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List of Publications

1. ***K. Esakki Muthu,*** *S. Selvendran, Keethana, K Murugalakshmi, S, A. Sivanantha Raja* ***(2020)*** **"**Design and analysis of a reconfigurable XOR/OR logic gate using 2D photonic crystals with low latency" Optical and Quantum Electronics, 52(10)

2. *Selvendran, S., A. Susheel, P. V. Tarun,* ***K. Esakki Muthu****, and A. Sivanantha Raja* ***(2020).*** *"A novel surface plasmon based photonic crystal fiber sensor." Optical and Quantum Electronics 52: 290.*

3. *A Mageshwari, A Sivanantha raja, S Selvendran,* ***K Esakki Muthu****, N Gobi* ***(2019)*** *"*A Novel PhC Based 4-channel Nano-cavities Biosensor for Diagnosis of Haemoglobin Disorders from Different States of Blood Simultaneously" JASC: Journal of Applied Science and Computations, 6 (6), pp-2883-2892.

4. *S Selvendran, A Sivanantha Raja,* ***K Esakki Muthu****, A Lakshmi* ***(2019)*** "Certain Investigation on Visible Light Communication with OFDM Modulated White LED Using Optisystem Simulation" Wireless Personal Communications, *April 2019, pp 1-18* ***Springer IF , 1.2*** https://doi.org/10.1007/s11277-019-06617-2

5. *Sarojini R, Selvendran S, Sivanantha Raja A,&* ***Esakki Muthu K, (2019)*** *"* Cross polarization modulation based wavelength conversion with very low pump power in SOA: An investigation" *Optik- International Journal of Light and Electron Optics April 2019,* ***Elsevier. IF 1.191*** https://doi.org/10.1016/j.ijleo.2019.04.016

6. *Selvendran S, Sivanantha Raja A,* ***Esakki Muthu K, (2019)*** *" A study on the Effect of Dispersion Flattened Characteristics of Highly Nonlinear Fiber in the Fiber Optic Parameter Amplification", Optik- International Journal of Light and Electron Optics,* https://doi.org/10.1016/j.ijleo.2019.02.063 ***Elsevier. IF 1.191***

7. ***Esakki Muthu K.*** *Jannath Ul Firthouse, S. Sorna Deepa, A. Sivanantha Raja & S. Robinson,* ***(2019)*** *"Design and Analysis of 3-input NAND/NOR/XNOR gate based on 2D Photonic Crystals", Journal of Optical Communications ,* *https://doi.org/10.1515/joc-2018-0210* ***De gruyter.***

8. *Selvendran, S, Sivanantha Raja, A,* ***Esakki Muthu, K. (2018)****, "investigation on the influence of duobinary and CSRZ modulation formats on self phase modulation effect in*

optical communication network" International Journal of Scientific Research in Physics and Applied Sciences, Vol.6 . Issue 4. August 2018.

9. ***Esakki Muthu, K.*** *and A. Sivanantha Raja,* ***(2018)*** *'Millimeter wave generation through frequency 12-tupling using DP-polarization modulators,' Optical and Quantum Electronics, Vol. 50, N0.5 pp. 1-9, ISSN: 0306-8919 (Print) 1572-817X (Online) (Annexure* ***I) IF-1.168. Springer.***

10. ***Esakki Muthu, K****, Sivanantha Raja, A & Shanmugapriya, G,* ***(2017)****, ' Frequency 16-tupled optical millimeter wave generation using dual stage cascaded MZMs and 2.5 Gbps RoF transmission' Optik- International Journal of Light and Electron Optics, Vol. 140, pp. 338- 336. ISSN: 0030-4026 (Annexure* ***I) IF. 1.191. Elsevier.***

11. ***Esakki Muthu, K****, Sivanantha Raja, A & Selvendran, S,* ***2017****, 'Optical Generation of millimeter waves through frequency decupling using DP-MZM with RoF transmission', Optical and Quantum Electronics, Vol. 49, no.63, pp. ISSN: 0306-8919 (Print) 1572-817X (Online) (Annexure* ***I) IF-1.168. Springer.***

12. ***Esakki Muthu, K*** *& Sivanantha Raja,* ***(2016)****, A, 'Improved filterless 12-tupled optical MM-Wave generation and 2.5 Gb/s RoF Transmission', Optoelectronics and Advanced Materials-Rapid Communications, Vol. 10, N0. 11-12, pp. 869-872, ISSN: 1842-6573 (Print) 2065-3824 (on-line) (Annexure* ***I****).* ***IF 0.470 Springer.***

13. ***Esakki Muthu, K*** *& Sivanantha Raja, A,* ***(2016)****, 'Bidirectional MM-wave Radio over Fiber Transmission through frequency dual octupling of RF local oscillator', Journal of the European Optical Society, Vol. 12 No.24, pp.1-9, ISSN: 1990-2573 (Online) (Annexure* ***I****).* ***IF 1.250 Springer.***

14. ***Esakki Muthu, K*** *& Sivanantha Raja, A,* ***(2016)****, '2.5 Gbps Millimeter wave Radio over Fiber Transmission based on dual octupling of RF Local Oscillator', International Journal of Control Theory and Applications, Vol.9, No. 8, pp. 3529-3534, ISSN: 0974-5572 (****Annexure II****).*

15. ***Esakki Muthu, K****, Sivanantha Raja, A & Suria Gandhi, C, (****2015****), ' 80 GHz Millimeter Wave Generation Using Octupling Technique and 2.5 Gbps Full duplex Radio over Fiber Transmission', International Journal of Applied Engineering Research, Vol. 10, No. 20, pp. 19264-19267, ISSN 0973-4562 (Print) 0973-9769 (on-line).* ***(Annexure II****).*

16. ***Esakki Muthu, K****, Sivanantha Raja, A & Ranjani, K. (****2015****),' Transmission Performance of 60 GHz optical Millimeter wave with two modulation format', International Journal of Applied Engineering Research, Vol. 10, No. 66, pp. 19264-19267, ISSN 0973-4562 (Print) 0973-9769 (on-line).* ***(Annexure II****).*

17. *Selvendran, S, Sivanantha Raja, A, Kalaiselvi, K, &* ***Esakki Muthu, K,*** *(****2013****), 'Simultaneous four channel wavelength conversion of 50 Gbps CSRZ-DPSK WDM signals in S and C bands using HNLF without additional pump signals' Optical and Quantum Electronics, pp. 1-12, doi:10.1007/s11082-012-9612-x, Publisher: Springer US,* ***(Annexure-I****).* ***IF-1.168****.* ***Springer.***