

# SSN COLLEGE OF ENGINEERING, KALAVAKKAM - 603110

Department of Electronics & Communication Engineering

## FACULTY PUBLICATIONS

July 2021 to June 2022

### JOURNAL PUBLICATIONS 2021- 2022

1. M. Dhana Lakshmi, S. Sakthivel Murugan, “Modified Restoration technique for improved visual perception of shallow underwater imagery” Current Science, vol. 121 (1), pp. 103-108, July 2021. (Clarivate Analytics, IF: 0.756) <https://www.currentscience.ac.in/Volumes/121/01/0103.pdf>
2. K. Malathi, Ms. S. Padmathilagam, Dr. M. Gulam Nabi Alsath, Dr. P. Sandeep Kumar, Ms. R. Abinaya and Ms. G. Cibita, “Miniaturized Circularly Polarized UWB Antenna for Body Centric Communication” IEEE Transactions on Antennas and Propagation, pp. 1-8, July 2021 (Published Online). DOI: <https://doi.org/10.1109/TAP.2021.3098517> (Clarivate Analytics, IF: 4.388)
3. M. Akila, Dr. K.T. Selvan, “On further enhancing the bandwidth of wideband RCS reduction checkerboard metasurfaces using an optimization algorithm”, International Journal of RF and Microwave Computer Aided Engineering, vol. 31, pp. 1-12, July 2021. (Clarivate Analytics, IF: 1.694) <https://doi.org/10.1002/mmce.22686>.
4. Mr. Melvin C. Jose, Dr. S. Radha, Dr. B. S. Sreeja, Dr. M. Gulam Nabi Alsath, Mr. Pratap Kumar, “A compact omnidirectional to directional frequency reconfigurable antenna for wireless sensor network applications”, International Journal of Microwave and Wireless Technologies, pp.1-12, July 2021 (Published Online). DOI: <https://doi.org/10.1017/S1759078721000994>.(Clarivate Analytics, IF: 1.064)
5. G. Revathi, RS/ECE, S. Radha, Dr. S. Ramprabhu, “Design of Miniaturized Tri-Band Microstrip Bandpass Filter Using Meandered Stubs for WLAN and Wi-Max Band”, IETE Journal of Research, July 2021 (Published Online). <https://doi.org/10.1080/03772063.2021.1951374> (Clarivate Analytics, IF: 2.333)
6. R. Nithya, Dr. N. Venkateswaran, Alex Noel Josephraj, Shantou, E. Srithaladevi, “Diagnosis of retinal disorders from Optical Coherence Tomography images using CNN” PLOS ONE, pp.1-17, July 2021 (Published Online). DOI: 10.1371/journal.pone.0254180 (Clarivate Analytics, IF: 3.2) <https://doi.org/10.1371/journal.pone.0254180>

7. M. Dhanalakshmi, T. Nagarajan, P. Vijayalakshmi, “Significant sensors and parameters in assessment of dysarthric speech” *Sensor review*, vol. 41 (3), pp. 271-286, July 2021. (Clarivate Analytics, IF: 1.71) <https://doi.org/10.1108/SR-01-2021-0004>
8. Melvin C. Jose, S. Radha, B. S. Sreeja, M. Gulam Nabi Alsath, Pratap Kumar, “Compact Dual-Band Millimeter-Wave Antenna for 5G WLAN” *International Journal of Microwave and Wireless Technologies*, pp. 1-August 2021 (Published Online). <https://doi.org/10.1017/S1759078721001288> (Clarivate Analytics, IF: 1.064)
9. G. Iyappan, R. Govindaraj, P. Ramasamy, R. Kiruthika, S. Radha, “Influence of refresh hydrothermally grown ZnO nanorods for vibration sensing application”, *IETE Journal of Research*, pp. 1-7, August 2021 (Published Online). DOI: <https://doi.org/10.1080/03772063.2021.1963331>(Clarivate Analytics, IF: 2.333)
10. B. Ashvanth, B. Partibane, “Multiband characterized high gain MIMO antenna for terahertz applications” *Optical and Quantum Electronics*, Springer, vol. 53 (8), 460 pp. 1-13, August 2021 (Published Online). DOI: <https://doi.org/10.1007/s11082-021-03114-4> (Clarivate Analytics, IF: 2.084)
11. M. Lingeswaran, S. Ramprabhu, “A Novel Fractal Inspired Iterated Four-Legged Loaded Loop Elements Based 2.5-D Miniaturized Frequency Selective Surface”, *IEEE Transactions on Electromagnetic Compatibility*, August 2021 (Published Online). DOI: <https://doi.org/10.1109/TEMC.2021.3095168> (Clarivate Analytics, IF: 2.006)
12. S. Radha, K. A. Karthikeyan, E Manikandan, “Single event transient mitigation techniques for a cross-coupled LC oscillator, including a single-event transient hardened CMOS LC-VCO Circuit”, *IET Circuits, Devices & Systems*, pp.1-11, August 2021 (Published Online). (Clarivate Analytics, IF: 1.290) <https://doi.org/10.1049/cds2.12094>
13. V. Aruna, M. Gulam Nabi Alsath, S. Kirubaveni, “A Novel Ultra-Miniaturized Highly Sensitive Refractive Index-Based Terahertz Biosensor”, *IEEE/OSA Journal of Lightwave Technology*, September 2021 (Published Online). DOI: <https://doi.org/10.1109/JLT.2021.3112529>(Clarivate Analytics, IF: 4.142)
14. P. Tejaswini, I. Sai Deepika, S. Sakthivel Murugan, “Development of an ROV- Undergraduate students developed inspection class ORCA ROV”, *Journal of Sea Technology*, vol. 62, no. 9, pp. 20-22, September 2021. (Clarivate Analytics, IF: 0.17) <https://iopscience.iop.org/article/10.1088/1742-6596/1911/1/012017>
15. M. Somasekar, S. Sakthivel Murugan, “Fusion based approach for quality enhancement of underwater images”, *Journal of Environmental Protection and Ecology*, vol. 22, no. 4, pp.1676-1687, September 2021. (Clarivate Analytics, IF: 0.692)

