

PUBLICATIONS

Dr. NAKKEERAN R, M.E., PH.D.,

Professor,

Department of Electronics Engineering , Pondicherry University,

Pondicherry, India - 605014

Email: nakkeeranpu@gmail.com

Contact: +91 94430 29346.

JOURNALS

1. T. A. Balarajuswamy, and R. Nakkeeran, "RF MEMS for reconfigurable antenna using gravitational search optimization and artificial neural network", Journal of Circuits, Systems and Computers, vol. 27, no. 08, 2018
2. Enaul haq Shaik, and Nakkeeran Rangaswamy, "All Optical OR/XOR Logic Gates using PhC-based T-shaped Waveguide with High-contrast Output to Implement 3-bit Binary to Gray Code Converter", Photonic Network Communications (Springer), vol. 39, pp.15-25, 2020
3. Heuristic Polling Sequence to Enhance Sleep Count of EPON, "Bhargav Ram Rayapati and Nakkeran Rangaswamy", Frontiers of Optoelectronics, vol. 12, no. 4, pp. 422-432, 2019
4. V.R. Balaji, M. Murugan, S. Robinson, and R. Nakkeeran, "Integrated 25 GHz and 50 GHz spectral line width dense wavelength division demultiplexer on single photonic crystal chip", Opto-Electronics Review, vol. 26, no. 4, pp. 285-295, 2018
5. Srinivasarao Alluri and Nakkeeran Rangaswamy, "A super wideband circular-shaped fractal antenna loaded with concentric hexagonal slots", International Journal of Engineering and Technology (IJET), vol. 7, no. 3.29, pp. 211-213, 2018

6. Govindanarayanan Idayachandran and Rangaswamy Nakkeeran, "Unidirectional Magneto-Electric Dipole Antenna for Base Station: A Review", Journal of The Institution of Engineers (India): Series B Electrical, Electronics & Telecommunication and computer Engineering (Springer),99(2): vol. 99(2), pp. 211-220,2018
7. Enaul haq Shaik, and Nakkeeran Rangaswamy, "Realization of XNOR logic function with all-optical high contrast XOR and NOT gates", Opto-Electronics Review,vol. 26, no. 1, pp. 63-72,2018
8. Shoba Mohan and Nakkeeran Rangaswamy, "Performance Improvement in Tree Multiplier using Full Swing GDI Logic based CLA Adder", International Journal of Circuits and Architecture Design (Inderscience),vol. 2(3/4), pp. 183-200,2018
9. S. Fouziya Sulthana, R. Nakkeeran, S. Shaffath Hussain Shakir and A. Rajesh, "Investigation on resource scheduling with coexistence of unicast and multicast services in LTE OFDMA system", Journal of High Speed Networks (IOS Press),vol. 24, no. 2, pp. 149-157,2018
10. Enaul haq Shaik, and Nakkeeran Rangaswamy, "Realization of all-optical NAND and NOR logic functions with photonic crystal based NOT, OR and AND gates using De Morgans theorem", Journal of Optics (Springer),vol. 47(1), pp. 8-21,2018
11. Enaul haq Shaik, and Nakkeeran Rangaswamy, "Realization of XNOR logic function with all-optical high contrast XOR and NOT gates", Optoelectronics Review (Elsevier),vol. 26(1), pp. 63-72,2018
12. Enaul haq Shaik, and Nakkeeran Rangaswamy, "Single photonic crystal structure for realization of NAND and NOR logic functions by cascading basic gates", Journal of Computational Electronics (Springer),vol. 17(1), pp. 337-348,2018
13. Ramya Jothikumar and Nakkeeran Rangaswamy, "Reduced Complexity by Combining Norm Based Ordering MMSE-BSIDE Detection in MIMO Systems", International Journal of Electronics and Telecommunications (IJET),vol. 63, no.3, pp. 305-308,2017
14. Shoba Mohan and Nakkeeran Rangaswamy, "An Improved Implementation of hierarchy Array Multiplier using CsIA Adder and full Swing GDI Logic", Electronics (Elsevier),vol. 21, no.1, pp. 38-47,2017

