diode lasers, *Electronics Letters* 35, 148-149 (1999).
141. J.S. Laird, R.A. Bardos, C. Jagadish, D.N. Jamieson and G.J.F. Legge, Scanning Ion Deep Level Transient Spectroscopy, *Nucl. Instrum. Methods B* 158, 464-469 (1999).
142. M.B. Johnston, M. Gal, N.Li, Z. Chen, X. Liu, N. Li, W. Lu, S.C. Shen, L. Fu, H.H. Tan and C. Jagadish, Quantum well infrared photodetector tuning for colour sensitive arrays, *Appl. Phys. Lett.* 75, 923-925 (1999).
143. M.I. Cohen, H.H. Tan and C. Jagadish, Intermixing induced resonance shift in GaAs/AlxOy distributed Bragg resonators, *J. Appl. Phys.* 85, 7964-7966 (1999).
144. Q.X. Zhao, M. Willander, P.O. Holtz, W. Lu, H.F. Dou, S.C. Shen, G. Li and C. Jagadish, Radiative recombination in p-type delta doped layers in GaAs, *Phys. Rev. B* 60, R2193-R2196 (1999).
145. M.O. Manasreh, P. Ballet, J.B. Smathers, G.J. Salamo and C. Jagadish, Proton irradiation effects on the inter sub-band transitions in GaAs/AlGaAs multiple quantum wells with bulk and superlattice barriers, *Appl. Phys. Lett.* 75, 525-527 (1999).

146. Y.Fu, M.Willander, X. Q. Liu, W. Lu, S. C. Shen, H. H. Tan, S. Yuan and C. Jagadish, Energy sublevels in a Al_{0.5}Ga_{0.5}As-GaAs-Al_{0.5}Ga_{0.5}As quantum wire, Superlattices and Microstructures, 26, 307-315 (1999).
147. Na Li, Ning Li, W. Lu, X.Q. Liu, X.Z.Yuan, Z.F. Li, H.F. Dou, S.C. Shen, Y. Fu, M. Willander, L. Fu, H.H. Tan, C. Jagadish, M.B. Johnston and M.Gal, Proton implantation and rapid thermal annealing effects on GaAs/AlGaAs quantum well infrared photodetector, Superlattices and Microstructures, 26, 317-324 (1999).
148. X. Liu, W. Lu, Z.F. Li, Y.D. Chen, S.C. Shen, Y. Fu, M. Willander, H.H. Tan, S. Yuan, C. Jagadish, J. Zou, D.J.H. Cockayne, Spatially resolved luminescence investigation of AlGaAs/GaAs single quantum wires modified by selective implantation and annealing, Appl. Phys. Lett. 75, 3339-3341 (1999).
149. S. Marcinkevicius, C. Jagadish, H.H. Tan, M. Kaminska, K. Korona, R. Adomavicius and A. Krotkus, Influence of annealing on carrier dynamics in As ion implanted epitaxially lifted off GaAs layers, Appl. Phys. Lett. 76, 1306-1308 (2000).
150. P.N.K. Deenapanray, H.H. Tan, M.I. Cohen, K. Gaff, M. Petravic and C. Jagadish, Silane flow rate dependence of SiO_x cap layer induced impurity free interdiffusion of GaAs/AlGaAs quantum wells, J. ElectroChem. Soc. 147, 1950-1956 (2000).
151. X.Liu, N. Li, W. Lu, N. Li, X.Z. Yuan, S.C. Shen, L. Fu, H.H. Tan and C. Jagadish, Wavelength tuning of GaAs/AlGaAs quantum well infrared photo detectors by proton implantation induced intermixing, Jpn. J. Appl. Phys. 39, 1687-1689 (2000).
152. L.V. Dao, M. Gal, G. Li and C. Jagadish, Photoluminescence in delta doped InGaAs/GaAs single quantum wells, J. Appl. Phys. 87, 3896-3899 (2000).
153. P.N.K. Deenapanray, H.H. Tan, L. Fu, K. Gaff and C. Jagadish, Influence of low temperature chemical vapour deposited SiO₂ capping layer porosity on GaAs/AlGaAs quantum well intermixing, ElectroChemical and SolidState Lett. 3, 196-199 (2000).
154. L. Fu, P.N.K. Deenapanray, H.H. Tan, C. Jagadish, L.V. Dao and M. Gal, Quality of silica capping layer and its influence on quantum well intermixing, Appl. Phys. Lett. 76, 837-839 (2000).
155. D.C. Schmidt, B.G. Svensson, M. Seibt, C. Jagadish and G. Davies, Photoluminescence and deep level transient spectroscopy and transmission electron microscopy measurements on MeV self-ion implanted and annealed n-type silicon, J. Appl. Phys. 88, 2309-2317 (2000).
156. M. Kuball, J.M. Hayes, T. Suski, J. Jun, M. Leszczynski, J. Domagala, H.H. Tan, J.S. Williams and C. Jagadish, High Pressure high temperature annealing of ion implanted GaN films monitored by visible and ultraviolet Micro-Raman scattering, J. Appl. Phys. 87, 2736-2741 (2000).
157. X.Q. Liu, W. Lu, X. Chen, S.C. Shen, H.H. Tan, S. Yuan, C. Jagadish, M.B. Johnston, L.V. Dao, M. Gal, J. Zou and D.J.H. Cockayne, Wavelength shifting of adjacent quantum wells in V-groove quantum wire structure by selective implantation and annealing, J. Appl. Phys. 87, 1566-1568 (2000).
158. S.O. Kucheyev, J.S. Williams, C. Jagadish, G. Li and S.J. Pearton, Strong surface disorder and loss of N produced by ion bombardment of GaN, Appl. Phys. Lett. 76, 3899-3901 (2000).

159. P.N.K. Deenapanray, H.H. Tan, C. Jagadish and F.D. Auret, Investigation of deep levels in rapid thermally annealed SiO₂ capped n-GaAs grown by metalorganic chemical vapour deposition, *Appl. Phys. Lett.* 77, 696-698 (2000).
160. J. Wong-Leung, S. Fatima, C. Jagadish, J.D. Fitz Gerald, C.T. Chou, J. Zou and D.J.H. Cockayne, Transmission electron microscopy characterisation of secondary defects created by MeV Si, Ge and Sn implantation in Silicon, *J. Appl. Phys.* 88, 1312-1318 (2000).
161. L.V. Dao, M. Gal, C. Carmody, H.H. Tan and C. Jagadish, A comparison of impurity-free and ion-implantation induced intermixing of InGaAs/InP quantum wells, *J. Appl. Phys.* 88, 5252-5254 (2000).
162. Y. Fu, M. Willander, W. Lu, X. Q. Liu, S. C. Shen, C. Jagadish, M. Gal, J. Zou, and D. J. H. Cockayne, Strain effect in a GaAs-InGaAs-AlGaAs asymmetric quantum wire, *Phys. Rev. B* 61, 8306-8311 (2000).
163. S.O. Kucheyev, J.S. Williams, C. Jagadish, J. Zou and G. Li, Damage build-up in GaN under ion bombardment, *Phys. Rev. B* 62, 7510-7522 (2000).
164. S.O. Kucheyev, J.S. Williams, C. Jagadish, J. Zou, V.S.J. Craig and G. Li, Ion beam induced porosity of GaN, *Appl. Phys. Lett.* 77, 1455-1457 (2000).
165. J. Wong-Leung, S. Fatima, C. Jagadish and J.D. Fitz Gerald, Effect of implant temperature on extended defects created by ion implantation in silicon, *Defect and Diffusion Forum* 183-185, 163-170 (2000).
166. A. Babinski, J. Siwiec-Matuszyk, J.M. Baranowski, G. Li and C. Jagadish, Transport and quantum electron mobility in the modulation Si delta doped pseudomorphic GaAs/InGaAs/AlGaAs quantum well grown by metalorganic vapor phase epitaxy, *Appl. Phys. Lett.* 77, 999-1001 (2000).
167. X.Q. Liu, Z.F. Li, X.S. Chen, W. Lu, S.C. Shen, H.H. Tan, S. Yuan and C. Jagadish, Arsenic implantation-induced intermixing effects on AlGaAs/GaAs single QW structures, *Phys. Lett. A* 271, 213-216 (2000).
168. Q.X. Zhao, M. Willander, W. Lu, X.Q. Liu, S.C. Shen, H.H. Tan, C. Jagadish, J. Zou and D.J.H. Cockayne, Optical properties of arsenic ions implanted GaAs/AlGaAs V-grooved quantum wires. *J. Appl. Phys.* 88, 2519-2522 (2000).
169. M. Toth, S. O. Kucheyev, J. S. Williams, C. Jagadish, M. R. Phillips and G. Li, Imaging charge trap distributions in GaN using environmental scanning electron microscopy, *Appl. Phys. Lett.* 77, 1342-1344 (2000).
170. S.O. Kucheyev, J.S. Williams, J. Zou, C. Jagadish and G. Li, Ion beam induced dissociation and bubble formation in GaN, *Appl. Phys. Lett.* 77, 3577-3579 (2000).
171. P.N.K. Deenapanray, H.H. Tan, C. Jagadish and F.D. Auret, Electronic and isochronal annealing properties of electron traps in rapid thermally annealed SiO₂ capped n-type GaAs epitaxial layers, *J. Appl. Phys.* 88, 5255-5261 (2000).
172. X. Q. Liu, Zhi Feng Li, Ning Li, Wei Lu, Xian Zhang Yuan, S.C. Shen, Hark Hoe Tan, C. Jagadish and J. Zou, Application of V-groove AlGaAs/GaAs quantum wire on infrared photo-detection, *Jpn. J. Appl. Phys.* 39, 5124-5127 (2000).
173. S.O. Kucheyev, J.S. Williams, C. Jagadish, J. Zou and G. Li, Polycrystallization and surface erosion of amorphous GaN during elevated temperature ion bombardment, *J. Appl. Phys.* 88, 5493-5495 (2000).
174. F. Hegeler, M.O. Manasreh, C. Morath, P. Ballet, H. Yang, G.J. Salamo, H.H. Tan and C. Jagadish, Thermal annealing recovery of intersubband transitions in proton-

- irradiated GaAs/AlGaAs multiple quantum wells, *Appl. Phys. Lett.* 77, 2867-2869 (2000).
175. P.N.K. Deenapanray, L. Fu, M. Petarvic, C. Jagadish, B. Gong and R.N. Lamb, Pulsed anodic oxidation of GaAs for impurity free interdiffusion of GaAs/AlGaAs quantum wells, *Surf. and Interface Analysis*, 29, 754-760 (2000).
 176. S.O. Kucheyev, J.E. Bradby, J.S. Williams, C. Jagadish, M. Toth, M.R. Phillips and M.V. Swain, Nanoindentation of epitaxial GaN films, *Appl. Phys. Lett.*, 77, 3577-3579 (2000).
 177. X.Q. Liu, X.S. Chen, Z.F. Li, W. Lu, S.C. Shen, H.H. Tan, S. Yuan and C. Jagadish, Proton implantation induced intermixing effects on AlGaAs/GaAs single quantum well structures, *Phys. Lett. A*, 278, 99-102 (2000).
 178. B.G. Svensson, A. Hallen, M.K. Linnarsson, A.Y. Kuznetsov, M.S. Janson, D. Aberg, J. Osterman, POA, Persson, L. Hultman, L. Storasta, F.H.C. Carlsson, J.P. Bergman, C. Jagadish and E. Morvan, Doping of silicon carbide by ion implantation, *Materials Science Forum*, 353-356, 549-554 (2001).
 179. A.Y. Kuznetsov, M.S. Janson, A. Hallen, B.G. Svensson, C. Jagadish, H. Grunleitner and G. Pensl, Channeling measurements of ion implantation damage in 4H-SiC, *Materials Science Forum*, 353-356, 595-598 (2001).
 180. L. Fu, H.H. Tan, C. Jagadish, N. Li, N. Li, X. Liu, W Lu and S.C. Shen, Tuning the detection wavelength of quantum well infrared photodetectors by single high energy implantation, *Appl. Phys. Lett.* 78, 10-12 (2001).
 181. P.N.K. Deenapanray and C. Jagadish, Effect of stress on impurity-free quantum well intermixing, *Electrochem.Solid-State Lett.* 4, G11-G13 (2001)
 182. S.O. Kucheyev, J.E. Bradby, J.S. Williams, C. Jagadish, M.V. Swain and G. Li, Deformation behaviour of ion beam modified GaN, *Appl. Phys. Lett.*, 78, 156-158 (2001).
 183. S.O. Kucheyev, M. Toth, M.R. Phillips, J.S. Williams, C. Jagadish and G. Li, Cathodoluminescence depth profiling of ion implanted GaN, *Appl. Phys. Lett.*, 78, 34-36 (2001).
 184. H. Boudinov, J.P. deSouza and C. Jagadish, Electrical isolation of n-type InP by ion bombardment: Dose dependence and thermal stability, *Nucl. Instrum. Meth. B* 175-177, 235-240 (2001).
 185. Y. Fu, M. Willander, X.-Q. Liu, W. Lu, S. C. Shen, H. H. Tan, C. Jagadish, J. Zou and D. J. H. Cockayne, Optical transition in infrared photodetector based on V-groove Al_{0.5}Ga_{0.5}As/GaAs multiple quantum wires, *J. Appl. Phys.* 89, 2351-2356 (2001).
 186. H.Boudinov, S.O. Kucheyev, J.S. Williams, C. Jagadish and G. Li, Electrical isolation of GaN by light-ion irradiation, *Appl. Phys. Lett.* 78, 943-945 (2001).
 187. L.V. Dao, M. Gal, L. Fu, C. Jagadish, Possibility of improved frequency response from intermixed quantum well devices, *Superlattices and Microstructures* 29, 105-110 (2001).
 188. J. Wong-Leung, C. Jagadish, M.J. Conway and J.D. Fitz Gerald, Effect of implant temperature on secondary defects created by MeV Sn implantation in Silicon, *J. Appl. Phys.* 89, 2556-2559 (2001).

189. M. Gal, M.C. Wengler, S. Ilyas, I. Rofii, H.H. Tan and C. Jagadish, Measurement of damage profile in semiconductors using an automated optical profiler, *Nucl. Instrum. Meth. B* 173, 528-532 (2001).
190. S.O. Kucheyev, J.S. Williams, J. Zou, C. Jagadish and G. Li, The effects of ion mass, energy, dose, flux and irradiation temperature on implantation disorder in GaN, *Nucl. Instrum. Meth. B* 178, 209-213 (2001).
191. S.O. Kucheyev, J.S. Williams, J. Zou, J.E. Bradby, C. Jagadish and G. Li, Ion beam induced reconstruction of amorphous GaN, *Phys. Rev.B* 63, 113202-1 to 113202-4 (2001).
192. S.O. Kucheyev, J.S. Williams, J. Zou, C. Jagadish and G.Li, Disordering and anomalous surface erosion of GaN during ion bombardment at elevated temperatures, *Appl. Phys. Lett.*, 78, 1373-1375 (2001).
193. L. Giniunas, R. Danielius, H.H. Tan, C. Jagadish, R. Adomavicius and A. Krotkus, Electron and trap dynamics in As ion implanted and annealed GaAs, *Appl. Phys. Lett.* 78, 1667-1669 (2001).
194. W. Lu, X.Q.Liu, Z.F. Li, S.C. Shen, Q.X. Zhao, Y. Fu, M. Willander, H.H. Tan, C. Jagadish, J. Zou and D.J.H. Cockayne, Carrier transfer between V-grooved quantum wire and vertical quantum well, *Phys. Lett. A*, 280, 77-80 (2001).
195. N. Li, L. Fu, N. Li, Y.C. Chan, W. Lu, S.C. Shen, H.H. Tan and C. Jagadish, The asymmetry in the characteristics of GaAs/AlGaAs quantum well infrared photodetectors, *J. Cryst. Growth*, 222, 786-790 (2001).
196. S.O. Kucheyev, J.S. Williams, A.I. Titov, G. Li and C. Jagadish, Effect of the density of collision cascades on implantation damage in GaN, *Appl. Phys. Lett.* 78, 2694-2696 (2001).
197. M.I. Cohen, A.A. Allerman, K.D. Choquette and C. Jagadish, Electrically steerable lasers using wide aperture VCSELs, *IEEE Photonics Tech. Lett.* 13, 544-546 (2001).
198. H. Boudinov, H.H. Tan and C. Jagadish, Electrical isolation of n-type and p-type InP layers by proton bombardment, *J. Appl. Phys.* 89, 5343-5347 (2001).
199. S.O. Kucheyev, J.S. Williams, J. Zou, C. Jagadish and G. Li, High-dose ion implantation into GaN, *Nucl. Instrum. Meth. B* 175-177, 214-218 (2001).
200. S.O. Kucheyev, J.S. Williams, C. Jagadish, J. Zou, G. Li and A.I. Titov, Effects of ion species on the accumulation of ion-beam damage in GaN, *Phys. Rev*, 64, 035202-1-035202-10 (2001).
201. L. Fu, H.H. Tan, C. Jagadish, N. Li, N. Li, X. Liu, W. Lu and S.C. Shen, Tuning of detection wavelength of quantum well infrared photodetectors by quantum well intermixing, *Infrared Phys. & Technol.* 42, 171-175 (2001).
202. P. Pellegrino, P. Leveque, J. Wong-Leung, C. Jagadish and B.G. Svensson, Separation of vacancy and interstitial depth profiles in ion-implanted silicon: experimental observation, *Appl. Phys. Lett.* 78, 3442-3444 (2001).
203. M.J. Lederer, V. Kolev, B.Luther-Davies, H.H. Tan and C. Jagadish, Ion Implanted InGaAs single quantum well semiconductor saturable absorber mirrors for passive mode-locking, *J. Phys. D. Appl. Phys.* 34, 2455-2464 (2001).
204. S.O. Kucheyev, M. Toth, M.R. Phillips, J.S. Williams and C. Jagadish, Effects of excitation density on cathodoluminescence from GaN, *Appl. Phys. Lett.* 79, 2154-2156 (2001).

205. P.N.K. Deenapanray and C. Jagadish, Impurity free intermixing of GaAs/AlGaAs quantum wells using SiO_x capping: Effect of nitrous oxide flow rate, *J. Vac. Sci. Technol. B*, 19, 1962-1966 (2001).
206. P.N.K. Deenapanray, A. Martin and C. Jagadish, Defect engineering in annealed n-type GaAs epilayers using SiO₂/Si₃N₄ stacking layers, *Appl. Phys. Lett.* 79, 2561-2563 (2001).
207. P. Pellegrino, P. Leveque, J. Lalita, A. Hallen, C. Jagadish and B.G. Svensson, Annealing Kinetics of vacancy-related defects in low-dose MeV self-ion-implanted n-type silicon, *Phys. Rev. B*, 64, 195211-10 pages (2001).
208. X.Q Liu, A. Sasaki, N. Ohno, Z.F. Li, W. Lu, S.C. Shen, Y. Fu, M. Willander, H.H. Tan and C. Jagadish, Evidence of blocking effect on carrier trapping process by necking region in very narrow AlGaAs/GaAs V-grooved quantum wire structure, *J. Appl. Phys.* 90, 5438-5440 (2001).
209. X.Q. Liu, W. Lu, S.C. Shen, H.H. Tan, C. Jagadish and J. Zou, Application of selective implantation in AlGaAs/InGaAs/GaAs pseudomorphic single quantum wire structures, *J. NanoSci. Nanotechnol.* 1, 389-392 (2001).
210. T.V. Lippen, H. Boudinov, H.H. Tan and C. Jagadish, Electrical isolation of AlGaAs by ion irradiation, *Appl. Phys. Lett.* 80, 264-266 (2002).
211. S.O. Kucheyev, J.E. Bradby, J.S. Williams, C. Jagadish and M.V. Swain, Mechanical deformation in single crystal ZnO, *Appl. Phys. Lett.* 80, 956-958 (2002).
212. S.O. Kucheyev, J.S. Williams, J. Zou, G. Li, C. Jagadish, M.O. Manasreh, M. Pophristic, S. Guo and I.T. Feguson, Structural disorder in ion-implanted Al_xGa_{1-x}N, *Appl. Phys. Lett.* 80, 787-789 (2002).
213. L. Fu, R.W.v.d.Heijden, H.H. Tan, C. Jagadish, L.V. Dao and M. Gal, Study of intermixing in a GaAs/AlGaAs quantum well structure using doped spin-on silica layers, *Appl. Phys. Lett.* 80, 1171-1173 (2002).
214. P. Pellegrino, P. Leveque, H. Kortegaard-Nielsen, A. Hallen, J. Wong-Leung, C. Jagadish and B.G. Svensson, Separation of vacancy and interstitial depth profiles in proton and bron implanted silicon, *Nucl. Instr. Meth. B*, 186, 334-338 (2002).
215. S.O. Kucheyev, J.S. Williams, J. Zou, G. Li and C. Jagadish, Blistering of H-implanted GaN, *J. Appl. Phys.* 91, 3928-3930 (2002).
216. S.O. Kucheyev, M. Toth, M.R. Phillips, J.S. Williams, C. Jagadish and G. Li, X-ray spectroscopy investigation of electrical isolation in GaN, *J. Appl. Phys.* 91, 3940-3942 (2002)
217. P. Pellegrino, P. Lévêque, H. Kortegaard-Nielsen, J. Wong-Leung, C. Jagadish, and B. G. Svensson, Response to "Comment on 'Separation of vacancy and interstitial depth profiles in ion-implanted silicon: Experimental observation', [Appl. Phys. Lett. 80, 1492 (2002)]", *Appl. Phys. Lett.* 80, 1494-1495 (2002).
218. M. Gal, L.V. Dao, E. Kraft, M.B. Johnston, C. Carmody, H.H. Tan and C. Jagadish, Thermoluminescence in ion-implanted GaAs, *J. Luminescence*, 96, 287-293 (2002).
219. S.O. Kucheyev, H. Boudinov, J.S. Williams, C. Jagadish and G. Li, Effect of irradiation temperature and ion flux on electrical isolation of GaN, *J. Appl. Phys.* 91, 4117-4120 (2002).

220. S.O. Kucheyev, M. Toth, M.R. Phillips, J.S. Williams, C. Jagadish and G. Li, Chemical origin of yellow luminescence in GaN, *J. Appl. Phys.* 91, 5867-5874 (2002).
221. P.N.K. Deenapanray, A. Martin, P. Lever and C. Jagadish, On the Pulsed Anodic Oxidation of n⁺-InP, *Electrochemical and Solid State Letters*, 5, G41-G44 (2002).
222. M.J. Lederer, M. Hildebrand, V.Z. Kolev, B. Luther-Davies, B. Taylor, J. Dawes, P. Dekker, J. Piper, H.H. Tan and C. Jagadish, Passive mode-locking of the self frequency doubling Yb:Yal3(BO3) laser crystal, *Opt. Lett.* 27, 436-438 (2002).
223. S.O. Kucheyev, J.S. Williams, J. Zou, G. Li, C. Jagadish and A.I. Titov, Effect of ion species on implantation produced disorder in GaN at liquid nitrogen temperature, *Nucl. Instrum. Meth. B* 190, 782-786 (2002).
224. E.V. Monakhov, J. Wong-Leung, A. Yu. Kuznetsov, C. Jagadish and B.G. Svensson, Ion mass effect on vacancy-related deep levels in Si induced by ion implantation, *Phys. Rev. B* 65, 245201-9pages (2002).
225. P.N.K. Deenapanray, B. Gong, R.N. Lamb, A. Martin, L. Fu, H.H. Tan and C. Jagadish, Impurity-free disordering mechanisms in GaAs-based structures using doped spin-on silica layers, *Appl. Phys. Lett.*, 80, 4351-4353 (2002).
226. J.E. Bradby, S.O. Kucheyev, J.S. Williams, C. Jagadish, M.V. Swain, P. Munroe and M.R. Phillips, Contcat-induced defect propagation in ZnO, *Appl. Phys. Lett.* 80, 4537-4539 (2002).
227. C.Carmody, H. Boudinov, H.H. Tan, C. Jagadish, M.J. Lederer, V. Kolev, B. Luther-Davies, L.V. Dao and M. Gal, Ultrafast carrier trapping times in ion implanted InP, *J. Appl. Phys.* 92, 2420-2423 (2002).
228. L. Fu, J. Wong-Leung, P.N.K. Deenapanray, H.H. Tan, C. Jagadish, R.M. Cohen, W. Reichert, L.V. Dao and M. Gal, Supression of interdiffusion in GaAs/AlGaAs quantum well structures capped with dielectric films by deposition of gallium oxide, *J. Appl. Phys.* 92, 3579-3583 (2002).
229. S.O. Kucheyev, J.S. Williams, J. Zou, C. Jagadish, M. Pophristic, S. Guo, I.T. Ferguson, M.O. Manasreh, Ion beam produced damage and its stability in AlN films, *J. Appl. Phys.* 92, 3554-3558 (2002).
230. S.O. Kucheyev, P.N.K. Deenapanray, C. Jagadish, J.S. Williams, M. Yano. K. Koike, S. Sasa, M. Inoue, K. Ogata, Electrical isolation of ZnO by ion bombardment, *Appl. Phys.Lett.* 81, 3350-3352 (2002).
231. P.N.K. Deenapanray, A. Martin, S. Doshi, M. Buda, H.H. Tan and C. Jagadish, Atomic relocation processes in impurity free disordered p-GaAs epitaxial layers studied by deep level transient spectroscopy, *Appl. Phys. Lett* 81, 3573-3575 (2002).
232. K.Ip, M.E. Overberg, D.P. Norton, S.J. Pearton, S.O. Kucheyev, C. Jagadish, J.S. Williams, R.G. Wilson and J.M. Zavada, Thermal stability of ion implanted hydrogen in ZnO, *Appl. Phys. Lett.* 81, 3996-3998 (2002).
233. B.Q. Sun, M. Gal, Q. Gao, H.H. Tan and C. Jagadish, On the nature of radiative recombination in GaAsN, *Appl. Phys. Lett.* 81, 4368-4370 (2002).
234. P. Leveque, H. Kortegaard Nielson, P. Pellegrino, A. Hallen, B.G. Svensson, A.Yu. Kuznetsov, J. Wong-Leung, C. Jagadish and V. Privitera, Vacancy and interstitial depth profiles in ion implanted silicon, *J. Appl. Phys.* 93, 871-877 (2003).

235. P.N.K. Deenapanray, V.A. Coleman and C. Jagadish, Electrical characterization of impurity free disordered p-type GaAs, *ElectroChem SolidState Lett.* 6, G 37-G40 (2003).
236. M.K. Linnarsson, U. Zimmermann, J. Wong-Leung, A. Schoner, M.S. Janson, C. Jagadish and B.G. Svensson, Solubility limits of dopants in 4H-SiC, *Appl. Surf. Sci.* 203-204, 427-432 (2003).
237. Y.G. Wang, J. Zou, S.O. Kucheyev, J.S. Williams and C. Jagadish, Nature of planar defects in ion implanted GaN, *ElectroChem. Solid State Lett.* 6, G34-G36 (2003).
238. S. Doshi, P.N.K. Deenapanray, H.H. Tan and C. Jagadish, Towards a better understanding of the operative mechanisms underlying impurity free disordering of GaAs: Effect of stress, *J. Vac. Sci. Technol. B* 21, 198-203 (2003).
239. S.O. Kucheyev, C. Jagadish, J.S. Williams, P.N.K. Deenapanray, M. Yano, K. Koike, S. Sasa, M. Inoue, K. Ogata, Implant isolation of ZnO, *J. Appl. Phys.* 93, 2972-2976 (2003).
240. H. Boudinov, A.V.P. Coelho, H.H. Tan and C. Jagadish, Characterisation of deep level traps responsible for isolation of proton implanted GaAs, *J. Appl. Phys.* 93, 3234-3238 (2003).
241. P. Lever, H.H. Tan, C. Jagadish, P. Reece and M. Gal, Proton-irradiation-induced intermixing in InGaAs quantum dots, *Appl. Phys. Lett.* 82, 2053-2055 (2003).
242. C. Carmody, H.H. Tan and C. Jagadish, Influence of cap layer on implantation induced interdiffusion in InP/InGaAs quantum wells, *J. Appl. Phys.* 93, 4468-4470 (2003).
243. S.O. Kucheyev, J.S. Williams, C. Jagadish, J. Zou, C. Evans, A.J. Nelson, A.V. Hamza, Ion beam produced structural defects in ZnO, *Phys. Rev. B* 67, 094115 (11 pages) (2003).
244. P.N.K. Deenapanray, H.H. Tan and C. Jagadish, Electrical characterisation of impurity-disordering induced defects in n-GaAs using native oxide layers, *Appl. Phys. A (Rapid Communications)* 76, 961-964 (2003).
245. P.N.K. Deenapanray, B.G. Svensson, H.H. Tan and C. Jagadish, A comparison of low-energy As ion-implantation induced and impurity free disordering in n-type GaAs epitaxial layers, *Jpn. J. Appl. Phys.* 42, 1158-1163 (2003).
246. L. Fu, P. Lever, H.H. Tan, C. Jagadish, P. Reece and M. Gal, Suppression of interdiffusion in InGaAs/GaAs quantum dots using dielectric layer of titanium dioxide, *Appl. Phys. Lett.* 82, 2613-2615 (2003).
247. M. Buda, J. Hay, H.H. Tan, J. Wong-Leung and C. Jagadish, Low loss, thin p-clad 980nm InGaAs semiconductor laser diodes with an asymmetric structure design, *IEEE J. Quantum Electronics*, 39, 625-633 (2003).
248. S-I.Kim, I-K.Han, S.W. Chung and C. Jagadish, Growth of triangular shaped InGaAs/GaAs quantum wire structures, *J. Mater. Sci. Lett.*, 22, 467- 469 (2003).
249. B.Q. Sun, M. Gal, Q. Gao, H.H. Tan, C. Jagadish, T. Puzzer, L. Ouyang and J. Zou, Epitaxially grown GaAsN random lasers, *J. Appl. Phys.* 93, 5855-5858 (2003).
250. P.N.K. Deenapanray, Q. Gao and C. Jagadish, Implant isolation of Zn doped GaAs epilayers: Effects of ion species, doping concentration and implantation temperature, *J. Appl. Phys.* 93, 9123-9129 (2003).

251. Q. Gao, P.N.K. Deenapanray, H.H. Tan and C. Jagadish, Implantation induced electrical isolation of GaAsN epilayers grown by metal organic chemical vapour deposition, *Appl. Phys. Lett.*, 83, 3386-3388 (2003).
252. C. Carmody, H.H. Tan, C. Jagadish, A. Gaarder and S. Marcinkevicius, Ion implanted InGaAs for ultrafast optoelectronic applications, *Appl. Phys. Lett* 82, 3913-3915 (2003).
253. M. Buda, J. Hay, H.H. Tan, L. Fu, C. Jagadish, P. Reece and M. Gal, Effect of Zn doping on intermixing of InGaAs/AlGaAs laser diode structures, *J. Electrochem. Soc.* 150, G481 – G487 (2003).
254. C. Carmody, H.H. Tan, C. Jagadish, A. Gaarder and S. Marcinkevicius, Ultrafast carrier trapping and recombination in highly resistive ion implanted InP, *J. Appl. Phys.* 94, 1074-1078 (2003).
255. P. Leveque, A. Hallen, B.G. Svensson, J. Wong-Leung, C. Jagadish and V. Privitera, Identification of hydrogen related defects in proton implanted float-zone silicon, *Eur. Phys. J. Appl. Phys.*, 23, 5-9 (2003).
256. K. Stewart, M. Buda, J. Wong-Leung, L. Fu, C. Jagadish, A. Stiff-Roberts and P. Bhattacharya, Influence of rapid thermal annealing on a 30 stack InAs/GaAs quantum dot infrared photodetector, *J. Appl. Phys.*, 94, 5283-5289 (2003).
257. C. Carmody, H.H. Tan and C. Jagadish, Electrical isolation of n- and p-InGaAs epilayers using ion irradiation, *J. Appl. Phys.* 94, 6616-6620 (2003).
258. A.Yu. Kuznetsov, J. Wong-Leung, A. Hallen, C. Jagadish and B.G. Svensson, Dynamic annealing in ion implanted SiC: flux versus temperature dependence, *J. Appl. Phys.* 94, 7112-7115 (2003).
259. Z.F. Li, W. Lu, X.Q. Liu, X.S. Chen, S.C. Shen, Y. Fu, M. Willander, H.H. Tan and C. Jagadish, Determination of carrier transfer length from side wall quantum well to quantum wire by micro-photoluminescence scanning, *J. Electron. Mater.* 32, 913-916 (2003).
260. Q. Gao, H.H. Tan, C. Jagadish, P.N.K. Deenapanray, Defect evolution in annealed p-type GaAsN epilayers grown by metal organic chemical vapour deposition, *Jpn. J. Appl. Phys.* 42, 6827-6832 (2003).
261. K. Ip, M.E. Overberg, K.W. Biak, R.G. Wilson, S.O. Kucheyev, J.S. Williams, C. Jagadish, F. Ren, Y.W. Heo, D.P. Norton, J.M. Zavada and S.J. Pearton, ICP dry etching of ZnO and effects of hydrogen, *Solid State Electronics*, 47, 2289-2294 (2003).
262. M. Buda, H.H. Tan, L. Fu, L. Josyula and C. Jagadish, Improvement of the kink-free operation in ridge-waveguide laser diodes due to coupling of the optical field to the metal layers outside the ridge, *IEEE Photonics Technol. Lett.*, 15, 1686-1688 (2003).
263. K. Ip, M.E. Overberg, Y.W. Heo, D.P. Norton, S.J. Pearton, C.E. Sutz, S.O. Kucheyev, C. Jagadish, J.S. Williams, B. Luo, F. Ren, D.C. Look and J.M. Zavada, Hydrogen incorporation, diffusivity and evolution in bulk ZnO, *Solid State Electronics*, 47, 2255-2259 (2003).
264. M.D.H. Lay, J.C. McCallum and C. Jagadish, Implantation angle dependent study of vacancy related defect profiles in ion implanted silicon, *Physica B*, 340-342, 748-751 (2003).

265. P.N.K. Deenapanray, W.E. Meyer, F.D. Auret, M. Krispin and C. Jagadish, Electron emission properties of a defect at $\sim (E_c-0.23\text{eV})$ in impurity-free disorder n-GaAs, *Physica B*, 340-342, 315-319 (2003).
266. C. Carmody, H.H. Tan, C. Jagadish, O. Douheret, K. Makaya, S. Anand, J. Zou, L. Dao and M. Gal, Structural, electrical and optical analysis of ion implanted semi-insulating InP, *J. Appl. Phys.* 95, 477-482 (2004).
267. S.O. Kucheyev, J.S. Williams and C. Jagadish, Ion beam defect processes in group III nitrides and ZnO, *Vacuum* 73, 93-104 (2004).
268. Q. Gao, H.H. Tan, C. Jagadish, B.Q. Sun, M. Gal, L. Ouyang and J. Zou, Enhanced optical properties of the GaAsN/GaAs quantum well structure by the insertion of InAs monolayers, *Appl. Phys. Lett.* 84, 2536-2538 (2004)
269. S.O. Kucheyev, J.S. Williams, J. Zou and C. Jagadish, Dynamic annealing in III-nitrides under ion bombardment, *J. Appl. Phys.*, 95, 3048-3054 (2004)
270. Q. Gao, H.H. Tan, C. Jagadish, B.Q. Sun, M. Gal, L. Ouyang and J. Zou, Metalorganic chemical vapour deposition of GaAsN epilayers: microstructures and optical properties, *J. Cryst. Growth*, 264, 92-97 (2004).
271. S.O. Kucheyev, H. Timmers, J. Zou, J.S. Williams, C. Jagadish and G. Li, Lattice damage produced in GaN by swift heavy ions, *J. Appl. Phys.*, 95, 5360-5365 (2004).
272. P. Lever, H.H. Tan and C. Jagadish, InGaAs quantum dots grown with GaP strain compensation layers, *J. Appl. Phys.*, 95, 5710-5714 (2004).
273. Q. Gao, H.H. Tan, L. Fu and C. Jagadish, Effects of thermal stress on interdiffusion in InGaAsN/GaAs quantum dots, *Appl. Phys. Lett.*, 84, 4950-4952 (2004)
274. A.V.P. Coelho, H. Boudinov, T.v. Lippen, H.H. Tan and C. Jagadish, Impant isolation of AlGaAs multilayer DBR, *Nucl. Instrum. Meth. B*, 218, 381-385 (2004).
275. G.C. Pesenti, H. Boudinov, C. Carmody and C. Jagadish, Variable temperature Hall effect measurements in ion bombarded InP, *Nucl. Instrum. Meth. B* 218, 386-390 (2004).
276. M.I. Cohen and C. Jagadish, It's all about speed, *IEEE Circuits and Devices*, 20, 38-43 (2004).
277. P. Lever, M. Buda, H. H. Tan and C. Jagadish, Investigation of the blueshift seen in electroluminescence from MOCVD grown InGaAs QDs, *IEEE Journal of Quantum Electronics*, 40, 1410-1415 (2004).
278. X. Li, Ning Li, S. Demiguel, X. Zheng, J. C. Campbell, H. H. Tan, C. Jagadish, A Partially Depleted Absorber Photodiode with Graded Doping Injection Regions, *Photonics Technology Lett.*, 16, 2326-2328 (2004).
279. E.W. Bogaart, J.E.M. Haverkort, T. Mano, R. Notzel, J.H. Wolter, P. Lever, H.H. Tan and C. Jagadish, Picosecond time-resolved bleaching dynamics of self-assembled quantum dots, *IEEE Trans. Nanotechnology*, 3, 348-352 (2004).
280. P. Lever, M. Buda, H. H. Tan and C. Jagadish, Characteristics of MOVPE grown InGaAs quantum dot lasers, *IEEE Photonics Technology Letters*, 16, 2589-2591 (2004).
281. P. Lever, H. H. Tan, C. Jagadish, P. Reece and M. Gal, Impurity Free Vacancy Disordering of InGaAs quantum dots, *Journal of Applied Physics*, 96, 7544-7548 (2004).

