

List of Publications of Prof Chennupati Jagadish*

*Prof. Jagadish's papers are cited according to Web of Science (Google Scholar) more than 17000+ (31000+) times and his h index is: 67 (81). In addition to more than 750+ 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).

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.

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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.
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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.
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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. Mokkapati 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:

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2. C. Jagadish (Editor), “1996 Conference on Optoelectronic and Microelectronic Materials and Devices Proceedings”, IEEE Publishing Co., Piscataway, NJ, USA, 1997, pp. 501.
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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.
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- 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).
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- 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).
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- 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).
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- 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.

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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.

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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).
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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*).
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6. J.A. Davis and C. Jagadish, Ultrafast spectroscopy of ZnO/ZnMgO quantum wells, Laser and Photonics Reviews, 3, 85-96 (2009).
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12. S. Mokkalapati 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).
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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).
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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).
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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).
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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).

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 13. Xuanhu Chen, Chennupati Jagadish, Jiandong Ye Fundamental Properties and Power Electronic Device Progress of Gallium Oxide, Oxide Electronics, Samit Ray (Ed), Chapter 9, Wiley (2021).

Refeered Journal Papers:

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