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### **Present Position**

Associate professor, Department of Electronics and Communication Engineering, College of Engineering Guindy, Anna University, Chennai from March-2007.

#### **Previous Positions**

Lecturer, Department of Electronics and Communication Engineering, College of Engineering Guindy, Anna University, Chennai from March-1994.

# **Previous Additional Responsibility**

- Deputy Director, , Anna University, Chennai.
- Deputy Director, , Anna University, Chennai.
- > Programme Officer, Youth Red Cross, Anna University, Chennai.
- > Deputy Warden, Girls Hostel, Anna University, Chennai.

# Other Employment

> ,.

# Degree

- M.E. in Microwave and Optical Engineering, AC TECH KARAIKUDI, Madurai Kamaraj (1988 - 1990).
- ❖ B.E. in ELECTRONICS AND COMMUNICATION ENGG , AC TECH KARAIKUDI, Madurai Kamaraj (1984 1988).

# Research Degree

 Ph.D. in MICROWAVE ENGINEERING from Faculty of INFORMATION AND COMMUNICATION, COLLEGE OF ENGINEERING GUINDY, ANNA UNIVERSITY (1996 -2004).

Title: ANALYSIS OF RECTANGULAR SHIELDED STRIPLINE ENCLOSURE.

### Area of Specialisation

- MICROWAVE ENGINEERING
- ANTENNA DESIGN
- PLANAR TRANSMISSION LINES
- EMI/EMC
- SIGNAL INTEGRITY IN HIGH SPEED DESIGN

## Membership in Professional Organization

- LMISTE
- IIFE MEMBER IN SOCIETY OF EMC ENGINEERS
- > SENIOR MEMBER IEEE

#### Research Guidance

Number of Ph.D Scholars Guided	: 15
Number of Ph.D Scholars Guiding	: 4
Number of M.S (By Research) Students Guided	: 2
Number of M.E./ M.Tech. Projects Guided	: 25
Number of M.E./ M.Tech. Projects Guiding	: 3

# Papers Published in Journals

Research Papers Published in International Journals : 84
Research Papers Published in National Journals : 2

- 1. Kanagasabai, Malathi; Annapurna Das, " Analysis of field and impedance of TEM Cell by FEM", EMC Journal, published by Society of EMC Engineers. Vol. 14, Issue 1, pp. 19-25 (2001).
- 2. Kanagasabai, Malathi; Annapurna Das, "Field and Impedance Analysis of Asymmetric RSSE by FDM", EMC Journal, published by Society of EMC Engineers. pp. 25-32 (2002).
- 3. Kanagasabai, Malathi; Annapurna Das,, "Numerical Analysis of impedance of Asymmetric TEM Cell filled with inhomogeneous isotropic dielectric", Applied Computational Electromagnetics Society (ACES) Journal, published by ACES. Vol. 19, Issue 1, pp. 39-45 (2004).