282. P. Reece, M. Gal, H.H. Tan and C. Jagadish, Optical Properties of Erbium Implanted Porous Silicon Microcavities, *Appl. Phys. Lett.* 85, 3363-3365 (2004).
283. P. Gareso, M. Buda, L. Fu, H.H. Tan and C. Jagadish, Suppression of thermal atomic interdiffusion in C-doped InGaAs/AlGaAs quantum well laser structures using TiO₂ dielectric layers, *Appl. Phys. Lett.*, 85, 5583-5585 (2004).
284. J. Lloyd-Hughes, E. Castro Camus, M.D. Fraser, C. Jagadish and M. Johnston, Carrier dynamics in ion implanted GaAs studied by simulation and observation of terahertz emission, *Phys. Rev. B*, 70, 235330 (6 pages) (2004).
285. Q. Gao, M. Buda, H.H. Tan and C. Jagadish, Room temperature operation of InGaAsN quantum dot lasers grown by MOCVD, *Electrochem. Solid State Lett.*, 8, G57-G59 (2005).
286. H.H. Tan, P. Lever and C. Jagadish, Growth of highly strained InGaAs quantum wells on GaAs substrates – effect of growth rate, *J. Cryst. Growth*, 274, 85-89 (2005).
287. J. Slotte, K. Saarinen, M.S. Janson, A. Hallen, A.Yu. Kuznetsov, B.G. Svensson, J. Wong-Leung and C. Jagadish, Fluence, flux and implantation temperature dependence of ion implantation induced defect production in 4H-SiC, *J. Appl. Phys.* 97, 033513 (7 pages) (2005).
288. P.N.K. Deenapanray, M. Petravic, C. Jagadish, M. Krispin and F.D. Auret, Electrical characterization of p-GaAs epilayers disordered by doped spin-on-glass, *J. Appl. Phys.* 97, 033524 (7 pages) (2005).
289. M. Buda and C. Jagadish, Computation of the modal reflectivity for a partially etched mirror: application for integration of a laser diode and a waveguide, *Appl. Optics*, 44, 1039-1050 (2005).
290. A. Geizutis, R. Adomavicius, A. Urbanowicz, K. Bertulis, H.H. Tan and C. Jagadish, Carrier recombination properties in low-temperature-grown and ion-implanted GaAs, *Lithuanian J. Phys.* 45, 249-255 (2005).
291. J.S. Williams, S.O. Kucheyev, H.H. Tan, J. Wong-Leung and C. Jagadish, Ion irradiation-induced disordering of semiconductors: defect structures and applications, *Phil. Mag.* 85, 677-687 (2005).
292. S. Mokkapati, P. Lever, H.H. Tan, C. Jagadish, K. McBean, M.R. Phillips, Controlling the properties of InGaAs quantum dots by selective area epitaxy, *Appl. Phys. Lett.* 86, 113102 (3 pages) (2005)
293. E. Castro-Camus, J. Lloyd-Hughes, M.B. Johnston, M.D. Fraser, H.H. Tan and C. Jagadish, Polarization sensitive terahertz detection by multicontact photoconductive receivers, *Appl. Phys. Lett.* 86, 254102 (3 pages) (2005).
294. V.A. Coleman, J.E. Bradby, C. Jagadish, P. Munroe, Y.W. Heo, S.J. Pearton, D.P. Norton, M. Inoue and M. Yano, Mechanical properties of ZnO epitaxial layers grown on a- and c-axis sapphire, *Appl. Phys. Lett.* 86, 203105 (3 pages) (2005).
295. K.Sears, J. Wong-leung, H.H. Tan and C. Jagadish, InAs quantum dots grown on InGaAs buffer layers by metal organic chemical vapour deposition, *Journal of Crystal Growth* 281, 290-296 (2005)
296. L. Fu, P. Lever, H.H. Tan, C. Jagadish, M. Gal, P. Reece, Study of intermixing in InGaAs/(Al)GaAs quantum well and quantum dot structures for optoelectronic/photonic integration, *IEE Proceedings, Devices, Circuits and Systems*, 152, 491-496 (2005).

297. L. Fu, P. Lever, K. Sears, H.H. Tan and C. Jagadish, In_{0.5}Ga_{0.5}As/GaAs quantum dot infrared photodetectors grown by metal organic chemical vapour deposition, *IEEE Electron Device Letters*, 26, 628-630 (2005).
298. V.A. Coleman, H.H. Tan, C. Jagadish, S.O. Kucheyev, J. Zou, Thermal Stability of ion implanted ZnO, *Appl. Phys. Lett.* 87, 231912 (3 pages) (2005).
299. V. A. Coleman, M. Buda, H.H. Tan, C. Jagadish, M.R. Phillips, K. Koike, S. Sasa, M. Inoue and M. Yano, Observation of blue-shifts in ZnO/ZnMgO multiple quantum well structures by ion-implantation induced intermixing, *Semicond. Sci. Technol. Rapid Communication.* 21, L25-L28 (2006).
300. K. Sears, H.H. Tan, J. Wong-Leung and C. Jagadish, The role of arsine in the self-assembled growth of InAs/GaAs quantum dots by metal organic chemical vapor deposition, *J. Appl. Phys.* 99, 044908-5pages (2006).
301. S. Barik, H.H. Tan and C. Jagadish, Comparison of InAs quantum dots grown on InGaAsP and InP, *Nanotechnology* 17, 1867-1870 (2006).
302. J.S. Laird, R.A. Bardos, C. Jagadish, D.N. Jamieson and G.J.F. Legge, Scanning ion deep level transient spectroscopy: I. Theory, *J. Phys. D, Appl. Phys.* 39 1342-1351 (2006).
303. J.S. Laird, R.A. Bardos, C. Jagadish, D.N. Jamieson, G.J.F. Legge, Scanning ion deep level transient spectroscopy: II. Ion irradiated Au-Si Schottky junctions, *J. Phys. D. Appl. Phys.* 39, 1352-1362 (2006).
304. M.Petravic, P.N.K.Deenapanray, V.A.Coleman, C.Jagadish, K-J.Kim, B.Kim, K.Koike, S.Sasa, M.Inoue, and M.Yano, Chemical states of nitrogen in ZnO studied by near-edge x-ray absorption fine structure and core-level photoemission spectroscopies, *Surface Science*, 600, L81-L85 (2006).
305. Yong Kim, H.J. Joyce, Q. Gao, H.H. Tan, C. Jagadish, M. Paladugu, J. Zou and A. Suvorova, Influence of nanowire density on the shape and optical properties of ternary InGaAs nanowires, *Nano Letters*, 6, 599-604 (2006).
306. S. Mokkaapati, H.H. Tan and C. Jagadish, Effect of Auger recombination in the performance of p-doped quantum dot lasers, *Appl. Phys. Lett.* 88, 161121 (3 pages) (2006).
307. S.H. Huang, Z. Chen, F.Z. Wang, S.C. shen, H.H. Tan, L. Fu, M. Fraser and C. Jagadish, Carrier transfer and magneto-transport in single modulation-doped V-grooved quantum wire modified by ion implantation, *J. Lumen.* 119-120, 198-203 (2006).
308. S. Barik, H.H. Tan, C. Jagdaish, N. Vukmirovic and P. Harrison, Selective wavelength tuning of self-assembled InAs quantum dots grown on InP, *Appl. Phys. Lett.* 88, 193112 (3 pages) (2006).
309. P. Gareso, M. Buda, H.H. Tan, C. Jagdaish, S. Ilyas and M. Gal, On quantifying the group V to group III interdiffusion rates in InGaAs/InP quantum wells, *Semicon. Sci. Technol.*, 21, 829-832 (2006)
310. S. Barik, H.H. Tan and C. Jagadish, Proton implantation-induced intermixing in InAs/InP quantum dots, *Appl. Phys. Lett.* 88, 223101 (3 pages) (2006).
311. K. Sears, J. Wong-Leung, H.H. Tan and C. Jagadish, A transmission electron microscopy study of defects formed through the capping layer of self-assembled InAs/GaAs quantum dot samples, *J. Appl. Phys.* 99, 113503 (9 pages) (2006).

312. L. Fu, H.H. Tan, I. McKerracher, J. Wong-Leung, C. Jagadish, N. Vukmirovic and P. Harrison, Effects of rapid thermal annealing on device characteristics of InGaAs/GaAs quantum dot infrared photodetectors, *J. Appl. Phys.*, 99, 114517 (8 pages) (2006).
313. S. Mokkalapati, H.H. Tan and C. Jagadish, Integration of an InGaAs quantum dot laser with a low loss passive waveguide using selective area epitaxy, *IEEE Photonics Technology Letters* 18, 1648-1650 (2006).
314. V. Coleman, J.E. Bradby, C. Jagadish and M.R. Phillips, Observation of enhanced defect emission and excitonic quenching from spherically indented ZnO, *Appl. Phys. Lett.* 89, 081902 (3 pages) (2006).
315. P. L. Gareso, M. Buda, M. Petracic, H.H. Tan and C. Jagadish, Effect of rapid thermal annealing on the atomic intermixing of Zn- and C-doped InGaAs/AlGaAs quantum well laser structures, *J. Electrochem. Soc.* 153, G879-G882 (2006).
316. P.L. Gareso, M. Buda, H.H. Tan, C. Jagadish, L.V. Dao, X. Wen, P. Hannaford, Proton implantation induced intermixing in InGaAs/InP quantum wells, *Semicond. Sci. Technol.*, 21, 1441-1446 (2006).
317. K. Drozdowicz-Tomsia, E.M. Goldys, L. Fu and C. Jagadish, Doping effect on dark current in InGaAs/GaAs quantum dot infrared photodetectors grown by metal-organic chemical vapour deposition, *Appl. Phys. Lett.*, 89, 113510 (3 pages) (2006)
318. J. Siegart, S. Marcinkevicius, L. Fu and C. Jagadish, Recombination properties of Si-doped InGaAs/GaAs Quantum Dots, *Nanotechnology*, 17, 5373-5377 (2006).
319. L.V. Titova, T.B. Hoang, H.E. Jackson, L.M. Smith, J.M. Yarrison-Rice, Y. Kim, H.J. Joyce, H.H. Tan and C. Jagadish, Temperature dependence of photoluminescence from single core-shell GaAs/AlGaAs nanowires, *Appl. Phys. Lett.* 89, 173126 (3pages) (2006).
320. J.A. Davis, L.V. Dao, X. Wen, P. Hannaford, V.A. Coleman, H.H. Tan, C. Jagadish, K. Koike, S. Sasa, M. Inoue and M. Yano, Observation of coherent biexcitons in ZnO/ZnMgO multi-quantum wells at room temperature, *Appl. Phys. Lett.* 89, 182109 (3pages) (2006).
321. Y.N. Guo, J. Zou, M. Paladugu, H. Wang, Q. Gao, H.H. Tan and C. Jagadish, Structural characteristics and growth nature of GaSb/GaAs heterostructures nanowires grown by metal organic chemical vapour deposition, *Appl. Phys. Lett.* 89, 231917 (2006).
322. J. Lloyd-Hughes, L. Fu, S. Merchant, E. Castro-Camus, H.H. Tan, C. Jagadish and M.B. Johnston, Enhanced terahertz emission from surface passivated GaAs, *Appl. Phys. Lett.* 89, 232102 (3 pages) (2006).
323. S.H. Huang, Z.H. Chen, L.H. Bai, X.C. Shen, H.H. Tan, L. Fu, M. Fraser and C. Jagadish, Micro-photoluminescence confocal mapping of single V-grooved GaAs quantum wire, *Chinese Phys. Lett.* 23, 3341-3344 (2006).
324. K. Sears, M. Buda, H.H. Tan and C. Jagadish, Modeling and Characterization of InAs/GaAs Quantum Dot Lasers grown using Metal Organic Chemical Vapor Deposition, *J. Appl. Phys.* 101, 013112 (9 pages) (2007).
325. H.T. Hattori, I. McKerracher, H.H. Tan, C. Jagadish and R.M. De La Rue, In-Plane Coupling of Light from InP Based Photonic Crystal Band-Edge Lasers into Single-Mode Waveguides, *IEEE J. Quantum Electronics* 43, 279- 286 (2007).

326. J. Zou, M. Paladugu, H. Wang, G.A. Auchterlonie, Y. Gao, Y. Kim, Q. Gao, H.J. Joyce, H.H. Tan and C. Jagadish, Growth mechanism of truncated triangular III-V nanowires, *Small* 3, 389-393 (2007).
327. T.B. Hoang, L.V. Titova, J.M. Yarrison-Rice, H.E. Jackson, A.O. Govorov, Y. Kim, H.J. Joyce, H.H. Tan, C. Jagadish and L.M. Smith, Resonant excitation and imaging of non-equilibrium exciton spins in single core-shell GaAs-AlGaAs nanowires, *Nano Lett.* 7, 588-595 (2007).
328. S. Barik, H.H. Tan and C. Jagadish, P ion implantation induced intermixing in InP/InAs QDs, *Appl. Phys. Lett.* 90, 093106 (3 pages) (2007).
329. S. Barik, H.H. Tan and C. Jagadish, Comparison of proton and P ion implantation induced intermixing in InAs/InP quantum dots, *Nanotechnology* 18, 175305 (4 pages) (2007).
330. H.J. Joyce, Yong Kim, Q. Gao, H.H. Tan, C. Jagadish, Y. Kim, X. Zhang, Y. Guo and J. Zou, Twin free uniform epitaxial GaAs nanowires grown a two temperature process, *Nano Lett.* 7, 921-926 (2007).
331. S.G. Matsik, M.B.M. Rinzan, A.G.U. Perera, H.H. Tan, C. Jagadish and H.C. Liu, Effects of a p-n junction on heterojunction far infrared detectors, *Infrared Physics and Technology* 50, 274-278 (2007).
332. N. Sathish, S. Dhamodaran, A.P. Pathak, M. Ghanashyam Krishna, S.A. Khan, D.K. Avasthi, A. Pandey, R. Muralidharan, G. Li and C. Jagadish, HRXRD, AFM and Optical study of damage created by swift heavy ion irradiation in GaN epitaxial layers, *Nucl. Instrum. Meth. B* 256, 281-287 (2007).
333. S. Mokkaapati, H.H. Tan and C. Jagadish, Multiple wavelength InGaAs quantum dot lasers using selective area epitaxy, *Appl. Phys. Lett.* 90, 171104 (3 pages)(2007).
334. X. Wen, L.V. Dao, J.A. Davis, P. Hannaford, V.A. Coleman, H.H. Tan, C. Jagadish, K. Koike, S. Sasa, M. Inoue and M. Yano, Temperature dependent photoluminescence in oxygen ion implanted and rapid thermally annealed ZnO/ZnMgO multiple quantum wells, *Appl. Phys. Lett.* 90, 221914 (3 pages) (2007).
335. E. Castro-Camus, J. Lloyd-Hughes, L. Fu, H.H. Tan, C. Jagadish, M.B. Johnston, An ion-implanted InP receiver for polarization resolved terahertz spectroscopy, *Optics Express* 15, 7047- 7057 (2007).
336. S. Barik, L. Fu, H.H. Tan and C. Jagadish, Impurity free disordering of InAs/InP quantum dots, *Appl. Phys. Lett.* 90, 243114 (3 pages) (2007).
337. X.M. Wen, J.A. Davis, D. McDonald, L.V. Dao, P. Hannaford, V.A. Coleman, H.H. Tan, C. Jagadish, K. Koise, S. Sasa, M. Inoue and M. Yano, Ultrafast dynamics in ZnO/ZnMgO multiple quantum wells, *Nanotechnology*, 18, 315403 (2007) (5 pages).
338. P.P. Parkinson, J. Lloyd-Hughes, Q. Gao, H.H. Tan, C. Jagadish, M.B. Johnston and L.M. Herz, Time resolved terahertz conductivity of GaAs nanowires, *Nano Lett* 7, 2162-2165 (2007).
339. Y. Kim, M.S. Song, Y.D. Kim, J.H. Jung, Q. Gao, H.H. Tan and C. Jagadish, Epitaxial germanium nanowires on GaAs grown by chemical vapor deposition, *J. Korean Physical Society*, 51, 120-124 (2007).

340. L. Fu, I. McKerracher, H.H. Tan, C. Jagadish, N. Vukmirovic and P. Harrison, Effect of GaP strain compensation layers on rapid thermally annealed InGaAs/GaAs quantum dot infrared photodetectors grown by metal organic chemical vapor deposition, *Appl. Phys. Lett* 91, 073515 (3 pages) (2007).
341. X.M. Wen, L.V. Dao, J. Davis, P. Hannaford, S. Mokkaapati, H.H. Tan and C. Jagadish, Carrier dynamics in p-type InGaAs/GaAs quantum dots, *J. Mat. Sci., Materials in Electronics* 18, S363-S365 (2007).
342. P.L. Gareso, M. Buda, L. Fu, H.H. Tan and C. Jagadish, Influence of SiO₂ and TiO₂ dielectric layers on the atomic intermixing of InGaAs/InP quantum well structures, *Semicon. Sci. Technol.* 22, 988-992 (2007).
343. X.M. Wen, L.V. Dao, P. Hannaford, S. Mokkaapati, H.H. Tan and C. Jagadish, The state filling effects in p-doped InGaAs/GaAs quantum dots, *J. Phys. Condens. Matter*, 19, 386213 (10 pages) (2007).
344. M. Paladugu, J. Zou, G.J. Auchterlonie, Y.N. Guo, Y. Kim, H.J. Joyce, Q. Gao, H.H. Tan and C. Jagadish, Evolution of InAs branches in InAs/GaAs nanowire heterostructures, *Appl. Phys. Lett.* 91, 133115 (3 pages) (2007).
345. H.T. Hattori, H.H. Tan and C. Jagadish, Analysis of optically pumped compact laterally coupled distributed feedback lasers with three symmetric defect regions, *J. Appl. Phys* 102, 083109 (8 pages) (2007).
346. G.V. Jolley, L. Fu, H.H. Tan and C. Jagadish, Influence of well and barrier composition on spectral response of quantum dots in a well infrared photodetector, *Appl. Phys. Lett* 91, 173508 (3 pages) (2007).
347. L.V. Titova, T.B. Hoang, L.M. Smith, H.E. Jackson, J.M. Yarrison Rice, Yong Kim, H.J. Joyce, Qiang Gao, H.H. Tan and C. Jagadish, Dynamics of strongly degenerate electron-hole plasmas and excitons in single InP nanowires, *Nano Letts.* 7, **3383-3387** (2007).
348. M. Paladugu, J. Zou, Y.N. Gao, G.J. Auchterlonie, Q. Gao, H.J. Joyce, H.H. Tan, C. Jagadish and Y. Kim, Novel growth phenomena observed in axial InAs/GaAs nanowire heterostructures, *Small* 3, 1873-1877 (2007).
349. S. Mokkaapati, S. Du, M. Buda, L. Fu, H.H. Tan and C. Jagadish, Multi-wavelength InGaAs quantum dot lasers by ion implantation induced interdiffusion, *Nanoscale Research Lett* 2, 550-553 (2007).
350. A. Mishra, L.V. Titova, T.B. Hoang, J.M. Yarrison-Rice, H.E. Jackson, L.M. Smith, Y. Kim, H.J. Joyce, Q. Gao, H.H. Tan and C. Jagadish, Polarization and temperature dependence from zincblende and wurtzite InP nanowires, *Appl. Phys. Lett.* 91, 263104 (3 pages) (2007).
351. J.A. Davis, L.V. Dao, X. Wen, C. Ticknor, P. Hannaford, V.A. Coleman, H.H. Tan, C. Jagadish, K. Koike, S. Sasa, M. Inoue and M. Yano, Suppression of the internal piezoelectric field in ZnO/ZnMgO quantum wells by ion implantation induced intermixing, *Nanotechnology* 19, 055205 (4 pages) (2008).
352. S. Mokkaapati, H.H. Tan, C. Jagadish and M. Buda, Self sustained output power pulsations in InGaAs/GaAs quantum dot ridge waveguide lasers, *Appl. Phys. Lett.* 92, 021104 (3 pages) (2008).
353. M.S. Song, J.H. Jung, Y. Kim, Y. Wang, J. Zou, H.J. Joyce, Q. Gao, H.H. Tan and C. Jagadish, Vertically standing Ge nanowires on GaAs(110) substrates, *Nanotechnology* 19, 125602 (6 pages) (2008).

354. S. Mokkaapati, J. Wong-Leung, H.H. Tan, C. Jagadish, K.E. McBean and M.R. Phillips, Tuning the bandgap of InAs quantum dots by selective area MOCVD, *J. Phys. D: Appl. Phys.* 41, 085104 (2008) (4 pages)
355. M. Buda, G. Iordache, S. Mokkaapati, H.H. Tan, C. Jagadish, V. Stancu and T. Botila, Capacitance spectroscopy study of InGaAs/GaAs quantum dot structures, *J. Optoelectronics*, 10, 323-326 (2008).
356. X.M. Wen, L.V. dao, P. Hannaford, S. Mokkaapati, H.H. Tan and C. Jagadish, Electron dynamics in modulation p-doped InGaAs/GaAs quantum dots, *Eur. Phys. J. B* 62, 65-70 (2008).
357. G.Jolley, L. Fu, H.H. Tan and C. Jagadish, Effects of well thickness on the spectral properties of In_{0.5}Ga_{0.5}As/GaAs/Al_{0.2}Ga_{0.8}As quantum dots-in-a-well infrared photodetectors, *Appl. Phys. Lett.* 92, 193507 (2008) (3 pages).
358. H.T. Hattori, H.H. Tan and C. Jagadish, Optically pumped in-plane photonic crystal microcavity laser arrays coupled to waveguides, *IEEE/OSA Journal of Lightwave Technology*, 26, 1374-1380 (2008).
359. J. Wong-Leung, M.S. Janson, A.Y. Kuznetsov, B.G. Svensson, M.K. Linnarson, A.Hallen, C. Jagadish and D.J.H. Cockayne, Ion implantation into 4H-SiC, *Nucl. Instrm. Meth. B*, 266, 1367-1372 (2008).
360. L. Fu, Q. Li, P. Kuffner, G.Jolley, P. Gareso, H.H. Tan, C. Jagadish, Two-color InGaAs/GaAs quantum dot infrared photodetectors by selective area interdiffusion, *Appl. Phys. Lett.* 93, 013504 (3 pages) (2008).
361. A. Zubiaga, F. Tuomisto, V.A. Coleman, H.H. Tan, C. Jagadish, K. Koike, S. Sasa, M. Inoue and M. Yano, Mechanisms of electrical isolation in O⁺ irradiated ZnO, *Phys. Rev. B* 78, 035125 (2008) (5 pages).
362. Ma Buda, G. Iordache, S. Mokkaapati, L. Fu, G. Jolley, H.H. Tan, C. Jagadish and Mi Buda, Analytical expression for the quantum dot contribution to the quasi static capacitance for conduction band characterization, *J. Appl. Phy.* 104, 023713 (2008) (11 pages).
363. S. Perera, M.A. Fickenscher, H.E. Jackson, L.M. Smith, J.Yarrison-Rice, H.J. Joyce, Q.Gao, H.H.Tan, C.Jagadish, X. Zhang and J. Zou, Nearly Intrinsic Exciton Lifetimes in Single Twin-Free GaAs/AlGaAs Core-Shell Nanowire Heterostructures, *Appl. Phys. Lett.* 93, 053110 (2008) (3 pages).
364. E. Castro-Camus, L. Fu, J. Lloyd-Hughes, H.H.Tan, C. Jagadish, M.B. Johnston, Photoconductive response correction for detectors of terahertz radiation, *J. Appl. Phys.* 104, 053113 (2008) (7 pages).
365. M. Paladugu, J. Zou, Y.N. Guo, X. Zhang, Y. Kim, H.J. Joyce, Q. Gao, H.H. Tan and C. Jagadish, Nature of hetero-interfaces in GaAs/InAs and InAs/GaAs axial nanowire heterostructures, *Appl. Phys. Lett* 93, 101911 (2008) (3 pages).
366. A. Zubiaga, F. Tuomisto, V.A. Coleman and C. Jagadish, Positron study of ion implantation ZnO, *Appl. Surf. Sci.* 255, 234-236 (2008).
367. V.S. Amaratunga, H.T. Hattori, M. Premaratne, H.H. Tan, C. Jagadish, Photonic crystal phase detectors, *J.Opt. Soc. Amer. B* 25, 1532-1536 (2008).
368. Q. Li, S. Barik, H.H. Tan and C. Jagadish, Effect of ion implantation enhanced intermixing on luminescence of InAs/InP quantum dots, *J. Phys. D.: Applied Physics*, 41, 205117 (2008) (6 pages).

369. G.V. Jolley, L. Fu, H.H. Tan and C. Jagadish, Effects of annealing on the spectral response and dark current of quantum dot infrared photodetectors, *J. Phys. D. Appl. Phys.* 41, 215101 (2008) (7 pages).
370. M. Paladugu, J. Zou, Y.N. Guo, X. Zhang, H.J. Joyce, Q. Gao, H.H. Tan, C. Jagadish, Y. Kim, Polarity driven formation of InAs/GaAs hierarchical nanowire heterostructures, *Appl. Phys. Lett.* 93, 201908 (2008) (3 pages).
371. H.J. Joyce, Q. Gao, H.H. Tan, C. Jagadish, Y. Kim, M.A. Fickenscher, S. Perera, T.B. Hoang, L.M. Smith, H.E. Jackson, J.M. Yarrison-Rice, X. Zhang, J. Zou, High purity GaAs nanowires free of planar defects: growth and characterization, *Adv. Functional Mater.* 18, 3794-3800 (2008).
372. T. Burgess and C. Jagadish, Nanoscale materials: How small is big, *Proc. IEEE*, 96, 1895-1897 (2008).
373. M. Paladugu, J. Zou, Y.N. Guo, X. Zhang, H.J. Joyce, Q. Gao, H.H. Tan, C. Jagadish, Y. Kim, Formation of nanorings in radial nanowire heterostructures, *Ang. Chemie. Int. Ed.* 48, 780-783 (2009).
374. X. Wen, J.A. Davis, L.V. Dao, P. Hannaford, V.A. Coleman, H.H. Tan, C. Jagadish, K. Koike, S. Sasa, M. Inoue and M. Yano, Thermal quenching of photoluminescence in ZnO/ZnMgO multiple quantum wells following oxygen implantation and rapid thermal annealing, *J. Lumin.* 129, 153-157 (2009).
375. X. Zhang, J. Zou, M. Paladugu, Y. Guo, Y. Wang, Yong. Kim, H.J. Joyce, Q. Gao, H.H. Tan and C. Jagadish, Evolution of epitaxial InAs nanowires grown on GaAs (111)B by MOCVD, *Small* 5, 366-369 (2009).
376. H.T. Hattori, D. Liu, H.H. Tan and C. Jagadish, Large square resonator with quasi single mode operation, *IEEE Photonics Technology Letters* 21, 359-361 (2009).
377. H.J. Joyce, Q. Gao, H.H. Tan, C. Jagadish, Y. Kim, M.A. Fickenscher, S. Perera, T.B. Hoang, L.M. Smith, H.E. Jackson, J.M. Yarrison-Rice, X. Zhang and J. Zou, Unexpected benefits of rapid growth rate for III-V nanowires, *Nano Letts.* 9, 695-701 (2009).
378. K. Pemasiri, M. Montazeri, R. Gass, L.M. Smith, H.E. Jackson, J. Yarrison-Rice, S. Paiman, Q. Gao, H.H. Tan, C. Jagadish, X. Zhang and J. Zou, Carrier dynamics and quantum confinement in type II ZB-WZ InP nanowire heterostructures, *Nano Letts.* 9, 648-654 (2009).
379. A. Minovich, H.T. Hattori, I. McKerracher, H.H. Tan, D.N. Neshev, C. Jagadish, Y.S. Kivshar, Extraordinary transmission of light through periodic and chirped lattices of nanoholes, *Opt. Comms.* 282, 2023-27 (2009).
380. M. Paladugu, J. Zou, Y.N. Guo, X. Zhang, H.J. Joyce, Q. Gao, H.H. Tan, C. Jagadish and Y. Kim, Crystallographically driven Au catalyst movement during growth of InAs/GaAs axial nanowire heterostructures, *J. Appl. Phys.* 105, 073503 (2009).
381. G. Jolley, L. Fu, H.H. Tan and C. Jagadish, Properties of InGaAs/GaAs/AlGaAs quantum dots in a well infrared photodetectors, *J. Phys. D. Appl. Phys.* 42, 095101 (2009) (8 pages).
382. H. Dong, Z. Chen, L. Sun, J. Lu, W. Xie, H.H. Tan, C. Jagadish, X. C. Shen, Whispering gallery modes in indium oxide hexagonal microcavities, *Appl. Phys. Lett.* 94, 173115 (2009) (3 pages).

383. S. Paiman, Q. Gao, H.H. Tan, C. Jagadish, K. Pemasiri, M. Montazeri, L.M. Smith, H.E. Jackson and J. Yarrison-Rice, X. Zhang, J. Zou, V/III ratio and size effects on the crystal structure and optical properties of InP nanowires, *Nanotechnology* 20, 225606 (2009) (7 pages).
384. G.Jolley, L. Fu, H.H. Tan and C. Jagadish, Effects of annealing on the properties of InGaAs/GaAs/AlGaAs quantum dots in a well infrared photodetector, *J. Phys.D. Appl. Phys.* 42, 115103 (2009) (5 pages).
385. A. Maharjan, K. Pemasiri, P. Kumar, A. Wade, L.M. Smith, H.E. Jackson, J.M. Yarrison-Rice, A. Kogan, S. Paiman, Q. Gao, H.H. Tan and C. Jagadish, Room temperature photocurrent spectroscopy of single zincblende and wurtzite InP nanowires, *Appl. Phys. Lett.* 94, 193115 (2009) (3 pages).
386. V.S. Amaratunga, H.T. Hattori, M. Premaratne, H.H. Tan, C. Jagadish, Directional optically pumped lateral coupled DFB lasers, *IEEE/OSA J. Lightwave Technology* 27, 1425-1433 (2009).
387. H. Dong, Z. Chen, L. Sun, L. Zhou, Y. Ling, C. Yu, H.H. Tan, C. Jagadish and S.C. Shen, Nanosheets based rhombohedral In₂O₃ 3D hierarchical microspheres: synthesis, growth and optical properties, *J. Phys. Chem. C* 113, 10511-10516 (2009).
388. D. Liu, H.T. Hattori, L. Fu, H.H. Tan and C. Jagadish, Single mode operation of a large optically pumped triangular laser with lateral air trenches, *J. Opt. Soc. Amer. B* 26, 1417-1422 (2009).
389. W. Lei, H.H. Tan and C. Jagadish, Formation and shape control of InAsSb/InP (001) nanostructures, *Appl. Phys. Lett* 95, 013108 (2009) (3 pages).
390. M. Paladugu, J. Zou, Y.N. Guo, X. Zhang, H.J. Joyce, Q. Gao, H.H. Tan, C. Jagadish and Y. Kim, Evolution of wurtzite structured GaAs shells around InAs nanowire cores, *Nanoscale Research Letters* 4, 846-849 (2009).
391. W. Lei, C. Notthoff, M. Offer, C. Meier, A. Lorke, C. Jagadish and A.D. Wieck, Electron energy structure of self-assembled In(Ga)As nanostructures probed by capacitance-voltage spectroscopy and one-dimensional numerical simulation, *J. Mater. Res.*, 24, 2179-2184 (2009).
392. P. Parkinson, H. Joyce, Q. Gao, H.H. Tan, C. Jagadish, L.M. Herz and M.B. Johnston, Carrier lifetime and mobility enhancement in nearly defect free core-shell nanowires measured using time-resolved terahertz spectroscopy, *Nano Lett* 9, 3349-3353 (2009).
393. P. Reece, S. Paiman, O. Abdul-Nabi, M. Gal, H.H. Tan and C. Jagadish, Combined optical trapping and micro-photoluminescence of single InP nanowires, *Appl. Phys. Lett.* 95, 101109 (2009) (3 pages).
394. I.D. Rukhlenko, D. Handapangoda, M. Premaratne, A.V. Fedorov, A.V. Baranov and C. Jagadish, Spontaneous emission of guided polaritons by quantum dot coupled to metallic nanowire: beyond the dipole approximation, *Opt. Exp.* 17, 17570-17581 (2009).
395. D. Liu, H.T. Hattori, L. Fu, H.H. Tan and C. Jagadish, Coupling analysis of GaAs based micro-disk lasers with different external claddings, *IEEE/OSA Journal of Lightwave Technology*, 27, 5090-5098 (2009).

396. W. Lei, H.H. Tan and C. Jagadish, Effect of matrix material on the morphology and optical properties of InAsSb nanostructures, *Appl. Phys. Lett* 95, 143124 (2009) (3 pages).
397. H. Xu, Y. Guo, Y. Wang, J. Zou, J-H. Kang, Q. Gao, H.H. Tan and C. Jagadish, Effects of annealing and substrate orientation on epitaxial growth of GaAs on Si, *J. Appl. Phys.* 106, 083514 (2009) (4 pages).
398. Q. Gao, H.J. Joyce, S. Paiman, J.H. Kang, H.H. Tan, Y. Kim, L.M. Smith, H.E. Jackson, J.M. Yarrison-Rice, X. Zhang, J. Zou and C. Jagadish, Nanowires for optoelectronic device applications, *Phys. Stat. Sol. C* 6, 2678-2682 (2009).
399. C. R. Hall, L.V. Dao, K. Koike, S. Sasa, H. H. Tan, M. Inoue, M. Yano, P. Hannaford, C. Jagadish, and J. A. Davis, Recombination dynamics and screening of the internal electric field in ZnO multiple quantum wells, *Phys. Rev. B* 80, 235316 (2009) (6 pages).
400. H. Dong, Z. Chen, L. Sun, J. Lu, W. Xie, H.H. Tan, C. Jagadish, X.C. Shen, Synthesis of indium oxide hexagonal microcavity and identification of whispering gallery modes, *Phys. Stat. Sol. (c)* 7, 1672-1674 (2010).
401. J-H. Kang, Q. Gao, H.J. Joyce, H.H. Tan, C. Jagadish, Y. Kim, D-Y. Choi, Y. Guo, H. Xu, J. Zou, M.A. Fickenscher, L.M. Smith, H.E. Jackson and J.M. Yarrison-Rice, Novel growth and properties of GaAs nanowires grown on silicon using double buffer layers, *Nanotechnology* 21, 035604 (2010) (6 pages).
402. S. Charnvanichborikarn, J. Wong-Leung, J. S. Williams, C. Jagadish, B.J. Willis, B.C. Johnson and J.C. McCallum, Effect of boron on interstitial related luminescence centers in silicon, *Appl. Phys. Lett* 96, 051906 (2010) (3pages).
403. D. Liu, H.T. Hattori, L. Fu, H.H. Tan and C. Jagadish, Increasing the coupling efficiency of a microdisk laser to waveguide by using well designed spiral structures, *J. Appl. Phys.* 107, 043105 (2010) (8 pages).
404. M. Montazeri, M. Fickenscher, L.M. Smith, H.E. Jackson, J. Yarrison-Rice, J-H. Kang, Q. Gao, H.H. Tan, C. Jagadish, Y. Guo, J. Zou, M-E. Pistol, C. Pryor, Direct Measure of Strain and Electronic Structure in GaAs/GaP Core-Shell Nanowires, *Nano Lett* 10, 880-886 (2010).
405. H.J. Joyce, J. Wong-Leung, Q. Gao, H.H. Tan and C. Jagadish, Phase perfect zincblende and wurtzite III-V nanowires using basic growth parameters, *Nano Lett.* 10, 908-915 (2010).
406. A.Minovich, D.N. Neshev, D. Powell, I.V. Shadrivov, M. Lapine, I. McKerracher, H.T. Hattori, H.H. Tan, C. Jagadish, Y.S. Kivshar, Tilted response of fishnet metamaterials at near-infrared wavelengths, *Phys. Rev. B* 81, 115109 (2010) (6 pages).
407. Y. L. Kim, J.H. Jung, H.S. Yoon, M.S. Song, S.H. Bae, Y. Kim, Z.G. Chen, J. Zou, H.J. Joyce, Q. Gao, H.H. Tan and C. Jagadish, CdS/CdSe lateral heterostructure nanobelts by a two-step physical vapour transport method, *Nanotechnology* 21, 145602 (2010) (5 pages).
408. D.Y. Liu, H.T. Hattori, L. Fu, H.H. tan and C. Jagadish, The temperature dependence of InGaAs single wavelength quantum well and multi-wavelength quantum dot square resonator microlasers, *J. Phys.D. Appl. Phy.* 43, 135102 (2010) (6 pages).