15. Shoba Mohan and Nakkeeran Rangaswamy, "Energy and area efficient hierarchy multiplier architecture based on Vedic mathematics and GDI logic", *Engineering Science and Technology, an International Journal (Elsevier)*, vol. 20, no. 1, pp. 321-331, 2017
16. S. Fouziya Sulthana and R. Nakkeeran, "Performance evaluation of downlink packet scheduling for real time traffic in LTE system", *International Journal of Information and communication Technology (Inderscience)*, vol. 10, no. 3, pp. 263-275, 2017
17. Enaul haq Shaik, and Nakkeeran Rangaswamy, "Implementation of 1x2 decoder and XOR-XNOR logic functions on a PhC structure", *Journal of Information and Optimization Sciences (Taylor and Francis)*, vol. 38 (6), pp. 953-960, 2017
18. Venkatchalam Rajarajan Balaji, Mahalingam Murugan, Sivarimuthu Robinson and Rangaswamy Nakkeeran, "Design and optimization of photonic crystal based eight channel dense wavelength division multiplexing demultiplexer using conjugate radiant neural n", *Optical and Quantum Electronics (Springer)*, vol. 49, no. 5, Article. 198, 2017
19. Enaul haq Shaik, and Nakkeeran Rangaswamy, "Investigation on photonic crystal based all-optical clocked D-flip flop", *Optoelectronics (IET)*, vol. 11, no. 4, pp. 148-155, 2017
20. Enaul haq Shaik, and Nakkeeran Rangaswamy, "Multi-mode interference-based photonic crystal logic gates with simple structure and improved contrast ratio", *Photonic Network Communications (Springer)*, vol. 34, no. 1, pp. 140-148, 2017
21. Idayachandran Govindanarayanan and Nakkeeran Rangaswamy, "A Broadband Stepped Monopole Antenna with Loop Ground", *Wireless Personal Communications (Springer)*, vol. 96(3), pp. 4251-4261, 2017
22. G. Idayachandran and R. Nakkeeran, "Defected Ground Magneto-Electric Dipole with Trivial Back Radiation", *Progress in Electromagnetics Research C (PIER-C)*, vol. 67, pp. 165-172, 2016
23. G. Idayachandran and R. Nakkeeran, "Compact magneto-electric dipole antenna for LTE femtocell base stations", *Electronics Letters (IET)*, vol. 52, no. 8, pp. 574-576, 2016
24. Shoba Mohan and Nakkeeran Rangaswamy, "GDI based full adders for energy efficient arithmetic applications", *Engineering Science and Technology, an International Journal (Elsevier)*, vol. 19, no. 1, pp. 485-496, 2016
25. Swagath Babu M, Idayachandran G, Rajesh A, Shankar T, and Nakkeeran R, "Investigation on defected ground-plane structures to improve isolation and correlation

- in multi-band MIMO antenna", International Journal of Information and Computer Security (Inderscience), vol. 8, no. 3, pp. 258-271, 2016
26. Rajesh A and Nakkeeran R, "Development and Analysis of Power Saving Models for Energy Conservation in IEEE 802.16m Networks: Towards Green Communication", Wireless Personal Communications (Springer), vol. 87, no. 2, pp. 443-460, 2016
 27. Idayachandran Govindanarayanan and Nakkeeran Rangaswamy, "Asymmetric folded dipole antenna with high front-to-back ratio for LTE base stations", IEEE Antennas and Wireless Propagation Letters (IEEE), vol. 15, pp. 869-872, 2016
 28. Enaul haq Shaik, and Nakkeeran Rangaswamy, "Improved design of all-optical photonic crystal logic gates using T-shaped waveguide", Optical and Quantum Electronics (Springer), vol. 48, no. 1, Article. 33, 2016
 29. Rajesh A and Nakkeeran R, "Investigation on group based contention bandwidth request in LTE-A networks under high delay spread environment", Wireless Networks (Springer), vol. 22, no. 6, pp. 1931-1945, 2016
 30. Idayachandran Govindanarayanan, Nakkeeran Rangaswamy and Rajesh Anbazhagan, "Design and analysis of broadband magneto-electric dipole antenna for LTE femtocell base stations", Journal of Computational Electronics (Springer)", Journal of Computational Electronics (Springer), vol. 15, no. 1, pp. 200-209, 2016
 31. Fouziya S. S. H. Shakir and Nakkeeran Rangaswamy, "A simple three level downlink packet scheduling to improve throughput in LTE network", Communication Express (IEICE), vol. 4, no. 9, pp. 293-298, 2015
 32. Idayachandran Govindanarayanan and Nakkeeran Rangaswamy, "Broadband Planar Circular Loop Antenna", International Journal of Microwave and Optical Technology (IJMOT), vol. 10, no. 4, pp. 274-279, 2015
 33. Neelamegam D, Nakkeeran R and Thirumalaivasan K, "Development and Analysis of Microstrip Antenna for Wireless Local Area Network (IEEE 802.11y)", International Journal of Applied Engineering Research (Research India Publications), vol. 10, no. 3, pp. 5820-5824, 2015
 34. K. Thirumalaivasan and R. Nakkeeran, "Development of Bandpass Filter Using Solanum Melongena Shaped MMR for UWB Systems", International Journal of Applied Engineering Research (Research India Publications), vol. 10, no. 3, pp. 2294-2297, 2015

35. Shoba Mohan and Nakkeeran Rangaswamy, "Implementation of Vedic multiplier using GDI logic", International Journal of Applied Engineering Research (Research India Publications),vol. 10, no. 1, pp. 244- 247,2015
36. Idayachandran Govindanarayanan and Nakkeeran Rangaswamy, "Minimization of Annular Slot Antenna using Low Loss Factor Co2Z Hexa ferrite for LTE 700 MHz band", Journal of Convergence Information Technology (AICIT),vol. 10, no. 3, pp. 25-32,2015
37. Rajesh Anbazhagan and Nakkeeran Rangaswamy, "Improved Random Access for Contention Bandwidth Request in LTE Networks under Extended Typical Urban 70 (ETU70) Channel", International Journal of Information and Communication Technology (Inderscience),vol. 10, no. 3, pp. 308-317,2015
38. Shoba Mohan and Nakkeeran Rangaswamy, "Design of High Speed Multiplier using Vedic Mathematics", European Journal of Scientific Research (Scientific Research Platform),vol. 129, no. 1, pp. 6-15,2015
39. Enaul haq Shaik, and Nakkeeran Rangaswamy, "Design of photonic crystal-based all-optical AND gate using T-shaped waveguide", Journal of Modern Optics (Taylor and Francis),vol. 63, no.10, pp. 941-949,2015
40. M. Thachayani and R. Nakkeeran, "Combined probabilistic deflection and retransmission scheme for loss minimization in OBS networks", International Journal of Optical Switching and Networking (Elsevier),vol.18, no.1, pp. 51-58,2015
41. Ramya Jothikumar, and Nakkeeran Rangaswamy, "A modified Euclidean norm computation for complexity reduction in MIMO decoder", Wireless Personal Communications (Springer),vol. 85, no.3, pp. 1251-1259,2015
42. S. Fouziya Sulthana, R. Nakkeeran, "Performance analysis of service based scheduler in LTE OFDMA system", Wireless Personal Communications (Springer),vol. 83, no. 2, pp. 841-854,2015
43. Rajesh Anbazhagan and Nakkeeran Rangaswamy, "Investigations on Enhanced Power Saving Mechanism for IEEE 802.16m Network with Heterogeneous Traffic", Journal of Network and Computer Applications (Elsevier),vol. 51, pp. 91-101,2015
44. Ramya Jothikumar, and Nakkeeran Rangaswamy, "Complexity Reduction by Sign Prediction in Tree Traversal of MIMO Decoder", Electronic Express (IEICE),vol. 11, no. 17, pp. 1-7,2014

