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Publications

A. International Journal

- B.Neethi Aadithiya, **B.Elizabeth Caroline**, “Rectangular patch with H Intervention Slot for WBAN Applications ”, International Journal of Recent Technology and engineering Vol.7,Issue 6S4,Apri1 2019(**Scopus**)
- Jeyaseelan J, Kumar DS, **Caroline BE**, A Novel Ergodic Capacity Analysis of MISO OFDM –PDM for Free Space Optical Communication System, **Optik , International Journal for Light and Electron Optics,Elsevier (2019), Volume 185, pp.1220-1225** <https://doi.org/10.1016/j.ijleo.2019.03.035> (**Impact Factor 1.19**)
- Jeyarani, J., D. Sriram Kumar and **B.E Caroline** (2018) Performance analysis of free space optical communication system employing WDM-PolSK under turbulent weather conditions, Journal of Optoelectronics and Advanced Materials, 20, 506-514 (2019)(**Annexure I**)- (**Impact Factor 0.39**)
- J. Rani, D. Sriramkumar, **B. E. Caroline** ,”Novel Interactive Communication System Connecting Farmers and Experts using Free Space Optical Communication Link”, International Journal- Czech Academy of Agricultural Sciences-SCI-(**under review**)
- N. Vijayanthi , **B. Elizabeth Caroline** and V. Senthilvel Murugan ,”Feature Extraction Based On Empirical Mode Decomposition For Automatic Mass Classification Of Mammogram Images",International journal of Image analysis and stereology (First revision over-**under review**).
- Jeyarani, J., D. Sriram Kumar and **B. Elizabeth Caroline** (2018) PolSK and ASK Modulation Techniques Based BER Analysis of WDM-FSO System for Under Turbulence Conditions,Journal of Wireless Personal Communications(**Springer**),**Vol.103**,No.4, 3221-3227.(2018)(**Annexure I**)- **Impact Factor 1.2**
- Jeyarani, J., D. Sriram Kumar and **B.E Caroline**, “Disaster Management using Free Space Optical Communication System”. Photonic Network Communication, **Accepted with revisions.(2019) (Annexure I)-Impact Factor-1.203**
- B. Elizabeth Caroline Susan Christina Xavier Arunachalam P. Kabilan ,Johnson William , “Performance analysis and comparison of optical signal processing beamforming networks: a survey” Springer Journal of Photonic Network Communication, Vol.37, Issue 1, pp 38–52(2018) (**Annexure I**)-**Impact Factor-1.203**
- N. Vijayanthi , B. Elizabeth Caroline and V. Senthilvel Murugan ,“Automatic Detection of Masses in Mammograms using Bi-dimensional Empirical Mode Decomposition”, Journal of medical imaging and health informatics Vol. 8, No. 7,pp.1325-1341. (**Annexure I**) **Journal Citation Reports®, Thomson Reuters.**
- R.J. Kavitha ,**Dr. B. Elizabeth Caroline**, “Secured and reliable data transmission on multi-hop wireless sensor network, Journal of cluster computing, Springer, Vol 24, No.7, pp. 1-10 (2017) Impact Factor 1.601.