409. A. Majid, L. Fu, C. Jagadish and H. Tan, MOCVD grown quantum dot in a well solar cells, *Key Engineering Materials*, 442, 398-403 (2010)
410. V. Amaratunga, M. Premaratne, H.T. Haroldo, H.H. Tan and C. Jagadish, Performance assessment of hybrid surface emitting lasers with lateral one-dimensional photonic crystal mirrors, *J. Opt. Soc. Am. B*, 27, 806-817 (2010).
411. Q. Li, H.H. Tan and C. Jagadish, A new optical front-end compensation technique for suppression of spurious signal in photorefectance spectroscopy using an antipahse signal, *Rev. Sci. Instrum*, 81, 043102 (2010) (4 pages).
412. S.Du, L. Fu, H.H. Tan and C. Jagadish, Investigation of impurity-free vacancy disordering in (Al)InGaAs(P)/InGaAs quantum wells, *Semicond. Sci.Technol.* 25, 055014 (2010) (7 pages).
413. C.R. Hall, L.V. Dao, K. Koike, S. Sasa, H.H. Tan, M. Inoue, M. Yano, C. Jagadish and J.A. Davis, Using graded barriers to control the optical properties of ZnO/ZnMgO quantum wells with an intrinsic internal electric field, *Appl. Phys. Lett.* 96, 193117 (2010) (3 pages).
414. W. Lei, H.H. Tan and C. Jagadish, Enhanced photoluminescence efficiency of mid-infrared InAsSb nanostructures using a carrier blocking layer, *Appl. Phys. Lett.* 96, 213102 (2010) (3 pages)
415. H. Dong, Z. Chen, L. Sun, W. Xie, H.H. Tan, J. Lu, C. Jagadish and X.C. Shen, Single crystalline ZnO microtube hexagonal optical resonators, *J. Mater. Chem.* 20, 5510-5515 (2010).
416. G.V. Jolley, L. Fu, H.H. Tan, C. Jagadish, The influence of doping on the device characteristics of InGaAs/GaAs/AlGaAs quantum dots in a well infrared photodetectors, *Nanoscale*, 2, 1128-1133 (2010).
417. Jae Hun Jung, Hyun Sik Yoon, Yu Lee Kim, Man Suk Song, Yong Kim, Zhi Gang Chen, Jin Zou, Duk Yong Choi, Jung Hyun Kang, Hannah J. Joyce, Qiang Gao, H. Hoe Tan and Chennupati Jagadish, Vertically oriented epitaxial germanium nanowires on silicon substrates using thin germanium buffer layers, *Nanotechnol* 21, 295602 (2010) (9 pages).
418. S. Perera, K. Pemasiri, M. Fickenscher, H.E. Jackson, J. Yarisson-Rice, L.M. Smith, S. Paiman, Q. Gao, H.H. Tan and C. Jagadish, Probing valence band structure in Wurtzite InP nanowires using excitation spectroscopy, *Appl. Phys. Lett.* 97, 023106 (2010) (3 pages).
419. W. Lei, H.H. Tan and C. Jagadish, Emission wavelength extension of mid-infrared InAsSb/InP nanostructures using InGaAsSb sandwich layers, *J. Phys. D: Appl. Phys.* 43, 302001 (2010) (5 pages).
420. I. McKerracher, L. Fu, H.H. Tan and C. Jagadish, Thermal expansion coefficients and composition of sputter-deposited silicon oxynitride thin films, *J. Phys. D: Appl. Phys.* 43, 335104 (2010) (8 pages).
421. T. Hakkarainen, O. Douheret, S. Anand, L. Fu, H.H. Tan and C. Jagadish, Spatially resolved characterisation of InGaAs/GaAs quantum dot structures by scanning spreading resistance microscopy, *Appl. Phys. Lett.* 97, 041106 (2010).
422. D.N. Neshev, A. Minovich, T. Dieing, H.T. Hattori, I. McKerracher, H.H. Tan, C. Jagadish, Y.S. Kivshar, Near-field studies of arrays of chirped subwavelength apertures, *Phys. Stat. Sol. RRL* 4, 253-255 (2010).

423. G. Jolley, H. Lu, L. Fu, H.H. Tan and C. Jagadish, Electron-hole recombination properties in InGaAs/GaAs quantum dot solar cells and the influence on the open circuit voltage, *Appl. Phys. Lett.* 97, 123505 (2010) (3 pages).
424. S. Saha, K. Sreenivas, V. Gupta, H.H. Tan and C. Jagadish, Third generation biosensing matrix based on Fe-implanted ZnO thin film, *Appl. Phys. Lett.* 97, 133704 (2010).
425. S. Paiman, Q. Gao, H.J. Joyce, Y. Kim, H.H. Tan, C. Jagadish, X. Zhang, Y. Guo and J. Zou, Growth temperature and V/III ratio effects on the morphology and crystal structure of InP nanowires, *J. Phys. D. Appl. Phys.* 43, 445402 (2010) (6 pages).
426. P. Zhang, Y.R. Song, X.P. Zhang, J.R. Tian, C. Jagadish, H.H. Tan and Z.G. Zhang, Tunable, high beam quality and narrow linewidth semiconductor disk laser, *Optical Engg.* 49, 104201 (2010) (5 pages).
427. W. Lei, H.H. Tan, C. Jagadish, Q.J. Ren, J. Lu and Z. H. Chen, Strain relaxation and phonon confinement in self-assembled InAsSb/InP(001) quantum dashes: effect of deposition thickness and composition, *Appl. Phys. Lett.* 97, 223108 (2010) (3 pages).
428. D. Handapangoda, I.D. Rukhlenko, M. Premaratne and C. Jagadish, Optimization of gain assisted waveguiding in metal-dielectric nanowires, *Optics Lett.* 35, 4190-4192 (2010).
429. C. Headley, L. Fu, P. Parkinson, X. Xu, J. Lloyd-Hughes, C. Jagadish and M.B. Johnston, Improved performance of GaAs based Terahertz emitters via surface passivation and silicon nitride encapsulation, *IEEE J. Selected Topics in Quantum Electron.*, 17, 17-21 (2011).
430. Y.B. Wang, L. Wang, H.J. Joyce, Q. Gao, X.Z. Liao, Y-W.Mai, H.H. Tan, J. Zou, S.P. Ringer, H. Gao and C. Jagadish, Super deformability and Young's Modulus of GaAs Nanowires, *Adv. Materials* 23, 1356-1360 (2011).
431. J. C. McCallum, B. J. Villis, B. C. Johnson, N. Stavrias, J. E. Burgess, S. Charnvanichborikarn, J. Wong-Leung, J. S. Williams, C. Jagadish, Effect of boron on formation of interstitial-related luminescence centres in ion implanted silicon, *Physica Status Solidi (a)* 208, 620-623 (2011).
432. M. Lysevych, H.H. Tan, F. Karouta and C. Jagadish, Single-step RIE fabrication process of low loss InP waveguide using CH₄/H₂ chemistry, *J. Electrochem. Soc.* 158, H281-H284 (2011).
433. R. Menon, V. Gupta, H.H. Tan, K. Sreenivas and C. Jagadish, Origin of stress in radio frequency magnetron sputtered zinc oxide thin films, *J. Appl. Phys.* 109, 064905 (2011).
434. Y.B. Wang, H.J. Joyce, Q. Gao, X.Z. liao, H.H. Tan, J. Zou, S.P. Ringer, Z.W. Shan and C. Jagadish, Self-healing of fractured GaAs Nanowires, *Nano Lett.* 11, 1546-1549 (2011).
435. H.F. Lu, L. Fu, G. Jolley, H.H. Tan, S.R. Tatavarti and C. Jagadish, Temperature dependence of dark current properties of InGaAs/GaAs quantum dot solar cells, *Appl. Phys. Lett.* 98, 183508 (2011) (3 pages).
436. I. McKerracher, J. Wong-Leung, G. Jolley, L. Fu, H.H. Tan and C. Jagadish, Selective intermixing of InGaAs/GaAs quantum dot infrared photodetectors, *IEEE J. Quantum Electronics*, 47, 577-590 (2011).

437. Q.Gao, H.J. Joyce, S. Paiman, J.H. Kang, H.H. Tan, Y. Kim, L.M. Smith, H.E. Jackson, J.M. Yarrison-Rice, J. Zou and C. Jagadish, III-V compound semiconductor nanowires for optoelectronic device applications, *Intl. J. High Speed Electronics and Systems*, 20, 131-141 (2011).
438. P.J. Reece, W.J. Toe, F. Wang, S. Paiman, Q. Gao, H.H. Tan and C. Jagadish, Characterization of semiconductor nanowires using optical tweezers, *Nano Lett.* 11, 2375-2381 (2011).
439. J. H. Kang, Q. Gao, H.J. Joyce, C. Jagadish, Y. Kim, Y. Guo, H. Xu, J. Zou, M.A. Fickenscher, L.M. Smith, H.E. Jackson and J.M. Yarrison-Rice, Defect free GaAs/AlGaAs core-shell nanowires on Si substrates, *Crystal Growth and Design* 11, 3109-3114 (2011).
440. J. Davis, C.Hall, H. Quiney, K.A. Nugent, H.H. Tan and C. Jagadish, Three-dimensional electronic spectroscopy of excitons in asymmetric quantum wells, *J. Chemical Physics* 135, 044510 (2011).
441. D. Handapangoda, M. Premaratne, I.D. Rukhlenko and C. Jagadish, Optimal design of composite nanowires for extended reach of surface plasmon polaritons, *Opt. Exp.* 19, 16058-16074 (2011).
442. H.J. Joyce, Q. Gao, J. Wong-Leung, Y. Kim, H.H. Tan and C. Jagadish, Tailoring GaAs, InAs and InGaAs nanowires for optoelectronic device integration, *IEEE Journal of Selected Topics in Quantum Electronics* 17, 766-778 (2011).
443. Z. Li, H.T. Hattori, L. Fu, H.H. Tan and C. Jagadish, Merging of photonic wire lasers and nano-antennas, *J. Lightwave Technol.* 29, 2690-2697 (2011).
444. M. Messing, J. Wong-Leung, Z. Zanolli, H.J. Joyce, H.H. Tan, Q. Gao, L.R. Wallenberg, J. Johansson and C. Jagadish, Achieving straight growth of InAs-on-GaAs nanowire heterostructures, *Nano Lett* 11, 3899-3905 (2011).
445. F. Wang, P. Reece, S. Paiman, Q. Gao, H.H. Tan and C. Jagadish, Nonlinear optical processes in optically trapped InP nanowires, *Nano Letts* 11, 4149-4153 (2011).
446. M. Montazeri, A. Wade, M. Fickenscher, H.E. Jackson, L.M. Smith, J.M. Yarrison-Rice, Q. Gao, H.H. Tan and C. Jagadish, Photomodulated Rayleigh scattering of single semiconductor nanowires: probing electronic band structure, *Nano Lett.* 11, 4329-4336 (2011).
447. A. A. Arroyo, P. Reece, F. Karouta, K. Vora and C. Jagadish, Wavelength selective filter based on polarization control in a photonic bandgap structure with a defect, *Opt. Express* 19, 25643-25650 (2011).
448. W. Lei, H.H. Tan and C. Jagadish, Controlling the morphology and optical properties of self-assembled InAsSb/InGaAs/InP nanostructures via Sb exposure, *Appl. Phys. Lett.* 99, 193110 (2011) (3 pages).
449. S. C. Du, L. Fu, H.H. Tan and C. Jagadish, Investigation of ion implantation induced intermixing in InP based quaternary quantum wells, *J. Phys. D: Appl. Phys.* 44, 475105 (2011) (7 pages).
450. M.A. Fickenscher, H.E. Jackson, L.M. Smith, J.M. Yarrison-Rice, J.H. kang, S. Paiman, Q. Gao, H.H. Tan and C. Jagadish, Direct imaging of the spatial diffusion of excitons in single semiconductor nanowires, *Appl. Phys. Lett.* 99, 263110 (2011).
451. M.D. Fraser, H.H. Tan and C. Jagadish, Selective confinement of macroscopic long-lifetime exciton and trion populations, *Phys. Rev. B* 84, 245318 (2011)

452. J.H. Kim, S.R. Moon, H.S. Yoon, J.H. Jung, Y. Kim, Z.G. Chen, J. Zou, D.Y. Choi, H.J. Joyce, Q. Gao, H.H. Tan and C. Jagadish, Taper-Free and vertically oriented Ge nanowires on Ge/Si substrates grown by a two-temperature process, *Crystal Growth and Design*, 12, 135-141 (2012).
453. J.H. Kim, S.R. Moon, Y. Kim, Z.G. Chen, J. Zou, D.Y. Choi, H.J. Joyce, Q. Gao, H.H. Tan and C. Jagadish, Taper-free and kinked germanium nanowires grown on silicon via purging and the two-temperature process, *Nanotech.* 23, 115603 (2012) 3 pages.
454. H.F. Lu, S. Mokkaḡapati, H.H. Tan and C. Jagadish, Plasmonic quantum dot solar cells for enhance IR response, *Appl. Phys. Lett* 100, 103505 (2012) (3 pages).
455. A. Minovich, J. Farnell, D.N. Neshev, I. McKerracher, F. Karouta, J. Tian, D.A. Powell, I.V. Shadrivov, H.H.Tan, C. Jagadish and Y.S. Kivshar, Liquid crystal based nonlinear fishnet metamaterials, *Appl. Phys. Lett* 100, 121113 (2012) (3 pages).
456. H.Y. Xu, Y. Wang, Y.N. Guo, Z.M. Liao, Q. Gao, H.H. Tan, C. Jagadish and J. Zou, Growth of high-density, defect free and taper-restrained epitaxial GaAs nanowires induced from annealed Au thin films, *Crystal Growth and Design*, 12, 2018-2022 (2012).
457. L. Vines, J.Wong-Leung, C. Jagadish, E.V. Monakhov and B.G. Svensson, Ion implantation induced defects in ZnO, *Physica B* 407, 1481-1484 (2012).
458. D. Saxena, S. Mokkaḡapati and C.Jagadish, Semiconductor Nanolasers, *IEEE Photonics Journal*, 4, 582-585 (2012).
459. L.Li, Y. Guo, X.Y. Cui, F. Matsukara, Rongkun Zheng, K. Ohtani, C. Kong, A.V. Ceguerra, M.P. Moody, J.D. Ye, H.H. Tan, C. Jagadish, H. Liu, C. Stampfl, H. Ohno and S.P. Ringer, Origin of the room-temperature ferromagnetism in Co-doped ZnO, *Phys. Rev. B.* 85, 174430 (2012) (8 pages).
460. C.K. Yong, H.J. Joyce, J. Lloyd-Hughes, Q. Gao, H.H. Tan, C. Jagadish, M.B. Johnston and L.M. Herz, Ultrafast dynamics of Exciton Formation in Semiconductor Nanowires, *Small* 8, 1725-1731 (2012).
461. L. Vines, J. Wong-Leung, C. Jagadish, V. Quemener, E.V. Monakhov and B.G. Svensson, Acceptor-like deep level defects in ion-implanted ZnO, *Appl. Phys. Lett* 100, 212106 (2012) (4 pages).
462. Z. Li, H.T. Hattori, P. Parkinson, J. Tian, L. Fu, H.H. Tan and C. Jagadish, A staircase nano-antenna device for strong electric field enhancement for SERS applications, *J. Phys.D: Appl. Phys.*45, 305102 (2012).
463. N. Jiang, P. Parkinson, Q. Gao, S. Breuer, H.H. Tan and C. Jagadish, Long minority carrier life time in Au-catalyzed GaAs/AlGaAs core-shell nanowires, *Appl. Phys. Lett.* 101, 023111 (2012).
464. Q. Ren, J. Lu, H.H. Tan, S. Wu, L. Sun, W. Zhou, W. Xie, Z. Sun, Y. Zhu, C. Jagadish, S.C. Shen and Z. Chen, Spin selective Purcell effect in quantum dot microcavity system, *Nano Lett* 12, 3455-3459 (2012).
465. M.H.Sun, H.J. Joyce, Q. Gao, H.H. Tan, C. Jagadish, C.Z. Ning, Removal of surface states and recovery of bandedge emission in InAs nanowires through surface passivation, *Nano Lett.* 12, 3378-3384 (2012).

466. G. Jolley, I. McKerracher, L. Fu, H.H. Tan and C. Jagadish, The conduction band absorption spectrum of interdiffused InGaAs/GaAs quantum dot infrared photodetectors, *J. Appl. Phys.* 111, 123719 (2012).
467. P. Parkinson, N. Jiang, Q. Gao, H.H. Tan and C. Jagadish, Direct-write non-linear photolithography for semiconductor nanowire characterisation, *Nanotechnology* 23, 335704 (2012).
468. H. Xia, Z-Y. Lu, T-X. Li, P. Parkinson, Z-M. Liao, F-H Liu, W. Lu, W.-D. Hu, P.P. Chen, J. Xu, J. Zou and C. Jagadish, Distinct photocurrent response of individual GaAs nanowires induced by n-type doping, *ACS Nano* 6, 6005-6-13 (2012).
469. J. Ye, S.T. Lim, M. Bosman, S. Gu, Y. Zheng, H. H. Tan, C. Jagadish, X. Sun, and K.L. Teo, Spin-polarized Wide Electron Slabs in Functionally Graded Polar Oxide Heterostructures, *Scientific Reports* 2, 533 (2012).
470. Zibin Chen, W. Lei, B. Chen, Y.B. wang, X.Z. Liao, H.H. Tan, J. Zou, S.P. Ringer and C. Jagadish, Can misfit dislocations be located above the interface of InAs/GaAs (001) epitaxial quantum dots?, *Nanoscale Research Letters* 7, 486 (2012).
471. L.M. Smith, H.E. Jackson, J. Yarrison-Rice and C. Jagadish, Measuring the energy landscape in single semiconductor nanowires, *Acta Physica Polonica A*, 122, 316-320 (2012).
472. J.H.Kang, Q. Gao, P. Parkinson, H.J. Joyce, H.H. Tan, Y. Kim, Y. Guo, H. Xu, J. Zou and C. Jagadish, Precursor flow rate optimization for the controlled fabrication of perfect GaAs nanowires on silicon substrates, *Nanotechnology* 23, 415702 (2012) (11 pages).
473. H.J. Joyce, J. Wong-Leung, C-K. Yong, C. Doherty, S. Paiman, Q. Gao, H.H. Tan, C. Jagadish, J. Lloyd-Hughes, L.M. Herz and M.B. Johnston, Ultra-low surface recombination velocity in InP nanowires probed by terahertz spectroscopy, *Nano Letts* 12, 5325-5330 (2012).
474. M. Montazeri, H.E. Jackson, L.M. smith, J.M. Yarrison-Rice, J.H. Kang, Q. Gao, H.H. Tan and C. Jagadish, Transient Rayleigh scattering: A new probe of picosecond carrier dynamics in a single semiconductor nanowire, *Nano Letts* 12, 5389-5395 (2012).
475. F. Karouta, K. Vora, J. Tien and C. Jagadish, Structural, compositional and optical properties of PECVD silicon nitride layers, *J. Phys D. Appl. Phys.* 45, 445301 (2012).
476. H.Y.Xu, Y. Wang, Y. Guo, Z. Liao, Q. Gao, H.H. Tan, C. Jagadish and J. Zou, Defect free <110> zinc-blende structured InAs nanowires catalyzed by palladium, *Nano Letts* 12, 5744-5749 (2012).
477. C.K. Yong, K. Noori, Q. Gao, H.J. Joyce, H.H. Tan, C. Jagadish, F. Giustino, M.B. Johnston and L.M. Herz, Strong carrier lifetime enhancement in GaAs nanowires coated with semiconducting polymer, *Nano Lett* 12, 6293-6301 (2012).
478. S. Mokkaapati, D. Saxena, N. Jiang, P. Parkinson, J. Wong-Leung, Q. Gao, H.H. Tan and C. Jagadish, Polarization tunable, multi-colour emission from core-shell III-V semiconductor nanowires, *Nano Lett* 12, 6428-6431 (2012).
479. I. McKerracher, L. Fu, H.H. Tan and C. Jagadish, Intermixing of InGaAs/GaAs quantum wells and quantum dots using sputter-deposited silicon oxynitride layers, *J. Appl. Phys.* 112, 113511 (2012).

480. I. Staude, I.S. Maksymov, M. Decker, A.E. Morishnichenko, D.N. Neshev, C. Jagadish and Yu. S. Kivshar, Broadband scattering by tapered nano-antennas, *Physica Status Solidi: Rapid Research Lett.* 6, 466-468 (2012).
481. J.D. Ye, P. Parkinson, F.F. Ren, S.L. Gu, H.H. tan and C. Jagadish, Raman probing of competitive laser heating and local recrystallization effect in ZnO nanocrystals, *Opt. Exp.* 20, 23281-23289 (2012).
482. S. Du, T. Burgess, S.T. Loi, B. Gault, Q. Gao, P. Bao, L. Li, X. Cui, W.K. Yeoh, H.H. Tan, C. Jagadish, S.P. Ringer and R. Zheng, Full tip imaging in atom probe tomography, *Ultramicroscopy* 124, 96-101 (2013).
483. Wen Lei, H.H. Tan and C. Jagadish, Engineering the composition, morphology and optical properties of InAsSb nanostructures via graded growth technique, *Appl. Phys. Lett* 102, 033111 (2013) (4 pages).
484. Y.N. Guo, H.Y. Xu, G. Aucherlonie, T. Burgess, H.J. Joyce, Q. Gao, H.H. Tan, C. Jagadish, H. Shu, X.S. Chen, W. Lu, Y. Kim and J. Zou, Phase separation induced by Au catalysts in ternary InGaAs nanowires, *Nano Lett* 13, 643-650 (2013).
485. I. McKerracher, L. Fu, H.H. Tan and C. Jagadish, Integration of bandpass filters with mid-wavelength infrared photodetectors, *J. Phys. D: Appl. Phys.* 46, 095104 (2013) (8 pages).
486. I. Staude, M. Decker, M.J. Ventura, C. Jagadish, D.N. Neshev, M. Gu and Y.S. Kivshar, Hybrid high resolution three-dimensional nanofabrication for metamaterials and nanoplasmonics, *Adv. Mater* 25, 1260-1264 (2013).
487. M. Lysevych, H.H. Tan, F. Karouta, L. Fu and C. Jagadish, Merged beam laser design for reduction of gain-saturation and two-photon absorption in high power single mode semiconductor lasers, *Optics Express*, 21, 8276-8285 (2013).
488. M. Fickenscher, T. Shi, H.E. Jackson, L.M. Smith, J. Yarrison-Rice, C. Zhweng, P. Miller, J. Etheridge, B.M. Wong, Q. Gao, S. Deshpande, H.H. Tan and C. Jagadish, Optical, structural and numerical investigation of GaAs/AlGaAs core-multishell nanowire quantum well tubes, *Nano Lett.* 13, 1016-1022 (2013).
489. F. Wang, W.J. Toe, W.M. Lee, D. McGloin, Q. Gao, H.H. Tan, C. Jagadish and P.J. Reece, Resolving stable axial trapping points of nanowires in optical tweezers using photoluminescence mapping, *Nano Lett.* 13, 1185-1191 (2013).
490. S. Turner, S. Mokkalapati, G. Jolley, L. Fu, H.H. Tan and C. Jagadish, Periodic dielectric structures for light-trapping in InGaAs/GaAs quantum well solar cells, *Optics Express* 21, A324-A335 (2013).
491. H.J. Joyce, C.J. Doherty, Q. Gao, H.H. Tan, C. Jagadish, J. Lloyd-Hughes, L.M. Herz and M.B. Johnston, Electronic properties of GaAs, InAs and InP nanowires studied by terahertz spectroscopy, *Nanotechnology* 24, 214006 (2013) (7 pages).
492. P. Parkinson, Yu-Heng Lee, L. Fu, S. Breuer, H.H. Tan and C. Jagadish, Three-dimensional in-situ photocurrent mapping of nanowire photovoltaics, *Nano Lett* 13, 1405-1409 (2013).
493. M. Decker, C. Kremers, A. Minovich, I. Staude, A.E. Miroschnichenko, D. Chigrin, D.N. Neshev, C. Jagadish and Y.S. Kivshar, Electro-optical switching by liquid-crystal controlled metasurfaces, *Opt. Exp.* 21, 8879-8885 (2013).
494. G. Jolley, L. Fu, H.F. Lu, H.H. Tan and C. Jagadish, The role of intersubband optical transitions on the electrical properties of InGaAs/GaAs quantum dot solar cells, *Progress in Photovoltaics* 21, 736-746 (2013).

495. G. Jolley, L. Faraone, L. Fu, H.F. Lu, H.H. Tan and C. Jagadish, A study of quantum well solar cell structures with bound-to-continuum transitions for reduced carrier recombinations, *Appl. Phys. Lett.* 102, 213903 (2013).
496. H. Xu, Y.N. Huo, Z.M. Liao, W. Sun, Q. Gao, H.H. Tan, C. Jagadish and J. Zou, Catalyst size dependent growth of Pd catalysed one-dimensional InAs nanostructures, *Appl. Phys. Lett.* 102, 203108 (2013).
497. B. Chen, Q. Gao, Y. Wang, X. Liao, Y-W. Mai, H.H. Tan, J. Zou, S.P. Ringer and C. Jagadish, Anelastic behaviour in GaAs semiconductor nanowires, *Nano Letts* 13, 31689-3172 (2013).
498. E.G. Mironov, Z. Li, H.T. Hattori, K. Vora, H.H. Tan and C. Jagadish, Titanium nano-antenna for high power pulsed operation, *J. Lightwave Technol.* 31, 2459-2466 (2013).
499. Z.B. Chen, W. Lei, B. Chen, Y.B. Wang, X.Z. Liao, H.H. Tan, J. Zou, S.P. Ringer and C. Jagadish, Preferential nucleation and growth of InAs/GaAs(001) quantum dots on defined sites by droplet epitaxy, *Scripta Mater.* 69, 638-641 (2013).
500. C. Zheng, J. Wong-Leung, Q. Gao, H.H. Tan, C. Jagadish and J. Etheridge, Polarity driven 3-fold symmetry of GaAs/AlGaAs core multishell nanowires, *Nano Letts* 13, 3742-3748 (2013).
501. C.K. Yong, J. Wong-Leung, H.J. Joyce, S. Paiman, J. Lloyd-Hughes, Q. Gao, H.H. Tan, C. Jagadish, M.B. Johnston and L.M. Herz, Direct observation of charge-carrier heating at WZ-ZB InP nanowires heterojunctions, *Nano Letts* 13, 4288-4287 (2013).
502. B. Chen, J. Wang, Q. Gao, X. Liao, C. Lu, H.H. Tan, Y-M. Mai, J. Zou, S.P. Ringer, H.J. Gao and C. Jagadish, Strengthening brittle semiconductor nanowires through stacking faults: insights from in situ mechanical testing, *Nano Letts* 13, 4369-4373 (2013).
503. W. Sun, Y.N. Guo, H.Y. Xu, Z.M. Liao, Q. Gao, H.H. Tan, C. Jagadish and J. Zou, Unequal P distribution in Nanowires and the planar layer during GaAsP growth on GaAs {111}B by metal organic chemical vapour deposition, *J. Phys. Chem. C* 117, 19234-19238 (2013).
504. A.R. Ullah, H.J. Joyce, A.M. Burke, J. Wong-Leung, H.H. Tan, C. Jagadish and A.P. Micolich, Electronic comparison of InAs wurtzite and zinblende phases using nanowire transistors, *Phys. Stat. Sol. Rapid Res. Lett*, 7, 907-910 (2013).
505. T. Burgess, S. Breuer, P. Caroff, J. Wong-Leung, Q. Gao, H.H. Tan and C. Jagadish, Twinning Superlattice formation in GaAs nanowires, *ACS Nano*, 7, 8105-8114 (2013).
506. N. Jiang, Q. Gao, P. Parkinson, J. Wong-Leung, S. Mokkaapati, S. Breuer, H.H. Tan, C.L. Zheng, J. Etheridge and C. Jagadish, Enhanced minority carrier lifetimes in GaAs/AlGaAs core-shell nanowires through shell growth optimization, *Nano Letts*, 13, 5135-5140 (2013).
507. Y.N. Guo, T. Burgess, Q. Gao, H.H. Tan, C. Jagadish and J. Zou, Polarity driven non-uniform composition in InGaAs nanowires, *Nano Letts*, 13, 5085-5089 (2013).
508. D.J. Little, R.L. Kuruwita, A. Joyce, Q. Gao, T. Burgess, C. Jagadish and D.M. Kane, Optical surface profiling of GaAs nanowires: determining nanowire radius, *Appl. Phys. Letts*, 103, 161107 (2013) (3pages).

509. S. Perera, T. Shi, M.A. Fickenscher, H.E. Jackson, L.M. Smith, J.M. Yarrison-Rice, S. Paiman, Q. Gao, H.H. Tan and C. Jagadish, Illuminating the second conduction band and spin-orbit energy in single wurtzite InP nanowires, *Nano Lett*, 13, 5367-5372 (2013).
510. S.S. Kruk, C. Helgert, M. Decker, I. Staude, C. Menzel, C. Etrich, C. Rockstuhl, C. Jagadish, T. Pertsch, D.N. Neshev and Y.S. Kivshar, Optical metamaterials with quasicrystalline symmetry: symmetry induced optical isotropy, *Phys. Rev.B: Rapid Comms*, 88, 201404 (R) (2013) (5 pages).
511. S. Paiman, Q. Gao, H.H. Tan, C. Jagadish, X. Zhang and J. Zou, Effects of growth rate on InP nanowires morphology and crystal structure, *J. Cryst. Growth*, 383, 100-105 (2013).
512. D. Saxena, S. Mokkalapati, P. Parkinson, N. Jiang, Q. Gao, H.H. Tan and C. Jagadish, Optically pumped room temperature GaAs nanowire lasers, *Nature Photonics*, 7, 963-968 (2013).
513. S. Mokkalapati, D. Saxena, H.H. Tan and C. Jagadish, Design considerations for semiconductor nanowire-plasmonic nanoparticle coupled systems for high quantum efficiency nanowires, *Small* 9, 3964-3969 (2013).
514. H.A. Fonseka, H.H. Tan, J. Wong-Leung, J. Kang, P. Parkinson and C. Jagadish, High vertical yield of InP nanowire growth on Si (111) with thin buffer layers, *Nanotechnology*, 24, 465602 (2013).
515. S. Du, T. Burgess, B. Gault, Q. Gao, P.T. Bao, L. Li, X.Y. Cui, W. KongYeoh, H.W. Liu, L. Yao, A.V. Ceguerra, H.H. Tan, C. Jagadish, S.P. Ringer and R.K. Zheng, Quantitative dopant distributions in GaAs nanowires using atom probe tomography, *Ultramicroscopy*, 132, 186-192 (2013).
516. M. Decker, I. Staude, I.I. Shishkin, K.B. Samusev, P. Parkinson, V.K.A. Sreenivasan, A. Minovich, A.E. Morishnichenko, A. Zvyagin, C. Jagadish, D.N. Neshev and Y.S. Kivshar, Dual-channel spontaneous emission of quantum dots in magnetic metamaterials, *Nature Communications* 4, 2949 (2013).
517. W. Sun, Y.N. Guo, H.Y. Xu, Q. Gao, H.H. Tan, C. Jagadish and J. Zou, Polarity driven simultaneous growth of free-standing and lateral GaAsP epitaxial nanowires on GaAs (001), *Appl. Phys. Lett.* 103, 223104 (2013).
518. B. Chen, Q. Gao, L. Chang, Y. Wang, Z. Chen, X. Liao, H.H. Tan, J. Zou, S.P. Ringer and C. Jagadish, Attraction of semiconductor nanowires; an in-situ observation, *Acta Mater.* 69, 638-641 (2013).
519. J. Ye, S.T. Lim, S. Gu, H.H. Tan, C. Jagadish, K.L. Teo, Origin and transport properties of two-dimensional electron gas at ZnMgO/ZnO interface grown by MOVPE, *Phys. Stat. Solidi (C)* 10, 1268-1271 (2013).
520. K.S. Chan, L. Vines, K.M. Johansen, E.V. Monakhov, J.D. Ye, P. Parkinson, C. Jagadish, B.G. Svensson and J.Wong-Leung, Defect formation and thermal stability of H in high dose H implanted ZnO, *J. Appl. Phys.* 114, 083111(2013).
521. D. Carrad, A. Burke, R. Lyttleton, H.J. Joyce, H.H. Tan, C. Jagadish, K. Storm, H. Linke, L. Samuelson and A. Micolich, Electron-beam patterning of polymer electrolyte films to make multiple nanoscale gates for nanowire transistors, *Nano Letts*, 14, 94-100 (2014).
522. P.T. Bao, Y.B. Wang, X.Y. Cui, Q. Gao, H.W. Yen, H.W. Liu, W.K. Yeoh, X.Z. Liao, S.C. Du, H.H. Tan, C. Jagadish, J. Zou, S.P. Ringer, R.K. Zheng, *Atomic*

- scale observation of parallel development of super elasticity and reversible plasticity in GaAs nanowires, *Appl. Phys. Lett.* 104, 021904 (2014).
523. Z.B. Chen, W. Lei, B. Chen, Y.B. Wang, X.Z. Liao, H.H. Tan, J. Zou, S.P. Ringer and C. Jagadish, Elemental diffusion during the droplet epitaxy growth of In(Ga)As/GaAs (001) quantum dots by metal-organic chemical vapour deposition, *Appl. Phys. Lett.* 104, 022108 (2014).
 524. M. Lysevych, H.H. Tan, F. Karouta and C. Jagadish, Effect of active region position in Fabry-Perot single transverse mode broad-waveguide InGaAsP/InP lasers, *Optics Express*, 22, 8156-8164 (2014).
 525. F.F. Ren, W.Z. Xu, J.D. Ye, K.W. Ang, H. Lu, R. Zhang, M.B. Yu, G.Q. Lu, H.H. Tan and C. Jagadish, Second-order surface-plasmon assisted responsivity enhancement in germanium nano-photodetectors with bull's eye antenna, *Optics Express*, 22, 15949-15956 (2014).
 526. H.A. Fonseka, P. Caroff, J. Wong-Leung, A.S. Ameruddin, H.H. Tan and C. Jagadish, Nanowires grown on InP(100): growth direction, facets, crystal structures and relative yield control, *ACS Nano*, 8, 6945-6954 (2014).
 527. M. De Luca, A. Polimeni, H.A. Fonseka, A.J. Meaney, P.C.M. Christianen, J.C. Maan, S. Paiman, H.H. Tan, C. Jagadish and M. Capizzi, Magneto-optical properties of wurtzite InP nanowires, *Nano Letts*, 14, 4250-4256 (2014).
 528. K.S. Chan, C. Ton-That, L. Vines, S. Choi, M.R. Phillips, B.G. Svensson, C. Jagadish, J. Wong-Leung, Effect of high temperature annealing on defects and luminescence properties of H implanted ZnO, *J. Appl. Phys.* 47, 342001(2014).
 529. Qian Gao, Dhruv Saxena, Fan Wang, Lan Fu, Sudha Mokkalapati, Yanan Guo, Li Li, Jennifer Wong-Leung, Philippe Caroff, Hark Hoe Tan, and Chennupati Jagadish, Selective-Area Epitaxy of Pure Wurtzite InP Nanowires: High Quantum Efficiency and Room-Temperature Lasing, *Nano Letts* 14, 5206-5211 (2014).
 530. Hannah J. Joyce, Patrick Parkinson, Nian Jiang, Callum J. Docherty, Qiang Gao, H. Hoe Tan, Chennupati Jagadish, Laura M. Herz, and Michael B. Johnston, Electron Mobilities Approaching Bulk Limits in "Surface-Free" GaAs Nanowires, *Nano Letts*.14, 5989-5994 (2014).
 531. Nian Jiang, Jennifer Wong-Leung, Hannah J. Joyce, Qiang Gao, Hark Hoe Tan, and Chennupati Jagadish, Understanding the True Shape of Au-Catalyzed GaAs Nanowires, *Nano Letts*. 14, 5865-5872 (2014).
 532. Yuda Wang, Howard E. Jackson and Leigh M. Smith, Tim Burgess, Suriati Paiman, Hark Hoe Tan, Qiang Gao and Chennupati Jagadish, Carrier thermalization dynamics in single Zinblende and Wurtzite InP nanowires, *Nano Letts* 14, 7153-7160 (2014).
 533. K. Peng, P. Parkinson, L. Fu, Q. Gao, N. Jiang, Y.N. Guo, F. Wang, H.J. Joyce, J.L. Boland, H.H. Tan, C. Jagadish and M.B. Johnston, Single Nanowire Photoconductive Terahertz Detectors, *Nano Letts* 15, 206-210 (2015).
 534. S. Mokkalapati, D. Saxena, N. Jiang, L. Li, H.H. Tan and C. Jagadish, An order of magnitude increase in the quantum efficiency of (Al)GaAs Nanowires using hybrid photonics-plasmonic modes, *Nano Letts* 15, 307-312 (2015).
 535. T. Burgess, P. Caroff, Y. Wang, B.H. Badada, H.E. Jackson, L.M. Smith, Y. Guo, H.H. Tan and C. Jagadish, Zn₃As₂ nanowires and nanoplatelets: Highly efficient