16. V. Yokesh, M. Gulam Nabi Alsath, K. Malathi, “Crosstalk Reduction Using Novel Cross-Shaped Resonators with Via Fence in High-Frequency Transmission Lines”, *Circuit World*, September 2021 (Published Online). DOI: <https://doi.org/10.1108/CW-04-2021-0099>(Clarivate Analytics, IF: 1.395)
17. G. Iyappan, R. Govindaraj, N. Santhosh, P. Ramasamy, R. Kiruthika, S. Radha, “Fabrication of vibration sensors using precursor molar concentration varied ZnO nanostructures grown by refresh hydrothermal method”, *Circuit World*, September 2021, pp.1-10. (Clarivate Analytics, IF: 1.395) <https://doi.org/10.1108/CW-08-2020-0183>
18. I. Nelson, C. Annadurai, Shriram Venkatasubramani I. Yogesh, “Underwater Image Enhancement and Fish Detection”, *Advances in Parallel Computing, Smart Computing and Communication Technology*, IOS press, vol. 38, pp. 300-304, October 2021. DOI: [10.3233/APC210055](https://doi.org/10.3233/APC210055) (Scopus Indexed)
19. C. Annadurai, I. Nelson, X. N. Ranald Nivethan, Suraj Vinod, “Implementation of IoT in Workplace Monitoring and Safety Systems”, *Advances in Parallel Computing, Smart Computing and Communication Technology*, IOS press, vol. 38, pp. 354-357, October 2021. DOI: [10.3233/APC210065](https://doi.org/10.3233/APC210065) (Scopus Indexed)
20. I. Nelson, C. Annadurai, E. Ramya, R. Shivani, V. Mathusana “IoT Based Smart Energy Meter System Using Machine Learning”, *Advances in Parallel Computing, Smart Computing and Communication Technology*, IOS press, vol. 38, pp. 358-362, October 2021. DOI: [10.3233/APC210066](https://doi.org/10.3233/APC210066) (Scopus Indexed)
21. S. Kalpana, C. Annadurai, “A novel energy efficient architecture for wireless body area networks”, *Personal and Ubiquitous Computing*, Springer, October 2021 (Published Online), pp. 1-12. DOI: <https://doi.org/10.1007/s00779-021-01652-y>(Clarivate Analytics, IF: 3.006)
22. B. Ashvanth, B. Partibane, M. Gulam Nabi Alsath, “An Ultra-Miniaturized Frequency Selective Surface with Angular and Polarization Stability” *IEEE Antennas and Wireless Propagation Letters*, vol. 99, pp. 1-4, October 2021. DOI: <https://doi.org/10.1109/LAWP.2021.3119984>
23. G. Revathi, S. Radha, S. Ramprabhu, “Mutual coupling reduction in Tri-band Monopole antenna using Spikes Loaded Asymmetric loop Resonator for WLAN and Wi-MAX Band”, *Analog Integrated Circuits and Signal Processing*, October 2021 (Published Online) [http://doi.org/10.1007/s10470-021-01943-7](https://doi.org/10.1007/s10470-021-01943-7) (Clarivate Analytics, IF: 1.337)
24. B. Sakthi Abirami, S. Esther Florence, R. Vimal Samsingh, “On-Body RF Sensor Toward Tremor Detection in Parkinson’s Disease”, *IEEE/ASME Transactions on Mechatronics*, vol. 26 (5), pp. 2814-2817, October 2021. (Clarivate analytics, IF: 5.303) <https://doi.org/10.1109/TMECH.2020.3045139>
25. J. Saranya, B. S. Sreeja, M. Arivanandan, K. Bhuvanewari, S. Sherin, K. S. Shivani, G. Saradha Preetha, K. K. Saroja, “Nanoarchitectonics of Cerium Oxide/Zinc Oxide/Graphene Oxide Composites for Evaluation of Cytotoxicity and Apoptotic Behavior in HeLa and VERO Cell Lines”, *Journal of Inorganic and Organometallic*

- Polymers and Materials, pp. 1-12, November 2021 (Published Online) DOI: <https://doi.org/10.1007/s10904-021-02128-5> (Clarivate Analytics, IF: 3.543)
26. A. Elakkiya, S. Radha, B. S. Sreeja, E. Manikandan, "Terahertz single dual multi-band metamaterial absorber", *Pramana- Journal of Physics*, vol. 95:163, pp.1-8, October 2021. DOI: [doi.org/10.1007/s12043-021-02201-1](https://doi.org/10.1007/s12043-021-02201-1). (Clarivate Analytics, IF: 2.219)
27. A. Elakkiya, S. Radha, B. S. Sreeja, E. Manikandan, "An Ultrathin Microwave Metamaterial Absorber for C, X, and Ku Band Applications", *Journal of Electronic Materials*, pp. 1-8, October 2021 (Published Online). DOI: <https://doi.org/10.1007/s11664-021-09251-6>. (Clarivate Analytics, IF: 1.938)
28. Santi C. Pavone, Kesav Ravichandran, S. Palaniappan, K. Balaji Prasanna, Loreto Di Donato, Ottavio Crisafulli, S. Radha, N. Prabagarane, Gino Sorbello, "Comparative analysis of machine learning and physics-based optimizations of a dual circularly polarized antenna for V2X applications", *AEU - International Journal of Electronics and Communications*, pp.1-7, October 2021 (Published Online), vol. 142, December 2021 153994. (Clarivate Analytics, IF: 3.183). <https://doi.org/10.1016/j.aeue.2021.153994>
29. K. Balaji, S. Sakthivel Murugan, "Implementing Blue-Green Spectral range channel characterization for underwater optical wireless communication system for sailors and submarines" *Journal of Environmental Protection and Ecology*, vol. 22 (5), pp. 2132-2145, November 2021. (Clarivate Analytics, IF: 0.692)
30. S. Vidhyashree, M. Gulam Nabi Alsath, N. Kavitha, "A Novel Broadband Reflectarray for 5G Satellite Communications" *International Journal of RF and Microwave Computer-Aided Engineering*, November 2021 (Published Online), DOI: <https://doi.org/10.1002/mmce.22972> (Clarivate Analytics, IF: 1.694)
31. P. Devi Sowjanya, S. Kirubaveni, G. Sudhilaya M. Gulam Nabi Alsath, S. Radha, "Thin film based optically transparent circular monopole antenna for wideband applications", *Analog Integrated Circuits and Signal Processing*, November 2021 (Published Online), DOI: [10.1007/s10470-021-01962-4](https://doi.org/10.1007/s10470-021-01962-4) (Clarivate Analytics, IF: 1.337)
32. G. Thennarasi, P. Sandeep Kumar, K. Malathi, T. Rama Rao, M. Gulam Nabi Alsath, Sachin Kumar, V. Sangeetha, Mohamed Marey, A. Apeksha, "On the design and performance analysis of wristband MIMO/diversity antenna for smart wearable communication applications", *Scientific Reports*, vol. 11:21917, pp. 1-14, November 2021 (Clarivate Analytics, IF: 5.133) <https://doi.org/10.1038/s41598-021-01326-y>
33. M. Dhana Lakshmi, S. Sakthivel Murugan, "Visibility improvement of underwater turbid image using hybrid restoration network with weighted filter", *Journal of Multidimensional Systems and Signal Processing*, pp. 1-26, November 2021 (Published Online). DOI: <https://doi.org/10.1007/s11045-021-00795-8> (Clarivate Analytics, IF: 2.03)
34. B. Ashvanth, B. Partibane, G. Idayachandran, "Designing miniaturized metamaterial absorber with tunable multiband characteristics for THz applications" *Bulletin of*