45. Rajesh Anbazhagan and Nakkeeran Rangaswamy, "Investigation on Cooperative Contention based Bandwidth Request Mechanism for Heterogeneous Networks", International Journal of Information and Communication Technology (Inderscience), vol. 6, no. 3/4, pp. 260-271, 2014
46. Rajesh Anbazhagan and Nakkeeran Rangaswamy, "Investigations on Heuristic Bandwidth Request Mechanism with Signaling Analysis for BWA Networks", International Journal of Electronics and Communications (Elsevier), vol. 68, no. 6, pp. 504-514, 2014
47. S. Fouziya Sulthana and R. Nakkeeran, "Study of downlink scheduling algorithms in LTE networks", Journal of Networks (Academy publishers), vol. 9, no. 12, pp. 3381-3391, 2014
48. Nakkeeran Rangaswamy and Rajesh Anbazhagan, "Failure aware contention based bandwidth request for multihop relay networks", Communication Express (IEICE), vol. 2, no. 5, pp. 173-179, 2013
49. Ramya Jothikumar and Nakkeeran Rangaswamy, "A Novel complexity reduction using similarity property in ML-ZF detection for MIMO systems", Communication Express (IEICE), vol. 2, no. 7, pp. 300-306, 2013
50. Thachayani M and Nakkeeran R, "DQOBSR Protocol with QoS Provisioning for OBS Metro Rings", Journal of Photonics (Hindawi), vol. 2013, no. 515074, pp. 1-5, 2013
51. Rajesh Anbazhagan and Nakkeeran Rangaswamy, "Investigation on Mutual Contention Bandwidth Request Mechanisms in Two-hop Relay Network with ITU-R Pathloss Models", ISRN Communications and Networking (Hindawi), vol. 2013, Article ID 417132, pp. 1-13, 2013
52. S. Robinson and R. Nakkeeran, "PCRR based Add drop filter for ITU.G.694.2 CWDM Systems", OPTIK Optics (Elsevier), vol. 124, no. 5, pp. 393-398, 2013
53. Jothikumar Ramya and Nakkeeranrangaswamy, "Complexity Reduction in ML Decoding for MIMO Systems", International Journal of Electronics Communication and Computer Engineering (IJECCCE, Timeline Publications Pvt. Ltd), vol. 4, no. 3, pp. 778-782, 2013
54. M. Thachayani and R. Nakkeeran, "Distributed Queue Optical Burst Switched Ring – A MAC Protocol with Zero Blocking for OBS Ring Networks", OPTIK Optics (Elsevier), vol. 124, no. 23, pp. 6308-6312, 2013

55. S. Robinson and R. Nakkeeran, "Photonic crystal ring resonator-based add drop filters: a review", Optical Engineering (SPIE), Optical Engineering (SPIE), vol. 52, no. 6, pp. 060901-060911, 2013
56. Rajesh Anbazhagan and Nakkeeran Rangaswamy, "Investigation on Uplink Collaborative Contention Based Bandwidth Request for WiMAX Three Hop Relay Networks", Journal of Network and Computer Applications (Elsevier), vol. 36, no. 6, pp. 1589-1598, 2013
57. Rajesh A and Nakkeeran R, "Contention resolution with EIED backoff for bandwidth request in IEEE 802.16 networks", International Journal of Electronics and Communications (Elsevier), vol. 67, no. 1, pp. 40-44, 2013
58. Rajesh A and Nakkeeran R, "Contention Based Bandwidth Request with Signaling Analysis in IEEE 802.16 Two Hop Relay Networks", International Journal of Computers & Electrical Engineering (Elsevier), vol. 39, no. 2, pp. 349-360, 2013
59. Neelamegam D, Nakkeeran R and Thirumalaivasan K, "Development of Compact Band pass Filter using Defected Ground Structure for UWB Systems", International Journal of Microwaves Applications (WARSE), vol. 2, no. 1, pp. 28-31, 2013
60. Sai Rajanarendra, R. Nakkeeran, "A Comparative study of Four Different Shaped Frequency Reconfigurable Log periodic Microstrip Antenna Array", International Journal of Microwave Applications (WARSE), vol. 2, no. 2, pp. 58-63, 2013
61. L. Nageswara Rao and R. Nakkeeran, "Design of Dual Band Dielectric Resonator Antenna with Serpentine Slot for WBAN Applications", International Journal of Science and Applied Information Technology (WARSE), vol. 2, no. 2, pp. 17-21, 2013
62. Yedukondala Rao V and R. Nakkeeran, "Spartan 3E Synthesizable FPGA Based Floating Point Arithmetic Unit", International Journal of Computer Trends and Technology (Seventh Sense Research Group), vol. 4, no. 4, pp. 751-755, 2013
63. S. Robinson and R. Nakkeeran, "Two Dimensional Photonic Crystal Ring Resonator based Add Drop Filter for CWDM Systems", Optik - International Journal for Light and Electron Optics (Elsevier), vol. 124, no. 18, pp. 3430-3435, 2013
64. P. Prasanna Kumar and R. Nakkeeran, "Compact Microstrip Patch Antenna with Comb-Like Slot for WLAN Applications", International Journal of Engineering Sciences and Research Technology (IJESRT), vol. 2, no. 11, pp. 3240-3243, 2013