- infrared emission and photodetection by an earth abundant material, *Nano Letts* 15, 378-385 (2015).
536. M. De Luca, A. Zilli, H.A. Fonseka, S. Mokkaapati, A. Miriametro, H.H. Tan, L.M. Smith, C. Jagadish, M. Capizzi and A. Polimeni, Polarized light absorption in wurtzite InP nanowire ensembles, *Nano Letts*, 15, 998-1005 (2015).
 537. F. Wang, Q. Gao, K. Peng, Z. Li, Z. Li, Y. Guo, L. Fu, L.M. Smith, H.H. Tan and C. Jagadish, Spatially resolved doping concentration and non-radiative lifetime profiles in single Si-doped InP nanowires using photoluminescence mapping, *Nano Letts* 15, 3017-3023 (2015).
 538. T. Shi, H.E. Jackson, L.M. smith, N. Jiang, Q. Gao, H.H. Tan, C. Jagadish, C. Zheng, J. Etheridge, Emergence of localized states in narrow GaAs/AlGaAs nanowire quantum well tubes, *Nano Letts* 15, 1876-1882 (2015).
 539. A.S. Ameruddin, H.A. Fonseka, P. Caroff, J. Wong-Leung, R.L.M. Op het Veld, J. Boland, M.B. Johnston, H.H. Tan and C. Jagadish, Achieving Au-seeded InGaAs nanowires with uniform composition, pure wurtzite crystal phase and untapered morphology for infrared emission, *Nanotechnology* 26, 5604 (2015).
 540. A. Zilli M. De Luca, D. Tedeschi, H.A. Fonseka, A. Miriametro, H.H. Tan, C. Jagadish, M. Capizzi and A Polimeni, Temperature dependence of interband transitions in wurtzite InP nanowires, *ACS Nano*, 9, 4277-4287 (2015)
 541. Zhe Li, Y.C. Wenas, L. Fu, S. Mokkaapati, H.H. Tan and C. Jagadish, Influence of electrical design on core-shell GaAs nanowire array solar cells, *IEEE J. Photovoltaics*, 5, 854-864 (2015).
 542. X.M. Yuan, P. Caroff, J. Wong-Leung, H.H. Tan and C. Jagadish, Controlling the morphology, composition and crystal structure in gold seeded GaAsSb nanowires, *Nanoscale*, 7, 4995-5003 (2015).
 543. T. Li, H.F. Lu, L. Fu, H.H. Tan, C. Jagadish and M. Dagenais, Enhanced carrier collection efficiency and reduced quantum state absorption by electron doping in self assembled quantum dot solar cells, *Appl. Phys. Lett.* 106, 053902 (2015).
 544. K. S. Chan, L. Vines, L. Li, B. G. Svensson, C. Jagadish, and J. Wong-Leung, Equilibrium shape of nano-cavities in H implanted ZnO, *Applied Physics Letters* 106, 21202 (2015).
 545. J. Lloyd-Hughes, M. Failla, J. Ye, S.P.P. Jones, K.L. Teo and C. Jagadish, Interfacial and bulk polaron masses in ZnMgO/ZnO heterostructures examined by terahertz time domain cyclotron spectroscopy, *Appl. Phys. Lett.* 106, 202103 (2015).
 546. M. Kaveh, O. Dyck, G. Duscher, Q. Gao, C. Jagadish and H. P. Wagner, Exciton emission from hybrid organic and plasmonic polytype InP nanowire heterostructures, *Materials Research Express* 2, 045001 (2015).
 547. X. Yuan, Y. Wada, Y. Guo, F. Wang, P. Caroff, L.M. Smith, H.E. Jackson, H.H. Tan and C. Jagadish, Antimony Induced {112}A Facetted Triangular GaAs_{1-x}Sb_x/InP Core/Shell Nanowires and Their Enhanced Optical Quality, *Advanced Functional Materials*, 25, 5300-5308 (2015).
 548. Yujie Chen, Qiang Gao, Yanbo Wang, Xianghai An, Xiaozhou Liao, Yiu-Wing Mai, H. Hoe Tan, Jin Zou, Simon P. Ringer, and Chennupati Jagadish,

- Determination of Young's modulus of ultrathin nanomaterials, *Nano Letters* 15, 5279-5283 (2015).
549. D. Saxena, F. Wang, Q. Gao, S. Mokkaapati, H.H. Tan and C. Jagadish, Mode profiling of semiconductor nanowire lasers, *Nano Lett* 15, 5342-5348 (2015).
 550. K. Pemasiri, H.E. Jackson, L.M. Smith, B.M. Wong, S. Paiman, Q. Gao, H.H. Tan and C. Jagadish, Quantum confinement of excitons in wurtzite InP nanowires, *J. Appl. Phy.* 117, 194306 (2015).
 551. A.S. Ameruddin, P. Caroff, H.H. Tan, C. Jagadish and V.G. Dubrovskii, Understanding the growth and composition evolution of gold seeded ternary InGaAs nanowires, *Nanoscale*, 7, 16266-16272 (2015).
 552. Z. Li, X. Yuan, L. Fu, K. Peng, F. Wang, X. Fu, P. Caroff, T.P. White, H.H. Tan and C. Jagadish, Room temperature GaAsSb single nanowire infrared photodetectors, *Nanotech.* 26, 445202 (2015).
 553. X. Yuan, P. Caroff, J. Wong-Leung, L. Fu, H.H. Tan and C. Jagadish, Tunable polarity in a III-V nanowire by droplet wetting and surface energy engineering, *Advanced Materials*, 27, 6096-6103 (2015).
 554. S. Mokkaapati, D. Saxena, H.H. Tan and C. Jagadish, Optical design of nanowire absorbers for wavelength selective photodetectors, *Scientific Reports*, 5, 15339 (2015).
 555. C.L. Davies, P. Parkinson, N. Jiang, J.L. Boland, S. Conesa-Boj, H.H. Tan, C. Jagadish. L.M. Herz and M.B. Johnston, Low ensemble disorder in quantum well tube nanowires, *Nanoscale*, 7, 20531-20538 (2015).
 556. B.H. Badada, T. Shi, H.E. Jackson, L.M. Smith, C.L. Zheng, J. Etheridge, Q. Gao, H.H. Tan and C. Jagadish, Quantum confined Stark effect in a GaAs/AlGaAs nanowire quantum well tube device: Probing exciton localization, *Nano Letters* 15, 7847-7852 (2015).
 557. T. Shi, H.E. Jackson, L.M. Smith, N. Jiang, H.H. Tan and C. Jagadish, Thermal delocalisation of excitons in GaAs/AlGaAs quantum well tube nanowires, *Nano Letts.*, 16, 1392-1397 (2016).
 558. N.P. Reddy, S. Naureen, S. Mokkaapati, K. Vora, N. Shahid, F. Karouta, H.H. Tan and C. Jagadish, Enhanced luminescence from GaN nanopillar arrays fabricated using a top-down process, *Nanotechnology* 27, 065304 (2016).
 559. W.J. Toe, I. Ortega-Piwonka, C.N. Angstmann, Q. Gao, H.H. Tan, C. Jagadish, B.I. Henry and P.J. Reece, Nonconservative dynamics of optically trapped high-aspect-ratio nanowires, *Phys. Rev. E*, 93, 022137 (2016).
 560. M.T. Soo, K. Zheng, Q. Gao, H.H. Tan, C. Jagadish, J. Zou, Mirror-twin induced bicrystalline InAs nanoleaves, *Nano Research* 9, 766-773 (2016).
 561. Y.J. Chen, T. Burgess, X.H. An, Y.W. Mai, H.H. Tan, J. Zou, S.P. Ringer, C. Jagadish and X.Z. Liao, Effect of high density stacking faults on the Young's modulus of GaAs nanowires, *Nano Letts.* 16, 1911-1916 (2016).
 562. W.Z. Xu, F.F. Ren, J.D. Ye, H. Lu, L.J. Liang, X.M. Huang, M.K. Liu, I.V. Shadrivov, D.A. Powell, G. Yu, B.B. Jin, R. Zhang, Y.D. Zheng, H.H. Tan and C. Jagadish, Electrically tunable terahertz metamaterials with embedded large-area transparent thin film transistor arrays, *Scientific Reports*, 6, 23486 (2016).

563. D. Tedeschi, M. De Luca, H. A. Fonseka, Q. Gao, F. Mura, H. H. Tan, S. Rubini, F. Martelli, C. Jagadish, M. Capizzi, and A. Polimeni, Long-Lived Hot Carriers in III–V Nanowires, *Nano Letts.* 16, 3085-3093 (2016).
564. K.S. Chan, L. Vines, L. Li, C. Jagadish, B.G. Svensson, J. Wong-Leung, Zn precipitation and Li depletion in Zn implanted ZnO. *Applied Physics Letters.* 109, 022102 (2016).
565. B. Guilhabert, A. Hurtado, D. Jevtics, Q. Gao, h.H. Tan, C. Jagadish and M.D. Dawson, Transfer printing of semiconductor nanowires with lasing emission for controllable nanophotonic device fabrication, *ACS Nano*, 10, 3951-3958 (2016).
566. J. Yang, Z. Wang, F. Wang, R.J. Xu, J. Tao, S. Zhang, Q.H. Qin, B. Luther-Davies, C. Jagadish, Z.F. Yu, Y.R. Lu, *Light- Science and Applications*, 5, e16046 (2016).
567. T. Burgess, D. Saxena, S. Mokkaapati, Z. Li, C.R. Hall, J.A. Davis, L.M. Smith, L. Fu, P. Caroff, H.H. Tan and C. Jagadish, Doping enhanced radiative efficiency enables lasing in unpassivated GaAs nanowires, *Nature Comms.* 7, 11927 (2016).
568. M. T. Soo, K. Zheng, Q. Gao, H.H. Tan, C. Jagadish, and J. Zou, Growth of Catalyst-Free Epitaxial InAs Nanowires on Si Wafers Using Metallic Masks, *Nano Letters* 16, 4189-4193 (2016).
569. Q. Gao, V.G. Dubrovskii, P. Caroff, J. Wong-Leung, Li Li, Y. Guo, L. Fu, H. H. Tan, and C. Jagadish, Simultaneous Selective-Area and Vapor–Liquid–Solid Growth of InP Nanowire Arrays, *Nano Letters* 16, 4361-4367 (2016).
570. K. Peng, P. Parkinson, J.L. Boland, Q. Gao, Y.C. Wenas, C.L. Davis, Z. Li, L. Fu, M.B. Johnston, H.H. Tan and C. Jagadish, Broadband phase-sensitive single InP nanowire photoconductive terahertz detectors, *Nano Letters* 16, 4925-4931 (2016).
571. D. Saxena, N. Jiang, X. Yuan, S. Mokkaapati, Y. Guo, H.H. Tan and C. Jagadish, Design and room-temperature operation of GaAs/AlGaAs multi-quantum well nanowire lasers, *Nano Letters* 16, 5080-5086 (2016).
572. M.B. Rota, A.S. Ameruddin, H.A. Fonseka, Q. Gao, F. Mura, A. Polimeni, A. Miriametro, H.H. Tan, C. Jagadish and M. Capizzi, Bandgap energy of wurtzite InAs nanowires, *Nano Letters* 16, 5197-5203 (2016).
573. G.Y Liu, S.K. Karuturi, A.N. Simonov, M. Fekete, H.J. Chen, N. Nasiri, N.H. Le, P.R. Narangari, M. Lysevych, T.R. Gengenback, A. Lowe, H.H. Tan, C. Jagadish, L. Spiccia and A. Tricoli, Robust sub-monolayers of Co₃O₄ nano-islands: A highly transparent morphology for efficient water oxidation catalysis, *Adv. Energy Mater.*, 6. 1600697 (2016).
574. M.T. Soo, K. Zheng, Q. Gao, H.H. Tan, C. Jagadish and J. Zou, Temperature dependent side facets of GaAs nanopillars, *Semicond. Sci. Technol.* 31, 094004 (2016).
575. Z.Q. Zhong, Z.Y. Li, Q. Gao, Z. Li, K. Peng, L. Li, S. Mokkaapati, K. Vora, J. Wu, G.J. Zhang, Z.M. Wang, L. Fu, H.H. Tan and C. Jagadish, Efficiency enhancement of axial junction InP single nanowire solar cells by dielectric coating, *Nano Energy*, 28, 106-114 (2016).
576. F. Xian, J. Ye, S. Gu, H.H. Tan and C. Jagadish, Structural transition, subgap states, and carrier transport in anion-engineered zinc oxynitride nanocrystalline films. *Applied Physics Letters*, 109, 023109 (2016).
577. D. Tedeschi, M. De Luca, A. Granados-del-Aguila, Q. Gao, G. Ambrosio, M. Capizzi, H.H. Tan, P.C.M. Christianen, C. Jagadish and A. Polimeni, Value and

- anisotropy of the electron and hole mass in pure wurtzite InP nanowires, *Nano Letters*, 16, 6213-6221 (2016).
578. G.G. Zhang, X. Guo, F.F. Ren, Y. Li, B. Liu, J.D. Ye, H.X. Ge, Z.L. Xie, R. Zhang, H.H. Tan and C. Jagadish, High brightness polarised InGaN/GaN light emitting diode structure with Al-coated p-GaN grating, *ACS Photonics*, 10, 1912-1918 (2016).
 579. G.G. Zhang, Z.Y. Li, X.M. Yuan, F. Wag, L. Fu, Z. Zhuang, F.F. Ren, B. Liu, R. Zhang, H.H. Tan and C. Jagadish, Single nanowire green InGaN/GaN light emitting diodes, *Nanotechnology*, 27, 435205 (2016).
 580. M. Kaveh, Q. Gao, C. Jagadish, J. Ge, G. Duscher and H.P. Wagner, Controlling the exciton-emission of gold coated GaAs-AlGaAs core-shell nanowires coated with an organic spacer layer, *Nanotech.* 27, 485204 (2016).
 581. R. Camach-Morales, M. Rahmani, S. Kruk, L. Wang, L. Xu, D.A. Smirnova, S.A. Solntsev, A. Miroshnichenko, H.H. Tan, F. Karouta, S. Naureen, K. Vora, L. Carletti, C. De Angelis, C. Jagadish, Y.S. Kivshar and D.N. Neshev, Nonlinear generation of vector beams of AlGaAs nanoantennas, *Nano Letters*, 16, 7191-7197 (2016).
 582. A. Berg, P. Caroff, N. Shahid, M.N. Lockrey, X. Yuan, M.T. Borgstrom, H.H. Tan and C. Jagadish, Growth and optical properties of InGaP nanowires synthesised by selective area epitaxy, *Nano Research* 10, 672-682 (2017).
 583. S.A. Baig, J.L. Boland, D.A. Damry, H.H. Tan, C. Jagadish, H.J. Joyce and M.B. Johnston, An ultrafast switchable terahertz polarisation modulator based on III-V semiconductor nanowires, *Nano Letts* 17, 2603-2610 (2017).
 584. H.P. Wagner, M. Kaveh, Q. Gao, H.H. Tan, C. Jagadish and W. Langbein, Population dynamics and dephasing of excitons and eciton-hole pairs in polytype wurtzite/zinc-benlde InP nanowires, *Phys. Rev. B.* 95, 045305 (2017).
 585. P.L. Gareso, M. Buda, H.H. Tan and C. Jagadish, The effect of rapid thermal annealing to device performance of InGaAs/AlGaAs quantum well laser diodes. *Indian Journal of Pure & Applied Physics (IJPAP)*, 55, 333-8 (2017).
 586. D.J. Carrod, A.B. Mostert, A.R. Ullah, A.M. Burke, H.J. Joyce, H.H. tan, C. Jagadish, P. Krogstrup, J. Nygard, P. Meredith and A.P. Micolich, Hybrid nanire ion-to-electron transduces for integrated bioelectronics circuiry, *Nano Lett.* 17, 827-833 (2017).
 587. K. Peng, P. Parkinson, Q. Gao, J.L. Boland, Z.Y. Li, F. Wang, S. Mokkaapati, L. Fu, M.B. Johnston, H.H. Tan and C. Jagadish, Single n(+)-i-n(+) InP nanowires for highly sensitive terahertz detection, *Nanotech.* 28, 125202 (2017).
 588. F.J. Li, Z.Y. Li, L.Y. Tan, Y.P. Zhou, J. Ma, M. Lysevych, L. Fu, H.H. Tan and C. Jagadish, Radiation effects on GaAs/AlGaAs core/shell ensemble nanowires and nowire infrared photodetectors, *Nanotech.* 28, 125702 (2017).
 589. P.R. Narangari, S.K. Karuturi, M. Lysevych, H.H. Tan and C. Jagadish, Improved photochemical performance of GaN nanopillar photoanodes, *Nanotech.* 28, 154001 (2017).
 590. X. Yuan, D. Saxena, P. Caroff, F. Wang, M. Lockrey, S. Mokakpati, H.H. Tana nd C. Jagadish, Strong amplified spontaneous emission from high quality GaAsSb single quantum well nanowires, *J. Phys. Chem. C.* 121, 8636-8644 (2017).

591. S. S. Kruk, R. Camacho-Morales, L. Xu, M. Rahmani, D.A. Smirnova, L. Wang, H.H. Tan, C. Jagadish, D.N. Neshev and Y.S. Kivshar, Nonlinear Optical Magnetism Revealed by Second-Harmonic Generation in Nanoantennas *Nano Letters* 17, 3914-3918 (2017).
592. S. Baig, J. Boland, D. Damry, H.H. Tan, C. Jagadish, M.B. Johnston and H.J. Joyce, Choice of Polymer Matrix for a Fast Switchable III-V Nanowire Terahertz Modulator. *MRS Advances*, 2, 1475-1480 (2017).
593. V. Gautam, S. Naureen, N. Shahid, Q. Gao, Y. Wang, D. Nisbet, C. Jagadish and V. R. Daria, Engineering highly interconnected neuronal networks on nanowire scaffolds, *Nano Letters* 17, 3369-3378 (2017).
594. J. Pei, J. Yang, X. Wang, F. Wang, S. Mokkaapati, T. Lü, J-C Zheng, Q. Qin, D. Neshev, H. H. Tan, C. Jagadish, and Y. Lu, Excited state biexcitons in atomically thin MoSe₂, *ACS Nano* 11, 7468-7475 (2017).
595. M. Rota, A. Ameruddin, J. Wong-Leung, A. Belabbes, Q. Gao, A. Miriametro, F. Mura, H.H. Tan, A. Polimeni, F. Bechstedt, C. Jagadish and M. Capizzi, Critical temperature for the conversion from wurtzite to zincblende of the optical emission of InAs nanowires, *J. Phys. Chem. C* 121, 16650-16656 (2017).
596. H.J. Joyce, S.A. Baig, P. Parkinson, C.L. Davies, J.L. Boland, H.H. Tan, C. Jagadish, L.M. Herz and M.B. Johnston, The influence of surfaces on the transient terahertz conductivity and electron mobility of GaAs nanowires, *J. Phys. D: Appl. Phys.* 50, 224001 (2017) (8 pages).
597. J. Alanis, D. Saxena, S. Mokkaapati, N. Jiang, K. Peng, X. Tang, L. Fu, H.H. Tan, C. Jagadish and P. Parkinson, Large-scale statistics for threshold optimization of optically pumped nanowire lasers, *Nano Letts* 17, 4860-4865 (2017).
598. K.Y. Nie, J. Li, X.H. Chen, Y. Xu, X.C. Tu, F.F. Ren, Q.G. Du, L. Fu, L. Kang, K. Tang, S.L. Gu, R. Zhang, P.H. Wu, Y.D. Zheng, H.H. Tan, C. Jagadish and J.D. Ye, Extreme absorption enhancement in ZnT:O/ZnO intermediate band core-shell nanowires by interplay of dielectric resonance and plasmonic bow-tie antennas, *Scientific Reports* 7, 7503 (2017).
599. M.B. Rota, A.S. Ameruddin, J. Wong-Leung, A. Belabbes, Q. Gao, A. Miriametro, F. Mura, H.H. Tan, A. Polimeni, F. Bechstedt, C. Jagadish and M. Capizzi, Critical temperature for the conversion from Wurtzite to Zincblende of the optical emission of InAs nanowires, *J. Phys. Chem. C* 121, 16650-16656 (2017).
600. J.T. Qu, S.C. Du, T. Burgess, C.H. Wang, X.Y. Cui, Q. Gao, W.C. Wang, H.H. Tan, H. Liu, C. Jagadish, Y.J. Zhnag, H.S. Chen, M. Khan, S. Ringer and R.K. Zheng, 3D atomic scale insights into anisotropic core-shell structured InGaAs nanowires grown by metal organic chemical vapor deposition, *Adv. Mater.* 29, 1701888 (2017).
601. H. A. Fonseka, A. S. Ameruddin, P. Caroff, D. Tedeschi, M. De Luca, F. Mura, Y. Guo, M. Lysevych, F. Wang, H. H. Tan, A. Polimeni and C. Jagadish, InP-In_xGa_{1-x}As Core-Multi-Shell Nanowire Quantum Wells with Tunable Emission in the 1.3 – 1.55 μ m Wavelength Range, *Nanoscale* 9, 13544-13562 (2017).
602. D. Jevtics, A. Hurtado, B. Guilhabert, J. McPhillimy, G. Cantarella, Q. Gao, H.H. Tan, C. Jagadish, M. Strain and M.D. Dawson, Integration of semiconductor nanowire lasers with polymeric waveguide devices on a mechanically flexible substrate, *Nano Letts* 17, 5990-5994 (2017).

603. P.L. Gareso, H.H. Tan and C. Jagadish, Impurity Free Vacancy Disordering (IFVD) of InGaAs/AlGaAs Quantum Well Laser Structures. *ECS Journal of Solid State Science and Technology*. 6, N122 (2017)
604. A R Ullah, H J Joyce, H H Tan, C Jagadish and A.P. Micolich, The influence of atmosphere on performance of pure-phase WZ and ZB InAs nanowire transistors, *Nanotech* 28, 454001 (2017).
605. W.Z. Xu, Y.T. Shi, J.D. Ye, F.F. Ren, I.V. Shadrivov, H. Lu, L.J. Liang, X.P. Hu, B.B. Jin, R. Zhang, Y.D. Zheng, H.H. Tan and C. Jagadish, A terahertz controlled NOT-gate based on asymmetric rotation of polarization in chiral metal materials, *Adv. Opt. Mater.*, 5, 1700108 (2017).
606. X.M. Yuan, Y. Guo, P. Caroff, J. He, H.H. Tan and C Jagadish, Dopant-free twinning superlattice formation in InSb and InP nanowires, *Phys. Stat. Solidi. Rapid Res. Lett.* 11, 1700310 (2017).
607. J. Alexander-Webber, C. Groschner, A. Sagade, G. Tainer, M. Gonzalez Zalba, R. Di Pietro, J. Wong-Leung, H.H. Tan. C. Jagadish, S. Hofmann and H.J. Joyce, Engineering the photoresponse of InAs nanowires, *ACS Applied Materials and Interfaces*, 9, 43993-44000 (2017).
608. B. Chen, X.W. Fu, J. Tang, M. Lysevych, H.H. Tan, C. Jagadish and A.H.Zewail, Dynamics and control of gold encapsulated gallium arsenide nanowires imaged by 4D electron microscopy, *Proceedings of National Academy of Sciences*, 114, 12876-12881 (2017).
609. A. Hurtado, D. Jevtics, B. Guilhabert, Q. Gao, H.H. Tan, C. Jagadish and M.D. Dawson, Transfer Printing of Semiconductor Nanowire Lasers, *IET Circuits, Devices and Systems*, 21, 303-5 (2018).
610. Y.Wan, S. Karuturi, C. Samundsett, J. Bullock, M. Hettick, D. Yan. J. Peng, P.R. Narangari, S. Mokkalapati, H.H. Tan, C. Jagadish, A. Javey and A. Cuevas, Tantalum oxide passivated heteroelectrodes for efficient photovoltaics and photoelectrochemical water reduction, *ACS Energy Materials*, 3, 125-131 (2018).
611. P.Yu, F.L. Zhang, Z.Y. Li, Z.Q. Zhong, A.Govorov, L. Fu, H.H. Tan, C. Jagadish and Z.M. Wang, Giant optical pathlength enhancement in plasmonic thin film solar cells using core-shell nanoparticles, *J. Phys. D.: Appl. Phys.* 51, 295106 (2018).
612. B.Zhao, M.N. Lockrey, P. Caroff, N. Wang, L. Li, J. Wong-Leung, H.H. Tan and C. Jagadish, The effect of nitridation on the polarity and optical properties of GaN self-assembled nanorods, *Nanoscale*, 10, 11205-11210 (2018).
613. Z.Y. Li, I. Yang, L. Li, Q. Gao, J.S. Chong, Z. Li, M.N. Lockrey, H.H. Tan, C. Jagadish and L. Fu, Reducing Zn diffusion in single axial junction InP nanowire solar cells for improved performance, *Progress in Natural Science-Materials International*, 28, 178-182 (2018).
614. J. Butson, P.R. Narangari, S.K. Karuturi, R. Yew, M. Lysevych, H.H. Tan and C. Jagadish, Photoelectrochemical studies of InGaN/GaN photoanodes, *Nanotechnology*, 29, 045403 (2018).
615. K. Peng, P. Parkinson, L. Fu, Q. Gao, J. Boland, Y.N. Guo, N. Jiang, H.H. tan, M.B. Johnston and C. Jagadish, Distinguishing cap and core contributions to the photoconductive terahertz response of single GaAs based core-shell cap nanowire detectors, *Lithuanian Journal of Physics*, 58, 15-23 (2018).

616. W.Z. Xu, F.F. Ren, D. Jevtics, A. Hurtado, L. Li, Q. Gao, J.D. Ye, F. Wang, B. Guilhabert, L. Fu, H.H. Tan and C. Jagadish, Vertically emitting indium phosphide nanowire lasers, *Nano Letts* 18, 3414-3420 (2018).
617. F.J. Li, X.L. Xie, Q. Gao L.Y. Tan, Y.P. Zhou, Q.B. Yang, J. Ma, L. Fu, H.H. Tan and C. Jagadish, Enhancement of radiation tolerance in GaAs/AlGaAs core-shell and InP nanowires, *Nanotechnology*, 29, 225703 (2018).
618. T.C. Wei, S. Mokkalapati, T.Y. Li, C.H. Lin, G.R. Lin, C. Jagadish and J.H. He, Nonlinear absorption applications of $\text{CH}_3\text{NH}_3\text{PbBr}_3$ perovskite crystals, *Adv. Func. Mater.* 28, 1707175 (2018).
619. Z.T. Sun, T. Burgess, H.H. Tan. C. Jagadish and A. Kogan. Temperature effects in contacts between a metal and a semiconductor nanowire near the degenerate doping, *Nanotechnology*, 29, 165202 (2018).
620. V. Raj, T. Sibeles dos Santos, F. Rougieux, K. Vora, M. Lysevych, L. Fu, S. Mokkalapati, H.H. Tan and C. Jagadish, Indium Phosphide Based Solar Cell Using Ultra-Thin ZnO as an Electron Selective Layer, *J. Phys. D: Appl. Phys* 51, 395301 (2018).
621. D. Chugh, J. Wong-Leung, L. Li, M. Lysevych, H.H. Tan and C. Jagadish, Flow modulation epitaxy of hexagonal boron nitride, *2D Materials*, 5, 045018 (2018).
622. P. Yu, F.L. Zhang, Z.Y. Li, Z.W. Zhong, A. Govorov, L. Fu. H.H. Tan, C. Jagadish and Z.M. Wang, Giant optical pathlength enhancement in plasmonic thin film solar cells using core-shell nanoparticles, *J. Phys. D: Appl. Phys*, 51, 295106 (2018).
623. L. Li, X.H. Chen, T.C. Ma, X.Y. Cui, F.F. Ren, S.L. Gu, R. Zhang, Y.D. Zheng, S.P. Ringer, L. Fu, H.H. Tan, C. Jagadish and J.D. Ye, Identification and modulation of electronic band structures of single phase beta $(\text{AlGa})_2\text{O}_3$ alloys grown by laser molecular beam epitaxy, *Appl. Phys. Letts.* 113, 041901 (2018).
624. S.K. Karuturi, H. Shen, T. Duong, P.R. Narangari, R. Yew, J. Wong-Leung, K. Catchpole, H.H. Tan and C. Jagadish, Perovskite photovoltaic integrated CdS/TiO₂ photoanode for unbiased photoelectrochemical hydrogen generation, *ACS Appl. Mater. & Interfaces*, 10, 23766-23773 (2018).
625. S.K. Karuturi, R. Yew, P.R. Narangari, J. Wong-Leung, L. Li, K. Vora, H.H. Tan, C. Jagadish, CdS/TiO₂ photoanodes via solution ion transfer method for highly efficient solar hydrogen generation. *Nano Futures.* 2, 015004 (2018).
626. K.Y. Nie, X.C. Tu, J. Li, X.H. Chen, F.F. Ren, G.G. Zhang, L. Kang, S.L. Gu, R. Zhang, P.H. Wu, Y.D. Zheng, H.H. Tan, C. Jagadish and J.D. Ye, Tailored emission properties of ZnTe/ZnTe:O/ZnO core-shell nanowires coupled with an Al plasmonic bowtie antenna array, *ACS NANO*, 12, 7327-7334 (2018).
627. P. Parkinson, J-A, Alanis, K. Peng, D. Saxena, S. Mokkalapati, N. Jiang, L. Fu, H.H. Tan and C. Jagadish, Modal refractive index measurement in nanowire lasers-a correlative approach, *Nano Futures*, 2, UNSP035004 (2018).
628. D. Chugh, J. Wong-Leung, M. Lysevych, H.H. Tan and C. Jagadish, Flow modulation epitaxy of hexagonal boron nitride, *2D Materials*, 5, 045018 (2018).
629. I. Yang, X. Zhang, C.L. Zheng, Q. Gao, Z.Y. Li, L. Li, M.N. Lockrey, H. Nguyen, P. Caroff, J. Etheridge, H.H. Tan, C. Jagdaish, J. Wong-Leung and L. Fu, Radial growth evolution of InGaAs/InP multi quantum-well nanowires grown by selective-area metal organic vapour-phase epitaxy, *ACS Nano*, 12, 10374-10382 (2018).

630. V. Raj, T.S. dos Santos, F. Rougieux, K. Vora, M. Lysevych, L. Fu, S. Mokkaapati, H.H. Tan and C. Jagadish, Indium phosphide based solar cell using ultra-thin ZnO as an electron selective layer, *J. Phys. D: Appl. Phys.*, 51, 395301 (2018).
631. H. Yang, J. Yang, X.B. Ren, H.Y. Chen, C. Jagadish, G.C. Guo, C.H. Jin, X.B. Niu and G.P. Guo, Three-leaf dart-shaped single-crystal BN formation promoted by surface oxygen, *Appl. Phys. Lett.* 113, 163101 (2018).
632. G.Y. Liu, S.K. Karuturi, H.J. Chen, L. Spiccia, H.H. Tan, C. Jagadish, D.W. Wang, A.N. Simonov and A. Tricoli, Tuning the morphology and structure of disordered hematite photoanodes for improved water oxidation: a physical and chemical synergistic approach, *Nano Energy* 53, 745-752 (2018).
633. H. Gao, M. Lysevych, H.H. Tan, C. Jagadish and J. Zou, The effect of Sn addition on GaAs nanowire grown by vapour-liquid-solid growth mechanism, *Nanotech.* 29, 465601 (2018).
634. M. Rahmani, L. Giuseppe, Igal Brener, Anatoly V. Zayats, Stefan A. Maier, Costantino De Angelis, Hoe Tan, V.F. Gili, F. Karouta, R. Oulton, K. Vora, M. Lysevych, I. Staude, L. Xu, A.E. Miroschnichenko, C. Jagadish and D.N. Neshev, "Nonlinear frequency conversion in optical nanoantennas and metasurfaces: materials evolution and fabrication." *Opto-Electronic Advances* 1, 180021 (12 pages) (2018).
635. P.R. Ghediya, T.K. Chaudhuri, V. Taj, D. Chugh, K. Vora, L. Li, H.H. Tan and C. Jagadish, Direct-coated Cu₂Sn₃ films from molecular solution inks for solar photovoltaics, *Mater. Sci. Semicond. Proc.* 88, 120-126 (2018).
636. B. Mirkhaydarov, H. Votsi, A. Sahu, P. Caroff, P.R. Young, V. Stolojan, S.C. King, C.C.H. Ng, V. Devabhaktuni, H.H. Tan, C. Jagadish, P.H. Aaen and M. Shkunov, Solution-processed InAs nanowire transistors as microwave switches, *Adv. Electron. Mater.* 5, 1800323 (2019).
637. J.A. Alanis, M. Lysevych, T. Burgess, D. Saxena, S. Mokkaapati, S. Skalsky, X.Y. Tang, P. Mitchell, A.S. Walton, H.H. Tan, C. Jagadish and P. Parkinson, Optical study of p-doping in GaAs nanowires for low-threshold and high-yield lasing, *Nano Lett.* 19, 362-368 (2019).
638. R. Yew, S.K. Karuturi, J.Q. Liu, H.H. Tan, Y.C. Wu and C. Jagadish, Exploiting defects in TiO₂ inverse opal for enhanced photoelectrochemical water splitting, *Opt. Exp.* 27, 761-773 (2019).
639. R. Camacho-Morales, G. Bautista, X.R. Zang, L. Xu, L. Turquet, A. Miroschnichenko, H.H. Tan, A. Lamprianidis, M. Rahmani, C. Jagadish, D.N. Neshev and M. Kauranen, Resonant harmonic generation in AlGaAs nanoantennas probed by cylindrical vector beams, *Nanoscale*, 11, 1745-1753 (2019).
640. B. Chen, X.W. Fu, M. Lysevych, H.H. Tan and C. Jagadish, Four-dimensional probing of phase-reaction dynamics in Au/GaAs nanowires, *Nano Lett.* 19, 781-786 (2019).
641. Q. Gao, Z.Y. Li, L. Li, K. Vora, Z. Li, A. Alabadla, F. wang, Y.A. Guo, K. Peng, Y.C. Wenas, S. Mokkaapati, F. Karouta, H.H. Tan, C. Jagadish and L. Fu, Axial p-n junction design and characterization for InP nanowire solar cells, *Progress in Photovoltaics*, 27, 237-244 (2019).
642. XT Zhang, H. Huang, X.M. Yao, Z.Y. Lo, C. Zhou, X. Zhang, P.P. Chen, L. Fu, X.H. Zhou, J.L. Wang, W.D. Hu, W. Lu, J. Zou, H.H. Tan and C. Jagadish,

- Ultrasensitive mid-wavelength infrared photodetection based on a single InAs Nanowire, *ACS Nano*, 13, 3492-3499 (2019).
643. X.M. Yuan, L. Li, z.Y. Li, F. Wang, N.Y. Wang, L. Fu, J. He, H.H. Tan and C. Jagadish, Unexpected benefits of stacking faults on the electronic structure and optical emission in wurtzite GaAs/GaInP core/shell nanowires, *Nanoscale*, 11, 9207-9215 (2019).
 644. D. Tadeschi, M. De Luca, P.E. Faria, A.G. del Aquila, Q. Gao, H.H. Tan, B. Schraf, P.C.M. Christianen, C. Jagadish, J. Fabian and A. Polimeni, Unusual spin properties of InP wurtzite nanowires revealed by Zeeman splitting spectroscopy, *Phys. Rev B*, 99, 161204 (2019).
 645. P.R. Narangari, S.K. Karuturi, Y.L. Wu, J. Wong-Leung, K. Vora, M. Lysevych, Y.M. Wan, H.H. Tan, C. Jagadish and S. Mokkaapati, Ultrathin Ta₂O₅ electron-selective contacts for high efficiency Silicon Solar Cells, 11, 7497-7505 (2019).
 646. X.M. Yuan, L.Li, Z.Y. Li, F. Wang, N.Y. Wang, L. Fu, J. He, H.H. Tan and C. Jagadish, Unexpected benefits of stacking faults on the electronic structure and optical emission in wurtzite GaAs/GaInP core/shell nanowires, *Nanoscale*, 11, 9207-9215 (2019).
 647. J.D. Sautter, X. Lu, A.E. Miroschnichenko, M. Lysevych, I. Volkoyskava, D.A. Smirnova, R. Camach-Morales, K.Z. Kamali, F. Karouta, K. Vora, C. Jagadish, D.N. Neshev and M. Rahmani, Tailoring second-harmonic emission from (111)-GaAs nanoantennas, *Nano Lett.* 19, 3905-3911 (2019).
 648. I. Yang, Z.Y. Li, J. Wong-Leung, Y. Zhu, Z. Li, N. Gagrani, L. Li, M.N. Lockrey, H. Nguyen, Y.R. Lu, H.H. Tan, C. Jagadish and L. Fu, Multiwavelength single nanowire InGaAs/InP quantum well Light-Emitting Diodes, *Nano Letts.* 19, 3821-3829 (2019).
 649. H. Gao, W. Sun, Q. Sun, H.H. Tan, C. Jagadish and J. Zou, Compositional varied core-shell InGaP nanowires grown by metal-organic chemical vapour deposition, *Nano Letts.* 19, 3782-3788 (2019).
 650. N.Y. Wang X.M. Yuan, X. Zhang, Q. Gao, B.J. Zhao, L. Li, M. Lockrey, H.H. Tan, C. Jagadish and P. Caroff, Shape engineering of InP nanostructures by selective area epitaxy, *ACS Nano*, 13, 7261-7269 (2019).
 651. Y.T. Shi, F.F. Ren, W.Z. Xu, X.H. Chen, J.D. Ye, L. Li, D. Zhou, R. Zhang, Y.D. Zheng, H.H. Tan, C. Jagadish and H. Lu, Realization of p-type gallium nitride by magnesium ion implantation for vertical power devices, *Scientific Reports*, 9, 8796 (2019).
 652. V. Raj, L. Fu, H.H. Tan and C. Jagadish, Design principles for fabrication of InP-based radial junction nanowire solar cells using an electron selective contact, *IEEE J. Photovoltaics*, 9, 980-991 (2019).
 653. J. Seidl, J.G. Gluschke, X. Yuan, S. Naureen, N. Shahid, H.H. Tan, C. Jagadish, A.P. Micolich and P. Caroff, Regaining a spatial dimension: Mechanically transferrable two-dimensional InAs nanofins grown by selective area epitaxy, *Nano Lett.* 19, 4666-4677 (2019).
 654. V. Raj, T. Lu, M. Lockrey, R. Liu, F. Kremer, L. Lu, Y. Liu, H.H. Tan and C. Jagadish, Introduction of TiO₂ in CuI for its improved performance as a p-type transparent conductor, *ACS Appl. Mater and Interfaces*, 11, 25254-24263 (2019).