Materials Science, vol. 44:281, pp. 1-8, November 2021 (Published Online). DOI: <https://doi.org/10.1007/s12034-021-02566-4>(Clarivate Analytics, IF: 1.84)

35. C. Ashok, N. Venkateswaran, “An Efficient Method for Resolving Ambiguity in DOA Estimation with Coprime Linear Array”, Circuits, Systems, and Signal Processing, pp. 1-17, November 2021 (Published Online). DOI: [10.1007/s00034-021-01887-3](https://doi.org/10.1007/s00034-021-01887-3) (Clarivate Analytics, IF: 2.225)
36. P. Devi Sowjanya, M. Gulam Nabi Alsath, G. Sudhilaya, S. Kirubaveni, “Design and Development of Optically Transparent Rectenna for RF Energy Harvesting Applications”, International Journal of Microwave and Wireless Technologies, pp. 1-8, November 2021 (Published Online), DOI: <https://doi.org/10.1017/S1759078721001616> (Clarivate Analytics, IF: 1.064)
37. G. Aswanth Kumar, W. Jino Hans, “Development of Visual-Only Speech Recognition System for Mute People”, Circuits, Systems, and Signal Processing, pp. 1-21, November 2021 (Published Online). DOI: [10.1007/s00034-021-01880-w](https://doi.org/10.1007/s00034-021-01880-w). (Clarivate Analytics, IF: 2.225)
38. M. Akhila, K. T. Selvan, A. K. Iyer, Alberta, K. V. Srivastava, A. Alphones, “A review of metasurface-assisted RCS reduction techniques”, Progress in Electromagnetics Research B, vol. 94, pp. 75-103, November 2021. (Scopus Indexed) [doi:10.2528/PIERB21081401](https://doi.org/10.2528/PIERB21081401)
39. K. Muthumeenakshi, S. Radha, R. Hemalatha, “Improved Collaborative Spectrum Sensing Scheme for Maritime Cognitive Radio”, Indian Journal of Geo-Marine Sciences, vol. 50 (8), pp. 603-612, August 2021. (Clarivate Analytics, IF: 0.496) <http://nopr.niscair.res.in/handle/123456789/58553>
40. R. Kiruthika, S. Radha, S. Kirubaveni, V. Shyamala, G. Iyappan, R. Govindaraj, P. Ramasamy, “Experimental investigation of performance tailoring of the multifunctional sensor using transition metal (Fe) doped ZnO nanorods synthesized via a facile solution-based method”, Nanotechnology, vol. 33 (3), 035713, pp. 1-14, October 2021 (Published Online). DOI: [10.1088/1361-6528/ac2e25](https://doi.org/10.1088/1361-6528/ac2e25) (Clarivate Analytics, IF: 3.874)
41. G. Anushiya Rachel, S. Sreenidhi, P. Vijayalakshmi, T. Nagarajan, “Incorporation of Happiness in Neutral Speech by Modifying Time-Domain Parameters of Emotive-Keywords”, Circuits, Systems and Signal Processing, pp. 1-27, November 2021 (Published online). DOI: <https://link.springer.com/article/10.1007/s00034-021-01875-7>(Clarivate Analytics, IF: 2.25)
42. K. Mrinalini, Dr. P. Vijayalakshmi, Dr. T. Nagarajan, “Feature-weighted AdaBoost classifier for punctuation prediction in Tamil and Hindi NLP systems”, Expert systems, pp. --19, November 2021 (Published online). DOI:<https://doi.org/10.1111/exsy.12889> (Clarivate Analytics, IF: 2.587)