65. S. Robinson and R. Nakkeeran, "Investigation on parameters affecting the performance of the two dimensional photonic crystal based band pass filter", *Optical and Quantum Electronics* (Springer), vol. 43, no. 6, pp. 62-82, 2012
66. Thirumalaivasan K and Nakkeeran R, "SVD based narrowband suppression algorithm for MB-OFDM ultra-wideband systems", *International Journal of Microwave and Optical Technology* (IJMOT), vol. 7, no. 4, 2012
67. Thirumalaivasan K and Nakkeeran R, "Development of UWB band pass filter with reconfigurable notches to suppress IEEE 802.11a/b Services", *Microwave and Optical Technology Letters* (MOTL) (Wiley), vol. 54, no. 10, pp. 2423-2426, 2012
68. Rajesh Anbazhagan and Nakkeeran Rangaswamy, "Investigation on IEEE 802.16m Networks under Developed Error Model", *International Journal of Computer Applications*, vol. 58, no. 12, pp. 28-32, 2012
69. Robinson S and Nakkeeran R, "Investigation on Two Dimensional Photonic Crystal Resonant Cavity based Bandpass Filter", *Optik Optics* (Elsevier), vol. 123, no. 5, pp. 451-457, 2012
70. S. Robinson and R. Nakkeeran, "Performance evaluation of PCRR based add drop filter with different rod shapes", *Journal of Microwaves, Optoelectronics and Electromagnetic Applications* (JMOe), vol. 11, no. 1, pp. 26-38, 2012
71. Thirumalaivasan K and Nakkeeran R, "Development and analysis of compact low pass filter for UWB systems", *Journal of Advanced Computational Techniques in Electromagnetics* (ACTE), vol. 2012, pp. 1-4, 2012
72. S. Robinson and R. Nakkeeran, "Coupled mode theory analysis for circular photonic crystal ring resonator based add-drop filter", *Optical Engineering* (SPIE), vol. 51, no. 11, pp. 114001-1-114001-6, 2012
73. Rajesh A and Nakkeeran R, "Performance analysis of unified failure model emerging WiMAX networks", *Wireless Engineering and Technology* (Scientific Research), vol. 3, no. 2, pp. 72-76, 2012
74. S. Robinson and R. Nakkeeran, "PC based optical salinity sensor for different temperatures", *Photonic Sensors* (Springer), vol. 2, no. 2, pp. 187-192, 2012

CONFERENCES

1. Srinivasarao Alluri and Nakkeeran Rangaswamy, "A Concentric Hexagonal Slot-loaded Circular-shaped Super Wideband Fractal Antenna",IEEE International Conference on Recent Innovations in Electrical, Electronics and Communication Engineering (ICRIEECE-2018), 27th – 28th July 2018, Kalinga Institute of Industrial Technology, Bhubaneswar, India.,2018
2. Supraja Eduru and Nakkeeran Rangaswamy, "BER Analysis of Massive MIMO Systems under Correlated Rayleigh Fading Channel",9th International Conference on Computing, Communication and Networking Technologies (ICCCNT), 10th-12th July 2018, IISc, Bengaluru, India.,2018
3. Josephine Mary Juliana M and Nakkeeran R, "A Neoteric Approach towards Anxiety Quantification through Electroencephalogram Signal Analysis",IEEE International Conference on Power, Energy, Control and Transmission Systems, Chennai, February 2018.,2018
4. Josephine Mary Juliana M and Nakkeeran R, "Leverage of cardinal biomedical signals for anxiety quantification",IEEE International Conference on Recent Innovation in Management, Engineering, Science and Technology, Uttar Pradesh, January 2018.,2018
5. Bhargav Ram Rayapati and Nakkeeran R, "Power Efficient SIEPON Design using Watchful Sleep Mode",Proceedings of National Photonics Symposium, Kerala, March 2018.,2018
6. Enaul haq. Shaik and Nakkeeran Rangaswamy, "Phase Interference dependent Single PhC based Logic Gate Structure with T-shaped Waveguide as XOR, NOT and OR logic gates",39th Progress In Electromagnetic Research Symposium (PIERS 2017), 19th - 20th Nov. 2017, Nanyang Technological University, Singapore.,2017
7. Bhargavram Rayapati, Nakkeeran Rangaswamy and Enaul haq. Shaik, "Investigation on power efficiency of GPON with heterogeneous traffic",39th Progress In Electromagnetic Research Symposium (PIERS 2017), 19th - 20th Nov. 2017, Nanyang Technological University, Singapore.,2017