655. J.D. Butson, P.R. Narangari, M. Lysevych, J. Wong-Leung, Y.M. Wan, S.K. Karuturi, H.H. Tan and C. Jagadish, InGaAsP as a promising narrow bandgap semiconductor for photoelectrochemical water splitting, *ACS Appl. Mater. and Interfaces*, 11, 25236-25242 (2019).
656. Z.Q. Zhong, X.L. Li, J. Wu, C. Li, R.B. Xie, X.M. Yuan, N.B. Niu, W.H. Wang, X.R. Luo, G.J. Zhang, Z.M. Wang, H.H. Tan and C. Jagadish, Wavelength tunable InAsP quantum dots in InP nanowires, *Appl. Phys. Letts.* 115, 053101 (2019).
657. D. Chugh, C. Jagadish and H. Tan, Large area hexagonal boron nitride for surface enhanced Raman spectroscopy, *Adv. Mater. Technol.* 4, 1900220 (2019).
658. I.A. Shojaei, S. Iinser, G. Jnawali, N. Wickramasuriya, H.E. Jackson, LM. Smith, F. Kargar, A.A. Balandin, X.M. Yuan, P. Caroff, H.H. Tan and C. Jagadish, Strong hot carrier effects in single nanowire hetrostructures, *Nano Lett.* 19, 5062-5069 (2019).
659. H.Gao, Q. Sun, M.Lysevych, H.H. Tan, C. Jagadish and J. Zou, Effect of Sn addition on epitaxial GaAs nanowire grown at different temperatures in metal organic chemical vapour deposition, *Cryst. Growth and Design*, 19, 5314-5319 (2019).
660. V. Raj, K. Vora, L. Fu, H.H. Tan and C. Jagadish, High efficiency solar cells from extremely low minority carrier lifetime substrates using radial junction nanowire architecture, *ACS Nano*, 13, 12015-12023 (2019).
661. T.C. Ma, X.H. Chen, Y. Kuang, L. Li, J. Li, F. Kremer, F.F. Ren, S.L. Gu, R. Zhang, Y.D. Zheng, H.H. Tan, C. Jagadish and J.D. Ye, On the origin of dislocation generation and annihilation in alpha-Ga₂O₃ epilayers on sapphire, *Appl. Phys. Lett.* 115, 182101 (2019).
662. J.A. Alanis, Q. Chen, M. Lysevych, T. Burgess, L. Li, Z. Liu, H.H. Tan, C. Jagadish and P. Parkinson, Threshold reduction and yield improvement of semiconductor nanowire lasers via processing related end facet optimization, *Nanoscale Advances*, 1, 4393-4397 (2019).
663. H. Gao, Q. Sun, W. Sun, H.H. Tan, C. Jagadish and J. Zou, Understanding the effect of catalyst size on the epitaxial growth of hierarchial structured GaP nanowires, *Nano Lett.* 19, 8262-8269 (2019).
664. P. Yu, Z.Y. Li, T.W. Wu, Y.T. Wang, X. Tong, C.F. Li, Z.C. Yang, S.H. Wei, Y.Y. Zhang, H.Y. Liu, L. Fu, Y.N. Zhang, J. Wu, H.H. Tan, C. Jagadish and Z.M. Wang, Nanowire quantum dot surface engineering for high temperature single photon emission, *ACS Nano*, 13, 13492-13500 (2019).
665. X.H. Chen, Y.T. Chen, F.F. Ren, S.L. Cu, H.H. Tan, C. Jagadish and J.D. Ye, Band alignment and band bending at alpha Ga₂O₃/ZnO n-n isotype hetero-interface, *Appl. Phys. Lett.* 115, 202101 (2019).
666. H.A. Fonseka, P. Caroff, Y.N. Guo, A.M. Sanchez, H.H. Tan and C. Jagadish, Engineering the side effects of vertical [100] oriented InP nanowires for novel radial heterostructures, *Nanoscale Research Lett.* 14, 399 (2019).
667. E.Z. Stutz, M. Friedl, T. Burgess, H.H. Tan, P. Caroff, C. Jagadish and A. Fontcuberta-in-Morrall, Nanosails showcasing Zn₃As₂ as an optoelectronic-grade earth abundant semiconductor, *Phys. Stat. Sol. Rapid Research Lett.* 1900084 (2019).

668. K. Bera, D. Chugh, A. Patra, H.H. Tan, C. Jagadish and A. Roy, Strain distribution in wrinkled hBN films, *Solid State Comms.*, 310, 113847 (2020).
669. L. Xu, G. Saerens, M. Timofeeva, D.A. Smirnova, I. Volkovskaya, R. Camach-Morales, M. Cai, K.Z. Kamali, L.J. Huang, F. Karouta, H.H. Tan, C. Jagadish, A.E. Miroshnichenko, R. Grange, D.N. Neshev and M. Rahmani, Forward and backward switching of nonlinear unidirectional emission from GaAs nanoantennas, *ACS Nano*, 14, 1379-1389 (2020).
670. J. Tournet, Y. Lee, S.K. Krishna, H.H. Tan and C. Jagadish, III-V semiconductor materials for solar hydrogen generation, *ACS Energy Letters*, 5, 611-622 (2020).
671. X Yuan, K Liu, S Skalsky, P Parkinson, L Fang, J He, HH Tan, C Jagadish, Carrier dynamics and recombination mechanisms in InP twinning superlattice nanowires, *Optics Express* 28, 16795-16804 (2020).
672. K. Peng, D. Jevtics, F. Zhang, S. Sterzl, D.A. Damry, M.U. Rothmann, B. Guilhabert, M.J. Strain, H.H. Tan, L.M Herz, L. Fu, M.D Dawson, A. Hurtado, C. Jagadish, M.B. Johnston, Three-dimensional cross-nanowire networks recover full terahertz state, *Science*, 368, issue 6490, 510-513 (2020).
673. I. Yang, S. Kim, M. Niihori, A. Alabadla, Z. Li, L. Li, M.N Lockrey, D-Y. Choi, I. Aharonovich, J. Wong-Leung, H.H. Tan, C. Jagadish, L. Fu, Highly uniform InGaAs/InP quantum well nanowire array-based light emitting diodes, *Nano Energy*, 71, 104576 (2020).
674. Z. Li, X. Yuan, Q. Gao, I. Yang, L. Li, P. Caroff, M. Allen, J. Allen, H.H. Tan, C. Jagadish, L. Fu, In situ passivation of GaAsSb nanowires for enhanced infrared photoresponse, *Nanotechnology*, 31, 244002 (2020).
675. D. Tedeschi, D. H.A. Fonseka, E. Blundo, A. Granados del Águila, Y. Guo, H.H. Tan, P.C. Christianen, C. Jagadish, A. Polimeni, M. De Luca, Hole and electron effective masses in single InP nanowires with a wurtzite-zincblende homojunction. *ACS nano*, 14, 11613-11622 (2020)
676. JG Hao, TC Ma, XH Chen, Y Kuang, L Li, J Li, F-F Ren, SL Gu, HH Tan, C Jagadish, JD Ye, Phase tailoring and wafer-scale uniform hetero-epitaxy of metastable-phased corundum α -Ga₂O₃ on sapphire, *Appl. Surf Sci.* 145871 (2020).
677. D. Chugh, S. Adhikari, J. Wong-Leung, M. Lysevych, C. Jagadish, H.H. Tan, Improving the morphology and crystal quality of AlN grown on two-dimensional hBN, *Crystal Growth & Design*, 20, 1811-1819 (2020).
678. S.K. Karuturi, H. Shen, A. Sharma, F.J Beck, P. Varadhan, T. Duong, P.R. Narangari, D. Zhang, Y. Wan, J-H. He, H.H. Tan, C. Jagadish, K. Catchpole, Over 17% Efficiency Stand-Alone Solar Water Splitting Enabled by Perovskite-Silicon Tandem Absorbers, *Advanced Energy Materials*, 2020, 2000772 (2020).
679. V. Raj, F. Rougieux, L. Fu, H.H. Tan, C. Jagadish, Design of Ultrathin InP Solar Cell Using Carrier Selective Contacts, *IEEE J. Photovoltaics*, 10, 1657-1666 (2020).
680. A. Gustafsson, N. Jiang, C. Zheng, J. Etheridge, Q. Gao, H.H. Tan, C. Jagadish, J. Wong-Leung, Cathodoluminescence visualisation of local thickness variations of GaAs/AlGaAs quantum-well tubes on nanowires, *Nanotechnology*, 31, 424001 (2020)

681. B.Zhao, M.N. Lockrey, N.Wang, P.Caroff, X.Yuan, L.Li, J.Wong-Leung, H.H. Tan, C. Jagadish, Highly regular rosette-shaped cathodoluminescence in GaN self-assembled nanodisks and nanorods, *Nano Research* 13, 2500–2505 (2020)
682. S. Pournia, S. Linser, G. Jnawali, H.E Jackson, L.M Smith, A. Ameruddin, P. Caroff, J. Wong-Leung, H.H. Tan, C.Jagadish, H.J. Joyce, Exploring the band structure of Wurtzite InAs nanowires using photocurrent spectroscopy, *Nano Research* 13, pp. 1586-1591 (2020).
683. Y. Lee, I. Yang, H.H. Tan, C. Jagadish and S.K. Karuturi, Monocrystalline InP thin films with tunable surface morphology and energy bandgap, *ACS Appl. Mater. and Interfaces*, 12, 36380-36388 (2020).
684. M.C. Luo, F.F. Ren, N. Gagrani, K. Qiu, Q.J. Wang, L. Yu, J.D. Ye, F. Yan, R. Zhang, H.H. Tan, C. Jagadish and XL. Ji, Polarisation independent indium phosphide nanowire photodetectors, *Advanced Optical Materials* 2000514 (2020).
685. D. Jevtics, J. McPhillimy, B. Guilhabert, J.A. Alanis, H.H. Tan, C. Jagadish and M.D. Dawson, A. Hurtado, P. Parkinson and M.J. Strain, Characterization, selection and microassembly of nanowire laser systems, *Nano Letts*, 20, 1862-1868 (2020).
686. P. R. Ghediya, T.K. Chaudhuri, V. Raj, D. Vnakhade, H.H. Tan and C. Jagadish, Electrical properties of compact drop-casted Cu₂SnS₃ films, *J. Electronic Materials*, 49, 6403-6409 (2020).
687. J.G. Gluschke, J. Seidl, H.H. Tan, C. Jagadish, P. Caroff and A.P. Micolich, Impact of invasive metal probes on Hall measurements in semiconductor nanostructures. *Nanoscale*, 12, 20317-20325 (2020).
688. X.M. Yuan, N.Y. Wang, Z.Z. Tian, F.L. Zhang, L. Li, M. Lockrey, J. He, C. Jagadish and H.H. Tan, Facet dependent growth of InAs quantum wells in InP nanowire and membrane arrays, *Nanoscale Horizons*, 5, 1530-1537 (2020).
689. R. Yew, H.H. Tan, C. Jagadish and S.K. Karuturi, Three-dimensional ordered macroporous TiO₂-TiO_xN_y heterostructure for photoelectrochemical water splitting, *J. Phys. Chem C*, 124, 24135-24144 (2020).
690. L.W. Smith, J.O. Batey, J.A. Alexander-Webber, Y. Fan, Y.C. Hsieh, S. Fung, D. Jevtics, J. Robertson, B.J.E. Guilhabert, M.J. Strain. M.D.Dawson, A. Hurtado, J.P. Griffiths, H.E. Beere. C. Jagadish, O.J. Burton, S. Hoffman, S.M. Chen, D.A. Ritchie, M. Kelly, H.J. Joyce and C.G. Smith, High-throughput electrical characterization of nanomaterials from room to cryogenic temperatures, *ACS Nano*, 14, 15293-15305 (2020).
691. N. Jiang, H.J. Joyce, P. Parkinson, J. Wong-Leung, H.H. Tan and C. Jagadish, Facet related nonuniformity in photoluminescence emission in passivated GaAs nanowires, *Frontiers in Chemistry*, 8,607481 (2020).
692. C.W. Tu, M. Franzl, Q. Gao, H.H. Tan. C. Jagadish, H. Schmitzer and H.P. Wagner, Lasing from InP nanowire photonic crystals on InP substrate, *Adv. Opt. Mater.* 9, 2001745 (2021).
693. N. Mendelson, D. Chugh, J.R. Reimers, T.S. Cheng, A. Gottscholl, H. Long, C.J. Mellor, A. Zettl, V. Dyakonov, P.H. Beton, S.V. Novikov, C. Jagadish, H.H. Tan, M.J. Ford, M. Toth, C. Bradac and I. Aharonovich, Identifying carbon as the source of visible single photon emission from hexagonal boron nitride, *Nature Materials*, 20, 321 (2021).

694. K. Bera, A. Roy, D. Chugh, J.Wong-Leung, H.H. Tan and C. Jagadish, Role of defects and grain boundaries in the thermal response of wafer-scale hBN films, *Nanotechnol.* 32, 075702 (2021).
695. V. Raj, D. Chugh, L.E. Black, M.M. Shehata, L. Li, F. Kremer, D. H. McDonald, H.H. Tan and C. Jagadish, Passivation of InP solar cells using large area hexagonal-BN layers, *2D Materials and Applications*, 5, 12 (2021).
696. Y. Lee, H.H. Tan, C. Jagadish and S.K. Karuturi, Controlled cracking for large-area thin film exfoliation: working principles, status and prospects, *ACS Applied Electronic Materials*, 3, 145-162 (2021).
697. V. Raj, T. Haggren, J. Tournet, H.H. Tan and C. Jagadish, Electron-Selective Contact for GaAs Solar Cells, *ACS Applied Energy Materials*, 4, 1356-1364 (2021).
698. Z.L. Liu, X.M. Yuan, S.L. Wang, S. Liu, H.H. Tan and C. Jagadish, Nanomechanical behavior of single taper-free GaAs nanowires unravelled by in-situ TEM mechanical testing and molecular dynamics simulation, *Mat. Sci. Eng. A*, 806, 140866 (2021).
699. V. Raj, H.H. Tan and C. Jagadish, Axial vs radial junction nanowire solar cell November 2019 *Asian Journal of Physics*, 28, 719-746 (2021).
700. N.Y. Wang, W.W. Wong, X.M. Yuan, L. Li, C. Jagadish and H.H. Tan, Understanding Shape Evolution and Phase Transition in InP Nanostructures Grown by Selective Area Epitaxy, *Small*, 17, 2100263 (2021).
701. J. Seidl, J.G. Gulshke, X.M. Yuan, H.H. Tan, C. Jagadish, P. Caroff and A.P. Micolich, Postgrowth Shaping and Transport Anisotropy in Two-Dimensional InAs Nanofins, *ACS Nano*, 15, 7226-7236 (2021).
702. R. Camacho-Morales, D. Rocco, L. Xu, V.F. Gill, N. Dimitrov, I. Stoyanov, Z.H. Ma, A. Komar, M. Lysevych, F. Karouta, A. Dreischuh, H.H. Tan. G. Leo, C. De Angelis, C. Jagadish. A.E. Morishnichenko, M. Rahmani and D. Neshev, Infrared upconversion imaging in nonlinear metasurfaces, *Adv. Photonics*, 3, 036002 (2021).
703. Z. Azimi, N. Gagrani, J.T. Qu, O.L.C. Lem, S. Mokkaapati, J.M. Cairney, R.K. Zheng, H.H. Tan, C. Jagadish and J. Wong-Leung, Understanding the role of facets and twin defects in the optical performance of GaAs nanowires for laser applications, *Nanoscale Horizons*, 6, 559-567 (2021).
704. M. Rashidi. T. Haggren, Z.C. Su, C. Jagadish, S. Mokkaapati and H.H. Tan, Managing Resonant and Nonresonant Lasing Modes in GaAs Nanowire Random Lasers, *Nano Lett.* 21, 3901-3907 (2021).
705. X.T. Zhang, R.X. Yi, N. Gagrani, Z.Y. Li, F.L. Zhang, X.T. Gan, X.M. Yao, X.M. Yuan, N.Y. Wang, J.L. Zhao, P.P. Chen, W. Lu, L. Fu, H.H. Tan and C. Jagadish, Ultralow Threshold, Single-Mode InGaAs/GaAs Multiquantum Disk Nanowire Lasers, *ACS Nano*, 15, 9126-9133 (2021).
706. Z.C. Su, N.Y. Wang, H.H. Tan and C. Jagadish, 2D Carrier Localization at the Wurtzite-Zincblende Interface in Novel Layered InP Nanomembranes, *ACS Photonics*, 8, 1735-1745 (2021).
707. F.L. Zhang, X.T. Zhang, Z.Y. Li, R.X. Yi, Z. Li, N.Y. Wang, X.X. Xu, Z. Azimi, L. Li, M. Lysevych, X.T. Gan, Y.R. Lu, H.H. Tan, C. Jagadish and L. Fu, A New Strategy for Selective Area Growth of Highly Uniform InGaAs/InP Multiple

- Quantum Well Nanowire Arrays for Optoelectronic Device Applications, *Adv. Functional Mater.* Article no. 2103057, DOI 10.1002/adfm.202103057 (2021).
708. W.W. Wong, Z.C. Su, N.Y. Wang, C. Jagadish and H.H. Tan, Epitaxially Grown InP Micro-Ring Lasers, *Nano Lett.* 21, 5681-5688 (2021).
709. Y. Lee, B. Gupta, H.H. Tan, C. Jagadish, J. Oh and S. Karuturi, Thin silicon via crack-assisted layer exfoliation for photoelectrochemical water splitting, *iScience*, 24, 102921 (2021).
710. P.R. Narangari, J.D. Butson, H.H. Tan, C. Jagadish and S. Karuturi, Surface-tailored InP nanowires via self-assembled Au nanodots for efficient and stable photoelectrochemical hydrogen generation, *Nano Letts* 21, 6967-6974 (2021).
711. Z. Li, S. Trendafilov, F.L. Zhang, M.S. Allen, J.W. Allen, S.U. Dev. W.W. Pan, Y. Yang, Q. Gao, X.M. Yuan, I. Yang, Y. Zhu. A. Bhat, S.X. Peng, W. Lei, H.H. Tan, C. Jagadish and L. Fu, Broadband GaAsSb nanowire array photodetectors for filter-free multispectral imaging, *Nano Letts* 21, 7388-7395 (2021).
712. J. Tournet, J.D. Butson, P.R. Narangari, S. Dontu, B. Gupta, M. Lysevych, S. Karuturi, H.H. Tan and C. Jagadish, Narrow-bandgap InGaAsP solar cell with TiO₂ carrier-selective contact, *Physica Status Solidi: Rapid Research Letters*, article no. 2100282, DOI: 10.1002/pssr.202100282 (2021).
713. S. Trendafilov, J.W. Allen, M.S. Allen, S.U. Dev, Z.Y. Li, L. Fu and C. Jagadish, Light Absorption in Nanowire Photonic Crystal Slabs and the Physics of Exceptional Points: The Shape Shifter Modes, *Sensors*, 21, 5420 (2021).
714. G. Liu, P.R. Narangari, Q.T. Trinh, W. Tu, M. Kraft, H. H. Tan, C. Jagadish, T.S. Choksi, J. W Ager, S. Karuturi, R. Xu, Manipulating Intermediates at the Au-TiO₂ Interface over InP Nanopillar Array for Photoelectrochemical CO₂ Reduction, *ACS Catalysis* 11, 11416-11428 (2021).
715. D. Jevtics, J.A. Smith, J.McPhillimy, B. Guilhabert, P.Hill, C.Klitis, A.Hurtado, M. Sorel, H.H. Tan, C. Jagadish, M.D. Dawson, M.J. Strain, Spatially dense integration of micron-scale devices from multiple materials on a single chip via transfer-printing, *Optical Mater. Exp.* 11, 3567-3576 (2021).
716. Y.Zhu, V. Raj, Z.Li, H.H. Tan, C. Jagadish, L.Fu, Self-Powered InP Nanowire Photodetector for Single-Photon Level Detection at Room Temperature, *Advanced Materials* 33, 2105729 (2021)
717. M. Rashidi, Z. Li, C. Jagadish, S. Mokkapati, H.H.Tan, Controlling the lasing modes in random lasers operating in the Anderson localization regime, *Optics Express*, 29, 33548-33557 (2021).
718. S.Wei, Z.Li, A.John, B.I. Karawdeniya, Z. Li, F. Zhang, K. Vora, H.H.Tan, C. Jagadish, K. Murugappan, A.Tricoli, L. Fu, Semiconductor Nanowire Arrays for High-Performance Miniaturized Chemical Sensing, *Adv. Funct. Mater.* 32, 2107596 (2021).
719. Y. Li, Y. Wang, R. Cai, C. Yu, J. Zhang, J. Wu, Y. Zhang, H.H. Tan, C. Jagadish, Y. Wu, Tunable Synthesis of 3D Niobium Oxynitride Nanosheets for Lithium-Ion Hybrid Capacitors with High Energy/Power Density, *ACS Sustainable Chemistry and Engineering* 9, 14569-14578 (2021).
720. G. Aman, F. Mohammadi, M. Franzl, M. Lysevych, H.H. Tan, C. Jagadish, H. Schmitzer, M. Cahay, H.P. Wagner, Effect of Au substrate and coating on the lasing characteristics of GaAs nanowires, *Sci. Rep.* 11, 21378 (2021).

721. X. Yuan, H. Liu, S. Liu, R. Zhang, Y. Wang, J. He, H. H. Tan, C. Jagadish, Thermodynamic properties of metastable wurtzite InP nanosheets, *J. Phys D Appl. Phys.* 54, 50511254 (2021).
722. J.D. Butson, A. Sharma, H. Chen, Y. Wang, Y. Lee, P. Varadhan, M.N. Tsampas, C. Zhao, A. Tricoli, H.H. Tan, C. Jagadish, S. Karuturi, Surface-structured cocatalyst foils unraveling a pathway to high-performance solar water splitting *Adv Energy Mater.* 12, 2102752 (2022).
723. Z. Azimi, A. Gopakumar, A.S. Ameruddin, L. Li, T. Truong, H.T. Nguyen, H.H. Tan, C. Jagadish, J. Wong-Leung, Tuning the crystal structure and optical properties of selective area grown InGaAs nanowires, *Nano Res.* 15, 3695–3703 (2022).
724. W. M.W. Ahmad Kamil, H.H. Tan, C. Jagadish, J. Dawes, B Zhao, WZ Wan Ismail, A hybrid random laser using dye with self-organized GaN nanorods, *Semicond. Sci. Technol.* 37, 025009 (2022).
725. D. Rocco, R.C. Morales, L. Xu, A. Zili, V. Vinel, M. Finazzi, M. Celebrano, G. Leo, M. Rahmani, C. Jagadish, H.H. Tan, D. Neshev, C. De Angelis, Second order nonlinear frequency generation at the nanoscale in dielectric platforms, *Adv Phys-X*, 7, 2022992 (2022).
726. R.X. Yi, X. T. Zhang, C. Li, B.J. Zhao, J. Wang, Z.W. Li, X.T. Gan, L. Li, Z.Y. Li, F.L. Zhang, L. Fang, N.Y. Wang, P.P. Chen, W. Lu, L. Fu, J.L. Zhao, H.H. Tan and C. Jagadish, Self-frequency-conversion nanowire lasers, *Light-Science and Applications*, 11, 120 (2022).
727. N. Gagrani, K. Vora, S. Adhikari, Y.X. Jiang, C. Jagadish and H.H. Tan, n-SnO_x as a Transparent Electrode and Heterojunction for p-InP Nanowire Light Emitting Diodes, *Adv. Opt. Mater.* DOI10.1002/adom.202102690 (2022).
728. Y. Lee, B. Gupta, H.H. Tan, C. Jagadish, J. Ohn and S. Karuturi, Ultrathin transparent metal capping layer on metal oxide carrier-selective contacts for Si solar cells, *Eur. Phys. Journal-Special Topics*, DOI
729. N. Gagrani, K. Vora, L. Fu, C. Jagadish and H.H. Tan, Flexible InP-ZnO nanowire heterojunction light emitting diodes, *Nanoscale Horizons*, 7, 446-454 (2022).
730. X.R. Zuo, Z.Y. Li, W.W. Wong, Y. Yu, X. Li, J. He, L. Fu, H.H. Tan, C. Jagadish, X.M. Yuan, Design of InAs nanosheet arrays with ultrawide polarization-independent high absorption for infrared photodetection, *Appl. Phys. Lett.* 120, 071109 (2022).
731. Z.Y. Li, L. Li, F. Wang, L. Xu, Q. Gao, A. Alabadla, K. Peng, K. Vora, H.T. Hattori, H.H. Yan, C. Jagadish and L. Fu, Investigation of light-matter interaction in single vertical nanowires in ordered nanowire arrays, *Nanoscale*, 14, 3527-3536 (2022).
732. C.W. Tu, M. Kaveh, M. Franzl, Q. Gao, H.H. Tao, C. Jagadish, H. Schmitzer and H.P. Wagner, Unique reflection from birefringent gold-coated InP nanowire crystal arrays, *Opt. Exp.* 30, 3172-3182 (2022).
733. A.G. S. Vilasam, P.K. Prasanna, X.M. Yuan, Z. Azimi, F. Kremer, C. Jagadish, S. Chakraborty and H.H. Tan, Epitaxial growth of GaAs nanowires on synthetic mica by metal organic chemical vapor deposition, *ACS Appl. Mater. Inter.* 13, 3395-3403 (2022).

734. B. Gupta, M.A. Hossain, Md Anower, A. Riaz, A. Sharma, D.D. Zhang, H.H. Tan, C. Jagadish, K. Catchpole, B. Hoex and S. Karuturi, Recent advances in materials design using atomic layer deposition for energy applications, *Adv Funct. Mater.* 31, 2109105 (2022).
735. S. Kaushik, S. Karmakar, R.K. Varshney, H. Sheoran, D. Chugh, C. Jagadish, H.H. Tan and R. Singh, Deep-Ultraviolet Photodetectors Based on Hexagonal Boron Nitride Nanosheets Enhanced by Localized Surface Plasmon Resonance in Al Nanoparticles, *ACS Appl. Nano Mater.* 5, 7481-7491 (2022).
736. S. Adhikari, OLC Lem, F. Kremer, K. Vora, F. Brink, M. Lysevych, H.H. Tan and C. Jagadish, Nonpolar Al_xGa_{1-x}N/AlyGa_{1-y}N multiple quantum wells on GaN nanowire for UV emission, *Nano Research*, 15, 7670-7680 (2022).
737. Z. Azimi, A. Gopakumar, L. Li, F. Kremer, M. Lockrey, A.A. Wibowo, H.T. Nguyen, H.H. Tan, C. Jagadish and J. Wong-Leung, Effective Passivation of InGaAs Nanowires for Telecommunication Wavelength Optoelectronics, *Adv. Opt. Mater.* 10. 2200739 (2022).
738. JZ. Soo, B. Gupta, A. Riaz, C. Jagadish, H.H. Tan, S. Karuturi, Facile Substrate-Agnostic Preparation of High-Performance Regenerative Water Splitting (Photo)electrodes, *Chemistry of Materials*, 34, 6792-6801 (2022).
739. N. Gagrani, K. Vora, C. Jagadish and H.H. Tan, Thin Sn_xNi_yO_z Films as p-Type Transparent Conducting Oxide and Their Application in Light-Emitting Diodes, *ACS Applied Materials and Interfaces*, 14, 37101-37109 (2022).
740. S. Adhikari, M. Lysevych, C. Jagadish and H.H. Tan, Selective Area Growth of GaN Nanowire: Partial Pressures and Temperature as the Key Growth Parameters, *Crystal Growth and Design*, 22, 5345-5353 (2022).
741. Y.F. Jiang, R. Shen. T. Li, J.M. Tian, S. Li, H.H. Tan. C. Jagadish, Q. Chen, Enhancing the electrical performance of InAs nanowire field-effect transistors by improving the surface and interface properties by coating with thermally oxidized Y₂O₃, *Nanoscale* 14, 12830-12840 (2022).
742. T. Potocnik, P.J. Christopher, R. Mouthaan, T. Albrow-Owen, O.J. Burton, C. Jagadish, H.H. Tan, T.D. Wilkinson, S. Hofmann, H.J. Joyce and J.A. Alexander-Webber, Automated Computer Vision-Enabled Manufacturing of Nanowire Devices, *ACS Nano* (2022).
743. M.S. Weissflog, M. Cai, M. Parry, M. Rahmani, L. Xu, D. Arslan, A. Fedotova, G. Marino, M. Lysevych, H.H. Tan, C. Jagadish, A. Morshnichenko, G. Leo. A.A. Sukhorukov, F. Stezpfandt, T. Pertsch, I. Staude, D. Neshev, Far-Field Polarization Engineering from Nonlinear Nanoresonators, *Lasers and Photonics Reviews* (2022).
744. K. Bera, D. Chugh, H.H. Tan, A. Roy and C. Jagadish, Non-thermal and thermal effects on mechanical strain in substrate-transferred wafer-scale hBN films, *J. Appl. Phys.* 132, 104303 (2022).
745. T. Haggren, V. Raj, A. Haggren, N. Gagrani, C. Jagadish and H.H. Tan, CuI as a Hole-Selective Contact for GaAs Solar Cells, *ACS Appl. Mater. & Interfaces*, 14, 52918-52926 (2022).
746. M. Rashidi, T. Haggren, C. Jagadish and H.H. Tan, Characteristics and Thermal Control of Random and Fabry-Perot Lasing in Nanowire Arrays, *ACS Photonics*, 9, 3573-3583 (2022).

747. R.X. Yi, X.T. Zhang, F.L. Zhang, L.P. Gu, Q. Zhang, L. Fang, J.L. Zhao, L. Fu, H.H. Tan, C. Jagadish and X.T. Gan, Integrating a Nanowire Laser in an on-Chip Photonic Waveguide, *Nano Letters* 22, 9920-9927 (2022).
748. W.W. Wong, N.Y. Wang, C. Jagadish and H.H. Tan, Directional Lasing in Coupled InP Microring/Nanowire Systems, *Laser and Photonics Reviews* 17, 2200658 (2022).
749. S.Y. Wei, Z. Li, K. Murugappan, Z.Y. Li, F.L. Zhang, A.G. Saraswathyvilasam, M. Lysevych, H.H. Tan, C. Jagadish, A. Tricoli and L. Fu, A Self-Powered Portable Nanowire Array Gas Sensor for Dynamic NO₂ Monitoring at Room Temperature, *Adv. Mater.* 35, 2207199 (2022).
750. J. He, Z.W. Huang, Z.Y. Li, W.W. Wong, Y. Yu, L.S.B. Huang, X. Li, L. Fu, H.H. Tan, C. Jagadish and X.M. Yuan, Design of InAs nanosheet arrays for high-performance polarization-sensitive infrared photodetection, *Appl Phys. Lett.* 120, 071109 (2022).
751. T. Haggren, J. Tournet, C. Jagadish, H.H. Tan and J. Oksanen, Strain-Engineered Multilayer Epitaxial Lift-Off for Cost-Efficient III-V Photovoltaics and Optoelectronics, *ACS Appl. Mater. & Interfaces* 15, 1184-1191 (2023).
752. X. Zhang, R. Yi, B. Zhao, C. Li, L. Li, Z. Li, F. Zhang, N. Wang, M. Zhang, L. Fang, J. Zhao, P. Chen, W. Lu, L. Fu, H.H. Tan, C. Jagadish, X. Gan, Vertical Emitting Nanowire Vector Beam Lasers, *ACS Nano*, 17, 10918-10924 (2023).
753. J-W. Liao, Z-T. Huang, C-H. Wu, N. Gagrani, H.H. Tan, C. Jagadish, K-P. Chen, T.C. Lu, Highly localised surface plasma nanolasers via strong coupling, *Nano Letters* 23, 4359–4366 (2023).
754. B. Gupta, M. M. Shehata, Y. Lee, L. E. Black, F. Ma, B. Hoex, C. Jagadish, H.H. Tan, S. Karuturi, Unveiling the Role of H₂ Plasma for Efficient InP Solar Cells, *Solar RRL*, 7, 2200868 (2023).
755. S. Adhikari, F. Kremer, M. Lysevych, C. Jagadish and H.H. Tan, Core-shell GaN/AlGaIn nanowires grown by selective area epitaxy. *Nanoscale Horizons*, 8, 530-542 (2023).
756. C.W. Tu, M. Kaveh, M. Franzl, Q. Gao, H.H. Tan, C. Jagadish, H. Schmitzer, H.P. Wagner, Polarization conversion of light diffracted from InP nanowire photonic crystal arrays, *Adv. Opt. Mater.* 11, 2202342 (2023).
757. K.Z. Kamali, L. Xu, N. Gagrani, H.H. Tan, C. Jagadish, A. Miroshnichenko, D. Neshev, M. Rahmani, Electrically programmable solid-state meta-surfaces via flash localised heating, *Light-Science and Applications*, 12, 40 (2023).
758. J.Z. Soo, P.R. Narangari, C. Jagadish, H.H. Tan and S. Karuturi, Protocol for scalable top-down fabrication of InP nanopillars using self-assembled random mask technique, *Star Protocols*, 4, 102237 (2023).
759. J.W. Liao, Z.T. Huang, C.H. Wu, N. Gagrani, H.H. Tan, C. Jagadish, K.P. Chen and T.C. Lu, Highly Localized Surface Plasmon Nanolasers via Strong Coupling, *Nano Lett.* 23, 4359-4366 (2023).
760. Z.Y. Li, Z. Azimi, Z. Li, Y. Yu, L. Huang, W.Q. Jin, H.H. Tan, C. Jagadish, J. Wong-Leung and L. Fu, InAs nanowire arrays for room-temperature ultra-broadband infrared photodetection, *Nanoscale*, 15, 10033-10041 (2023).