- 4. D. Sathish Kumar, Raghuram, Kanagasabai, Malathi; S. Indhumathi, B.Bhuvaneswari, "Broadband Dual Frequency Planar Antenna", International journal of Scientific Computing, published by Serial Pubs. Vol. 1, Issue 1, pp. 75-79 (2009).
- 5. Indhumathi, Kanagasabai, Malathi; Raghuram, Satish Babu, Ameelia Roseline A, "Analysis of radiation properties of Electromagnetic bandgap structures over patch antenna", International Journal of Computer Science and Knowledge Engineering, published by Serial Pubs. Vol. 3, Issue 1, pp. 151-155 (2009).
- 6. Harichandran A, Ameelia Roseline A, Esther Florence S, Marin A, Richards Joe S, Kanagasabai, Malathi, "Novel Triband Double Layer Patch Antenna", International Journal of Microwave and Optical Technology, published by IJMOT. Vol. 6, Issue 6, pp. 338-342 (2011).
- 7. Ameelia Roseline A, Kanagasabai, Malathi, "Enhanced Performance Of A Patch Antenna Using Spiral-Shaped Electromagnetic Bandgap Structures For High-Speed Wireless Networks", IET Microwaves, Antennas & Propagation, published by IET. Vol. 5, Issue 14, pp. 1750-1755 (2011).
- 8. Habiba, H. U.; Kanagasabai, Malathi; Masood, M.H., Kunnath, R, "Tunable Electromagnetic Band Gap-Embedded Multimode Resonators for Ultra-Wideband Dual Band, Lower-Ultra-Wideband and Upper-Ultra-Wideband Applications", IET Microwaves, Antennas & Propagation, published by IET. Vol. 5, Issue 10, pp. 1182-1187 (2011).
- 9. Alsath, M.G.N.; Kanagasabai, Malathi; Balasubramanian, B.,, "Implementation of Slotted Meander-Line Resonators for Isolation Enhancement in Microstrip Patch Antenna Arrays", IEEE Antennas and Wireless Propagation Letters, published by IEEE. Vol. 12, Issue 1, pp. 15-18 (2012).
- 10. Alsath, M.G.N.; Kanagasabai, Malathi; Arunkumar, S., "Dual-Band Dielectric Resonator Reflectarray for C/X-Bands", IEEE Antennas and Wireless Propagation Letters, published by IEEE. Vol. 11, Issue 1, pp. 1253-1256 (2012).
- 11. S. Baisakhiya, Kanagasabai, Malathi, "Resonance Damping in Shielding Enclosure Using Partial Lining Technique", Journal of Electromagnetic Waves and Applications, published by Taylor & Francis. Vol. 26, Issue 16, pp. 2081-2089 (2012).
- Ameelia Roseline A, Kanagasabai, Malathi, "Compact Dual-Band Patch Antenna using Spiral Shaped Electromagnetic Bandgap Structures for High Speed Wireless Networks", AEU International Journal of Electronics and Communications, published by Elseiver. Vol. 66, Issue 12, pp. 963-968 (2012).
- M. G. Nabi Alsath, B. Sridhar, Kanagasabai, Malathi; R. R. Kumar, N. Karthik, and A. Henridass, "A Dual Band Frequency And Pattern Reconfigurable Dielectric Resonator Antenna", Progress in Electromagnetics Research C, published by PIER. Vol. 27, Issue 1, pp. 115-128 (2012).
- 14. Bhuvaneswari, B.; Kanagasabai, Malathi; Shrivastav, A.K., "Effect of placing mushroom electromagnetic bandgap structures at the inset feedline of microstrip patches", IET Microwaves, Antennas & Propagation, published by IET. Vol. 6, Issue 13, pp. 1487-1497 (2012).