8. Enaul haq. Shaik and Nakkeeran Rangaswamy, "Design of all-optical photonic crystal half adder with T-shaped waveguides using path difference based interference", 39th Progress In Electromagnetic Research Symposium (PIERS 2017), 19th - 20th Nov. 2017, Nanyang Technological University, Singapore., 2017
9. Enaul haq. Shaik and Nakkeeran Rangaswamy, "Investigation on PhC based T-shaped Waveguide as All-Optical XOR, NOT, OR and AND Logic Gates", 12th IEEE International Conference Information and Industrial Systems, 16th - 17th Dec. 2017, University of Peradeniya, Srilanka., 2017
10. Enaul haq. Shaik and Nakkeeran Rangaswamy, "Implementation of $1\text{Å}—2$ decoder and XOR-XNOR logic functions on a PhC structure", International Conference on Smart Technologies in Computer and Communication, 27-29 Mar, 2017, Jaipur, Rajasthan, India., 2017
11. Enaul haq. Shaik and Nakkeeran Rangaswamy, "High contrast all-optical XOR gate with T-shaped photonic crystal waveguide using phase based interference", IEEE sponsored 14th International Conference on Wireless and Optical Communications Networks, 24-26 Feb, 2017, Mumbai, Maharastra, India., 2017
12. Enaul haq. Shaik and Nakkeeran Rangaswamy, "Implementation of photonic crystal based all-optical half adder using T-shaped waveguides", IEEE sponsored 2nd International Conference on Computing and Communications Technologies, 23-24 Feb, 2017, Chennai, Tamil Nadu, India., 2017
13. Shoba Mohan and Nakkeeran Rangaswamy, "An improved implementation of array multiplier using full swing GDI logic gates", IEEE sponsored International Conference on Innovations in Information Embedded and Communication Systems, 17-18 March 2016, Coimbatore, Tamilnadu, India., 2016
14. Enaul haq. Shaik and Nakkeeran Rangaswamy, "Interference based compact OR/XOR logic gate structure with T-shaped waveguide", IEEE sponsored International Conference on Innovations in Information, Embedded and Communication Systems, 17-18 March 2016, Coimbatore, Tamilnadu, India., 2016
15. Ankit Kumar Verma, R. Nakkeeran and Rigvendra Kumar Vardhan, "Design of 2x2 Single Sided Wrench Shaped UWB MIMO Antenna with High Isolation using Y shaped

structure",IEEE Sponsored International Conference on Circuit, Power and Computing Technologies, 18-19 March 2016, Kanyakumari, Tamilnadu, India.,2016

16. Shoba Mohan and Nakkeeran Rangaswamy, "An implementation of CLA adder with minimum area and lesser PDP using full swing GDI logic gates",IEEE International Conference on Electronics and Communication Systems, 25-26 Feb. 2016, Coimbatore, Tamilnadu, India.,2016
17. Enaul haq. Shaik and Nakkeeran Rangaswamy, "Phase based all optical photonic crystal XNOR and XOR logic gates using T-shaped waveguides",IEEE sponsored 3rd International Conference on Electronics and Communication Systems, 25-26 Feb. 2016, Coimbatore, Tamilnadu, India.,2016
18. Fouziya Sulthana S and Nakkeeran R, "Resource scheduling for combined unicast and multicast services in downlink LTE system",IEEE sponsored 3rd International Conference on Electronics and Communication Systems, 25-26 Feb. 2016, Coimbatore, Tamilnadu, India.,2016
19. Y. Sunil Raj Kumar, R. Nakkeeran and H. Rekha, "Compressed Sensing for ECG Signals by l1- Min Algorithm with Quadratic Constraints",International Conference on Biomedical Systems, Signals and Images organized by the Department of Applied Mechanics, IIT Madras, 24-26 Feb. 2016, Chennai, Tamilnadu, India.,2016
20. Shivangi Srivastava, R. Nakkeeran and B. Krishna Teja, "Design and analysis of energy efficient 2:1 multiplexer",IEEE Sponsored 3rd International Conference on Electronics and Communication Systems (ICECS) 26th February 2016, Karpagam College of Engineering, Coimbatore, Tamilnadu, India.,2016
21. Nrusingha Charan Pradhan, R. Nakkeeran and B. Krishna Teja, "Design Of Mimo Antenna For Mobile Handsets",IEEE International Conference on Circuit Power and Computing Technologies (ICCPCT), 18-19 Mar. 2016, Noorul Islam Centre for Higher Education in Nagercoil, Tamil Nadu India,2016
22. Kakali Saharia and R. Nakkeeran, "Reconfigurable pulse shaping FIR filter with modified carry select adder",IEEE sponsored International Conference on Engineering and Technology (ICET), 16-17 Dec. 2016, Karpagam College of Engineering, Coimbatore, Tamilnadu, India.,2016