761. C.Y. Li, X.T. Zhang, R.X. Yi, Z.Y. Li, F.L. Zhang, K.H. Liu, X.T. Gan, L. Fu, F.J. Xiao, J.L. Zhao, H.H. Tan and C. Jagadish, Low-threshold multiwavelength plasmonic nanolasing in an H-shape cavity, *Laser and Photonics Reviews*, 17, 2300187 (2023).
762. W.W. Wong, N.Y. Wang, B.D. Esser, S.A. Church, L. Li, M. Lockrey, I. Aharonovich, P. Parkinson, J. Etheridge, C. Jagadish and H.H. Tan, Bottom-up, chip-scale engineering of low threshold, multi-quantum-well microring lasers, *ACS Nano*, 17, 15065-15076 (2023).
763. J.D. Butson, A. Sharma, J. Tournet, Y. Wang, R. Tatavarti, C. Zhao, C. Jagadish, H.H. Tan and S. Karuturi, Unlocking ultra-high performance in immersed solar-water splitting with optimised energetics, *Adv. Energy Mater.* 40, 2301793, (2023)
764. B. Gupta, D.D. Zhang, H.J. Chen, C. Jagadish, H.H. Tan and S. Karuturi, Ferrhydrite: a novel electron selective contact layer for InP photovoltaic and photoelectrochemical cells, *ACS Appl. Mater. & Inter.* 15, 44912-44920 (2023).
765. J.Z. Soo, A. Riaz, F. Kremer, F. Brink, C. Jagadish, H.H. Tan and S. Karuturi, Cobalt modification of nickel-iron hydroxide electrocatalysts: a pathway to enhanced oxygen evolution reaction, *J. Mater. Chem. A*, 11, 22941-22950 (2023).
766. K. Bera, D. Chugh, A. Bandopadhyay, H.H. Tan, A. Roy and C. Jagadish, Decoupling the roles of defects/impurities and wrinkles in thermal conductivity of wafer-scale hBN films, *J. Appl. Phys.* 134, 155108 (2023).
767. G. Aman, M. Lyzevych, H.H. Tan, C. Jagadish, H. Schmitzer, M. Franzl, M. Cahay and H.P. Wagner, Lasing in Zn-doped GaAs nanowires on an iron film, *Nanotechnology*, 34, 445201 (2023).
768. T. Haggren, H.H. Tan and C. Jagadish, III-V thin films for flexible, cost-effective and emerging applications in optoelectronics and photonics, *Acc. Mater. Res.* 4, 1046-1056 (2023).
769. A.G.S. Vilasam, S. Adhikari, B. Gupta, S. Balendhran, N. Higashitarumizu, J. Tournet, L.Li, A. Javey, K.B. Crozier, S. Karuturi, C. Jagadish and H.H. Tan, Large-area epitaxial growth of InAs nanowires and thin films on hexagonal boron nitride by metal organic chemical vapour deposition, *Nanotech.* 34, 495601 (2023).
770. A. Riaz, Z. Fusco, F. Kremer, B. Gupta, D.D. Zhang, C. Jagadish, H.H. Tan and S. Karuturi, Hierarchically multiscale vertically oriented NiFeCo nanoflakes for efficient electrochemical oxygen evolution at high current densities, *Adv. Energy Mater.* 14, 2303001 (2024).
771. S.Y. Wei, Z. Li, K. Murugappan, Z.Y. Li, M. Lysevych, K. Vora, H.H. Tan. C. Jagadish, B. Karawdeniya, C.J. Nolan, A. Trocoli and L. Fu, Nanowire Array Breath Acetone Sensor for Diabetes Monitoring, *Advanced Science*, 11,2309481 (2024).
772. Z. Li, H.H. Tan, C. Jagadish and L. Fu, An efficient modeling workflow for high-performance nanowire single-photon avalanche detector, *Nanotechnology*, 175209 (April 2024).
773. Z.C. Su, J.S. Yan, N.Y. Wang, C. Jagadish, D. Neshev and H.H. Tan, Tunable enhanced second harmonic generation in InP-InAsP quantum well nanomembranes, *Small* DOI 10.1002/sml.202307512 (2024).

774. X.Y. Huang, J. Horder, W.W. Wong, N.Y. Wang, Y. Bian, K. Yamamura, I. Aharonivich, C. Jagadish and H.H. Tan, Scalable bright and pure single photon sources by droplet epitaxy on InP nanowire array, *ACS Nano*, 18, 5581-5589 (2024).
775. V. Raj, T. Haggren, Y.O. Mayon, C. Jagadish and H.H. Tan, 21.2% GaAs solar cell using bilayer electron selective contact, *Solar RRL*, 8, DOI 10.1002/solr.202300889 (2024).
776. R.X. Yi, X.T. Zhang, X.M. Yuan, J.G. Wang, Q. Zhang, Y. Zhang, L. Fang, F.L. Zhang, L. Fu, H.H. Tan, C. Jagadish, J.L. Zhao and X.T. Gan, Integrating a Semiconductor Nanowire Lasers in a Silicon Nitride Waveguide, *ACS Photonics*, 11, 2471-2479 (2024).
777. S.Y. Wei, T. Haggren, Z. Li, H.H. Tan, C. Jagadish, A. Tricoli and L. Fu, Ultrasensitive Indium Phosphide Wearable Gas Sensors, *Energy and Environmental Mater.* DOI: 10.1002/eem2.12763 (2024).
778. B. Gupta, K.H. Min, Y.H. Lee, J. Tournet, B. Hoex, C. Jagadish, H.H. Tan and S. Karuturi, From Rigid to Flexible: Progress, Challenges and Prospects of Thin c-Si Solar Energy Devices. *Adv. Ener. Mater.* 14, issue 27, DOI 10.1002/aenm.202400743 (2024).
779. J.Z. Soo, A. Riaz, D.D. Zhang, C. Jagadish, H.H. Tan and S. Karuturi, Enhancing the Hydrogen Evolution Reaction Performance of Solution-Corroded NiMO via Plasma Modification, *Chem. Mater.* 36, 4164-4173 (2024).
780. J. D. Butson, J. Tournet, B. Gupta, A. Sharma, M. Lysevych, T. Haggren, C. Jagadish, H. H. Tan, S. Karuturi, AlGaAs as an Alternative Solar Water Splitting Material: Insights into Performance, Stability, and Future Directions, *ACS Applied Materials & Interfaces* 16, 45180-45188, (2024).
781. B. Gupta, Y. Lee, J. Z. Soo, S. Adhikari, O. L. C. Lem, C. Jagadish, H. H. Tan, and S. Karuturi, Mechanically Exfoliated InP Thin Films for Solar Energy Conversion Devices, *Small Science* 4, 2400167, (2024).
782. W. W. Wong, J. H. Zhang, G. Garg, C. Jagadish, and H. H. Tan, Mode management in Bottom-Up, Parity-Time-Symmetric Micro-Cavity Lasers, *Laser & Photonics Reviews* 18, 2400222 (2024)
783. S. Norman, G. Chu, K. Peng, J. Seddon, L. L. Hale, H. H. Tan, C. Jagadish, R. Mouthaan, J. Alexander-Webber, H. J. Joyce, M. B. Johnston, O. Mitrofanov, and T. Siday, Resonance-Amplified Terahertz Near-Field Spectroscopy of a Single Nanowire, *Nano Letters* 24, 15716-15723 (2024).
784. J. X. Ding, D. D. Zhang, A. Riaz, H. M. Gu, J. Z. Soo, P. R. Narangari, C. Jagadish, H. H. Tan, and S. Karuturi, Scalable Amorphous NiFe(OH)_x/Fe/Graphene Bifunctional Electrocatalyst via Solution Corrosion for Water Splitting, *CCS Chemistry* 6, 2692-2703 (2024).
785. X. T. Zhang, F. L. Zhang, R. X. Yi, N. Y. Wang, Z. C. Su, M. W. Zhang, B. J. Zhao, Z. Y. Li, J. T. Qu, J. M. Cairney, Y. R. Lu, J. L. Zhao, X. T. Gan, H. H. Tan, C. Jagadish, and L. Fu, Telecom-band multiwavelength vertical emitting quantum well nanowire laser arrays, *Light-Science & Applications* 13, 230 (2024).
786. T. Malepathirana, D. Senanayake, V. Gautam, M. Engel, R. Balez, M. D. Lovelace, G. Sundaram, B. J. M. Heng, S. Chow, C. Marquis, G. J. Guillemin, B.

- Brew, C. Jagadish, L. Ooi, and S. Halgamuge, Visualization of incrementally learned projection trajectories for longitudinal data, *Scientific Reports* 14, 13558 (2024).
787. H.A. Fonseka, N. Denis, J.a. gott, X. Yuan, R. Beanland, H.H. Tan, C.Jagadish, A.M. Sanchez, M. De Luca, Revealing inclined twin related defects in III-V nanowires grown in popular inclined crystallographic directions, *J. Phys. Chem. C*, 128, 21593-21603 (2024).
788. X. Y. Huang, J. Horder, K. Yamamura, W. W. Wong, I. Aharonovich, N. Y. Wang, C. Jagadish, and H. H. Tan, Bottom-up Single Quantum Dots in Microring Resonators for On-Chip Integrated Single Emitters, *Nano Letters* 25, 6318-6324 (2025).
789. S. A. Church, F. Vitale, A. Gopakumar, N. Gagrani, Y. Y. Zhang, N. Jiang, H. H. Tan, C. Jagadish, H. Y. Liu, H. Joyce, C. Ronning, and P. Parkinson, Data-Driven Discovery for Robust Optimization of Semiconductor Nanowire Lasers, *Laser & Photonics Reviews* 19, 2401194 (2025).
790. Y. Yu, Z. Y. Li, Z. Zheng, D. Y. Choi, L. Xu, F. L. Zhang, K. Vora, G. Vaidya, W. Q. Jin, M. Rahmani, H. T. Hattori, H. H. Tan, C. Jagadish, and L. Fu, Hybrid Nanoantenna-Nanopillar Si Schottky Photodetectors for Ultrawide Wavelength-Tunable Photodetection, *Advanced Optical Materials* 2403246 (2025).
791. Z. Y. Xia, D. Jevtics, B. J. E. Guilhabert, J. J. D. McKendry, Q. Gao, H. H. Tan, C. Jagadish, M. D. Dawson, and M. J. Strain, Modulation of Nanowire Emitter Arrays Using Micro-LED Technology, *ACS Nano* 19, 15813–15819, (2025).
792. Y. Bian, F. L. Zhang, Z. Li, D. W. Liu, J. S. Yan, G. A. U. Membreno, W. W. Pan, W. Lei, L. Faraone, L. Li, M. Lysevych, D. Neshev, H. H. Tan, C. Jagadish, and L. Fu, Normal-incidence mid-infrared photodetection via intraband transitions in InGaAs/InP multiple quantum well nanowire arrays, *Applied Physics Letters* 126, 041105 (2025).
793. C. H. Wu, C. W. Chen, H. J. Shen, H. Y. Chuang, H. H. Tan, C. Jagadish, T. C. Lu, S. Ishii, and K. P. Chen, Reversible Carrier Modulation in InP Nanolasers by Ionic Liquid Gating with Low Energy Consumption, *Advanced Science* 12, 2412340 (2025).
794. I.H. Abbasi, T. Albrow-Owen, F. Abualnaja, R. Mouthaan, T. Potocnik. P.J. Christopher, H.H. Tan C. Jagadish, J. Wong-Leung, J.A. Alexander-Webber, H.J. Joyce, InAs nanowire transistor pairs as NMOS inverters, *Nanotech.* 36, 245202 (2025).
795. Z.C. Su, W. Yan, N.Y. Wang, Y.L. Wang, D.D. Sun, Y. Ge, C.C. Zheng, C. Jagadish and H.H. Tan, Abnormal carrier thermalization dynamics at type-II interface in InP nanomembranes, *APL Photonics*, 10, 076108 (2025).
796. B. Gupta, H. Son, T. Chang, S.I. Yoon, S. Karuturi, H.H. Tan, C. Jagadish, T.K. Lee, N. Park and Y. Lee, Direct microscale periodic surface structuring on zinc-blende crystal semiconductor via a facile cracking method, *ACS Appl. Mater.& Inter.* 17, 41206-41214 (2025).
797. J.Y. Ma, T.M. Fan, T. Haggren, L.V. Molina, M. Parry, S. Shinde, C. McManus-Barrett, J.H. Zhang, R.C. Morales, F. Setzfandt, H.H. Tan, C. Jagadish, D.N. Neshev and A.A. Sukhorukov, Nonlinearity symmetry breaking for generating

- tunable quantum entanglement in semiconductor metasurfaces, *Science Adv.* 11, eadu4133 (2025).
798. N. Jayawardana, M.T. Larson, C.W. Tu, N.Y. Wang, W.W. Wong, H.H. Tan, C. Jagadish, H. Schmitzer and H.P. Wagner, Design and characterization of low-threshold InP nanowire photonic crystal surface-emitting lasers, *Adv. Phot. Res.* DOI 10.1002/adpr.202500121 (2025).
799. F.M. Wagner, T. Haggren, J-C. Burger, T.J. Keat, K. Peng, C. Uswachoke, D.A. Damry, H. Kraus, H.J. Joyce, H.H. Tan, C. Jagadish, T. Siday and M.B. Johnston, The influence of subwavelength geometry on extracting the electrical properties of semiconductors by terahertz spectroscopy, *APL Phot.* 10, 0176123 (2025).
800. W.W. Wong, X. Huang, O.L.C. Lem, C. Jagadish and H.H. Tan, Near-unity spontaneous emission factor InP surface emitting lasers based on quasi bound states in the continuum, *Science Adv.* 11, eadx6527 (2025).
801. W.W. Wong, S. Adhikari, K. Tomioka, C. Jagadish and H.H. Tan, Crystal phase engineering of semiconductor nanostructures, *MRS Bulletin*, 50, 1476-1491 (2025).
802. Z.C. Su, M.R. Cui, W. Yan, Y.L. Wang, D.D. Sun, Z.Y. Xue, K.H. Wang, N.Y. Wang, C.W. Pan, C.C. Zheng, C. Jagadish, Z.H. Ni, H.H. Tan and J.P. Lu, Boosting SHG in InP nanomembranes: the role of the wurtzite-zincblende polytypic interface, *Adv Func Mater.* 36, doi: 10.1002/adfm.202522095 (2026).
803. N. Jayawardana, M.T. Larson, C.W. Tu, W.W. Wong, H.H. Tan, C. Jagadish, H. Schmitzer, H.P. Wagner, Low-threshold InP nanowire hetero-photonic crystal surface-emitting lasers, *ACS Appl. Mater. Inter.* 18, 9070-9078 (2026).
804. T. Haggren, W.W. Wong, Y. Yu, V.C. Dinesh, S. Samsuri, C.L. Xu, M. Bhaskaran, C. Jagadish, L. Fu and H.H. Tan, Polarization-selective, tunable, and flexible InP nanoilm UV photodetectors, *Nanoscale*, doi: 10.1039/d5nr03746h (2026)
805. R.X. Yi, X.T. Zhang, Z.Z. Shi, X.R. Wei, L.K. Shui, P.H. Zhang, J.G. Wang, X.M. Yuan, J.L. Qu, X.T. Zhang, L. Fang, L. Fu, H.H. Tan, C. Jagadish, J.L. Zhao and X.T. Gan, Nanowire lasing with SiN microring resonator, *Laser and Photonics Reviews*, doi: 10.1002/lpor.202502465 (2026).
806. P. Duhan, G. Bartholazzi, T. Haggren, B. Gupta, S. Adhikari, L.E. Black, D.D. Zhang, C. Jagadish, S. Karuturi and H.H. Tan, Ultrathin CuO hole-selective contact for efficient GaAs solar cells, *ACS Applied Energy Materials*, doi: 10.1021/acsaem.5c04065 (2026)

In Refereed Conference Proceedings:

1. A.L. Dawar, K.V. Ferdinand, C. Jagadish, A. Kumar and P.C. Mathur, Field effect studies on MIS structures of p-type $\text{Hg}_{0.8}\text{Cd}_{0.2}\text{Te}$ thin films, Proceedings of 1984 International Conference on Solid State Devices and Materials, Kobe, Japan, p.407-411 (1984).
2. A.L. Dawar, C. Jagadish, V.K. Gandotra, K.V. Ferdinand and P.C. Mathur, Growth of CdS thin films for transducer applications, Proceedings of 1986 IEEE International Symposium on Applications of Ferroelectrics, Bethlehem, USA, p.593-595 (1986)
3. A.L. Dawar, C. Jagadish and P.C. Mathur, Effect of laser irradiation on the electrical properties of $\text{Pb}_{0.8}\text{Sn}_{0.2}\text{Te}$ thin films using MIS structures, Proceedings of 1986 IEEE International Symposium on Applications of Ferroelectrics, Bethlehem, USA, p. 572-575(1986).
4. M.C. Ridgway, C. Jagadish, T.D. Thompson and S.T. Johnson, MeV implantation of the group IV elements in InP, in Proceedings of the Fourth International Conference on Indium Phosphide and related compounds (IEEE, New York, 1992) p.56-59.
5. M.C. Ridgway, C. Jagadish, R.G. Elliman and N. Hauser, Single step implant isolation of p^+ -InP using an MeV O ion beam, Proceedings of the Fourth International Conference on Indium Phosphide and related compounds (IEEE, Piscataway, 1992) p.294-297.
6. S.J. Pearton, F. Ren, T.R. Fullowan, A. Katz, W.S. Hobson, C.R. Abernathy, J.R. Lothian, L.A. D'Asaro, R.G. Elliman, M.C. Ridgway, C. Jagadish and J.S. Williams, Use of selective area defect creation for isolation of III-V multilayer structures, in Defect Engineering in Semiconductor Growth, Processing and Device Technology (Mat. Res. Soc. , Pittsburgh, 1992) p. 763-768.
7. R.G. Elliman, M. Lawn, G. Reeves and C. Jagadish, Physical and Electrical properties of Iridium thin films, in Advanced Metallization and Processing for Semiconductor Devices and Circuits II (Mat. Res. Soc., Pittsburgh, 1992) p. 569-574.
8. F. Ren, S.J. Pearton, C.R. Abernathy, S.N.G. Chu, T.R. Fullowan, R.F. Kopf, J.R. Lothian, P.W. Wisk, W.S. Hobson, R. Bylsma, R. Esagui, R.G. Elliman, M.C. Ridgway, C. Jagadish and J.S. Williams, Ion Implantation Technology for III-V Heterojunction Devices, Ion Implantation Technology-92, p. 421.(invited paper).
9. C. Jagadish, R.G. Elliman, M.C. Ridgway and J.S. Williams, MeV ion implantation into semiconductors, Proceedings of the First French-Australian Workshop on the Applications of Ion Beam Analysis, eds. J.P. Frontier, J. Trochon and P. Trocellier, p. 75 (1993). (invited paper).
10. G. Li, C. Jagadish, A. Clark, C.A. Larsen and N. Hauser, Influence of growth rate on the dopant confinement in delta doped GaAs epitaxial layers grown by low pressure metal organic vapour phase epitaxy, Proceedings of the International Symposium on Physical Concepts and Materials for Novel Optoelectronic Device Applications II, (SPIE, Washington, DC 1993), eds. F. Beltram and E. Gornik, p. 151-156.

11. J.S.Williams, H.H. Tan, R.D. Goldberg, R.A. Brown and C. Jagadish, Dynamic annealing and amorphous phase formation in Si, GaAs and AlGaAs under irradiation, MRS Proceedings, v. 316, p. 15-25 (1994). (invited paper).
12. C. Jagadish, G. Li, A. Clark and N. Hauser, Growth and characterisation of silicon delta-doped GaAs epitaxial layers, Fifth European Workshop on Metal-Organic Vapour Phase Epitaxy and Related Growth Techniques, Malmo, Sweden, 1993, p. D20.
13. A. Kurpiewski, K. Korona, M. Palczewska, C. Jagadish, J.S. Williams and M. Kaminska, High resistivity in MeV As ion implanted GaAs, Proceedings of 8th Conference on Semi-insulating III V Materials, Ed. M. Godlewski, World Scientific, Singapore, 1994, p.271-274.
14. C. Jagadish, M.C. Ridgway, R.G. Elliman and J.S. Williams, Ion beam induced semi-insulating behaviour in III-V compounds, Proceedings of 8th Conference on Semi-insulating III-V Materials, Ed. M. Godlewski, World Scientific, Singapore, 1994, p. 239-246. (invited paper).
15. M.K. Kaminska, E.R. Weber and C. Jagadish, Defects in non-stoichiometric III_V compounds, Proceedings of 8th Conference on Semi-insulating III-V Materials, Ed. M. Godlewski, World Scientific, Singapore, 1994, p. 327-334.(invited paper).
16. A.A. Allerman, N. Hauser, W. Xu, G. Li and C. Jagadish, Electron Transport in 2-dimensional systems, Proceedings of 1993 Australian Conference on Compound Optoelectronic Materials and Devices, Australian Materials Research Society, Canberra, 1994(Eds. R.J. Egan and C. Jagadish), p. 58-65.
17. P. Kraisingdecha, M. Gal, H. Tan and C. Jagadish, Measurement of damage profiles in ion implanted GaAs using optical modulation spectroscopy, Proceedings of 1993 Australian Conference on Compound Optoelectronic Materials and Devices, Australian Materials Research Society, Canberra, 1994(Eds. R.J. Egan and C. Jagadish), p. 79-82.
18. A. Clark, R.J. Egan and C. Jagadish, Growth and Characterisation of III-V quantum wells for visible light modulation, Proceedings of 1993 Australian Conference on Compound Optoelectronic Materials and Devices, Australian Materials Research Society, Canberra, 1994(Eds. R.J. Egan and C. Jagadish), p. 103-107.
19. G. Li, C. Jagadish, P. Kraisingdecha and M. Gal, Electrical and Optical characterisation of delta doped III-V semiconductor structures, Proceedings of 1993 Australian Conference on Compound Optoelectronic Materials and Devices, Australian Materials Research Society, Canberra, 1994(Eds. R.J. Egan and C. Jagadish), p. 171-173.
20. H.H. Tan, J.S. Williams and C. Jagadish, Damage in GaAs/AlGaAs structures by keV and MeV Si ion beams, Proceedings of 1993 Australian Conference on Compound Optoelectronic Materials and Devices, Australian Materials Research Society, Canberra, 1994(Eds. R.J. Egan and C. Jagadish), p.201-205.
21. P. Kraisingdecha, M. Gal, H.H. Tan and C. Jagadish, Measurement of damage in keV ion implanted GaAs by differential reflectance spectroscopy, Proceedings of International Conference on Ion Beam Modification of Materials, Canberra, Australia, 1995, p.1118-1122.
22. M. Gal, P. Kraisingdecha, C. Shwe, M. Gross, H.H. Tan and C. Jagadish, Measurement of ion induced damage profiles in GaAs using differential

- reflectance, Proceedings of 22nd International Conference on Physics of Semiconductors, World Scientific, Singapore, 1995, p. 141-144.
24. A. Clark, R.J. Egan and C. Jagadish, Mirrors, MQWs and Modulators, Proceedings of 1994 Australian Conference on Compound Optoelectronic Materials and Devices, eds. V.W.L. Chin and T.L. Tansley(Semiconductor Science and Technology Laboratories, N. Ryde, 1995) p.174-179.
 25. H.H. Tan, J.S. Williams and C. Jagadish, Characterisation of deep levels created by proton irradiation in GaAs using capacitance-voltage profiling and deep level transient spectroscopy, Proceedings of 1994 Australian Conference on Compound Optoelectronic Materials and Devices, eds. V.W.L. Chin and T.L. Tansley(Semiconductor Science and Technology Laboratories, N. Ryde, 1995) p.166-170.
 26. P. Hawker, N. Hauser, G. Li and C. Jagadish, Evidence of inter subband acoustic phonon emission from hot carriers in a Silicon delta doped GaAs structure using heat pulse techniques, Proceedings of 1994 Australian Conference on Compound Optoelectronic Materials and Devices, eds. V.W.L. Chin and T.L. Tansley(Semiconductor Science and Technology Laboratories, N. Ryde, 1995) p.239-243.
 27. C.T.Chou, D.J.H.Cockayne, X.H. Wu, J. Zou and C. Jagadish, Characterisation rod-like defects in silicon ion implanted silicon, Proceedings of 1994 Australian Conference on Compound Optoelectronic Materials and Devices, eds. V.W.L. Chin and T.L. Tansley(Semiconductor Science and Technology Laboratories, N. Ryde, 1995) p.259.
 28. N. Hauser, P. Hawker, W. Xu, C. Jagadish and M.R. Melloch, Phonon emission from a weakly coupled AlGaAs/GaAs double quantum well structure, Proceedings of 1994 Australian Conference on Compound Optoelectronic Materials and Devices, eds. V.W.L. Chin and T.L. Tansley(Semiconductor Science and Technology Laboratories, N. Ryde, 1995) p.234-238.
 29. M. Kaminska, J. Jasinski, A. Kurpiewski, K.P. Korona, M. Palczewska, A. Krotkus, S. Marcinkevicius, H.H. Tan and C. Jagadish, Electrical, Optical and Structural Properties of MeV As and Ga implanted and annealed GaAs, Proceedings of 1994 Australian Conference on Compound Optoelectronic Materials and Devices, eds. V.W.L. Chin and T.L. Tansley(Semiconductor Science and Technology Laboratories, N. Ryde, 1995) p.117-120.
 30. G. Li and C. Jagadish, A study of Zn delta doped GaAs by LP-MOVPE, Proceedings of 1994 Australian Conference on Compound Optoelectronic Materials and Devices, eds. V.W.L. Chin and T.L. Tansley(Semiconductor Science and Technology Laboratories, N. Ryde, 1995) p.58-61.
 31. A. Clark, R.J. Egan and C. Jagadish, Growth of AlGaAs/AlAs multiple quantum well structures for modulation at visible wavelengths, Proceedings of International Conference on Semiconductor Heteroepitaxy, eds. B.Gil and R-L Aulombard, World Scientific, Singapore (1995) p. 486-489.
 32. R.J. Egan, A. Clark and C. Jagadish, Design and growth of AlGaAs/AlAs structures for visible wavelength modulation, Proceedings of the 1995 Conference on Lasers and Electro-Optics, Baltimore, May 1995, p. 341-342.

33. C. Jagadish and G. Li, Incorporation mechanism of carbon delta doping of AlGaAs grown by metal organic vapour phase epitaxy, Proceedings of the 6th European Workshop on Metal Organic Vapour Phase Epitaxy and related growth techniques, Gent, Belgium, June 1995, p.A10.
34. H.H. Tan, C. Jagadish, M. Kaminska, J. Jasinski, A. Krotkus and S. Marcinkevicius, Picosecond lifetime and high resistivity in As or Ga implanted GaAs : an alternative material for fast optoelectronic applications, Proceedings of the 8th Annual Meeting of the IEEE Lasers & Electro- Optics Society, San Francisco, USA Oct 30 - Nov. 2 , 1995 , vol. 1, p. 345-346.
35. H.H. Tan, C. Jagadish and M. Gal, Quantum Well intermixing by proton irradiation, Proceedings of the 8th Annual Meeting of the IEEE Lasers & Electro-Optics Society, San Francisco, USA, Oct. 30- Nov. 2, 1995, vol. 2, p. 94-95.
36. H.H. Tan, J.S. Williams, C. Jagadish, P.T. Burke and M. Gal, Irradiation-induced damage and intermixing of GaAs-AlGaAs quantum wells, MRS Proceedings, v. 396 (1996). p.823-827. (invited paper).
37. R.J. Egan, A. Clark, A. Kuver, T.D. Thompson and C. Jagadish, An AlGaAs/AlAs reflection modulator for visible wavelengths, Proceedings of the 20th Australian Conference on Optical Fibre Technology, December 1995, p. 389-392.
38. C. Jagadish, A. Clark and R.J. Egan, Growth and characterisation of multilayers of III-V compound semiconductors for visible wavelength applications, Proceedings of the Symposium on State of the Art Program on Compound Semiconductors, Los Angeles, USA , May 5-10, 1996 (invited paper), p. 19-26.
39. C. Jagadish, H.H. Tan, A. Krotkus, S. Marcinkevicius, K.P. Korona, J. Jasinski and M. Kaminska, Ultrafast carrier trapping and high resistivity of MeV energy ion implanted GaAs, Proceedings of the 9th International Conference on Semiconducting and Insulating Materials, Toulouse, France, April 29 - May 3, 1996, p.41-4.
40. S. Marcinkevicius, A. Krotkus, R. Leon, C. Jagadish, N. Welham and M. Gal, Picosecond lifetimes and exciton quenching induced by metallic precipitation in InP:Cu, Proceedings of the 8th International Conference on Indium Phosphide and related compounds, Germany, April 1996, p.296-299.
41. A. Clark, R.J. Egan and C. Jagadish, Optical modulators in the 500 - 600 nm range using $\text{Al}_x\text{Ga}_{1-x}\text{As}/\text{Al}_y\text{Ga}_{1-y}\text{As}$ multilayers, Technical Digest of 1996 Conference on Lasers & Electro-Optics, Anaheim, Ca, USA, June 1996, p. 488-489.
42. H.H. Tan and C. Jagadish, Quantum well intermixing and wavelength shifting in GaAs lasers by proton irradiation, Proceedings of 1996 IEEE International Conference on Semiconductor Electronics, Malaysia, November 1996, p. 175-179.
43. S. Yuan, G. Li, H.H. Tan, C. Jagadish and F. Karouta, InGaAs GRINSCH-SQW lasers with novel carbon delta doped contact layer, Proceedings of the 9th Annual Meeting of the IEEE Lasers & Electro-Optics Society, Boston, USA, Nov. 1996, vol.2, p. 132-133.
44. H.H. Tan, F. Karouta, Y. Kim, C. Jagadish, P.T. Burke and M. Gal, Ion implantation intermixing of quantum wells and its applications to optoelectronic devices, Proceedings of the Progress in Electromagnetics Research Symposium, Hong Kong, Jan 1997, vol. 2, p. 717. (invited paper).

45. R. Leon, Y. Kim, C. Jagadish and M. Gal, Large blue shifts in the luminescence of InGaAs/GaAs quantum dots after intermixing, Proceedings of the Conference on Nanostructures: Physics and Technology, St. Petersburg, Russia, Oct. 1996.
46. H.H. Tan, Y. Kim and C. Jagadish, Ion implantation for wavelength shifting and quantum wire lasers, 1996 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Ed. C. Jagadish, IEEE, Piscataway, NJ, USA, 1997, p.114-117.
47. P. T. Burke, M. Gal, S. Yuan, Y. Kim and C. Jagadish, Photoluminescence studies of anodic oxide induced intermixing of GaAs/AlGaAs quantum well heterostructures, 1996 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Ed. C. Jagadish, IEEE, Piscataway, NJ, USA, 1997, p. 122-125.
48. G. Li and C. Jagadish, Recent progress in delta doped compound semiconductors, 1996 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Ed. C. Jagadish, IEEE, Piscataway, NJ, USA, 1997, p.126-129.
49. M.B. Johnston, M. Gal, G. Li and C. Jagadish, Optical properties of delta doped GaAs nipi superlattices, 1996 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Ed. C. Jagadish, IEEE, Piscataway, NJ, USA, 1997, p.179-182.
50. C. T. Chou, D.J.H. Cockayne, J. Zou, P. Kringhoj and C. Jagadish, Formation of {111} and {311} rod-like defects in 1 MeV silicon ion implanted silicon, 1996 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Ed. C. Jagadish, IEEE, Piscataway, NJ, USA, 1997, 305-308.
51. A. Babinski, R. Leon and C. Jagadish, Capacitance measurements on self organised MOCVD grown InGaAs quantum dots, 1996 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Ed. C. Jagadish, IEEE, Piscataway, NJ, USA, 1997, p.183-186.
52. S. Fatima, B.G. Svensson and C. Jagadish, Point defects in ion implanted p-type silicon, 1996 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Ed. C. Jagadish, IEEE, Piscataway, NJ, USA, 1997, p.154-157.
53. S. Fatima and C. Jagadish, Electrical characterisation of subthreshold damage in ion implanted p-type silicon, 1996 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Ed. C. Jagadish, IEEE, Piscataway, NJ, USA, 1997, p.158-161.
54. Y.Kim, S. Yuan, R. Leon, A. Clark, C. Jagadish, M.B. Johnston, P.Burke, M. Gal, J. Zou, D. Cockayne, M.R. Phillips and M.A. Stevens Kalceff, V-grooved GaAs/AlGaAs quantum wires with side walls intermixed by anodisation and rapid thermal annealing, 1996 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Ed. C. Jagadish, IEEE, Piscataway, NJ, USA, 1997, p.200-203.
55. A. Wyszomolek, J.M. Baranowski, M. Kaminska and C. Jagadish, Origin of centers involved in orange luminescence of 6H-SiC, Proceedings of the 23rd International Conference on Physics of Semiconductors, (Eds. M. Sheffler and R. Zimmerman) World Scientific, 1996, p.2673-2676.

56. J. Lalita, P. Pellegrino, B.G. Svensson, N. Keskitalo, S. Fatima and C. Jagadish, Rapid migration of defects in ion implanted silicon, Proceedings of the Spring MRS Meeting, San Francisco, 1997, p. 239-244.
57. J. Jasinski, M. Kaminska, Z. Liliental-Weber, J. Washburn, H.H. Tan and C. Jagadish, A. Krotkus and S. Marcinkevicius, Structural, electrical and optical studies of GaAs implanted with MeV As or Ga ions - Material for fast photocarrier recombination, Proceedings of the 23rd International Conference on Physics of Semiconductors, (Eds. M. Sheffler and R. Zimmerman) World Scientific, 1996, p.329-332.
58. S. Yuan, Y. Kim, C. Jagadish, L.V. Dao, P.T. Burke, M. Gal, J. Zou and D.J.H. Cockayne, Anodic-oxide induced interdiffusion in GaAs/AlGaAs quantum wire structure grown on V-grooved substrate, Proceedings of the Eighth International Conference on Narrow Gap Semiconductors, Eds. S.C. Shen, D.Y. Tang, G.Z. Zheng, G. Bauer, World Scientific, Singapore, 1998, p. 113-118.
59. H.H. Tan and C. Jagadish, Wavelength shifting of GaAs GRIN SCH lasers by ion implantation, Proceedings of the 10th Annual Meeting of IEEE Lasers and Electro-Optics Society, San Francisco, USA Nov. 1997, vol. 2, p.447-448.
60. C. Jagadish, H.H. Tan, S. Yuan and M. Gal, Quantum Well Intermixing for Optoelectronic Applications, Proceedings of 1997 Fall MRS Meeting, Boston, USA, vol. 484, 397-411 (1998)(invited paper).
61. T. Suski, J. Jun, M. Leszczynski, H. Teisseyre, I Grzegory, S. Porowski, J.M. Baranowski, A. Rocket, S. Strite, A. Stonert, A. Turos, H.H. Tan, J.S. Williams and C. Jagadish, Doping, activation of impurities and defect annihilation in GaN by high pressure annealing, Proceedings of Fall MRS Meeting, vol. 482, p. 949-959 (1998). (invited paper).
62. C. Jagadish, H.H. Tan, S. Yuan, Y. Kim and M. Gal, Ion Beam and Anodic Oxide Induced Intermixing of Quantum Well Heterostructures for Optoelectronic Devices, Proceeding of the Symposium on Light Emitting Devices for Optoelectronic Devices, 193rd Meeting of the Electrochemical Society, Eds. H.Q. Hou, R.E. Sah, S.J. Pearton, F. Ren and K. Wada, San Diego, May 1998, p. 87-96(invited paper).
63. C. Jagadish, H.H. Tan, K.P. Korona, J. Jasinski, M. Kaminska, S. Marcinkevicius, A. Krotkus, M. Lederer and B. Luther-Davies, Ion Implanted GaAs for Ultrafast Optoelectronic Applications, Proceedings of the Symposium on State of the Art Program on Compound Semiconductors XXVII, 193rd Meeting of the Electrochemical Society, Eds. H.Q. Hou, R.E. Sah, S.J. Pearton, F. Ren and K. Wada, San Deigo, May 1998, p. 279-288 (invited paper).
64. S. Fatima, J. Wong-Leung, C. Jagadish and J. Fitz Gerald, Characterisation of the subthreshold damage in MeV ion implanted p-Si, Proceedings of Spring MRS Meeting, San Francisco, USA, April 1998, vol. 510, p.411-416.
65. L.V. Dao, M. Gal, H.H. Tan and C. Jagadish, Ultrafast carrier capture into InGaAs/GaAs quantum well, Proceedings of the XIth International conference on ultrafast phenomena, Garmisch-Partenkirchen, Germany, July 12-17, 1998, Spinger Verlag, Eds. T. Elsaesser, J.G. Fujimoto, D.A. Wiersma, W. Zinth, p.298-300.
66. M.J. Lederer, B. Luther-Davies, H.H. Tan and C. Jagadish, An ion-implanted anti-resonant Fabry Perot saturable absorber for passive mode-locking of solid state

- lasers, Proceedings of 10th International Semiconducting and Insulating Materials Conference, Berkeley, USA, June 1-5, 1998, Eds. Z. Liliental-Weber and C. Miner, p. 105-108 (1999).
67. R.M. Cohen, G. Li, C. Jagadish, P.T. Burke and M. Gal, Changes in interdiffusion associated with thermally oxidized GaAs, Proceedings of 10th International Semiconducting and Insulating Materials Conference, Berkeley, USA, June 1-5, 1998 Eds. Z. Liliental-Weber and C. Miner, p. 218-221 (1999).
 68. F. Karouta, H.H. Tan, C. Jagadish and B.H. van Roy, Vertical Integration of Dual Wavelength Index Guided GaAs-Lasers, Proceedings of the 11th Annual Meeting of IEEE Lasers and Electro-Optics Society, Orlando, USA, December 1-4, 1998, vol.2,p.51-52.
 69. S. Yuan, G. Li, R.M. Cohen, L. Fu, H.H. Tan, M.B. Johnston, L.V. Dao, M. Gal and C. Jagadish, Interdiffusion in GaAs/AlGaAs quantum wells using anodic and thermal oxides of GaAs, Proceedings of the 11th Annual Meeting of IEEE Lasers and Electro-Optics Society, Orlando, USA, December 1-4, 1998, vol. 2, p.36-37.
 70. Shu Yuan, L. Fu, Y. Chang, H. H. Tan, G. Li, and C. Jagadish, High power 980-nm lasers with external differential efficiency improved by rapid thermal annealing Proceedings of the 11th Annual Meeting of IEEE Lasers and Electro-Optics Society, Orlando, USA, December 1-4, 1998, vol. 2, p.124-125.
 71. M.I. Cohen, H.H. Tan and C. Jagadish, Implantation induced optical losses in GaAs/AlGaAs distributed Bragg mirrors, Proceedings of the 11th Annual Meeting of IEEE Lasers and Electro-Optics Society, Orlando, USA, December 1-4, 1998, vol. 2, p. 45-46.
 72. R.D. Goldberg, I.V. Mitchell, P. Piva, H.H. Tan, C. Jagadish, P. Poole, G. Aers, S. Charbonneau, G.C. Weatherly, M.B. Johnston, M. Gal, H. Chen and R. Feenstra, Selective intermixing of ion irradiated semiconductor heterostructures, Proceedings of 1998 Fall Materials Research Society, Boston, USA, December 1-4, 1998, vol. 540, p. 15-26 (1999). (invited paper).
 73. R.D. Goldberg, H.H. Tan, M.B. Johnston, C. Jagadish, M. Gal and I.V. Mitchell, The effect of ion mass on irradiation induced intermixing of GaAs/AlGaAs quantum wells, Proceedings of SPIE, E.J. Knystautas (editor), Quebec City, 1998, Canada, pp.140-145.
 74. B. Luther-Davies, M. Lederer, C. Jagadish and H.H. Tan, The properties and performance of anti-resonant Fabry-Perot saturable absorbers for passive mode-locking fabricated by metal organic chemical vapour deposition and ion-implantation, Proceedings of the 11th Annual Meeting of IEEE Lasers and Electro-Optics Society, Orlando, USA, December 1-4, 1998, vol.1, p.267.
 75. M.B. Johnston, L.V. Dao, M. Gal, N. Li, Z. Chen, X. Liu, N. Li, W. Lu, S.C. Shen, H.H. Tan, C. Jagadish, N.E. Lumpkin and R.G. Clark, A comparative study of GaAs/AlGaAs quantum well infrared photodetectors grown by molecular beam epitaxy and metal organic vapour phase epitaxy, 1998 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Perth, December 14-16, 1998, Eds. L. Faraone, J.M. Dell, T.A. Fisher, C.A. Musca, B.D. Nener, IEEE Publishing Co., Piscataway (1999), p. 348-351.
 76. L.M. Herz, L.V. Dao, M.B. Johnston, M. Gal, L. Fu and C. Jagadish, Time resolved photoluminescence cross-correlation measurements on III-V quantum structures,

- 1998 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Perth, December 14-16, 1998, Eds. L. Faraone, J.M. Dell, T.A. Fisher, C.A. Musca, B.D. Nener, IEEE Publishing Co., Piscataway (1999), p. 344-347.
77. L.V. Dao, M.B. Johnston, M. Gal, L. Fu, H.H. Tan and C. Jagadish, Possibility of enhanced frequency response of intermixed InGaAs/GaAs quantum well devices, 1998 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Perth, December 14-16, 1998, Eds. L. Faraone, J.M. Dell, T.A. Fisher, C.A. Musca, B.D. Nener, IEEE Publishing Co., Piscataway (1999), p. 352-354
78. L. Fu, H.H. Tan, C. Jagadish, M.B. Johnston and M. Gal, Quantum well intermixing in InGaAs/(Al)GaAs by As and H irradiation, 1998 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Perth, December 14-16, 1998, Eds. L. Faraone, J.M. Dell, T.A. Fisher, C.A. Musca, B.D. Nener, IEEE Publishing Co., Piscataway (1999), p. 355-357.
79. J. Zou, D.Q. Cai, D.J.H. Cockayne, S. Yuan and C. Jagadish, TEM measurement of Al profiles in interdiffused GaAs/AlGaAs quantum wells, 1998 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Perth, December 14-16, 1998, Eds. L. Faraone, J.M. Dell, T.A. Fisher, C.A. Musca, B.D. Nener, IEEE Publishing Co., Piscataway (1999), p. 358-360.
80. P.N.K. deenapanray, H.H. Tan, J. Lengyel, C. Jagadish, A. Durandet and M. Gal, Impurity free interdiffusion in GaAs/AlGaAs multiple quantum wells capped with PECVD SiO_x: effect of nitrous oxide flow, 1998 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Perth, December 14-16, 1998, Eds. L. Faraone, J.M. Dell, T.A. Fisher, C.A. Musca, B.D. Nener, IEEE Publishing Co., Piscataway (1999), p. 361-364.
81. M.I. Cohen, H.H. Tan and C. Jagadish, Intermixing induced resonance shift in GaAs/Al_xO_y DBR resonators, 1998 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Perth, December 14-16, 1998, Eds. L. Faraone, J.M. Dell, T.A. Fisher, C.A. Musca, B.D. Nener, IEEE Publishing Co., Piscataway (1999), p. 365-368.
82. X. Liu, W. Lu, N. Li, X. Chen, X. Yuan, H.F. Dou, N. Li, S.C. Shen, S. Yuan, H.H. Tan and C. Jagadish, Tuning of detection wavelength of GaAs/AlGaAs quantum well infrared photodetectors by rapid thermal annealing, 1998 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Perth, December 14-16, 1998, Eds. L. Faraone, J.M. Dell, T.A. Fisher, C.A. Musca, B.D. Nener, IEEE Publishing Co., Piscataway (1999), p. 128-130.
83. S.I. Kim, H.H. Tan, C. Jagadish, L.V. Dao and M. Gal, Fabrication and characterisation of delta doped InGaAs/GaAs quantum wire structures grown by MOCVD using selective area epitaxy, 1998 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Perth, December 14-16, 1998, Eds. L. Faraone, J.M. Dell, T.A. Fisher, C.A. Musca, B.D. Nener, IEEE Publishing Co., Piscataway (1999), p. 140-143.
84. M.J. Lederer, B. Luther-Davies, H.H. Tan, C. Jagadish, M. Haiml, U. Siegner and U. Keller, Nonlinear optical properties of ion implanted GaAs, 1998 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Perth, December 14-16, 1998, Eds. L. Faraone, J.M. Dell, T.A. Fisher, C.A. Musca, B.D. Nener, IEEE Publishing Co., Piscataway (1999), p. 151-153.