43. S. Annapoorani, R. Jayaparvathy, "Modified Seagull Optimization Algorithm based MPPT for augmented performance of Photovoltaic solar energy systems", *Automatika Journal for Control, Measurement, Electronics, Computing and Communications*, November 2021 (Published Online). DOI: <https://doi.org/10.1080/00051144.2021.1997253> (Clarivate Analytics, IF: 1.65)
44. R. Sriharini, N. Edna Elizabeth, D. Supriya, V. S. Surether, S. Sneha, "IoT based multi-purpose smart fabric curtain", *Australian Journal of Electrical and Electronics Engineering*, pp. 1-9, November 2021 (Published Online). <https://doi.org/10.1080/1448837X.2021.2004658> (Scopus Indexed, 0.63)
45. J. Abanah Shirley, S. Esther Florence, B. S. Sreeja, S. Radha, "Performance Analysis of Wearable Pressure Sensor Based on Structural Properties of Zinc Oxide Nanostructures Grown on Fabric", *IEEE Transactions on Nanotechnology*, vol. 20, pp. 837-845, November 2021. (Clarivate Analytics, IF: 2.5) DOI: [10.1109/TNANO.2021.3124047](https://doi.org/10.1109/TNANO.2021.3124047)
46. J. Abanah Shirley, S. Esther Florence, V. Saraswathi, S. Sankarshwari, S. Sona, "Fall detection smart-shoe enabled with wireless IoT device", *Circuit World*, vol. 47(4), pp. 325-334, November 2021. <https://doi.org/10.1108/CW-08-2018-0067> (Clarivate Analytics, IF: 0.875)
47. V. Aruna, M. Gulam Nabi Alsath, S. Kirubaveni, Jaume Anguera, Jessica Constance Paul, K. Ram Kumar, "Refractive Index-Based Terahertz Sensor Using Graphene for Material Characterization", *Sensors*, vol. 21, 8151, pp. 1-13, December 2021. <https://doi.org/10.3390/s21238151> (Clarivate Analytics, IF:3.576)
48. V. Aruna, M. Gulam Nabi Alsath, S. Kirubaveni, V. Pancha Durga V, "An Ultra-thin Multiband Refractive Index-Based Carcinoma Sensor Using THz Radiation", *IEEE Sensors Journal*, December 2021 (Published Online). <https://doi.org/10.1109/JSEN.2021.3134663> (Clarivate Analytics, IF: 3.301)
49. P. Devi Sowjanya, M. Gulam Nabi Alsath, S. Kirubaveni, P. Balaji Bhargav, "Multilayer Thin Film Based Optically Transparent Dual-Band Automotive Windshield Antenna", *International Journal of RF and Microwave Computer-Aided Engineering*, December 2021 (Published Online). <https://doi.org/10.1002/mmce.23038> (Clarivate Analytics, IF: 1.694)
50. J. Blessy Annie Flora, S. Radha, R. Hemalatha, S. Aasha Nandhini, "Plant Disease Detection for Banana using Long Range Wide Area Network" in *International Journal of Security and Networks*, vol. 16 (2), pp. 129-134, July 2021. <https://www.inderscienceonline.com/doi/epdf/10.1504/IJSN.2021.116778> (Scopus Indexed, SJR: 0.14)
51. M. Gulam Nabi Alsath, K. Malathi, "Reply to Comment on Compact UWB Monopole Antenna for Automotive Communications", *IEEE Transactions on Antennas and*

Propagation, p. 1, December 2021 (Published Online).  
<https://doi.org/10.1109/TAP.2021.3132669> (Clarivate Analytics, IF: 4.388)

52. G. Thennarasi, P. Sandeep Kumar, K. Malathi, Sachin Kumar, T. Rama Rao, M. Gulam Nabi Alsath, “Conformal Quad-Port UWB MIMO Antenna for Body-Worn Applications”, International Journal of Antennas and Propagation, December 2021 (Published Online). DOI:<https://doi.org/10.1155/2021/9409785> (Clarivate Analytics, IF: 1.174)
53. G. Annalakshmi, S. Sakthivel Murugan, “A Novel feature descriptor based coral image classification using extreme learning machine with ameliorated chimp optimization algorithm”, Elsevier Journal of Ecological Informatics, pp. 1-14, December 2021 (Published Online), DOI: <https://doi.org/10.1016/j.ecoinf.2021.101527> (Clarivate Analytics, IF: 3.142)
54. K. Nirmala Devi, C. Annadurai, I. Nelson, R. Manikandan, Amir H. Gandomi, “Deep Q-Learning Based Neural Network with Privacy Preservation Method for Secure Data Transmission in Internet of Things (IoT) Healthcare Application”, MDPI Electronics, vol. 11 (1), pp. 1-14, January 2022. <https://doi.org/10.3390/electronics11010157> (Clarivate Analytics, IF: 2.397)
55. R. Adithya Pillai, S. Sakthivel Murugan, Guruprasad Gupta, “A Complete Analysis of Clarity (C50) Using I-SIMPA to Maintain Ideal Conditions in an Acoustic Chamber”, Journal of Sound and Vibration, vol. 56 (1), pp. 51-64, January 2022. <https://www.techscience.com/sv/v56n1/46217> (Clarivate Analytics, IF: 0.37)
56. A. Abirami, , Dr. S. Esther Florence,. R. Vimal Samsingh, “Realization of a Novel Weaving Framework in Looms for Manufacturing of E-Textiles”, IEEE Transactions on Components, Packaging and Manufacturing Technology, pp. 1-9, January 2022 (Published Online), DOI: <https://doi.org/10.1109/TCPMT.2022.3144366> (Clarivate Analytics, IF: 1.738)
57. J. Mary Suji Mol, S. Esther Florence, Mr. M. Abraham, “Twisted F-Shaped Slot Loaded UWB Printed Antenna for On-Body Application”, Wireless Personal Communications, pp. 1-19, January 2022 (Published Online), DOI: <https://doi.org/10.1007/s11277-022-09471-x> (Clarivate Analytics, IF: 1.671)
58. B. Ashvanth, B. Partibane, “Inductively coupled triple layers of ultra-miniaturized frequency selective surface for L-band applications”, International Journal of RF and Microwave Computer-Aided Engineering, pp. 1-9, January 2022 (Published Online), DOI: <https://doi.org/10.1002/mmce.23099> (Clarivate Analytics, IF: 1.694)
59. S. Annapoorani, R. Jayaparvathy, “Grasshopper optimization algorithm tuned maximum power point tracking for solar photovoltaic systems”, Journal of Ambient Intelligence and Humanized Computing, vol. 12 (9), pp. 8637-8645, September 2021. <https://doi.org/10.1007/s12652-020-02593-9> (Clarivate Analytics, IF: 7.104)