23. Shoba Mohan and Nakkeeran Rangaswamy, "Design of ripple carry adder using GDI logic", Springer International Conference on Soft Computing Systems, 21-22 Apr. 2015, Chennai, Tamilnadu, India., 2015
24. Reena Parihar and R. Nakkeeran, "Performance Analysis of LTE Network in Different Transmission Modes using 16-QAM under Fading Channels", IEEE Conference on Communications and Signal Processing, 2-4 Apr. 2015, Chennai, Tamilnadu, India., 2015
25. R. Srinivasa Rao and R. Nakkeeran, "High Level Abstraction Method for Implementing Image Processing Techniques on FPGA", IEEE International Conference on Knowledge Collaboration of Engineering, 27-28 Mar. 2015, Coimbatore, Tamilnadu, India., 2015
26. Rakesh Achar, Rajesh A, Nakkeeran R and Fouziya Sulthana, "Heterogeneous Resource Allocation in LTE based Femtocell Network", IEEE International Conference on Circuit, Power and Computing Technologies, 19-20 Mar. 2015, Nagarkoil, Tamilnadu, India., 2015
27. Swagath Babu, Rajesh A, Nakkeeran R and Idayachandran G, "Design of DGS based Dual-Element Multiband (DEMB) MIMO Antenna for GPS and LTE-A Applications", IEEE International Conference on Circuit, Power and Computing Technologies, 19-20 Mar. 2015, Nagarkoil, Tamilnadu, India., 2015
28. Swagath Babu M, Rajesh A, Nakkeeran R and Idayachandran G, "Design of Dual-Element Multi-Band MIMO Antenna for LTE-A, GPS and IEEE 802.11af Applications", IEEE International Conference on Electrical, Computer and Communication Technologies, 5-7 Mar. 2015, Coimbatore, Tamilnadu, India., 2015
29. Harendra Kumar Pandit and R. Nakkeeran, "Low Power Wave-up receiver Operating in the Sub-threshold Region", IEEE Conference on Computing and Communications Technologies, 26-27 Feb. 2015, Chennai, Tamilnadu, India., 2015
30. Himanshu Ranjan Das and R. Nakkeeran, "Analysis of MEMS Electrostatic Comb Drive with Polysilicon as the Structural Material", IEEE Conference on Computing and Communications Technologies 26-27 Feb. 2015, Chennai, Tamilnadu, India., 2015
31. Idayachandran G and Nakkeeran R, "Dual band Monopole antenna for LTE Femtocell Base Station", 8th Annual International Conference ATMS -2015, Bangalore, Feb. 2015., 2015

32. Swagath Babu M, Rajesh A, Shankar T, Nakkeeran R and Idayachandran G, "Design of Dual-Element Tri-Band (DETB) MIMO Antenna with Improved Isolation",IEEE 2nd International Conference on Electronics and Communication Systems, 26-27 Feb. 2015, Coimbatore, Tamilnadu, India.,2015
33. Idayachandran G and Nakkeeran R, "Broadband asymmetric folded dipole antenna for LTE base station",IEEE Sponsored 9th International Conference on Intelligent Systems and Control (ISCO), 9-10 Jan. 2015, Coimbatore, Tamilnadu, India.,2015
34. Rajesh A and Nakkeeran R, "Investigation on Cohesive Discontinuous Reception in LTE Networks for Emerging Mobile Internet Services",Elsevier Second International Conference on Emerging Research in Computing, Information, Communication and Applications (ERCICA-2014), 1-2 Aug. 2014, Organized by Departments of Computer Science and Engineering and Master of Computer Applications, Nitte Meenakshi Institute of Technology, Yelahanka, Bangalore, India.,2014
35. S.Fouziya Sulthana and R Nakkeeran, "Performance Evaluation of Downlink Packet Scheduling Algorithms in LTE",Fifth International Conference on Advances in Communication, Network, and Computing (CNC-2014), 21-22 Feb. 2014, Chennai, Tamilnadu, India.,2014
36. Shoba Mohan and Nakkeeran Rangaswamy, "Performance Analysis of 1 bit Full Adder using GDI Logic",IEEE International Conference on Information, Communication and Embedded Systems(ICICES), 27-28 Feb. 2014, S. A. Engineering College, Chennai, Tamil Nadu, India.,2014
37. Prasanna Kumar P Anand and R Nakkeeran, "A New Corrugated Tooth like slot Microstrip Antenna for WiMAX/Satellite Applications",IEEE Students' Conference on Electrical, Electronics and Computer Science (SCEECS-2014), 1-2 Mar. 2014, Maulana Azad National Institute of Technology, Bhopal, Madhya Pradesh, India.,2014
38. Rajesh A and Nakkeeran R, "Performance Analysis of Enhanced DRX Mechanism in LTE Networks",IEEE International Conference on Computer Communication and Informatics (ICCCI-2014), 3-5 Jan. 2014, Sri Shakthi Institute of Engineering and Technology, Coimbatore, Tamilnadu, India.,2014
39. Arun George and R. Nakkeeran, "CBCPW Fed Compact Dual Band Antenna for WLAN Applications",IEEE International Conference on Computer Communication and

Informatics (ICCCI-2014), 3-5 Jan. 2014, Sri Shakthi Institute of Engineering and Technology, Coimbatore, Tamilnadu, India.,2014