85. S. Fatima, J. Wong-Leung, C. Jagadish and J. Fitz Gerald, Comparative study of electrical and structural characterization of the sub-thresholds damage in n and p-type Si implanted with MeV ions, 1998 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Perth, December 14-16, 1998, Eds. L. Faraone, J.M. Dell, T.A. Fisher, C.A. Musca, B.D. Nener, IEEE Publishing Co., Piscataway (1999), p. 505-508.
86. X. Liu, W. Lu, X. Chen, Y. Chang, S.C. Shen, H.H. Tan, S. Yuan and C. Jagadish, M. Johnston, L.V. Dao, M. Gal, J. Zou and D.J.H. Cockayne, Application of selective implantation induced intermixing in V-grooved AlGaAs/GaAs coupled quantum wires, 1998 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Perth, December 14-16, 1998, Eds. L. Faraone, J.M. Dell, T.A. Fisher, C.A. Musca, B.D. Nener, IEEE Publishing Co., Piscataway (1999), p. 513-515.
87. H. Dou, W. Lu, X. Chen, N. Li, S.C. Shen, G. Li and C. Jagadish, Photoluminescence of InGaAs/GaAs heterostructures with double excitation beams, 1998 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Perth, December 14-16, 1998, Eds. L. Faraone, J.M. Dell, T.A. Fisher, C.A. Musca, B.D. Nener, IEEE Publishing Co., Piscataway (1999), p. 516-519.
88. H. Dou, W. Lu, X. Chen, N. Li, S.C. Shen, G. Li and C. Jagadish, Photomodulation spectroscopy of Zn delta doped GaAs, 1998 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Perth, December 14-16, 1998, Eds. L. Faraone, J.M. Dell, T.A. Fisher, C.A. Musca, B.D. Nener, IEEE Publishing Co., Piscataway (1999), p. 519-521.
89. P.J. Edwards, G. Ganeshkumar, W.N. Cheung, C. Jagadish, L. Fu and H.H. Tan, Inter-facet noise correlation measurement as a diagnostic tool for semiconductor laser studies, 1998 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Perth, December 14-16, 1998, Eds. L. Faraone, J.M. Dell, T.A. Fisher, C.A. Musca, B.D. Nener, IEEE Publishing Co., Piscataway (1999), p. 236-239.
90. H.H. Tan, L. Fu, C. Jagadish, M.B. Johnston, L.V. Dao and M. Gal, Improved intermixing in GaAs/AlGaAs quantum well structures through repeated implant-anneal sequence, 1998 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Perth, December 14-16, 1998, Eds. L. Faraone, J.M. Dell, T.A. Fisher, C.A. Musca, B.D. Nener, IEEE Publishing Co., Piscataway (1999), p. 187-190.
91. N. Li, N. Li, X. Liu, W. Lu, S.C. Shen, M.B. Johnston, M. Gal, L. Fu, H.H. Tan and C. Jagadish, Multiple energy proton implantation induced quantum well intermixing in GaAs/AlGaAs quantum well infrared photodetectors, Technical Digest of the Pacific Rim Conference on Lasers and Electro-Optics, Seoul, Korea, August 30-Sept. 3, 1999, vol.2, p. 312-313.
92. H.H. Tan, C. Jagadish, M.B. Johnston and M. Gal, Implantation induced intermixing in GaAs/AlGaAs quantum well structures and its application to quantum well lasers, Technical Digest of the Pacific Rim Conference on Lasers and Electro-Optics, Seoul, Korea, August 30-Sept. 3, 1999, vol.4, p. 1101-1102.

93. A. Claverie, G. Ben Assayag and C. Jagadish, Characteristics of as-rich GaAs layers created by ion implantation, Proceedings of the First Symposium on Non-Stoichiometric III-V Compounds, Eds. P. Kiesel, S. Malzer and T. Marek, Erlangen-Nurnberg, Germany, 5-7, Oct. 1998, p. 7-13.
94. M.B. Johnston, M. Gal, N. Li, X. Liu, N. Li, W. Lu, S.C. Shen, L. Fu, H.H. Tan and C. Jagadish, Tuning of quantum well infrared photodetectors using ion beam induced quantum well intermixing, Technical Digest of the Conference on Lasers and Electro-Optics, Baltimore, USA, May 23-28, 1999, p. 23.
95. G. Iordache, M. Buda, G.A. Acket, T.G. van de Roer, L.M.F. Kaufmann, F. Karouta, C. Jagadish and H.H. Tan, Continuous wave operation of low confinement asymmetric structure diode lasers, Technical Digest of the Conference on Lasers and Electro-Optics, Baltimore, USA, May 23-28, 1999, p. 487.
96. M.J. Lederer, B. Luther-Davies, H.H. Tan, C. Jagadish, N.N. Akhmediev, J.M. Soto-Crespo, Multiple-sliton states in passively mode-locked Ti:sapphire laser, Technical Digest of 1999 Nonlinear Guided Waves and their Applications, Dijon, France, 1-3, Sept. 1999, Optical Society of America, p. 186-188.
97. S.I. Kim, Y.K. Park, Y.T. Kim, H.H. Tan and C. Jagadish, Fabrication and Characterization of Triangular Shaped InGaAs/GaAs Quantum Wire Structures Using Selective Area Epitaxy, Proceedings of the 31st Symposium on State of the Art Program on Compound Semiconductors, Hawaii, Oct. 17-22, 1999, Eds. D.N. Buckley, S.N.G. Chu, F. Ren, p. 64-69
98. H.H. Tan, P.N.K. Deenapanray, L. Fu and C. Jagadish, Effect of deposition parameters on SiO_x enhanced intermixing in GaAs/AlGaAs quantum wells, Proceedings of 1999 Lasers and Electro-Optics Society Annual Meeting, San Francisco, November 8-11, 1999, vol. 2, p. 437-438.
99. M.I. Cohen, H.H. Tan, C. Jagadish and R.M. Cohen, Al_xO_y induced intermixing in GaAs/AlGaAs quantum wells, Proceedings of 1999 Lasers and Electro-Optics Society Annual Meeting, San Francisco, November 8-11, 1999, vol. 2, p. 433-434.
100. M. Kuball, J.M. Hayes, T. Suski, J. Jun, H.H. Tan, J.S. Williams and C. Jagadish, The use of Micro-Raman spectroscopy to monitor high-pressure, high temperature annealing of ion implanted GaN films, Proceedings of Fall Materials Research Society Meeting, Boston, Nov. 29-Dec 3, 1999.
101. P.N.K. Deenapanray, H.H. Tan and C. Jagadish, Influence of SiO₂ capping layer quality on impurity free interdiffusion in GaAs/AlGaAs quantum wells, Materials Research Society Symposium Proceedings, vol 607, pp 491-502 (2000).
102. A.Babiński, T.Tomaszewicz, A.Wysmolek, J.M.Baranowski, C.Lobo, R.Leon, C.Jagadish, Optical properties of self-organized InGaAs/GaAs quantum dots in field effect structures, Microcrystalline and Nanocrystalline Semiconductors - 1998. Mater. Res. Soc.Proceedings vol. 536 (1999) pp.269-74. Warrendale, PA, USA.
103. S.O. Kucheyev, J.S. Williams, C. Jagadish, J. Zou, M. Toth, M.R. Phillips, H.H. Tan, G. Li and S.J. Pearton, Surface Disordering and Nitrogen Loss in GaN under Ion Bombardment, Mater. Res. Soc. Symp. Proceedings, vol. 622 (2000) pp. T7.9.1-T7.9.6.
104. C. Carmody, H. Boudinov, H.H. Tan, C. Jagadish, M.J. Lederer, V. Kolev and B. Luther-Davies, Electrical and optical properties of MeV As and P ion implanted

- and annealed Indium Phosphide, Proceedings of 2000 Semiconducting and Insulating Materials Conference, Canberra, 3-7, July 2000, IEEE Publishing Co. (2000) 137-140.
105. S.O. Kucheyev, J.S. Williams, C. Jagadish, J. Zou, M. Toth, M.R. Phillips and G. Li, Ion implantation into GaN: Opportunities and problems, Proceedings of 2000 Semiconducting and Insulating Materials Conference, Canberra, 3-7, July 2000, IEEE Publishing Co. (2000) 47-50.
 106. W.Lu, N. Li, N.Li, L.F. Zhang, S.C. Shen, Y. Fu, M. Willander, L. Fu, H.H. Tan, and C. Jagadish, Intermixing effect in quantum well infrared detector, Proceedings-SPIE the International Society for Optical Engineering, 2000, no. 4130, pp. 348-352. Record 28.
 107. Z.F.Li, W.Lu, X. Liu, S.C. Shen, Y. Fu, M. Willander, H.H. Tan and C. Jagadish, Scanning photoluminescence microscopy on GaAs/AlGaAs single quantum wire at room temperature, Proceedings- SPIE the International Society for Optical Engineering, 2000, no. 4086, pp. 195-198.
 108. N. Li, X. Liu, N. Li, W. Lu, X.Z. Yuan, S.C. Shen, H.H. Tan, L. Fu and C. Jagadish, Wavelength tuning of GaAs/AlGaAs quantum well infrared photodetectors by rapid thermal annealing and proton implantation, Proceedings- Spie the International Society for Optical Engineering, 2000, no. 4086, pp. 151-154.
 109. J. Wong-Leung, J.S. Williams, C. Jagadish, M. Petracic, M. Conway, B. Mohadjeri, A. Kinomura and J. Fitz Gerald, Gettering of metals to open-volume defects in silicon, Proceedings of European Network on Defect Engineering in Silicon (submitted).
 110. M.J. Lederer, B. Luther-Davies, H.H. Tan, C. Jagadish, M. Haiml, U. Siegner, U. Keller, J. Zou and D.J.H. Cockayne, Ion-implanted GaAs for ultrafast saturable absorber applications, Proceedings of 2000 Semiconducting and Insulating Materials Conference, Canberra, 3-7, July 2000, IEEE Publishing Co.(2000) 133-136.
 111. L.V. Dao, E. Kraft, M. Gal, L. Fu and C. Jagadish, Thermoluminescence in GaAs, Proceedings of 2000 Semiconducting and Insulating Materials Conference, Canberra, 3-7, July 2000, IEEE Publishing Co.(2000) 141-144.
 112. M. Gal, M.C. Wengler, S. Ilyas, I. Rofii, H.H. Tan and C. Jagadish, Measurement of the damage profile in ion implanted GaAs using an optical method, Proceedings of 2000 Semiconducting and Insulating Materials Conference, Canberra, 3-7, July 2000, IEEE Publishing Co.(2000) 145-148.
 113. L.V. Dao, M. Gal, G. Li and C. Jagadish, The influence of delta doped sheet position on the optical properties of InGaAs/GaAs single quantum wells, Proceedings of 2000 Semiconducting and Insulating Materials Conference, Canberra, 3-7, July 2000, IEEE Publishing Co.(2000) 268-271.
 114. M.Toth, M.R. Phillips, S.O. Kucheyev, J.S. Williams, C. Jagadish and G. Li, Charge contrast in secondary electron images using environmental scanning electron microscope, Proceedings of 2000 Microbeam Analysis Conference, Institute of Physics Conference series, vol. 165, 275-276 (2000).
 115. L. Fu, P.N.K. Deenapanray, H.H. Tan, S. Yuan, L.V. Dao, M. Gal and C. Jagadish, Application of quantum well intermixing for integration of photonic devices, Proceedings of 2000 International Conference on Fibre Optics and Photonics,

- Calcutta, India, Dec. 18-20,2000, vol. 1, Allied Publishers Ltd. New Delhi, p. 65-74 (2000).
116. R.W. van der Heijden, L. Fu, H.H. Tan, C. Jagadish, L.V. Dao and M. Gal, Effect of dopants in the spin-on-glass layer on the bandgap shift in GaAs/AlGaAs and InGaAs/AlGaAs intermixed quantum wells, 2000 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Melbourne, 6-8 December 2002, Eds. L.D. Broekman, B.F. Usher and J.D. Riley, IEEE Publishing Co., Piscataway (2000), p. 145-148.
 117. M. Buda, L. Fu, J. Hay, H.H. Tan and C. Jagadish, High power, kink-free 970nm InGaAs/AlGaAs laser diodes with a symmetric structures, 2000 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Melbourne, 6-8 December 2002, Eds. L.D. Broekman, B.F. Usher and J.D. Riley, IEEE Publishing Co., Piscataway (2000), p. 149-152.
 118. C. Carmody, H. Boudinov, H.H. Tan, C. Jagadish, L.V. Dao and M. Gal, Ion implanted InP for ultrafast photodetector applications, 2000 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Melbourne, 6-8 December 2002, Eds. L.D. Broekman, B.F. Usher and J.D. Riley, IEEE Publishing Co., Piscataway (2000), p. 153-156.
 119. SO. Kucheyev, M. Toth, M.R. Phillips, J.S. Williams, C. Jagadish and G. Li, Cathodoluminescence study of ion implanted GaN, 2000 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Melbourne, 6-8 December 2002, Eds. L.D. Broekman, B.F. Usher and J.D. Riley, IEEE Publishing Co., Piscataway (2000), p. 190-193.
 120. L. Fu, H.H. Tan, C. Jagadish, L.V. dao, M. Gal, N. Li, W. Lu, S.C. shen, Post-growth tuning of optoelectronic devices by ion implantation induced quantum well intermixing, 2000 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Melbourne, 6-8 December 2002, Eds. L.D. Broekman, B.F. Usher and J.D. Riley, IEEE Publishing Co., Piscataway (2000), 344-347.
 121. M. Buda, C. Jagadish, G.A. Acket and J.H. Wolter, Waveguiding in InGaN/GaN/AlGaN blue laser structures, 2000 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Melbourne, 6-8 December 2002, Eds. L.D. Broekman, B.F. Usher and J.D. Riley, IEEE Publishing Co., Piscataway (2000), p. 438-442.
 122. L.V. Dao, M. Gal, A. Babinski and C. Jagadish, Ultrafast time-resolve photoluminescence measurements on InGaAs/GaAs quantum dots, 2000 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Melbourne, 6-8 December 2002, Eds. L.D. Broekman, B.F. Usher and J.D. Riley, IEEE Publishing Co., Piscataway (2000), p. 443-446.
 123. T.v.Lippen, H. Boudinov, H.H. Tan and C. Jagadish, Electrical isolation of AlGaAs by proton irradiation, 2000 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, Melbourne, 6-8 December 2002, Eds. L.D. Broekman, B.F. Usher and J.D. Riley, IEEE Publishing Co., Piscataway (2000), p. 447-450.
 124. M Buda, L. Fu, J. Hay, P.N.K. Deenapanray, H.H. Tan, C. Jagadish, P. Reece and M. Gal, Impurity free intermixing for optoelectronic device integration, Proceedings of the First International Symposium on Integrated Optoelectronics,

- Electrochemical Society, Pennington, NJ, M.J. Deen, D. Misra and J. Ruzyllo (Eds), pp.89-105 (2002).
125. P. Lever, H.H. Tan, C. Jagadish and M. Gal, Atomic interdiffusion for integration of quantum dot optoelectronic devices, Proceedings of 2nd IEEE Conference on Nanotechnology, Washington DC, August 26-28, 2002, IEEE Publishing Co. Piscataway, pp. 337-340 (2002).
 126. M. Buda, J. Hay, H.H. Tan, J. Wong-Leung and C. Jagadish, Asymmetric design of semiconductor laser diodes: thin p-clad and low divergence InGaAs/AlGaAs/GaAs devices, The 15th Annual Meeting of the IEEE Lasers and Electro-Optics Society, Glasgow, Scotland, 10-14 Nov. 2002, pp. 647-648 (2002).
 127. C. Carmody, H.H. Tan and C. Jagadish, Influence of cap layer on interdiffusion in InP/InGaAs quantum wells, The 15th Annual Meeting of the IEEE Lasers and Electro-Optics Society, Glasgow, Scotland, 10-14 Nov. 2002, pp. 845-846 (2002).
 128. C. Carmody, H. Boudinov, H.H. Tan, C. Jagadish, L.V. Dao and M. Gal, Ultrafast carrier trapping in high energy ion implanted indium phosphide, Proceedings of 12th International Semiconducting and Insulating Materials Conference, IEEE Publishing Co., Piscataway, NJ (USA), pp. 221-224 (2002).
 129. Q. Gao, H.H. Tan, C. Jagadish and P.N.K. Deenapanray, Influence of isochronal annealing on the evolution of hole traps in GaAsN epilayers grown by metalorganic chemical vapour deposition, Proceedings of 12th International Semiconducting and Insulating Materials Conference, IEEE Publishing Co., Piscataway, NJ (USA), pp. 80-83 (2002).
 130. S.O. Kucheyev, C. Jagadish, J.S. Williams, P.N.K. Deenapanray, M. Yano, K. Koike, S. Sato, M. Inoue and K-I.Ogata, Electrical isolation of ZnO by ion irradiation, Proceedings of 12th International Semiconducting and Insulating Materials Conference, IEEE Publishing Co., Piscataway, NJ (USA), pp. 143-146 (2002).
 131. P. Lever, H. H. Tan, P. Reece, M. Gal and C. Jagadish, Impurity-free vacancy disordering of InGaAs quantum dots, Proc. of SPIE: Photonics West, San Jose, Volume 4656, pp. 43-48 (2002).
 132. Q. Gao, J. Muller, P.N.K. Deenapanray, H.H. Tan and C. Jagadish, Electrical isolation of p-type GaAsN epitaxial layers by ion irradiation, Mat. Res. Soc. Symp. Proc. Vol. 744, M10.8.1-6 (2003)
 133. P. Lever, L. Fu, C. Jagadish, M. Gal and H.H. Tan, Interdiffusion in semiconductor quantum dot structures, Mat. Res. Soc. Symp. Proc. Vol. 744, M6.5.1-8 (2003)
 134. S.O. Kucheyev, C. Jagadish, J.S. Williams, P.N.K. Deenapanray, M. Yano, K. Koike, S. Sasa, M. Inoue and K. Ogata, Implant isolation of ZnO epitaxial layers, Mat. Res. Soc. Symp. Proc. Vol. 744, M3.5.1-6 (2003)
 135. M. Buda, H.H. Tan, L. Fu, L. Josyula and C. Jagadish, Improvement in the Kink-Free Operation in InGaAs/GaAs/AlGaAs High Power, Ridge Waveguide Laser Diodes, Proceedings of 2002 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co., Piscataway, NJ (USA), pp. 25 –28 (2003).
 136. M. Buda and C Jagadish, Computation of the modal reflectivity for a partially etched mirror: application for integration of a laser diode and a waveguide,

- Proceedings of 2002 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co., Piscataway, NJ (USA), pp. 137-140 (2003).
137. Q. Gao, H. H. Tan, C. Jagadish, B. Q. Sun, M. Gal, L. Ouyang, and J. Zou, Growth and characterization of GaAsN bulk layer and (In)GaAsN quantum-well structures, Proceedings of 2002 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co., Piscataway, NJ (USA), pp. 247-250 (2003).
138. P. Lever, H. H. Tan, and C. Jagadish, Growth of InGaAs Quantum Dots by Metal Organic Chemical Vapour Deposition, Proceedings of 2002 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co., Piscataway, NJ (USA), pp. 307-310 (2003).
139. M. D. H. Lay, J. C. McCallum, G. de M. Azevedo, P. N. K. Deenapanray and C. Jagadish, A Deep Level Transient Spectroscopy Study of Vacancy-Related Defect Profiles in Channeled Ion Implanted Silicon, Proceedings of 2002 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co., Piscataway, NJ (USA), pp. 437-440 (2003).
140. K. Stewart, M. Buda, J. Wong-Leung, L. Fu, C. Jagadish, A. Stiff-Roberts, P. Bhattacharya, Strain Relaxation in Rapid Thermally Annealed InAs/gaAs Quantum Dot Infrared Photodetectors Silicon, Proceedings of 2002 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co., Piscataway, NJ (USA), pp. 475-478 (2003).
140. B. Q. Sun, M. Gal, Q. Gao, H. H. Tan, and C. Jagadish, Properties of radiative recombination in GaAsN epilayers, Proceedings of 2002 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co., Piscataway, NJ (USA), pp. 483-486 (2003).
141. C. Carmody, H. H. Tan, C. Jagadish, J. Zou, L. Dao, M. Gal, Structural, Electrical and Optical Properties of MeV As⁺ Ion Implanted InP, Proceedings of 2002 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co., Piscataway, NJ (USA), pp. 487-490 (2003).
142. C. Carmody, H. H. Tan, C. Jagadish, Evolution of InGaAs/InP Quantum well Intermixing as a Function of Cap Layer, Proceedings of 2002 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co., Piscataway, NJ (USA), pp. 491-494 (2003).
143. V. A. Coleman, P. N. K. Deenapanray, H. H. Tan, and C. Jagadish, Atomic Relocation of Fast Diffusers in Impurity-Free disordered P-type GaAs, Proceedings of 2002 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co., Piscataway, NJ (USA), pp. 495-498 (2003).
144. L. Fu, P. Lever, H. H. Tan, C. Jagadish, P. Reece and M. Gal, Suppression of Interdiffusion in In_{0.5}Ga_{0.5}As/GaAs Quantum Dots, Proceedings of 2002 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co., Piscataway, NJ (USA), pp. 502-506 (2003).
145. P. Lever, H. H. Tan, P. Reece, M. Gal and C. Jagadish, Interdiffusion in InGaAs quantum dots by ion implantation, Proceedings of 2002 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co., Piscataway, NJ (USA), pp. 515-518 (2003).

146. P. Lever, M. Buda, H.H. Tan and C. Jagadish, Comparison of quantum dot lasers with and without strain compensation layers, The 16th Annual Meeting of the IEEE Lasers and Electro-Optics Society, Tucson, USA, 26-30 Oct. 2003, pp. 951-952 (2003).
147. P.N.K. Deenapanray, M. Krispin, W.E. Meyer, H.H. Tan, C. Jagadish and F.D. Auret, Defect engineering and atomic relocation processes in impurity-free disordered GaAs and AlGaAs, Materials Research Society Proceedings, vol. 799, pp. 103-114 (2004).
148. P. Lever, K. Stewart, L. Fu, H. H. Tan and C. Jagadish, The use of strain compensation layers in the growth of stacked quantum dot structures, Proc. of 3rd IEEE Conference on Nanotechnology, IEEE Publishing Co., Piscataway, NJ, pp. 848-851 (2003)
149. P. Lever, L. Fu, H. H. Tan, C. Jagadish, P. Reece and M. Gal, Comparison of interdiffusion between single (layer) and stacked InGaAs/GaAs quantum dots, Proc. of 3rd IEEE Conference on Nanotechnology, IEEE Publishing Co., Piscataway, NJ, pp. 852-855 (2003).
150. E.W. Bogaart, J.E.M. Haverkort, T. Mano, R. Nötzel, J.H. Wolter, P. Lever and C. Jagadish, Picosecond Time-Resolved Bleaching Dynamics of InAs/GaAs Self-Assembled Quantum Dots, Proc. of 3rd IEEE Conference on Nanotechnology, IEEE Publishing Co., Piscataway, NJ, pp. 663-666 (2003).
151. P.L. Gareso, L. Fu, M. Buda, H.H. Tan and C. Jagadish, Suppression of thermal atomic interdiffusion in InGaAs/AlGaAs QW laser structures, SPIE Proceedings, Photonics: Design, Technology and Packaging, vol. 5277, pp. 356-364 (2004).
152. K. Stewart, S. Barik, M. Buda, H.H. Tan and C. Jagadish, InAs quantum dots for optoelectronic device applications, MRS Proceedings, vol. 829, B. 3.4 (2004).
153. V.A. Coleman, H.H. Tan, C. Jagadish, S.O. Kucheyev, M.R. Phillips, and J. Zou, Towards p-Type Doping of ZnO by Ion Implantation, MRS Proceedings, vol. 829, B8.7 (2004).
154. K. Stewart, H.H. Tan, J. Wong-Leung and C. Jagadish, MOCVD growth of InAs/GaAs quantum dots and laser diodes, Proceedings of the 17th Annual Meeting of the IEEE Lasers and Electro-Optics Society, vol.1, 206-207 (2004).
155. Q. Gao, M. Buda, H.H. Tan and C. Jagadish, Room temperature operation of InGaAsN quantum dot lasers, Proceedings of the 17th Annual Meeting of the IEEE Lasers and Electro-Optics Society, vol.1, 210-211 (2004).
156. K. Sears, J. Wong-Leung, M. Buda, H.H. Tan and C. Jagadish, Growth and Characterisation of InAs/GaAs quantum dots grown by MOCVD, Proceedings of 2004 Conference on Optoelectronic and Microelectronic Materials and devices, IEEE Publishing Co., Piscataway, NJ, pp. 1-4 (2005)
157. Q. Gao, M. Buda, H.H. Tan and C. Jagadish, Comparison of Photocurrent spectra of InGaAsN QD and InGaAs QW devices, Proceedings of 2004 Conference on Optoelectronic and Microelectronic Materials and devices, IEEE Publishing Co., Piscataway, NJ, pp. 9-12 (2005).
158. P.L. Gareso, H.H. Tan, J. Wong-Leung, C. Jagadish, L.V. Dao, Proton irradiation induced intermixing in InGaAs/InP quantum wells, Proceedings of 2005 Conference on Optoelectronic and Microelectronic Materials and devices, IEEE Publishing Co., Piscataway, NJ, pp. 93-96 (2005).

- 159 S. Mokkapati, P. Lever, H.H. Tan, C. Jagadish, K.e. McBean and M.R. Phillips, Selective area epitaxy of InGaAs quantum dots for optoelectronic device integration, Proceedings of 2004 Conference on Optoelectronic and Microelectronic Materials and devices, IEEE Publishing Co., Piscataway, NJ, pp. 273-276 (2005).
- 160 P. Lever, Z. Lowrie-Nunes, M.Buda, H.H. Tan and C. Jagadish, Characterisation of InGaAs/GaAs quantum dot lasers grown by metal organic vapour phase epitaxy, Proceedings of 2004 Conference on Optoelectronic and Microelectronic Materials and devices, IEEE Publishing Co., Piscataway, NJ, pp. 277-280 (2005).
- 161 S. Barik, H.H. Tan and C. Jagadish, Role of thin GaAs interlayer on InAs quantum dots grown on InGaAsP/InP (100) by metalorganic chemical vapour deposition, Proceedings of 2004 Conference on Optoelectronic and Microelectronic Materials and devices, IEEE Publishing Co., Piscataway, NJ, pp. 331-334 (2005).
- 162 R.C.P. Hoskins, T.G. van de Roer, E. Smalbrugge, J.J.M. Kwaspen, V.I. Tolstikhin, H.H. Tan, C. Jagadish and G.A. Acket, Hot electron injection laser controlled carrier-heating induced gain switching, Proceedings of 2004 Conference on Optoelectronic and Microelectronic Materials and devices, IEEE Publishing Co., Piscataway, NJ, pp. 397-400 (2005).
- 163 P.L. Gareso, M. Buda, H.H. Tan, C. Jagadish, S. Ilyas and M. Gal, On quantifying the group V to group III interdiffusion rate in InGaAs/InP quantum wells by differential reflectance, Proceedings of the 18th Annual Meeting of the IEEE Lasers and Electro-Optics Society, pp. 989-990 (2005).
- 164 K. Sears, S. Mokkapati, M. Buda, P. Lever, H.H. Tan and C. Jagadish, Quantum dot lasers and optoelectronic device integration, Proceedings of the 18th Annual Meeting of the IEEE Lasers and Electro-Optics Society, pp. 606-608 (2005).
- 165 G. Jolley, H.H. Tan, L. Fu and C. Jagadish, InGaAs quantum dots in a well photodetectors grown by metal organic chemical vapour deposition, Proceedings of the 18th Annual Meeting of the IEEE Lasers and Electro-Optics Society, pp. 230-231 (2005).
- 166 L. Fu, P. Kuffner, I. McKerracher, H.H. Tan and C. Jagadish, Rapid thermal annealing study of InGaAs/GaAs quantum dot infrared photodetectors grown by metal organic chemical vapour deposition, Proceedings of the 18th Annual Meeting of the IEEE Lasers and Electro-Optics Society, pp. 228-229 (2005).
- 167 S. Mokkapati, H.H. Tan and C. Jagadish, Integration of an InGaAs quantum dot laser with a passive waveguide using selective area MOCVD, Proceedings of the 18th Annual Meeting of the IEEE Lasers and Electro-Optics Society, pp. 915-916 (2005).
- 168 K. Sears, M. Buda, H.H. tan and C. Jagadish, The impact of AlGaAs cladding layers grown at low temperature on the performance of MOCVD based InAs/GaAs quantum dot laser diodes, Proceedings of the 18th Annual Meeting of the IEEE Lasers and Electro-Optics Society, pp. 911-912 (2005).
- 169 V.A. Coleman, H.H. Tan, C. Jagadish, S.O. Kucheyev, J. Zou and M.R. Phillips, Towards p-type doping of ZnO by ion implantation, Proceedings of the 18th Annual Meeting of the IEEE Lasers and Electro-Optics Society, pp. 847-848 (2005).

- 170 S. Barik, H.H. Tan, M. Buda and C. Jagadish, Effects of strain and barrier height of thin interlayer on InAs quantum dots grown on GaInAsP/InP, Proceedings of the 18th Annual Meeting of the IEEE Lasers and Electro-Optics Society, pp. 111-112 (2005).
- 171 Y. Kim, H.J. Joyce, Q. Gao, H.H. Tan and C. Jagadish, Growth of GaAs/InAs vertical nanowires on GaAs, Proceedings of the 18th Annual Meeting of the IEEE Lasers and Electro-Optics Society, pp. 455-456 (2005).
- 172 H.H. Tan, M. Buda, L. Fu, J. Wong-Leung, Q. Gao, Y. Kim, P. Lever, K. Stewart, V. Coleman, P. Gareso, S. Mikakparti, M. Fraser, S. Barik, G. Jolley, M. Lysevych, I. McKerracher, H. Joyce, L. Bougen, P. Kuffner, M. O'Connor, M.F. Aggett and C. Jagadish, Compound semiconductor optoelectronics research at the Australian National University, Proceedings of the 18th Annual Meeting of the IEEE Lasers and Electro-Optics Society, pp. 11-12 (2005).
173. G. Jolley, L. Fu, H.H. Tan, C. Jagadish, N. Vukmirovic and P. Harrison, Quantum dots in a well infrared photodetectors grown by MOCVD, Proceedings of 2006 International Conference on Nanoscience and Nanotechnology, IEEE Publishing Co., Piscataway, NJ, pp. 419-422 (2006).
174. H. J. Joyce, Y. Kim, Qiang Gao, H. H. Tan, C. Jagadish, Growth, Structural and Optical Properties of GaAs/AlGaAs Core/Shell Nanowires with and without Quantum Well Shells, Proceedings of 2006 International Conference on Nanoscience and Nanotechnology, IEEE Publishing Co., Piscataway, NJ, pp. 450-453 (2006).
175. S. Mokkaapati, Hark Hoe Tan, C. Jagadish, K.E. McBean, Matthew R. Phillips, Integration of Quantum Dot Devices by Selective Area Epitaxy, Proceedings of 2006 International Conference on Nanoscience and Nanotechnology, IEEE Publishing Co., Piscataway, NJ, pp. 442-445 (2006).
176. S. Barik, Hark Hoe Tan, C. Jagadish, Growth of Stacked InAs/InP Quantum Dot Structures, Proceedings of 2006 International Conference on Nanoscience and Nanotechnology, IEEE Publishing Co., Piscataway, NJ, pp. 454-457 (2006).
177. L. Fu, I. McKerracher, Hark Hoe Tan, C. Jagadish, Thermal Annealing Study on InGaAs/GaAs Quantum Dot Infrared Photodetectors, Proceedings of 2006 International Conference on Nanoscience and Nanotechnology, IEEE Publishing Co., Piscataway, NJ, pp. 493-496 (2006).
178. Qiang Gao, Manuela Buda, Hark Hoe Tan, C. Jagadish, InGaAsN Quantum Dots for Long Wavelength Lasers, Proceedings of 2006 International Conference on Nanoscience and Nanotechnology, IEEE Publishing Co., Piscataway, NJ, pp. 482-485 (2006).
179. Kallista Sears, Hark Hoe Tan, Manuela Buda, Jenny Wong-Leung, C. Jagadish, Growth and Characterization of InAs/GaAs Quantum Dots and Diode Lasers, Proceedings of 2006 International Conference on Nanoscience and Nanotechnology, IEEE Publishing Co., Piscataway, NJ, pp. 505-508 (2006).
180. M. Paladugu, J. Zou, H. Wang, G.J. Auchterlonie, Y. Kim, Hannah J. Joyce, Qiang Gao, Hark Hoe Tan, C. Jagadish, Understanding the Kink Formation in GaAs/InAs Heterostructural Nanowires, Proceedings of 2006 International Conference on Nanoscience and Nanotechnology, IEEE Publishing Co., Piscataway, NJ, pp. 600-603 (2006).