60. S. Annapoorani, R. Jayaparvathy, P. Nammalvar, "An Efficient Hybrid Converter for Dc-Based Renewable Energy Nanogrid Systems", *Revue Roumaine des Sciences Techniques*, vol. 66 (4), pp. 225-230, January 2022. <https://journal.iem.pub.ro/rrst-ee/article/view/38/112> (Clarivate Analytics, IF: 0.443)
61. T. Thomas Leonid, R. Jayaparvathy, "Classification of Elephant Sounds using Parallel Convolutional Neural Network", *Journal of Intelligent Automation and Soft Computing*, vol. 32 (3), 2022, pp.1415-1426, December 2021. (Clarivate Analytics SCIE, IF: 1.647)
62. S. Mary Cecelia, S. Sakthivel Murugan, "Denoising, Edge aware restoration and enhancement of single shallow coastal water image", *Fluctuation and Noise Letters*, vol. 21 (1), pp. 1-16, February 2022. DOI: <https://doi.org/10.1142/S0219477522500092> (Clarivate Analytics, IF: 1.31)
63. K. Balaji, PT-RS/ECE, S. Sakthivel Murugan, "Execution of Channel Characterization for Underwater Optical Wireless Communication System in Blue-Green Spectral Range for Different Types of Sea Water Based on Chlorophyll Content", *Light & Engineering*, vol. 30 (1), pp. 71-81, February 2022. (Clarivate Analytics, IF: 0.53)
64. N. Vinodhkumar, G. Durga, ASP/ECE, Muthumanickam, "Numerical Study on SEU Performance of Strain Engineered 6T-SRAM Cells", *Journal of Circuits, Systems and Computers*, vol. 31 (2), pp. 2250034 (1-9), March 2022. DOI: <https://doi.org/10.1142/S0218126622500347> (Clarivate Analytics, IF: 1.333)
65. K. Nirmala, ASP/BME, C. Vinoth Kumar, "Hash and Prediction-Error-Based Reversible Watermarking for Medical Images", *Fluctuation and Noise Letters*, vol. 21 (1), 2250007-28, January 2022. (Clarivate Analytics, IF: 1.31) DOI: <https://doi.org/10.1142/S0219477522500079>
66. K. A. Karthigeyan, S. Radha, E. Manikandan, "Polarisation-insensitive and broadband band-stop metamaterial filter for THz waves", *Pramana - Journal of Physics*, vol. 96:65, pp. 1-5, March 2022. <https://doi.org/10.1007/s12043-022-02314-1> (Clarivate Analytics, IF: 2.219)
67. K. Mrinalini, P. Vijayalakshmi, T. Nagarajan, "SBSim: A Sentence-BERT Similarity-Based Evaluation Metric for Indian Language Neural Machine Translation Systems", *IEEE/ACM Transactions on Audio, Speech and Signal processing*, vol. 30, pp. 1396-1406, March 2022. (Clarivate Analytics, IF: 3.919) <https://doi.org/10.1109/TASLP.2022.3161160>
68. M. Nanmalar, P. Vijayalakshmi, T. Nagarajan, "Literary and Colloquial Tamil Dialect Identification", *Circuits, Systems and Signal Processing*, pp.1-24, March 2022 (Published Online), DOI: <https://doi.org/10.1109/TENCON.2019.8929499> (Clarivate Analytics, IF: 2.225)

69. K. Malathi, S. Padmathilagam, M. Gulam Nabi Alsath, "Compact Ultra-wideband Pattern Diversity Antenna for Body Centric Communications", International Journal of Microwave and Wireless Technologies, April 2022 (Published Online), DOI: <https://doi.org/10.1017/S1759078722000393> (Clarivate Analytics, IF: 1.064)
70. B. N. Priyanka, R. Jayaparvathy, D. Divyabarathi, "Efficient and Dynamic Cluster Head Selection for Improving Network Lifetime in WSN using Whale Optimization Algorithm" in Wireless Personal Communications, vol. 123, pp. 1467-1481, April 2022. <https://doi.org/10.1007/s11277-021-09192-7> (Clarivate Analytics, IF: 1.601)
71. M. Akila, RS/ECE, N. Divya, S. Abishek, V. Lingasamy, K. Hariharan, K. T. Selvan, "A Broadband Dual-Polarized Magneto-Electric Dipole Antenna Element for Low-Frequency Astronomical Arrays", Applied Computational Electromagnetics Society Journal, vol. 37 (1), pp. 78-84, January 2022. DOI: <https://doi.org/10.13052/2022.ACES.J.370109> (Clarivate Analytics)
72. B. Raagavi, S. Swathi, S. Sakthivel Murugan, "Characteristics Analysis of Metamaterial Enhanced Magnetic Induction Based Underground Communication", Wireless Personal Communications, vol. 123, pp. 1669-1685, March 2022. <https://doi.org/10.1007/s11277-021-09207-3>(Clarivate Analytics, IF: 1.061)
73. D. Kanchana, S. Radha, B. S. Sreeja, "A miniaturised FSS with band-stop response for shielding application in X-band frequency", Pramana, vol. 96 (1), pp. 1-5, March 2022. <https://doi.org/10.1007/s12043-021-02274-y> (Clarivate Analytics, IF: 1.688)
74. J. Renita, N. Edna Elizabeth, A. Nandhini, "Implementation and Performance Analysis of Elliptic Curve Cryptography using an Efficient Multiplier", Journal of Semiconductor Technology and Science, vol. 22 (2), pp. 53-60, April 2022. (Clarivate Analytics, IF: 0.424)
75. C. Ashok, N. Venkateswaran, Vaddi Lakshmi Satya Sai Sarojini, Sneha Rajan, "An unambiguous DOA estimation method for coprime array with displaced subarrays" in Applied Acoustics, vol. 195, pp. 1-7, April 2022. (Published Online). DOI: <https://doi.org/10.1016/j.apacoust.2022.108818> (Clarivate Analytics, IF: 2.639)
76. C. Ashok, N. Venkateswaran, "An Improved Polynomial Rooting based Method for Solving Non-Trivial Ambiguity in Direction-Finding using an Unfolded Co-prime Linear Array", Signal, Image and Video Processing, pp. 1-8, April 2022 (Published Online). DOI: <https://doi.org/10.1007/s11760-022-02224-0> (Clarivate Analytics, IF: 2.157)
77. S. Kalpana, C. Annadurai, ASP/ECE published a paper titled "Optimized Cognitive Learning Model for Energy Efficient Fog-BAN-IoT Networks" in Computer System Science Engineering, vol. 43 (3), pp. 1027-1040, May 2022. <https://www.techscience.com/csse/v43n3/47693> (Clarivate Analytics, IF: 1.486)