40. Arun George and R. Nakkeeran, "A Novel CBACS Fed Compact Antenna for WLAN Applications",IEEE International Conference on Impact of E- Technology on Us, 10-11 Jan. 2014, Organized by Department of Electronics and Communication Engineering, Malnad College of Engineering, Hassan, Bangalore, Karnataka, India.,2014
41. Rajesh A and Nakkeeran R, "Group based Preamble Detection for Contention Bandwidth Request under EVA Channel",IEEE International Conference on Green Computing, Communication and Conservation of Energy (ICGCE 2013), 12-14 Dec. 2013, organized by RMD Engineering College, Chennai, Tamil Nadu, India.,2013
42. Rajesh A and Nakkeeran R, "Contention Based Bandwidth Request and Power Saving in Heterogeneous Networks - A Joint Approach",IEEE International Conference on Control Communication and Computing (ICCC 2013), 13-15 Dec. 2013, organized by College of Engineering, Trivandrum, Thiruvananthapuram, Kerala, India.,2013
43. Arun George and R. Nakkeeran, "Conductor Backed CPW Fed Antenna for 2.4 GHz WLAN Applications",IEEE International Conference on Green Computing, Communication and Conservation of Energy (ICGCE 2013), 12-14 Dec. 2013, organized by RMD Engineering College, Chennai, Tamil Nadu, India.,2013
44. Arun George and R. Nakkeeran, "CBCPW Fed Compact Antenna for WLAN Applications",International Conference on Circuits, Control and Communication (CCUBE 2013), 27-28 Dec. 2013, organized by R.N. Shetty Institute of Technology, Bangalore, Karnataka, India.,2013
45. Rajesh Anbazhagan and Nakkeeran Rangaswamy, "Performance Analysis of Contention based Ranging Mechanism for Idle Mode Mobility",International Conference on Advanced Computing, Networking, and Informatics (ICACNI-2013), 12-14 Jun. 2013, organized by Department of Computer Science & Engineering, Central Institute of Technology, Raipur, Chhattisgarh, India.,2013
46. Rajesh A and Nakkeeran R, "Performance Analysis of Bandwidth Request Mechanism in ITU-R Vehicular Pathloss Model",IEEE Conference on Information and Communication Technologies (ICT-2013), 11-12 Apr. 2013, organized by Noorul Islam University, Tamilnadu, India.,2013

47. Ramya jothikumar and Nakkeeran R, "Reduced Complexity Analysis for ML MIMO Systems",IEEE Conference on Emerging Trends in Computing, Communication and Nanotechnology (ICECCN 2013), 25-26 March 2013, Department of Electronics and Communication Engineering, Infant Jesus College of Engineering and Technology, Tirunelveli, Tamil Nadu, India.,2013
48. Rajesh A and Nakkeeran R, "Performance Analysis of Contention Bandwidth Request Mechanism in Emerging Wireless Networks",IEEE International Conference on Communication and Signal Processing (ICCSP-13), 03-05 Apr. 2013, organized by Department of Electronics and Communication Engineering, Adhiparasakthi Engineering College, Tamilnadu, India.,2013
49. R. Uma, P. Vigneshwarababu R. Nakkeeran and P. Dhavachelvan, "New Low-Power Reversible Logic Gates Using Gate Diffusion Input Technique",International Conference on Emerging Research in Computing, Information, Communications and Applications (ERCICA-2013), 1-3 Aug. 2013, Organized by Departments of Computer Science and Engineering and Master of Computer Applications, Nitte Meenakshi Institute of Technology, Yelahanka, Bangalore, India.,2013
50. Sai Rajanarendra and Nakkeeran R, "Simulation of Frequency Reconfigurable Log periodic Microstrip Antenna Array",International Conference on Advanced Engineering and Technology, 15 Feb. 2013, Tirupati, Andhra Pradesh, India.,2013
51. Shoba Mohan and Nakkeeran R, "Gate Diffusion Input Based Primitive Cells for Full Swing Logic",National Conference on Green Technology Concepts for Bridging the Digital Divide using ICT, 5-6 July 2013.,2013
52. Sai Rajanarendra and R.Nakkeeran, "Frequency Reconfigurable Circular Log-periodic Microstrip Antenna Array",National Conference On Innovations in IT and Engineering, 20-22 April 2013, S.V University, Tirupathi, Andhra Pradesh, India.,2013
53. L. Nageswara Rao and R. Nakkeeran, "Design of Dual Band Dielectric Resonator Antenna with parasitic slot for WBAN",National Conference On Innovations in IT and Engineering, 20-22 April 2013, S.V University, Tirupathi, Andhra Pradesh, India.,2013
54. Karthik Reddy G and Nakkeeran R, "Design of Energy Efficient MAC Protocol for WBAN",National Conference On Innovations in IT and Engineering, 20-22 April 2013, S.V University, Tirupathi, Andhra Pradesh, India.,2013