181. J. Zou, H. Wang, G.J. Auchterlonie, M. Paladugu, Y.N. Gao, Y. Kim, Hannah J. Joyce, Qiang Gao, Hark Hoe Tan, C. Jagadish, Growth Mechanism of Truncated Triangular GaAs Nanowires, Proceedings of 2006 International Conference on Nanoscience and Nanotechnology, IEEE Publishing Co., Piscataway, NJ, pp. 604-605 (2006).
182. H.J. Joyce, Yong Kim, Qiang Gao, Hark Hoe Tan and C. Jagadish, Growth of III-V Nanowires and Nanowire Heterostructures by Metalorganic Chemical Vapor Deposition, Proceedings of 2nd IEEE International Conference on Nano/Micro Engineered and Molecular Systems, IEEE Publishing Co., Piscataway, NJ, pp.567 – 570 (2007).
183. H.J. Joyce, Qiang Gao, Yong Kim, H.H. tan and C. Jagadish, Growth, structural and optical properties of III-V nanowires for optoelectronic applications, Proceedings of 7th IEEE Conference on Nanotechnology, IEEE Publishing Co., Piscataway, NJ, Page(s):866 - 869 (2007).
184. E. Castro-Camus, J. Lloyd-Hughes, L. Fu, H.H. Tan, C. Jagadish and M.B. Johnston, Transmission and emission terahertz time-domain spectroscopy with polarisation-sensitive photoconductive receivers, Proceedings of the Joint 32nd International Conference on Infrared and Millimeter Waves, and the 15th International Conference on Terahertz Electronics, IEEE Publishing Co., Piscataway, NJ, pp. 210 -211 (2007).
185. M.B. Johnston, E. Castro-Camus, J. Lloyd-Hughes, S.K.E. Merchant, P. Parkinson, Y.J. Wang, L.M. Herz, L. Fu, Q. Gao, H.H. Tan and C. Jagadish, Compound Semiconductors for Terahertz Photonics, Proceeding of the 20th Annual Meeting of the IEEE Lasers and Electro-Optics Society, IEEE Publishing Co., Piscataway, NJ, pp. 409 - 410 (2007).
186. H.J. Joyce, Q. Gao, Yong Kim, H.H. Tan and C. Jagadish, Growth, Structural and Optical Properties of GaAs, InGaAs and AlGaAs Nanowires and Nanowire Heterostructures, Proceedings of the 20th Annual Meeting of the IEEE Lasers and Electro-Optics Society, IEEE Publishing Co., Piscataway, NJ, pp.407 - 408 (2007).
187. G. Jolley, L. Fu, H.H. Tan and C. Jagadish, Spectral behavior of quantum dots-in-a-well infrared photodetectors grown by MOCVD, Proceedings of the 20th Annual Meeting of the IEEE Lasers and Electro-Optics Society, IEEE Publishing Co., Piscataway, NJ, pp. 580 - 581 (2007).
188. H.J. Joyce, Q. Gao, Y. Kim, H.H. Tan and C. Jagadish, Structural and Optical Properties of III-V Nanowires and Nanowire Heterostructures Grown by Metalorganic Chemical Vapour Deposition, Proceedings of the 2007 IEEE/LEOS International Conference on Optical MEMS and Nanophotonics, IEEE Publishing Co., Piscataway, NJ, pp. 187 - 188 (2007).
189. H. E. Jackson, S. Perera, M. A. Fickenscher, L. M. Smith, J. M. Yarrison-Rice, H. J. Joyce, Q. Gao, H. H. Tan, C. Jagadish, X. Zhang and J. Zou, Optical properties of single InP and GaAs nanowire heterostructures, Proceedings of the 21st Annual Meeting of the IEEE Lasers and Electro-Optics Society, pp. 407 – 408 (2008).
190. H.J. Joyce, Q. Gao; Y. Kim; H.H. Tan; C. Jagadish; X. Zhang, Y. Guo; J. Zou, M.A. Fickenscher, S. Perera, T.B. Hoang, L.M. Smith, H.E. Jackson, J.M. Yarrison-Rice, Growth, Structural and Optical Properties of High Quality GaAs

- Nanowires for Optoelectronics, Proceedings of the 8th IEEE Conference on Nanotechnology, pp. 59 – 62 (2008).
191. S. Du, L. Fu, H.H. Tan and C. Jagadish, Comparison of proton and arsenic implantation induced intermixing in InGaAsP/InGaAs/InP and InAlGaAs /InGaAs/InP quantum wells, Proceedings of 2008 International Conference on Nanoscience and Nanotechnology, IEEE Publishing Co., Piscataway, NJ, pp. 32-35 (2008).
 192. I. R. McKerracher, L. Fu, H. H. Tan and C. Jagadish, Impurity-free vacancy disordering of quantum heterostructures with SiO_xN_y encapsulants deposited by magnetron sputtering, SPIE Proceedings of Nanoengineering: Fabrication, Properties, Optics, and Devices V, San Diego, CA, USA, Vol. 7039, 70390U-10 (2008).
 193. I. R. McKerracher, H. T. Hattori, L. Fu, H. H. Tan and C. Jagadish, Photonic crystal-enhanced quantum dot infrared photodetectors, SPIE Proceedings of Nanoengineering: Fabrication, Properties, Optics, and Devices V, San Diego, CA, USA, Vol. 7039, 70390S-11 (2008).
 194. H. T. Hattori, D. Liu, H. H. Tan and C. Jagadish, Optically pumped equilateral triangular microlasers with three mode-selective trenches, Proceedings of Joint Conference of the Opto-Electronics and Communications and Australian Conference Optical Fibre Technology. OECC/ACOFT, pp 1-2 (2008).
 195. J. Zou, M. Paladugu, Y.N. Guo, X. Zhang, G.J. Auchterlonie, H.J. Joyce, Q. Gao, H.H. Tan, C. Jagadish and Y. Kim, Growth behavior of epitaxial semiconductor axial nanowire heterostructures, Proceedings of 2008 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co, Piscataway, NJ, pp. 71-74 (2008).
 196. S. Barik, L. Fu, H.H. Tan and C. Jagadish, Role of stress on impurity free disordering of quantum dots, Proceedings of 2008 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co, Piscataway, NJ, pp. 221-224 (2008).
 197. S. Paiman, H.J. Joyce, J.H. kang, Q. Gao, H.H. Tan, Y. Kim, X. Zhang, C. Jagadish, III-V compound semiconductor nanowires, Proceedings of the 9th IEEE Nanotechnology Conference, IEEE Publishing Co., Piscataway, NJ, pp. 184-185 (2009).
 198. Q. Gao, H.J. joyce, S. paiman, H.H. Tan, Y. Kim, L.M. Smith, H.E. Jacson, J.M. Yarrison-Rice, X. Zhang, J. Zou and C. Jagadish, Epitaxy of III-V semiconductor nanowires towards optoelectronic devices, 14th Optoelectronics and Communications Conference, IEEE Publshing Co. NJ, pages: WC2 (2 pages) (2009).
 199. Y. Song, P. Zhang, J. Tian, X. Zhang, C. Jagadish and H.H. Tan, Semiconductor disk laser with a diamond heat spreader, The Pacific Rim Conference on Lasers and Electro-Optics 2009, IEEE Publshing Co. NJ, pages 1-2, (2009).
 200. H.J. Joyce, S. paiman, Q. Gao, H.H. Tan, Y. Kim, L.M. smith, H.E. Jackson, J.M. Yarrison-Rice, X. Zhang, J. Zou and C. Jagadish, III-V compound semiconductor nanowires, 2009 IEEE Nanotechnology Materials and Devices Conference, IEEE Publishing Co., NJ, pp. 59-60 (2009).
 201. S. Paiman, Q. Gao, H.H. Tan, C. Jagadish, K. Pemasiri, M. Montazeri, H.E. Jackson, L.M. Smith, J.M. Yarrison-Rice, X. Zhang and J. Zou, 2009 IEEE Lasers

- and Electro-Optics Society Annual Meeting, IEEE Publishing Co. NJ, pp. 145-146 (2009).
202. P.Parkinson, H.J. Joyce, X. Xu, Q. Gao, H.H. Tan, C. Jagadish, L.M. Herz and M.B. Johnston, Characterisation of nanostructures via terahertz spectroscopy, Proceedings of 2010 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co., Piscataway, NJ, pp. 23-24 (2010).
 203. A.Minovich, J. Farnell, D.N. Neshev, D.A. Powell, I.V. Shadrivov, I. McKerracher, H.H. Tan, C. Jagadish and Y.S. Kivshar, Infrared metamaterials tuned by liquid crystals, Proceedings of 2010 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co., Piscataway, NJ, pp. 27-28 (2010).
 204. H.Y. Xu, Y. Wang, Y.N. Guo, J. Zou, Q. Gao, H.H. Tan and C. Jagadish, Growth of GaAs nanowires using different Au catalysts, Proceedings of 2010 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co., Piscataway, NJ, pp. 35-36 (2010).
 205. S. Paiman, Q. Gao, H.J. Joyce, H.H. Tan, C. Jagadish, Y. Kim, Y. Guo, J. Zou, Au catalysed InP nanowires: The influence of growth temperature and V/III ratio, Proceedings of 2010 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co., Piscataway, NJ, pp. 37-38 (2010).
 206. C.R. Hall, L.V. Dao, K. Koike, S. Sasa, H.H. Tan, M. Inoue, M. Yano, C. Jagadish and J.A. Davis, dynamics of carriers and the influence of the quantum confined Stark effect in ZnO/ZnMgO quantum wells, Proceedings of 2010 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co., Piscataway, NJ, pp. 45-46 (2010).
 207. S. Du, L. Fu, H.H. Tan and C. Jagadish, Study of intermixing mechanism in AlInGaAs/InGaAs quantum well, Proceedings of 2010 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co., Piscataway, NJ, pp. 47-48 (2010).
 208. I. McKerracher, J. Wong-Leung, G. jolly, L. Fu, H.H. Tan and C. Jagadish, Spectral tuning of InGaAs/GaAs quantum dot infrared photodetectors using selective area intermixing, Proceedings of 2010 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co., Piscataway, NJ, pp. 49-50 (2010).
 209. Y/N/ Guo, J. Zou, H.J. Joyce, Q. Gao, H.H. Tan and C. Jagadish, Effect of high temperature annealing on sidewalls of GaAs NWs grown by MOCVD, Proceedings of 2010 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co., Piscataway, NJ, pp. 51-52 (2010).
 210. J-H. Kang, Q. Gao, H.J. Joyce, Y. Kim, Y. guo, H. Xu, J. zou, M.A. Fickenscher, L.M. Smith, H.E. Jackson, J.M. Yarrison-Rice, H.H. Tan and C. Jagadish, Proceedings of 2010 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co., Piscataway, NJ, pp. 57-58 (2010).
 211. W. Lei, H.H. Tan and C. Jagadish, Mid-infrared InAsSb quantum dots with high emission efficiency, Proceedings of 2010 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co., Piscataway, NJ, pp. 65-66 (2010).
 212. Z. Li, H.T. Hattori, L. Fu, H.H. Tan and C. Jagadish, High efficiency coupling of light from photonic wire lasers into nano-antennas, Proceedings of 2010

- Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co., Piscataway, NJ, pp. 67-68 (2010).
213. D. Liu, H.T. Hattori, L. Fu, H.H. Tan and C. Jagadish, Increasing the coupling efficiency of a microdisk laser to a waveguide using spiral structures, Proceedings of 2010 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co., Piscataway, NJ, pp. 69-70 (2010).
 214. J. Lu, Q. Ren, H.H. tan, S. Wu, Z. An, S. Zhang, Y. Zhu, Z. chen, C. jagadish, X.C. Shen, Selective enhancement of photon emission in a quantum dot coupling with micropillar cavity, Proceedings of 2010 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co., Piscataway, NJ, pp. 71-72 (2010).
 215. V. Ramesh, Q. Gao, H.H. Tan, S. Paiman, Y.N. Guo, J. Zou and C. Jagadish, InP/InGaAs core-shell nanowire heterostructures: growth and characterization, Proceedings of 2010 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co., Piscataway, NJ, pp. 83-84 (2010).
 216. C.R. Hall, L.V. Dao, H.H. Tan, C. Jagadish and J.A. Davis, Observation of patially separated coherent coupling near the LO phonon resonance within asymmetric double quantum wells, Proceedings of 2010 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co., Piscataway, NJ, pp. 115-116 (2010).
 217. H.F. Lu, L. Fu, G. Jolley, H.H. Tan, S.R. Tataavarti and C. Jagadish, Temperature dependence of dark current properties of InGaAs/GaAs quantum dot solar cells, Proceedings of 2010 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co., Piscataway, NJ, pp. 127-128 (2010).
 218. K. Vora, K. Belay, F. Karouta and C. Jagadish, Correlating properties of PECVD SiNx layrs to deposition parameters, Proceedings of 2010 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co., Piscataway, NJ, pp. 197-198 (2010).
 219. D. Waddington, A.M. Burke, S. Fricke, H.H. Tan, C.Jagadish, A.R. Hamilton, K. Trunov, D. Reuter, A.D. Wieck and A.P. Micolich, Can insulating gates lead us to stable modulation doped hole quantum devices, Proceedings of 2010 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co., Piscataway, NJ, pp. 199-200 (2010).
 220. M. Williams, A.M. Burke, H.J. Joyce, A.P. Micolich, H.H. Tan and C. Jagadish, A comparative study of transistors based on wurtzite and zinblende InAs nanowires, Proceedings of 2010 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co., Piscataway, NJ, pp. 203-204 (2010).
 221. F. Wang, W.J. Toe, S. Paiman, Q. Gao, H.H. Tan, C. Jagadish, P.J. Reece, Photoluminescence study of optically trapped InP semiconductor nanowires, Proceedings of 2010 Conference on Optoelectronic and Microelectronic Materials and Devices, IEEE Publishing Co., Piscataway, NJ, pp. 211-212 (2010).
 222. J-H.Kang, Q. Gao, H.J. joyce, H.H. tan, C. Jagadish, Y. Kim, Y. guo, H. Xu, J. Zou, M.A. Fickenscher, L.M. smith, H.E. Jackson and J.M. Yarrison-Rice, Improvement of morphology, structure and optical properties of GaAs annowires grown on Si substrates, Proceedings of 10th International Conference on Nanotechnology Joint

- Symposium with Nano Korea 2010, IEEE Publishing Co. Piscataway, NJ, pp.470-473 (2010).
223. D. Liu, H.T. Hattori, L. Fu, H.H. tan and C. Jagadish, Analysis of multi-wavelength photonic crystal single-defect laser arrays, Proceedings of 23rd Annual Meeting of IEEE Photonics Society, IEEE Publishing Co., Piscataway, NJ, pp. 500-501 (2010).
 224. L. Fu, G. Jolley, H.F. Lu, A. Majid, H.H. Tan and C. Jagadish, Temperature effect on device characteristics of InGaAs/GaAs quantum dot solar cell, Proceedings of 23rd Annual Meeting of IEEE Photonics Society, IEEE Publishing Co., Piscataway, NJ, pp. 716-717 (2010).
 225. Q. Gao, H.J. Joyce, S. Paiman, J.H. Kang, H.H. Tan, H.E. Jackson, L.M. Smith, J. Yarrison-Rice and C. Jagadish, Compound semiconductor nanowires for optoelectronic device applications, 2011 ICO International conference on Information Photonics, IEEE Publishing Co., Piscataway, NJ. Pp 1-2 (2011).
 226. Q. Gao, H.H. Tan, H.E. Jackson, L.M. Smith, J. Yarrison-Rice, J. Zou, M.B. Johnston and C. Jagadish, Growth and characterization of III-V compound semiconductor nanowires, Proceedings of 2011 16th Optoelectronics and communications Conference, IEEE Publishing co., Piscataway, NJ, pp. 366-367 (2011).
 227. Q. Gao, J.H. Kang, H.H. Tan, H.E. Jackson, L.M. Smith, J. Yarrison-Rice, J. Zou and C. Jagadish, Growth and characterization of compound semiconductor nanowires on Si, Proceedings of 2011 IEEE Nanotechnology Conference, IEEE Publishing Co., Piscataway, NJ, pp. 44-47 (2011).
 228. G. Jolley, L. Fu, H.H. Tan and C. Jagadish, Growth and confinement effects in III-V semiconductor Nanostructures, Proceedings of 2011 Microoptics Conference, IEEE Publishing Co., Piscataway, NJ, pp. 1-4 (2011).
 229. L. Fu, H.F. Lu, S. Mokkaapati, G. Jolley, H.H. Tan and C. Jagadish, Plasmonic light trapping effect on properties of InGaAs/GaAs quantum dot solar cells, Proceedings of 2011 IEEE Photonics Conference, IEEE Publishing Co., Piscataway, NJ, pp. 387-388 (2011).
 230. F. Wang, S. Paiman, Q. Gao, H.H. Tan, C. Jagadish and P.J. Reece, Two-photon luminescence study of optically trapped InP semiconductor nanowires, 2011 Quantum Electronics Conference and Conference on Lasers and Electro-Optics Proceedings, IEEE publishing co., Piscataway, NJ, pp. 221-223 (2011).
 231. G. Jolley, H.F. Lu, L. Fu, H.H. Tan, S.R. Tataavarti and C. Jagadish, The influence of InGaAs quantum dots on GaAs p-i-n solar cell dark current properties, 2011 IEEE Photovoltaic Specialists Conference Proceedings, IEEE Publishing Co., Piscataway, NJ., pp. 00513-00516 (2011).
 232. L. Vines, P.T. Neuvonen, A.Yu. Kuznetsov, J. Wong-Leung, C. Jagadish and B.G. Svensson, Anomalous diffusion of intrinsic defects in K implanted ZnO using Li as tracer, MRS Symp. Proceedings, Vol. 1394, DOI:10.1557/opl.2012.529 (2012). (5 pages).
 233. M. Montazeri, A. Wade, M. Fickenscher, H.E. Jackson, L.M. smith, J.M. Yarrison-Rice, Q. Gao, H.H. Tan and C. Jagadish, Photomodulated Rayleigh scattering from single semiconductor nanowires, MRS Symp. Proc. Vol. 1408, 11-16 (2012).
 234. J.D. Ye, S.T. Lim, S.L. Gu, H.H. Tan, C. Jagadish, K.L. Teo, Magneto-transport study on the two-dimensional electron gas in ZnMgO/ZnO heterostructure grown

- by MOCVD, 2012 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, IEEE Publishing Co., Piscataway, NJ, pp. 201-202 (2012).
235. K.S. Chan, J.D. Ye, P. Parkinson, E. Monakhov, K.M. Johansen, L. Vines, B.G. Svensson, C. Jagadish and J. Wong-Leung, Structural and optical properties of H-implanted ZnO, 2012 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, IEEE Publishing Co., Piscataway, NJ, pp. 219-220 (2012).
 236. W. Sun, Y.N. Guo, H.Y. Xu, Z.M. Liao, J. Zou, Q. Gao, H.H. Tan and C. Jagadish, Unequal P distribution in nanowires and the layer during the growth of GaAsP nanowires in GaAs, 2012 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, IEEE Publishing Co., Piscataway, NJ, pp. 147-148 (2012).
 237. X. Yuan, H.H. Tan, P. Parkinson, J. Wong-Leung, S. Breuer, Q. Gao and C. Jagadish, Growth and characterisation of GaAsSb nanowires, 2012 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, IEEE Publishing Co., Piscataway, NJ, pp. 141-142 (2012).
 238. L.H. Willems van Beveren, J.C. McCallum, H.H. Tan and C. Jagadish, Progress towards opto-electronic characterization of indium phosphide nanowire transistors at milli-kelvin temperatures, 2012 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, IEEE Publishing Co., Piscataway, NJ, pp. 49-50 (2012).
 239. H. Wang, P. Parkinson, J. Tian, D. Saxena, S. Mokkalapati, Q. Gao, P. Prasai, L. Fu, F. Karouta, H.H. Tan and C. Jagadish, Optoelectronic properties of GaAs nanowire photodetector, 2012 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, IEEE Publishing Co., Piscataway, NJ, pp. 139-140 (2012).
 240. S. Mokkalapati, H.F. Lu, S. Turner, L. Fu, H.H. Tan and C. Jagadish, Plasmonics for III-V semiconductor solar cells, 2012 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, IEEE Publishing Co., Piscataway, NJ, pp. 56-57 (2012).
 241. Q. Gao, H.H. Tan, L. Fu, P. Parkinson, S. Breuer, J. Wong-Leung and C. Jagadish, InP nanowires grown by SA-MOVPE, 2012 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, IEEE Publishing Co., Piscataway, NJ, pp. 45-46 (2012).
 242. Z. Li, H.T. Hattori, F. Karouta, J. Tian, P. Parkinson, L. Fu, H.H. Tan and C. Jagadish, Coupling of light from microdisk lasers to nano-antennas with nanotapers, 2012 IEEE Photonics Conference Proceedings, IEEE Publishing Co., Piscataway, NJ, pp. 889-890 (2012).
 243. S. Mokkalapati, D. Saxena, Q. Gao, H.H. Tan and C. Jagadish, Effect of plasmonic nanoparticles on the quantum efficiency of III-V semiconductor nanowire emitters, 2012 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, IEEE Publishing Co., Piscataway, NJ, pp. 47-48 (2012).
 244. A.S. Ameruddin, H.H. Tan, H.A. Fonseka, Q. Gao, J. Wong-Leung, P. Parkinson, S. Breuer and C. Jagadish, Influence of growth temperature and V/III ratio on Au-assisted InGaAs nanowires, 2012 Conference on Optoelectronic and

- Microelectronic Materials and Devices Proceedings, IEEE Publishing Co., Piscataway, NJ, pp. 37-38 (2012).
245. H.Y. Xu, Y.N. Guo, Z.M. Liao, J. Zou, Q. Gao, H.H. Tan and C. Jagadish, Growth of defect-free InAs nanowires using Pd catalyst, 2012 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, IEEE Publishing Co., Piscataway, NJ, pp. 31-32 (2012).
 246. M. Lysevych, H.H. Tan, F. Karouta, L. Fu and C. Jagadish, Reduction of gain-saturation in merged beam lasers, 2012 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, IEEE Publishing Co., Piscataway, NJ, pp. 189-190 (2012).
 247. Y.H.J. Lee, Z. Li, L. fu, P. Parkinson, K. Vora, H.H. Tan and C. Jagadish, Improved GaAs nanowire solar cells using AlGaAs for surface passivation, 2012 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, IEEE Publishing Co., Piscataway, NJ, pp. 131-132 (2012).
 248. P. Parkinson, H. Wang, Q. Gao, H.H. Tan and C. Jagadish, Picosecond carrier lifetime measurements on a single GaAs nanowire, 2012 Conference on Lasers and electro-Optics Proceedings, IEEE Publishing Co., Piscataway, NJ, pp. 1-2 (2012).
 249. W. Lei, P. Parkinson, H.H. Tan and C. Jagadish, Droplet epitaxy of strain-free GaAs/AlGaAs quantum molecules for optoelectronic applications, 2012 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, IEEE Publishing Co., Piscataway, NJ, pp. 53-54 (2012).
 250. P. Sajewicz, L. Fu, H.H. Tan, K. Vora and C. Jagadish, Monolithically integrated multi-section semiconductor lasers by selective area quantum well intermixing, 2012 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, IEEE Publishing Co., Piscataway, NJ, pp. 137-138 (2012).
 251. H.H. Tan, N. Jiang, Y.H. Lee, D. Saxena, P. Parkinson, Q. Gao, L. Fu and C. jagadish, III-V nanowires for optoelectronic applications, 2012 International Conference on Computers and Devices for Commications, IEEE Publshing Co., Piscataway, NJ, pp. 1-3 (2012).
 252. H.A. Fonseka, H.H. Tan, J.H. Kang, S. Paiman, Q. Gao, P. Parkinson and C. Jagadish, Growth of InP nanowires on silicon using a thin buffer layer, 2012 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, IEEE Publishing Co., Piscataway, NJ, pp. 43-44 (2012).
 253. N. Jiang, P. Parkinson, Q. Gao, J. Wong-Leung, S. Breuer, H. H. Tan and C. Jagadish, Improvement of minority carrier lifetime in GaAs/AlGaAs core-shell nanowires, 2012 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, IEEE Publishing Co., Piscataway, NJ, pp. 34-35 (2012).
 254. F. Wang, W.M. Lee, W.J. Toe, Q. Gao, H.H. Tan, C. Jagadish and P.J. Reece, PL mapping and optimized optical trapping of nanowires SLM beam shaping, 2012 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, IEEE Publishing Co., Piscataway, NJ, pp. 29-30 (2012).
 255. C.R. Hall, G. Richards, J. Tollerud, H.H. Tan, C. Jagadish, K. Koike, S. Sasa, M. Inoue, M. Yano and J.A. Davis, Diffusion and population dynamics of exciton in c-axis grown ZnO quantum wells, 2012 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, IEEE Publishing Co., Piscataway, NJ, pp. 59-60 (2012).

256. S. Turner, S. Mokkalpati, G. Jolley, L. Fu, H.H. Tan and C. Jagadish, Dielectric diffraction gratings for light trapping in InGaAs-GaAs quantum well structures, 2012 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, IEEE Publishing Co., Piscataway, NJ, pp. 129-130 (2012).
257. Y. Guo, J. zou, T. Burgess, Q. Gao, H.H. Tan and C. Jagadish, Shell formation in InGaAs nanowires driven by lattice latching and polarity effect, 2012 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, IEEE Publishing Co., Piscataway, NJ, pp. 51-52 (2012).
258. Q. Gao, J.H. Kang, H.E. Jackson, L.M. smith, J.M. Yarrison-Rice, J. Zou and C. Jagadish, Growth and characterization of compound semiconductor nanowires on Si, 2012 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, IEEE Publishing Co., Piscataway, NJ, pp. 44-47 (2012).
259. S. Bruer, F. Karouta, H.H. Tan and C. Jagadish, MOCVD growth of GaAs nanowires using Ga droplets, 2012 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, IEEE Publishing Co., Piscataway, NJ, pp. 39-40 (2012).
260. P. Parkinson, K. Peng, N. Jiang, Q. Gao, H.H. Tan and C. Jagadish, Nonlinear direct laser-write lithography for semiconductor nanowire characterization, 2012 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, IEEE Publishing Co., Piscataway, NJ, pp. 135-136 (2012).
261. I.S. Maksymov, I. Staude, A.E. Miroschnichenko, M. Decker, H.H. Tan, D.N. Neshev, C. Jagadish and Y.S. Kivshar, Arrayed nanoantennas for efficient broadband unidirectional emission enhancement, 2012 Conference on Lasers and Electro-Optics Proceedings, IEEE Publishing Co., Piscataway, NJ, pp. 1-2 (2012).
262. J.O. Tollerud, G. Richards, H.H. Tan, C. Jagadish and J.A. Davis, Demonstration of a stable and flexible coherent multi-dimensional spectroscopy apparatus to study coherent coupling in asymmetric double quantum wells, 2012 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, IEEE Publishing Co., Piscataway, NJ, pp. 151-152 (2012).
263. A. Minovich, J. Farnell, D.N. Neshev, I. McKerracher, F. Karouta, J. Tian, D.A. Powell, I.V. Shadrivov, H.H. Tan, C. Jagadish and Y.S. Kivshar, Nonlinear fishnet metamaterials based on liquid crystal infiltration, 2012 Conference on Lasers and Electro-Optics Proceedings, IEEE Publishing Co., Piscataway, NJ, pp. 1-2 (2012).
264. T. Burgess, S. Du, B. Gault, Q. Gao, H.H. Tan, R. Zheng and C. Jagadish, Quantification of the zinc dopant concentration in GaAs nanowires, 2012 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, IEEE Publishing Co., Piscataway, NJ, pp. 41-42 (2012).
265. D. Saxena, S. Mokkalpati, H.H. Tan and C. Jagadish, Designing single GaAs nanowire lasers, 2012 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, IEEE Publishing Co., Piscataway, NJ, pp. 101-102 (2012).
266. H.F. Lu, L. Fu, G. Jolley, H.H. Tan and C. Jagadish, Improved performance of InGaAs/GaAs quantum dot solar cells using Si-modulation doping, 2012 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings, IEEE Publishing Co., Piscataway, NJ, pp. 127-128 (2012).

267. M. Montazeri, H.E. Jackson, L.M. Smith, J.M. Yarrison-Rice, J.H. Kang, Q. Gao, H.H. Tan and C. Jagadish, Transient Rayleigh scattering from single semiconductor nanowires, Proceedings of International Conference on Physics of Semiconductors, Zurich, AIP Proceedings, 1566, 425-426 (2013).
268. K. Pemasiri, S. Perera, Y.D. Wang, M. Montazeri, H.E. Jackson, L.M. Smith, J. Yarrison-Rice, Q. Gao, H.H. Tan and C. Jagadish, Determining Wurtzite band structure using optical spectroscopies on single InP nanowires, Proceedings of International Conference on Physics of Semiconductors, Zurich, AIP Proceedings, 1566, 476-477 (2013).
269. T. Shi, M. Fickenscher, L.M. Smith, H.E. Jackson, J. Yarrison-Rice, Q. Gao, H.H. Tan, C. Jagadish, J. Etheridge, B.M. Wong, Proceedings of International Conference on Physics of Semiconductors, Zurich, AIP Proceedings, 1566, 516-517 (2013).
270. K. Vora, F. Karouta and C. Jagadish, Nanostencil lithography for fabrication of III-V nanostructures, SPIE Proceedings of Conference on Nanoengineering-fabrication, properties, optics and devices, San Diego, 8816, UNSP88161B (2013).
271. H.J. Joyce, C.J. Docherty, C.K. Yong, J. Wong-Leung, Q. Gao, S. Paiman, H.H. Tan, C. Jagadish, J. Lloyd-Hughes, L.M. Herz, M.B. Johnston, Measuring the electrical properties of semiconductor nanowires using terahertz conductivity spectroscopy, SPIE Proceedings of Conference on Micro/Nano Materials, Devices and Systems, Melbourne, 8293, 892321 (2013).
272. H.H. Tan, N. Jiang, D. Saxena, Y.H. Lee, S. Mokkaapati, L. Fu, Q. Gao, H.J. Joyce and C. Jagadish, III-V nanowires for optoelectronic applications, Proceedings of Symposium on semiconductors, dielectrics and metals for nanoelectronics, San Francisco, ECS Transactions, 58, 93-98 (2013).
273. S. Mokkaapati, D. Saxena, N. Jiang, Q. Gao, H.H. Tan and C. Jagadish, III-V semiconductor nanowire lasers, Proceedings of 24th IEEE International Semiconductor Lasers Conference, IEEE Publishing Co., Piscataway, NJ, pp. 217-218 (2014).
274. H.P. Wagner, N. Wickremasinghe, M. Kaveh, M. Ajward, X. Wang, H. Schmitzer, Q. Gao, C. Jagadish, Optical properties of Alq(3) films and Alq(3)/plasmonic heterostructures, Proceedings of SPIE Light Manipulating Organic Molecules and Devices, vol. 9181, pp. 91810P (2014).
275. W.J. Toe, I.O. Piwonka, A. Andres-Arroyo, Q. Gao, H.H. Tan, C. Jagadish, B. Henry, C. Angstmann, P.J. Reece, Anomalous dynamic behaviour of optically trapped high aspect ratio nanowires, Proceedings of SPIE Optical Trapping and Optical Manipulation, vol. 9164, pp. 91641L (2014).
276. H.E. Jackson, L.M. Smith and C. Jagadish, Recent advances in semiconductor nanowire heterostructures, Proceedings of ECS Transactions on State of the Art Program on Compound Semiconductors, vol. 64, pp. 1-5 (2014).
277. S. Mokkaapati, N. Jiang, D. Saxena, H.H. Tan and C. Jagadish, High quantum efficiency AlGaAs nanowires for optoelectronic devices, Proceedings of 2014 IEEE Photonics Society Summer Topical Meeting, IEEE Publishing Co. Piscataway, NJ, pp. 13-14 (2014).
278. H. P. Wagner, N. D. Wickremasinghe, M. Kaveh, M. Ajward, X. Wang, H. Schmitzer, Q. Gao and C. Jagadish, "Optical properties of Alq₃ films and

- Alq3/plasmonic heterostructures”, SPIE, Enhanced Optical Interactions, 9191-23 (2014)
279. F.F. Ren, W.Z. Xu, H. Lu, J.D. Ye, H.H. Tan and C. Jagadish, Dynamic control of THz waves through thin film transistor metamaterials, Proceedings of SPIE Micro-Nano Materials, Devices and Systems, Vol. 9668, pp. 966800 (2015).
280. K. Peng, P. Parkinson, L. Fu, Q. Gao, N. Jiang, Y.N. Guo, F. Wang, H.J. Joyce, J.L. Boland, H.H. Tan, C. Jagadish and M.B. Johnston, Photoconductive terahertz receiver utilising single semiconductor nanowires, 40th International Conference on Infrared, Millimeter and Terahertz Waves, IEEE Publishing, (2015).
281. M. Kaveh, Ondrej Dyck, Gerd Duscher, Q. Gao, C. Jagadish and H. P. Wagner, Exciton Emission from Plasmonic Metal/organic multishell semiconductor Nanowires., Progress in Electromagnetic Research Symposium (PIERS), IEEE, 673, (2015)
282. H. P. Wagner, M. Kaveh, F. Mohammadi, H. Schmitzer, Q. Gao, C. Jagadish, G. Kunert, D. Hommel, J. Ge and G. Duscher, Exciton Emission from Plasmonic-organic-III-V-semiconductor Nanowires and Nanorods., Progress in Electromagnetic Research Symposium (PIERS), IEEE, 1847-1847, (2016).
283. R. Camacho-Morales, M. Rahmani, S. Kruk, L. Wang, L. Xu, A. E. Miroshnichenko, D. Smirnova, H. Tan, F. Karouta, S. Naureen, K. Vora, A. S. Solntsev, L. Carletti, C. De Angelis, C. Jagadish, Y. S. Kivshar, and D. N. Neshev, "Shaping the radiation pattern of second-harmonic generation from AlGaAs nonlinear nanoantennas," in Photonics and Fiber Technology 2016 (ACOFT, BGPP, NP), OSA Technical Digest (online) (Optica Publishing Group, 2016), paper JW6A.5.
284. P. Parkinson, J.A. Alanis, S. Skalsky, Y.Y. Zhang, H.Y. Liu, M. Lysevych, H.H. Tan and C. Jagadish, A needle in a needlestack: exploiting functional inhomogeneity for optimised nanowire lasing, Proceedings of SPIE, 11291, 112910K (2020).
285. I. Volovaskaya, D. Smirnova, L. Xu, J. Sautter, A. Miroshnichenko, M. Lysevych, R. Camacho-Morales, K.Z. Kamali, F. Kaouta, K. Vora, H.H. Tan, M. Kauranen, I. Staude, C. Jagadish, D. Neshev and M. Rahmani, Multipolar analysis of second-harmonic generation in (111) Gallium Arsenide nanoparticles, Journal of Physics Conference Series, 1461, 012185 (2020).
286. D. Jevtics, M. Hejda, K. Peng, B. Guilhabert, J. Robertson, J. McPhillimy, H.H. Tan, C. Jagadish. M.B. Johnston, M.J. Strain, M.Dawson, A. Hurtado, Heterogeneous integration of semiconductor nanowires in 2D and 3D nanophotonic systems, Proceedings of Symposium on Physics and Simulation of Optoelectronic Devices XXIX, SPIE, 11680, 116800X (2021).
287. W. W. Wong, T. Haggren, D. Neshev, H. H. Tan, A. Sukhorukov, C. Jagadish and Alex Song, Scaling of single-mode surface-emitting lasers with a perturbed Dirac cone, IEEE 29th International Semiconductor Laser Conference (ISLC) Orlando, FL Sep 29-Oct 02 (2024)
288. N. Jayawardana, M. Larson, C-W. Tu, W. W. Wong, H. H. Tan, C. Jagadish, H. Schmitzer, H. P. Wagner, Lasing from InP Nanowire Hetero-PCSELS, IEEE 29th International Semiconductor Laser Conference (ISLC) Orlando, FL Sep 29-Oct 02 (2024)