78. P. Senthil Kumar, B. S. Sreeja, K. Krishna Kumar, G. Padmalaya, "Static and dynamic analysis of sulfamethoxazole using GO/ZnO modified glassy carbon electrode by differential pulse voltammetry and amperometry techniques", *Chemosphere*, vol. 302, pp. 134936, May 2022 (Published Online). DOI: <https://doi.org/10.1016/j.chemosphere.2022.134926> (Clarivate Analytics, IF: 7.086)
79. P. Devisowjanya, M. Gulam Nabi Alsath, S. Kirubaveni, K. Malathi, Y. V. Ramana Rao, Jeevani W. Jayasinghe, Disala N. Udawala, "An Optically Transparent Circularly Polarized UHF RFID Reader Antenna", *International Journal of RF and Microwave Computer-Aided Engineering*, May 2022 (Published online). DOI: <https://doi.org/10.1002/mmce.23225> (Clarivate Analytics, IF: 1.694)
80. S. Karthie, J. Zuvairiya Parveen, Yogeshwari, E. Venkadeshwari, "Compact dual-mode microstrip bandpass filter based on slotted square patch resonator", *Microelectronics International*, vol. 39 (2), pp. 49-57, May 2022. <https://doi.org/10.1108/MI-08-2021-0080> (Clarivate Analytics, IF: 0.758)
81. S. Sayi Soundariya, S. Ramprabhu, G. Mugeshnandha, G. Karthick, S. Nandhakishore, "Miniaturized Multi-band Frequency Selective Surface with Angular and Polarization Independent Characteristic", *Frequenz*, pp. 1-8, May 2022 (Published online). DOI: <https://doi.org/10.1515/freq-2021-0097>
82. R. Anandan, C. Annadurai, "An ultrawideband miniaturized MIMO antenna with split ring Yagi like structures for S and X frequency multiband applications", *Journal of Electromagnetic Waves and Applications*, pp. 1-17, May 2022 (Published Online). DOI: <https://doi.org/10.1080/09205071.2022.2076159> (Clarivate Analytics, IF: 1.335)
83. V. Chandra Prasad, S. Ramprabhu, "Compact Uniform Folded Section Rat-Race Couplers with Harmonic Suppression" in *IETE Journal of Research*, pp. 1-11, May 2022. (Published Online). DOI: <https://doi.org/10.1080/03772063.2022.2069163> (Clarivate Analytics, IF: 2.333)
84. B. Mohammed Hashim and R. Amutha, "Deep transfer learning based human activity recognition by transforming IMU data to image domain using novel activity image creation method", *Journal of Intelligent & Fuzzy Systems*, pp. 1-8, 2022. (Published Online) DOI: 10.3233/JIFS-213174; <https://content.iospress.com/articles/journal-of-intelligent-and-fuzzy-systems/ifs213174> Impact Factor: 1.739
85. B. Mohammed Hashim and R. Amutha "Elderly Hajj pilgrims activity recognition based on candidate classification technique", *Concurrency and Computation: Practice and Experience*, 2022. (Published Online) Impact Factor: 0.55 <https://doi.org/10.1002/cpe.6932>
86. R. Amrith, K. Bavapriyan, V. Gopinaath, A. Jawahar, C. Vinoth Kumar, "DDoS Detection using Machine Learning Techniques" *Journal of IoT in Social, Mobile, Analytics, and Cloud*, Vol.4, No.1, pp. 24-32, March 2022. DOI: <https://doi.org/10.36548/jismac.2022.1.003>
87. Inbaraj Divya, Kailasam Muthumeenakshi and Sankararajan Radha, "An optimization of a reconfigurable CPW antenna for RF energy harvesting cognitive radio application"

Frequenz, vol. 76, (3-4), pp. 185-198, 2022. (Clarivate analytics, IF: 0.737)  
<https://doi.org/10.1515/freq-2021-0131>

88. Vijayalakshmi, P., Nagarajan, T., Jayapriya, R., Brathindara, S., Krithika, K., Nikhilesh, N., Naren Raju, N., Johanan Joysingh, S., Aiswarya, V., Mrinalini, K., "Development of a low-resource wearable continuous gesture-to-speech conversion system", Disability and Rehabilitation: Assistive Technology, Published online: 21 Jan 2022.  
<https://doi.org/10.1080/17483107.2021.2022787>
89. K. Sumathi, K. K. Nagarajan, and R. Srinivasan, "Sensitivity Analysis of Gallium Nitride Quantum Dot LED", Journal of Nanoelectronics and Optoelectronics (CA), Vol.16, No. 8, pp.1204–1214 (August 2021), DOI:  
<https://doi.org/10.1166/jno.2021.3067> (IF - 1.069)

## **International Conference Publications (July'21 – June'22)**

1. Mr. Santosh Saranyan & Mr. Srivas Seshadri (UG-ECE 20171-2021 Batch students), Dr. B. Ramani, ASP/ECE presented a paper titled “Real-time Facemask Detection and Analytics” in 2021 International Conference on Automation, Control and Mechatronics for Industry 4.0 (ACMI), organized by Department of Mechatronics Engineering, Rajshahi University of Engineering & Technology (RUET), Rajshahi, Bangladesh on 08.07.2021.
2. Dr. P. Kaythry, ASP/ECE presented a paper titled “Hand Cricket game application using Computer Vision” in the Second International Conference on Advances in Physical Sciences and Materials 2021 (ICAPSM 2021) organized by SNS College of Technology, Coimbatore during August 17-18, 2021.
3. Ms. P. Kalpana, PT-RS/ECE, Dr. C. Annadurai, ASP/ECE presented a paper titled “A Performance Analysis Using Fox BAN Architecture in Wireless Body Area Networks” in International Conference on Artificial Intelligence and Smart Computing, conducted by Narasimha Reddy Engineering College, Secunderabad during October 22-23, 2021
4. Dr. P. Kaythry, ASP/ECE virtually presented a paper titled “Durability studies on concrete with partial replacement of cement and coarse aggregate by seashell waste” in the International Conference on sustainable Technology and Development held at Shenzhen, China during 31.10.2021 to 02.11.2021.
5. Dr. P. Kaythry, ASP/ECE virtually presented a paper titled “Monitoring the impact of air quality during Covid -19 in Chennai, India: Using Machine Learning Techniques” in the International Conference on Sustainable Technology and Development held at Shenzhen, China during 31.10.2021 to 02.11.2021.
6. Dr. P. Kaythry, ASP/ECE virtually presented a paper titled “Automated Paralysis Patient Monitoring System” in the 1<sup>st</sup> National Biomedical Engineering Conference (NBEC 2021) organized by University Technology Malaysia, Malaysia during November 09-10, 2021.
7. Dr. M. Anbuselvi, ASP/ECE presented a paper titled “Low Cost and Compact Electrostatic Precipitator Model Controlled by Smoke Detector” in the International Conference on Green Energy and Technologies (GreenTech21) organized by Department of Mechanical Engineering, SSN College of Engineering during November 26-27, 2021.