- R.J. Kavitha ,**Dr. B. Elizabeth Caroline**, “Ultrasonic Carrier Communication with Security in wireless Body Sensor Network, Journal of Perspectives em Ciencia DA Informacao, Vol 22, No.2, pp. 13-23 (2017).
- P.Shanmuga Priya,**B.Elizabeth Caroline**,M.Margarat, “Design and Simulation of All-Optical Gates Using Co-Propagating SOAMZI Scheme”, International Journal of Advanced in Management, Technology and Engineering Sciences ,Vol 07,No.10,pp.389-398 (2017).
- **Dr. B. Elizabeth Caroline** , **M.sangeetha**, Design And Analysis Of Koch Fractal Wearable Antennas With Jean Substrate International Journal on Applications in Engineering and Technology Volume 3, Issue 1 , March 2017.
- **Dr. B. Elizabeth Caroline** , **M.sangeetha** “A Survey on Fractal Wearable Antennas With Different Substrate Materials”, International Journal on Applications in Engineering and Technology Volume 2: Issue 11, November 2016, pp 1-.7
- R.J. Kavitha ,**Dr. B. Elizabeth Caroline**, “Hybrid firefly and identity-Bas edring Signcryption scheme based secure date aggregation for clusteed HWSN”, A journal of Transylvanian Review ,Vol 24,No.7,pp.(2016), [**Journal Citation Reports®, Thomson Reuters**]
- R.J. Kavitha ,**Dr. B. Elizabeth Caroline**, “Hybrid transmission Technique with security in heterogeneous wireless sensor network”, Asian Journal of information technology, Vol.15, Issue 4, pp.651-660(2016).
- B. Elizabeth Caroline, N.Vaijayanthi “Feature Extraction Of Digital Mammogram Based On Multidimensional Complete Ensemble Empirical Mode Decomposition With Adaptive Noise”, International Journal of Advanced Engineering Technology Tech, Vol. 7, Issu1, pp 404-409I(2016).
- Elizabeth Caroline B., Susan Christina X William J, Kabilan A.P. “Compact Photonic Crystal Integrated Circuit for All-Optical Logic Operation” **Journal of IET Optoelectronics**, **Doi:10.1049/iet-opt.2015.0072(2016).(Impact Factor 0.806)**
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- B.Nivetha, A.Deepa Lakshmi, Dr.B.Elizabeth Caroline, M.Margarat “The Literature Survey Based On Virtual Fitting Room” International Journal of Advanced Research in Engineering & Management (IJAREM), Vol. 01, Issue 07, pp: 101-104, October 2015.
- R.J. Kavitha ,**Dr. B. Elizabeth Caroline**, “PROXUM: An Energy Efficient and Privacy - Aware Data Aggregation in Heterogeneous Wireless Sensor Networks”, Advances in Natural and Applied Sciences, 9(6) Special 2015, Pages: 316-321.
- P.Santhini, B. Sahaya Jenila, **B. Elizabeth Caroline** “Performance Comparison of 16x16 bit Multi-precision Multiplier based on the Vedic and Array Multiplication Technique”

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- B. Sahaya Jenila, S. Ashvini, B. Elizabeth Caroline “An Efficient Encryption and Compression System for Grayscale and Color Images”, International Journal Of Science Engineering And Technology, Vol.03, Issue.43 December-2014, Pages: 8665-8670.
- M.Lavanya, P.Aravind, M.Valluvan , **Dr.B.Elizabeth Caroline**,”Model Based Control For Interacting And Non-Interacting Level Process Using Labview” International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering Vol. 2, Issue 7, July 2013 pp:3174-3179.
- *Susan Christina Xavier ; Kabilan Arunachalam, Elizabeth Caroline .,”Design of two-dimensional photonic crystal –based All-Optical Half Adder* “OpicalEngineering(SPIE)Vol.52,Issue.2(2013). doi:10.1117/1,OE.52.2.025201.**Annexure I(Impact Factor 0.908) pp.025201-1025201-7**
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- Susan Christina X, Kabilan A.P. and Elizabeth Caroline B., “Ultra compact All Optical Logic gates using Photonic Band gap Material”, International Journal of Nano electronics and Opto electronics Vol.5, No.3, pp.397-401, Dec 2010, **.(Annexure I), Thomson Reuters.**
- **Elizabeth Caroline B.**, Kabilan A.P. and Susan Christina X., ‘Optical MEMS Based Signal Processor for smart antenna in Mobile broad-band communications’, International Journal of Microwave and Optical Technology, ISRAMT Publication ,Vol.4, No.1, pp. 52-59, Jan 2009.
- **Elizabeth Caroline B.**, Kabilan A.P. and Susan Christina X., ‘An optical beam former for smart antennas in mobile broadband communication’, International Journal of Mobile Communication, Inder Science publication, Vol.7, No.6, pp.683-694, 2009.**(Annexure I)**

B. International Conference

- Jeyarani, J., D. Sriram Kumar and **B.E Caroline**, (Accepted)“Performance Analysis of MIMO –FSO over Strong Atmospheric Turbulence Conditions”,IMICPW 2019, IEEE Conference to be held at NIT, Trichirapalli, 22-24 May 2019