- 15. Ameelia Roseline A., Kanagasabai, Malathi; Shrivastav A.K., "Dual-band patch antenna using spiral shaped Electromagnetic Bandgap structures for cellular applications", Microwave and Optical Technology Letters, published by Wiley. Vol. 54, Issue 2, pp. 477-482 (2012).
- 16. Natarajan, R.; Kanagasabai, Malathi; Baisakhiya, S.; Sivasamy, R.; Palaniswamy, S.; Pakkathillam, J.K.,, "A Compact Frequency Selective Surface With Stable Response for WLAN Applications", IEEE Antennas and Wireless Propagation Letters, published by IEEE. Vol. 12, Issue 1, pp. 718-720 (2013).
- 17. Pakkathillam, J.K.; Kanagasabai, Malathi; Varadhan, C.; Sakthivel, P., "A Novel Fractal Antenna for UHF Near-Field RFID Readers", IEEE Antennas and Wireless Propagation Letters, published by IEEE. Vol. 12, Issue 1, pp. 1411-1444 (2013).
- 18. Varadhan, C.; Pakkathillam, J.K.; Kanagasabai, Malathi; Sivasamy, R.; Natarajan, R.; Palaniswamy, S.K., "Triband Antenna Structures for RFID Systems Deploying Fractal Geometry", IEEE Antennas and Wireless Propagation Letters, published by IEEE. Vol. 12, Issue 1, pp. 437-440 (2013).
- 19. S. Baisakhiya, R. Sivasamy, Kanagasabai, Malathi; and S. Periaswamy,, "Novel compact UWB frequency selective surface for angular and polarization independent operation", Progress In Electromagnetics Research Letters, published by PIER. Vol. 40, Issue 1, pp. 71-79 (2013).
- 20. H Umma Habiba, Kanagasabai, Malathi; M H Masood, "Simulation of Ultra-wideband (UWB) Filters with Defected Ground Planes using ADS and Performance Analysis", The Arabian Journal for Science and Engineering, published by Springer. Vol. 38, Issue 4, pp. 937-946 (2013).
- 21. R. Sivasamy, Kanagasabai, Malathi; S. Baisakhiya, R. Natarajan, J. K. Pakkathillam, and S. K. Palaniswamy, "A novel shield for GSM 1800 MHz band using frequency selective surface", Progress In Electromagnetics Research Letters, published by PIER. Vol. 38, pp. 193-199 (2013).
- 22. Esther Florence S, Kanagasabai, Malathi; Gulam Nabi Alsath M,, "An Investigation of a Wearable Antenna using Human-body Modeling", Applied Computational Electromagnetics Society (ACES) Journal, published by ACES. Vol. 29, Issue 10, pp. 777-783 (2014).
- 23. Sundarsingh, E.F.; Velan, S.; Kanagasabai, Malathi; Sarma, A.K.; Raviteja, C.; Alsath, M.G.N.,, "Polygon-Shaped Slotted Dual-Band Antenna for Wearable Applications", IEEE Antennas and Wireless Propagation Letters, published by IEEE. Vol. 13, Issue 1, pp. 611-614 (2014).
- 24. Raviteja, C.; Varadhan, C.; Kanagasabai, Malathi; Sarma, A.K.; Velan, S, "A Fractal-Based Circularly Polarized UHF RFID Reader Antenna", IEEE Antennas and Wireless Propagation Letters, published by IEEE. Vol. 13, Issue 1, pp. 499-502 (2014).
- Arun, H.; Sarma, A.K.; Kanagasabai, Malathi; Velan, S.; Raviteja, C.; Alsath, M.G.N., "Deployment of Modified Serpentine Structure for Mutual Coupling Reduction in MIMO Antennas", IEEE Antennas and Wireless Propagation Letters, published by IEEE. Vol. 13, Issue 1, pp. 277-280 (2014).
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- 28. Sindhadevi M, Kanagasabai, Malathi; Henridass A, Shrivastav A K, "Crosstalk Reduction Using Defective Ground Plane Structures In RF Printed Circuit Boards", The Arabian Journal for Science and Engineering, published by Springer. Vol. 39, Issue 2, pp. 1107-1116 (2014).
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- 30. Alsath, M.G.N.; Kanagasabai, Malathi, "A Shared-Aperture Multiservice Antenna for Automotive Communications", IEEE Antennas and Wireless Propagation Letters, published by IEEE. Vol. 13, Issue 1, pp. 1417-1420 (2014).
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- 33. Natarajan, R.; George, J.; Kanagasabai, M.; Arunkumar, S., "A Compact Antipodal Vivaldi Antenna for UWB Applications", IEEE Antennas and Wireless Propagation Letters, published by IEEE. Vol. 14, Issue 1, pp. 1557-1560 (2015).
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- 35. Pakkathillam, J.K.; Kanagasabai, Malathi, "Circularly Polarized Broadband Antenna Deploying Fractal Slot Geometry", IEEE Antennas and Wireless Propagation Letters, published by IEEE. Vol. 14, Issue 1, pp. 1286-1289 (2015).
- 36. Indhumathi, K., Kanagasabai, Malathi; Shrivastav, A., "A Substrate Modified CPW Based Linear Microwave Phase Shifter", Waves in Random and Complex Media, published by Taylor & Francis. Vol. 25, Issue 4, pp. 457-472 (2015).
- 37. Alsath, M. G. N., Lawrance, L., Kanagasabai, Malathi; Rajendran, D., Moorthy, B., George, J.,, "Quad-Band Diversity Antenna for Automotive Environment", IEEE Antennas and Wireless Propagation Letters, published by IEEE. Vol. 14, Issue 1, pp. 875-878 (2015).
- 38. Pakkathillam, J.K.; Kanagasabai, Malathi, "Performance Evaluation of a Dual Band Paper Substrate WSN Antenna over Curvilinear Surfaces", IET Microwaves, Antennas & Propagation, published by IET. Vol. 9, Issue 8, pp. 715-722 (2015).