55. Yedukondala Rao V and R. Nakkeeran, "Tradeoff Analysis of 32-bit Floating Point FFT Processor", 5th National Conference on Signal Processing, Communication Systems and VLSI Design, 10-11 May 2013, Anna University, Coimbatore, Tamil Nadu, India., 2013
56. Rajesh A and Nakkeeran R, "Signaling Analysis of Contention based Bandwidth Request Mechanism for WiMAX Systems with Retransmission Attempt", IEEE Region 10 Conference (TENCON 2012) on Sustainable Development Through Humanitarian Technology, 19-22 Nov. 2012, Cebu, Philippines., 2012
57. Rajesh Anbazhagan and Nakkeeran Rangaswamy, "Performance Analysis of Unified Power Saving Mechanism for IEEE 802.16m Networks", 2nd World Congress on Information and Communication Technologies (WICT 2012), 30 Oct. – 02 Nov. 2012, IIITM, Trivandrum, Kerala, India., 2012
58. Thirumalaivasan K and Nakkeeran R, "Compact UWB Filter Using Inverted-T Stub to Stop IEEE 802.11a Narrowband Service", IEEE International conference on Computing, Communication and Networking Technologies (ICCCNT-2012), 26-28 July 2012, SNS College of Engineering, Coimbatore, Tamil Nadu, India., 2012
59. Thachayani M and Nakkeeran R, "Effect of buffer size on the performance of DQOBSR protocol", IEEE International conference on Computing, Communication and Networking Technologies (ICCCNT-2012), 26-28 July 2012, SNS College of Engineering, Coimbatore, Tamil Nadu, India., 2012
60. S. Robinson and R. Nakkeeran, "Heterostructure based Add Drop Filter for ITU-T G 694.2 CWDM systems using PCRR", IEEE International Conference on Advances in Engineering, Science and Management (ICCCNT-2012), 26-28 July 2012, SNS College of Engineering, Coimbatore, Tamil Nadu, India., 2012
61. Rajesh A and Nakkeeran R, "Signaling analysis of heterogeneous bandwidth request for WiMAX multihop relay networks", IEEE International Conference on Advances in Engineering, Science and Management (ICCCNT-2012), 26-28 July 2012, SNS College of Engineering, Coimbatore, Tamil Nadu, India., 2012
62. Rajesh A and Nakkeeran R, "Performance analysis of two hop bandwidth request for heterogeneous WiMAX networks", IEEE International Conference on Advances in Engineering, Science and Management (ICCCNT-2012), 26-28 July 2012, SNS College of Engineering, Coimbatore, Tamil Nadu, India., 2012

63. S. Oudaya coumar, R. Nakkeeran and G. Ashwath, "Development of Compact Monopole Antenna for UWB Applications",IEEE International Conference on Advances in Engineering, Science and Management (ICCCNT-2012), 26-28 July 2012, SNS College of Engineering, Coimbatore, Tamil Nadu, India.,2012
64. S. Oudaya coumar, R. Nakkeeran and L. Sithananthan, "Development of Novel Double Eye Structured Dual Band Antenna for 802.16d (Fixed WiMAX)",IEEE International Conference on Advances in Engineering, Science and Management (ICCCNT-2012), 26-28 July 2012, SNS College of Engineering, Coimbatore, Tamil Nadu, India.,2012
65. Rajesh A and Nakkeeran R, "Heuristic Contention Based Bandwidth Request for IEEE 802.16 Networks",IEEE International Spring World Congress on Engineering and Technology, 27-30 May. 2012, Xiâ€™an, China.,2012
66. Rajesh A and Nakkeeran R, "Base station assisted backoff for broadband wireless access networks",SPIE International Conference on System Engineering and Modeling, 7-8 Apr. 2012, Malaysia.,2012
67. Rathinasabapathy M, and Nakkeeran R, "Performance of adaptive OFDM system for broadband power line network",IEEE International Conference on Advances in Engineering, Science and Management (ICAESM), EGS Pillay Engineering College, 30-31 Mar. 2012, Nagapattinam, Tamilnadu, India.,2012
68. S. Robinson, and R. Nakkeeran, "Photonic Crystal based sensor for sensing the salinity of sea water",IEEE International Conference on Advances in Engineering, Science and Management (ICAESM), EGS Pillay Engineering College, Nagapattinam, India, 30-31 Mar. 2012.,2012
69. Rajesh A and Nakkeeran R, "Performance Comparison of Contention Resolution Mechanisms for Emerging WiMAX Networks",IEEE International Conference on Computing, Electronics and Electrical Technologies, 21-22 Mar. 2012, Noorul Islam Centre for Higher Education, Kanyakumari, Tamilnadu, India.,2012
70. Rathinasabapathy M and Nakkeeran R, "Adaptive transmission for power line communication using neural networks",IEEE International Conference on Devices, Circuits and Systems, 15-16 Mar. 2012, Karunya University, Coimbatore, Tamilnadu, India.,2012

71. Journal of Advanced Computational Techniques in Electromagnetics (ACTE), "Thirumalaivasan K and Nakkeeran R", vol. 2012, pp. 1-4,0
72. Optical Engineering (SPIE), "S. Robinson and R. Nakkeeran", vol. 51, no. 11, pp. 114001-1-114001-6,0.959
73. Wireless Engineering and Technology (Scientific Research), "Rajesh A and Nakkeeran R", vol. 3, no. 2, pp. 72-76,0
74. Photonic Sensors (Springer), "S. Robinson and R. Nakkeeran", vol. 2, no. 2, pp. 187-192,

BOOKS/BOOK CHAPTERS

1. Palanivelu T G and Nakkeeran R, "Wireless and Mobile Communication", **Prentice Hall of India**, 2009, 978-81-203-3607-0
2. Enaul haq Shaik and R. Nakkeeran, "**Interference based All-optical Photonic Crystal Logic Gats - Advances in Photonic Crystals and Devices**", CRC Press (Taylor & Francis Ltd), 2018
3. S. Robinson, and R Nakkeeran, "Two dimensional photonic crystal ring resonator based add drop filter for ITU-T G. 694.2 CWDM systems", invited Chapter in **Photonic Crystals** under the working book title **Photonic Crystals: Features and Applications**, Nova Science Publishers, Inc., Chapter 10, pp. 143-164, 2013. ISBN: 978-1-62417-668-5.
4. S. Robinson, and R Nakkeeran, "Photonic crystal ring resonator based optical filters", invited Chapter in **Photonic Crystals** under the working book title **Advances in Photonic Crystals**, Martin M (Ed.) Intech, Chapter 1, pp. 2-24, 2012. ISBN: 980-953-307-921-4, DOI: 10.5772/54533.