8. Ms. M. Akila, RS/ECE and Dr. K. T. Selvan, Prof/ECE presented the paper titled “Toward improved prediction of RCS reduction bandwidth of checkerboard metasurfaces” at the 2021 IEEE International Symposium on Antennas and Propagation held in Singapore during December 6-10, 2021.
9. Dr. S. Esther Florence, ASP/ECE, Dr. K. T. Selvan, Prof/ECE, Dr. H. G. Espinosa, Griffith University, Australia, Dr. C. Furse, University of Utah, USA presented the paper titled “Experiences from teaching an online short-term course on bioelectricity during the pandemic” at the 2021 IEEE International Symposium on Antennas and Propagation held in Singapore during December 6-10, 2021.
10. Dr. P. Kaythry, ASP/ECE presented a paper titled “Letting Villages go smart in Indian Scenario” in TENCON 2021 during December 7-10, 2021.
11. Dr. C. Vinothkumar, ASP/ECE presented a paper titled “Markov Random Field based Compression of Encrypted Medical Images” in Third International Conference on Communication and Intelligent Systems during December 18-19, 2021.
12. Ms. S. Indu, Ms. Indu Subramanian, Ms. Aishwarya Ponni, Ms. Akilandeswari, Ms. S. Kaavya, Dr. P. Vijayalakshmi, Prof & Head/ECE presented & published a paper titled “Speaker identification in vehicular environment using GMM and BiLSTM”, in Proceedings of IEEE International Conference on Technology, Engineering, Management for Societal Impact using Marketing, Entrepreneurship and Talent (TEMSMET), co-hosted by Symbiosis International (Deemed University) held during December 2021.
13. Ms. S. Abirami, Mr. L. Anirudh, UG-ECE 2017-2021 Batch students and Dr. P. Vijayalakshmi, Prof & Head/ECE, presented a paper titled “Silent speech recognition: an inversion problem” in the 8<sup>th</sup> International conference on Biosignals, Images and Instrumentation (ICBSII), 2022 organized by Department of BME, SSN CE during March 16-18, 2022.
14. Dr. K. J. Jegadish Kumar ASP/ECE participated and presented a paper titled “Design of Twin-slot Radiator Beam-forming antenna using Metasurface” in the International Conference on Wireless Communications, Signal Processing and Networking (WiSPNET 2022) held at Sri Sivasubramaniya Nadar College of Engineering, Chennai, India during March 24-26, 2022.
15. Mr. R. Amrishi, Mr. K. Bavapriyan, Mr. V. Gopinaath, UG-ECE 2018-2022 Batch students, Dr. A. Jawahar, Prof/ECE, Dr. C. Vinoth Kumar, ASP/ECE presented a paper titled “DDoS Detection Using Machine Learning Techniques” in the International Virtual Conference on Artificial Intelligence, 5G Communications and Network Technologies (ICA5NT 2022) organized by Velammal Institute of Technology, Chennai on 28.04.2022.

16. Ms. B. Adsaiya, Ms. V. Ezhilarasi, Ms. T. Gomathi, UG-ECE 2018-2022 Batch students, Dr. C. Annadurai, Dr. S. Ramprabhu, Dr. I. Nelson, ASPs/ECE presented a paper titled “Generating Side-View Face Images from a Single-View Face Image” in the International Virtual Conference on Artificial Intelligence, 5G Communications and Network Technologies (ICA5NT 2022) organized by Velammal Institute of Technology, Chennai during April 28-29, 2022.
17. Ms. X. Agasya, Ms. S. Esther Sobiya, Mr. V. Gokulakrishnan, UG-ECE 2018-2022 Batch students, Dr. C. Annadurai, Dr. S. Ramprabhu, Dr. I. Nelson, ASPs/ECE presented a paper titled “Design of Y-shaped Fractal Antenna for Satellite Application” in the International Virtual Conference on Artificial Intelligence, 5G Communications and Network Technologies (ICA5NT 2022) organized by Velammal Institute of Technology, Chennai during April 28-29, 2022.
18. Mr. A. Ajay, Ms. P. Harshavardhini, Ms. C. Yuvasri, UG-ECE 2018-2022 Batch students, Dr. C. Annadurai, Dr. S. Ramprabhu, Dr. I. Nelson, ASPs/ECE presented a paper titled “Design of Low Insertion Loss Narrow Band Filter for Satellite Application” in the International Virtual Conference on Artificial Intelligence, 5G Communications and Network Technologies (ICA5NT 2022) organized by Velammal Institute of Technology, Chennai during April 28-29, 2022.
19. Dr. B. S. Sreeja, ASP/ECE presented a paper titled “Mechanical and Skin Insertion Analysis of Hollow Polymer Microneedle for Transdermal Drug Delivery” at the 3rd Indo-Korea conference on Development of Advanced Materials for Future Technologies (DAMFT-2022) held during April 22-23, 2022.
20. Dr. B. S. Sreeja, ASP/ECE presented a paper titled “Development of integrated 1D/0D/1D hybrid formation by MWCNT and CQDs supported MnO<sub>2</sub> hybrid nanomaterials for electrochemical detection of heavy metal ions” in 3rd Indo-Korea conference on Development of advanced materials for future technologies (DAMFT-2022) held during April 22-23, 2022.
21. Dr. K. Bhuvaneshwari, Dr. B. S. Sreeja, ASP/ECE, Dr. S. Radha, VP/SSNCE presented a paper titled “Study on electrochemical detection of metal ions and photocatalytic degradation of MB dye using Nano zero-valent iron” in 3rd Indo-Korea conference on Development of advanced materials for future technologies (DAMFT-2022) held during April 22-23, 2022.
22. Ms. A. Gowthami, Dr. B. S. Sreeja, ASP/ECE presented a paper titled “Design and Fabrication of Low Cost and Biocompatible Microneedle arrays using 3D printing” in 3rd Indo-Korea conference on Development of advanced materials for future technologies (DAMFT-2022) held during April 22-23, 2022.
23. Ms. V. Dharshini, Ms. S. Saranya, Mr. V. K. Sethuraman, UG-ECE 2018-2022 Batch students, Dr. A. Jawahar, Prof/ECE, Dr. C. Vinoth Kumar, ASP/ECE presented a paper titled “Energy Efficient Street Lighting System” in the 10th