- 39. Velan, S.; Sundarsingh, E.; Kanagasabai, Malathi; Sharma, A.; Raviteja, C.; Sivasamy, R.; Kizhekke pakkathillam, J.,, "Dual-Band EBG Integrated Monopole Antenna Deploying Fractal Geometry for Wearable Applications", IEEE Antennas and Wireless Propagation Letters, published by IEEE. Vol. 14, Issue 1, pp. 249-252 (2015).
- 40. Vimal Samsingh, R.; Kanagasabai, Malathi; Sundarsingh, E.;, "Detection of Voids in Fibre Reinforced Plastics using Magneto-inductive Coupled Microstrip Sensor", IEEE Sensors Journal, published by IEEE. Vol. 15, Issue 8, pp. 4182-4183 (2015).
- 41. Indhumathi, K., Kanagasabai, Malathi; Shrivastav, A.,, "Triband Phase Shifter Design Using Split-Ring Resonator and Complementary Split-Ring Resonator Loaded Ground Plane for Wireless Applications", Waves in Random and Complex Media, published by Taylor & Francis. Vol. 25, Issue 4, pp. 669-681 (2015).
- 42. Sundarsingh, E.; Vimal Samsingh, R.; Kanagasabai, Malathi;, "Statistical Analysis on the Bandwidth of a Dual Frequency Textile Antenna", IET Microwaves, Antennas & Propagation, published by IET. Vol. 9, Issue 15, pp. 1683-1690 (2015).
- 43. Alsath, M.G.N.; Lawrance, L.; Kanagasabai, Malathi;, "Bandwidth Enhanced grid Array Antenna for UWB Automotive Radar Sensors", IEEE Transactions on Antennas and Propagation, published by IEEE. Vol. 63, Issue 11, pp. 5215-5219 (2015).
- 44. Rajesh, N., George, J., Kanagasabai, Malathi; Lawrance, L., Rajendran, D., Moorthy, B., Alsath, MGN;, "Modified Antipodal Vivaldi Antenna for UWB Communications", IET Microwaves, Antennas & Propagation, published by IET. Vol. 10, Issue 4, pp. 401-405 (2016).
- 45. Pakkathillam, J.K.; Kanagasabai, Malathi; Alsath, M.G.N., "A Compact Multiservice UHF RFID Reader Antenna for Near field and Farfield Operations", IEEE Antennas and Wireless Propagation Letters, published by IEEE. Vol. 16, Issue 1, pp. 490-492 (2016).
- 46. Rajendran, D.,Indhumathi, K., Kanagasabai, Malathi,, "Multi-band Phase Shifter Design Using Modified Slotline Configuration", Waves in Random and Complex Media, published by Taylor & Francis. Vol. 27, Issue 1, pp. 38-46 (2016).
- 47. M. Sindhadevi, Kanagasabai, M., Henridass Arun and A. K. Shrivastav, "Signal Integrity Analysis of High Speed Interconnects In PCB Embedded with EBG Structures", Journal of Electrical Engineering and Technology, published by KIEE. Vol. 11, Issue 1, pp. 175-183 (2016).
- 48. Sangeetha, V., Kanagasabai, M., Pakkathillam, JK., Sandeep Kumar, P., "A Compact Paper-substrate Rat-Race Coupler Deploying Modified Stepped Impedance Stub and Interdigitated Slot Resonator for Wide-Band Harmonic Suppression", IET Microwaves, Antennas & Propagation, published by IET. Vol. 10, Issue 15, pp. 1667-1672 (2016).
- 49. Alsath, M.G.N.; Kanagasabai, Malathi;, " Ultra-Wideband Grid Array Antenna for Automotive Radar Sensors", IET Microwaves, Antennas & Propagation, published by IET. Vol. 10, Issue 15, pp. 1613-1617 (2016).
- 50. Rajesh, N., Kanagasabai, M., Alsath, M. G. N.,, "Dual Mode Antipodal Vivaldi Antenna", IET Microwaves, Antennas & Propagation, published by IET. Vol. 10, Issue 15, pp. 1643-1647 (2016).

