# PUBLICATIONS

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## JOURNALS

1. Balaji VR, Murugan M, Robinson S, Nakkeeran R. "Integrated 25 GHz and 50 GHz Spectral Line width Dense Wavelength Division Demultiplexer on Single Photonic Crystal Chip", OptoElectronics Review https://doi.org/10.1016/j.opelre.2018.10.001.

2. Venkatachalam Rajarajan Balaji, Mahalingam Murugan, and Savarimuthu Robinson, "Optimization of DWDM Demultiplexer Using Regression Analysis," Journal of Nanomaterials, Vol. 2016, Article ID 9850457, 10pages, 2016. doi:10.1155/2016/9850457.

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5. Venkatachalam Rajarajan Balaji, Mahalingam Murugan, Savarimuthu Robinson and Nakkeeran R. Design and optimization of photonic crystal based eight channel dense wavelength division multiplexing demultiplexer using conjugate radiant neural network. Optical and Quantum Electronics. 2017 May 1; 49(5):198.

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7. Venkatachalam Rajarajan Balaji, Mahalingam Murugan, and Savarimuthu Robinson. Integration of 100 GHz and 50 GHz Spectral Bandwidth Wavelength Demultiplexer using 2D Photonic Crystal. AIP Conference Proceedings 1849, 020015 (2017); doi: 10.1063/1.4984162

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9. Balaji V. R., M. Murugan and S. Robinson, "Photonic crystal filter to work in DWDM using ultra cell resonant cavity," 2015 International Conference on Control, Instrumentation, Communication and Computational Technologies (ICCICCT), Kumaracoil, 2015, pp. 388-392. doi: 10.1109/ICCICCT.2015.7475309

10. Balaji V. R, M. Murugan and S. Robinson, "Single port tunable DWDM demultiplexer using twodimensional Photonic crystal", 2016 International Conference on Wireless Communications, Signal Processing and Networking (WiSPNET), Chennai, 2016, pp. 33-37. doi: 10.1109/WiSPNET.2016.7566083.

11. Balaji.V.R "Design and Implementation of MIMO-OFDM For 4G Mobile Communications" JGRCS, Vol.4, PP. 18-21, 2013.

12. Venkatachalam Rajarajan Balaji, Mahalingam Murugan, Savarimuthu Robinson, and Gopalkrishna Hegde " A Novel Hybrid Channel DWDM Demultiplexer using Two Dimensional Photonic Crystals meeting ITU Standards" Optics Communication (Under review).

13. Venkatachalam Rajarajan Balaji, Mahalingam Murugan, Savarimuthu Robinson, and Gopalkrishna Hegde " Design and Modeling of the waveguide taper for Photonic Crystal demultiplexer" OptoElectronics Review (Under review).

14. Subhash R, Venkatachalam Rajarajan Balaji, Sanjana.K.E and Nikhil Madhavan "Smart Automated Energy Meter", Springer Communications in Computer and Information Science series (Waiting for Publication)

15. Mira Ganesh, Venkatachalam Rajarajan Balaji, Sri Nivedha R, Kavya D " New Modelisation of Silicon DWDM demux and AND gate for wavelenghts in C and L bands. Springer Communications in Computer and Information Science series (Waiting for Publication)

16. Yasar Ahamed S, Raghulram V, Balaji V R, "Smart Kitchen with Inventory Monitoring and Management using IoT", International Journal of Innovation in Engineering Research & Management, Vol. 05, ISSN .No.02, April 2018.

17. Madhura Subramanian,Neeraj Chidambaram,Venkatachalam Rajarajan Balaji" Low Crosstalk DWDM Photonic Demultiplexer" International Journal of Innovation in Engineering Research & Management, Vol. 05,Iss.No.02, April 2018

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