- P.Shanmuga Priya,**B.Elizabeth Caroline**,M.Margarat ,”Design and simulation of various all optical code converters using SOA-MZI”,IEEE International Conference Photonics and High speed optical networks April 2018(Accepted for publication)
- Kavitha, R.J, **B. Elizabeth Caroline**, “Hybrid cryptographic technique for heterogeneous wireless sensor networks”, IEEE International Conference on Communications and Signal Processing, April’15, pp.1016 – 1020.
- R.J.Kavitha, **B. Elizabeth Caroline**, “Subsidiary Cluster Head with Cooperative Modulation Diversity applied to Heterogeneous Wireless Sensor Networks”, IEEE International Conference on Communications and Signal Processing, April’15, pp: 1281-1285.
- Santhini.P, **Dr. Elizabeth Caroline**,”32 bit ALU with Multi-precision Multiplier based on Vedic Technique,” Fourth International Conference on Futuristic trends in Electronics Engineering, March 2015.
- **B.Sahaya Jenila and B. Elizabeth Caroline** “An Efficient Encryption System for Grayscale and Color images” in *Proceedings of International Conference in Recent Innovations in Engineering and Technology-2015*.
- **M. Anthuvan Lydia, B.Elizabeth Caroline** ,” An Effective Approach To Plaque Characterization in Ultrasound Images of Carotid Atherosclerosis”, *International Conference on “Advanced Computing, Machines And Embedded Technology” (ICACT 2013) on organized by J.K.K.Nattraja College of Engineering and Technology, Namakkal, Tamilnadu, India Mar’ 2013*.
- **B. Elizabeth Caroline**, Mrs.J.Jeyarani, Mrs.G.Sheeba, Salma Rosline Mary, “Reconfigurable DCT/IDCT architecture for video codec: A Review” IEEE- Third International Conference on Computing, Communication and Networking Technologies, Jul’2012,pp.1-6.
- **B. Elizabeth Caroline**, S.Sweetline, “Reduction of area and power using ECSFD in Wireless Sensor Network”, International Conference on Innovative Computing and Information Processing, Mar’ 2012.
- **B. Elizabeth Caroline**, Mrs.J.Jeyarani, Mrs.G.Sheeba, Mrs.Salma Rosline Mary, “VLSI Implementation and performance Evaluation of Adaptive Filters for Impulse Noise Removal” , IEEE International Conference on Emerging Trends in Science, Engineering and Technology ,Dec’2012,pp.294-299.
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- Kabilan, A.P.; Christina, X.S.; **Caroline, B.E.** ‘Design of optical logic gates using Photonic Crystal “AH-ICI 2009. IEEE First Asian Himalayas International Conference on Internet, pp: 1 – 4, Nov’2009.

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- **Elizabeth Caroline B.**, Kabilan A.P. and Susan Christina X., ‘MEMS based optical signal processing beam former’, Proceedings of IEEE Third international conference on Wireless and optical Communication Networks, Bangalore, India, Aug’2006.
- **Caroline, B.E,S.Malathy** “Optical beam former using fiber bragg grating” Eighth International Conference on “Opto electronics, Fiber Optics and Photonics”, Hyderabad, Dec’2006.
- **Elizabeth Caroline B.**, Kabilan A.P. and Susan Christina X., ‘Optical Signal Processor for Multibeam Array Antennas using Inverse Piezoelectric Effect’, Proceedings of IEEE Tenth regional conference on Communication, Melbourne, Australia, pp.1-5, Nov’ 2005.

C. National Conference

- Santhini.P, **Dr. Elizabeth Caroline.B**, “32x16 bit Multiprecision multiplier based on Vedic mathematics and Array multiplication Technique” National conference on Nascent Technologies in signal processing and communication(NT – SIPCOM’14), November 2014.
- *M. Anthuvan Lydia, B.Elizabeth Caroline ,”An Effective Approach To Plaque Characterization In Ultrasound Images Of Carotid Atherosclerosis”, on 3rd National Conference Keynote -2013 organized by Care School Of Engineering, Thayanoor Village, Trichy, Feb’2013.*
- C.Karuppaiah, **B.Elizabeth Caroline** “QTD Image Compression for On-Chip CMOS Active Pixel Sensors”, 7th National Conference on Optimization Techniques in Engg. Science and Technologies, Apr’2012.
- *Joyce Monica, B.E.Caroline “Comparison of Image compression for medical images” at Jeyaram College of Engg. & Tech., Trichy, Mar’2011.*
- Vinoth Kumar, **B.E.Caroline** “Energy Aware Routing Protocol for wireless sensor network” at National Conference on Computing and Communication Tech.nologies, Mar’ 2011.
- Joy Monica , **B.Elizabeth Caroline**, “Panoramic Dental Image Compression using Wavelet Filters” at National Conference on Emerging Trends in Engineering, Management and Computer Application, Anna University of Technology, Trichirapalli, Mar’2011.
- F.Salma Roseline, and **B.E.Caroline**, “Design of low complexity MIMO sphere decoder” in National conference at Kamaraj College of Engg. & Tech., Virudhunagar, Mar’2010.
- R.Krishanaveni , **B.E.Caroline**, ‘ VLSI implementation of Encryption and Decryption using RC6 Algorithm” at Kamaraj College of Engg. & Tech., Virudhunagar, Mar’2010.