- 51. Sandeep, P., Y. Panneer Selvam., Alsath, M.G.N., Kanagasabai, Malathi, S. Kingsly, S. Subbaraj, "3D Eight-Port Ultra-Wideband (UWB) Antenna Array for Diversity Applications", IEEE Antennas and Wireless Propagation Letters, published by IEEE. Vol. 16, Issue 1, pp. 59-572 (2016).
- 52. Sangeetha, V.,Saffrine, Kingsley; Kanagasabai, Malathi;Alsath, M.G.N.; Yogeshwari, P; Sangeetha, S;, "Quad-Band Rat-Race Coupler with Suppression of Spurious Pass-Bands", IEEE Microwave and Wireless Components Letters, published by IEEE. Vol. 26, Issue 7, pp. 490-492 (2016).
- 53. Indhumathi, K., Kanagasabai, Malathi; Rajendran, D., Lawrance, L., Moorthy, B., George, J.,, "Dual-frequency Phase Shifter Deploying Complementary Split-ring Resonator", International Journal of Microwave and Wireless Technologies, published by Cambridge University Press. Vol. 8, Issue 7, pp. 1045-1050 (2016).
- 54. Sangeetha, V., Kanagasabai, Malathi, "Compact Microtrip Branch-line Coupler With Wideband Quadrature Phase Balance", Microwave and Optical Technology Letters, published by Wiley. Vol. 58, Issue 6, pp. 1369-1374 (2016).
- 55. Rajesh, N., George, J., Kanagasabai, Malathi, "Design of an X band Vivaldi Antenna with Low Radar Cross Section", IET Microwaves, Antennas & Propagation, published by IET. Vol. 10, Issue 6, pp. 651-655 (2016).
- 56. Ramprabhu, S.; Lingeshwaran, M., Kanagasabai, Malathi; Sundarsingh, E.; Alsath, M.G.N.,, "A low profile paper substrate based dual-band FSS for GSM shielding", IEEE Transactions on Electromagnetic Compatibility, published by IET. Vol. 58, Issue 2, pp. 611-614 (2016).
- 57. Sandeep Kumar, P.; Kanagasabai, Malathi;, "Palm Tree Structured Wideband Monopole Antenna", International Journal of Microwave and Wireless Technologies, published by Cambridge University Press. Vol. 8, Issue 7, pp. 1077-1084 (2016).
- 58. Sangeetha, S., Vimal R Samsingh, Sundarsingh, EF., Kanagasabai, Malathi., Yogeshwari, P., Saffrine, K., "Electromagnetic Nondestructive Material Characterization of Dielectrics using EBG based Planar Transmission Line Sensor", IEEE Sensors Journal, published by IEEE. Vol. 16, Issue 19, pp. 7081-7087 (2016).
- 59. Sivasamy, R.; Kanagasabai, Malathi;, "Novel Reconfigurable 3-D Frequency Selective Surface", IEEE Transactions on Components, Packaging and Manufacturing Technology, published by IEEE. Vol. 7, Issue 10, pp. 1678-1682 (2017).
- 60. Y. Panneer Selvam., Elumalai, L., Alsath, M.G.N., Kanagasabai, Malathi, S. Kingsly, S. Subbaraj, "A Novel Frequency and Pattern Reconfigurable Rhombic Patch Antenna with Switchable Polarization", IEEE Antennas and Wireless Propagation Letters, published by IEEE. Vol. 16, Issue 1, pp. 1639-1642 (2017).
- 61. Y. P. Selvam.; Kanagasabai, Malathi; Alsath, M.G.N.; S. Velan; S. Kingsly; S. Subbaraj; R. Srinivasan; A. Kumar Varadahan; M. Karuppiah; Y.V.Ramana Rao, "A Low Profile Frequency and Pattern Reconfigurable Antenna", IEEE Antennas and Wireless Propagation Letters, published by IEEE. Vol. 16, Issue 1, pp. 3047-3050 (2017).