International Conference on Contemporary Engineering and Technology 2022 (ICCET) organized by Prince Shri Venkateshwara Padmavathy Engineering College, Chennai on 21.05.2022.

24. Mr. C. Ashok, PT-RS/ECE, Ms. Vaddi Lakshmi Satya Sai, Ms. Sarojini, Dr. N. Venkateswaran, Prof/ECE presented a paper titled “Direction-of-Arrival Estimation of Multiple Closely Spaced Signals using MVDR-CSVR Approach” at the International Conference - IETE CHENCON 2022 organized by IETE Chennai Centre held during April 22-23, 2022. pp. 47 -52.
25. Ms. V. Krishi Divya Dharshini, Ms. K. Nethra Prakash, Ms. A. Shafiya Sidrath, UG-ECE 2019-2023 Batch students, Dr. N. Venkateswaran, Prof/ECE presented a paper titled “Diagnosis of Stages of Acute Lymphoblastic Leukaemia using Image Processing and Deep Learning” at the International Conference - IETE CHENCON 2022 organized by IETE Chennai Centre held during April 22-23, 2022. pp. 116-121.
26. Ms. Charu Jain, Ms. Indu Subramanian, Ms. Meghna Govind, UG-ECE 2018-2022 Batch students, Dr. N. Venkateswaran, Prof/ECE presented a paper titled, “Artificial Intelligence and Machine Learning Based Wireless Localization” at the International Conference - IETE CHENCON 2022 organized by IETE Chennai Centre held during April 22-23, 2022. pp. 74-79.
27. Dr. K. Muthumeenakshi, ASP/ECE presented a paper titled “A comprehensive analysis on the performance of antenna design using machine learning techniques” in the International Conference on Signal & Data Processing (ICS DP) organized by VIT Bhopal University held during June 10-11, 2022. The paper was co-authored by Dr. S. Radha, VP/SSNCE.

## **National Conference Publications (July 21 to June 22)**

1. Ms. S. Swathi, RS/ECE, Dr. S. Sakthivel Murugan, ASP/ECE presented a paper titled “Influence of Various Soil Types and its Properties on Filamentary Planar Coil based Magnetic Induction Communication System” in 27th National Conference on Communications (NCC 2021), organized by IIT Kanpur, Uttar Pradesh, held during 27-30 July, 2021.
2. Ms. S. Mary Cecilia, RS/ECE, Dr. S. Sakthivel Murugan, ASP/ECE presented a paper titled “Visibility Restoration of Diverse Turbid Underwater Images - Two Step Approach” in 27th National Conference on Communications (NCC 2021), organized by IIT Kanpur, Uttar Pradesh, held during 27-30 July, 2021.
3. Mr. R. Manjunathan, Ms. V. Krishi Divyadharshini, Mr. G. Bharath Vishal, UG-ECE 2019-2023 Batch students, Dr. N. Venkateswaran, Prof/ECE attended and presented a paper titled “Real-time Ship Detection and Localisation in SAR Images using Artificial Intelligence and Remote Sensing for Maritime Defense applications” in the 5th Innovators-Industry Meet on August 26-27, 2021 held at New Delhi organized by IETE.
4. Mr. A. Pranav, UG-ECE 2020-2024 Batch, Ms. S. Vidhyashree, RS/ECE, Dr. M. Gulam Nabi Alsath, Dr. S. Kirubaveni, ASPs/ECE presented a paper titled “Dual-Layer Beamscanning Reflectarray Antenna Operating at Ku-Band” in the National Conference on Information and Communication Technologies organized by the Department of ECE, SSNCE during 23.02.2022.
5. Ms. N. Kavitha, RS/ECE, Ms. S. Vidhyashree, RS/ECE, Dr. M. Gulam Nabi Alsath, ASP/ECE, Ms. B. Ishwarya, UG-ECE 2016-2020 Batch presented a paper titled “Design and Development of Frequency Reconfigurable Reflectarray Antenna” in the National Conference on Information and Communication Technologies organized by the Department of ECE, SSNCE during 23.02.2022.
6. Ms. S. Vidhyashree, RS/ECE, Dr. M. Gulam Nabi Alsath, Dr. S. Kirubaveni, ASPs/ECE presented a paper titled “Novel Ku Band Reflectarray Antenna for Beam scanning Applications” in the National Conference on Information and Communication Technologies organized by the Department of ECE, SSNCE during 23.02.2022.
7. Dr. S. Ramprabhu, ASP/ECE, Mr. L. Abdulla Khan, Mr. S. Nahul, Ms. K. Nandhini, Mr. Mohd Shahrukh, UG-ECE 2016-2020 Batch students presented a paper titled “Design and Fabrication of a Miniaturized Microwave Absorber with Wide Band Absorption Characteristics” in the IEEE Wireless, Antenna & Microwave Symposium - WAMS 2022 held during June 05-08, 2022 organized by NIT Rourkela, India.