- 62. Geetha, G.; Sandeep, P.; Alsath, M.G.N; Kanagasabai, Ramarao, T, "Compact and Flexible Monopole Antenna for UWB Applications Deploying Fractal Geometry", Journal of Electrical Engineering and Technology, published by KIEE. Vol. 13, Issue 1, pp. 400-405 (2017).
- 63. Sundarsingh, EF.; Kanagasabai, Malathi; Vimal R Samsingh, "Completely Integrated Multilayered Weave Electro-Textile Antenna for Wearable Applications", International Journal of Microwave and Wireless Technologies, published by Cambridge University Press. Vol. 9, Issue 10, pp. 2029-2036 (2017).
- 64. Vimal R Samsingh, Kanagasabai, Malathi, Sundarsingh, EF., "Transit Time Dependent Condition Monitoring of PCBs during Testing for Diagonistics in Electronics Industry", IEEE Transactions on Industrial Electronics, published by IEEE. Vol. 65, Issue 1, pp. 553-560 (2017).
- 65. Vimal R Samsingh, S. Subbaraj, Kanagasabai, Malathi, Sundarsingh, EF., Y. Panneer Selvam, S. Kingsly, Y.V.Ramana Rao, "Characterization of Delamination in Fiber-Reinforced Epoxy-Based PCB Laminates, Using an EBG-Enhanced Planar Microwave Sensor", IEEE Transactions on Components, Packaging and Manufacturing Technology, published by IEEE. Vol. 7, Issue 10, pp. 1739-1746 (2017).
- 66. Rajesh, N., Kanagasabai, M., Raju, S., Abhaikumar, V., Deepak Ramprasad, Alsath, M. G. N., "Design of Vivaldi Antenna with Wideband Radar Cross Section Reduction", IEEE Transactions on Antennas and Propagation, published by IEEE. Vol. 65, Issue 4, pp. 2102-2105 (2017).
- 67. Pakkathillam, J.K.; Kanagasabai, Malathi;, "A Novel UHF Near Field RFID Reader Antenna Deploying CSRR Elements", IEEE Transactions on Antennas and Propagation, published by IEEE. Vol. 65, Issue 4, pp. 2047-2050 (2017).
- 68. Vimal R Samsingh, Kanagasabai, Malathi., Sundarsingh, EF.;, "A Novel Metamaterial Enhanced Microwave Testing System for Bare PCB Substrates using Image Rendering Approach", IEEE Transactions on Components, Packaging and Manufacturing Technology, published by IEEE. Vol. 7, Issue 2, pp. 285-291 (2017).
- 69. Indhumathi, K., Kanagasabai, Malathi; Shrivastav, AK; Indiragandhi, S & Alsath, MGN,, "A Planar Microwave Phase Shifter using Microstrip-CPW-Microstrip Transition with Defected Ground Structures", International Journal of Microwave and Wireless Technologies, published by Cambridge University Press. Vol. 9, Issue 1, pp. 71-77 (2017).
- 70. Sandeep Kumar, P.; Kanagasabai, Malathi; Arunkumar, S., Alsath, M.G.N., Velan, S.; Pakkathillam, J.K.;, "Super Wideband Printed Monopole Antenna for Ultra-Wideband Applications", International Journal of Microwave and Wireless Technologies, published by Cambridge University Press. Vol. 9, Issue 1, pp. 133-141 (2017).
- 71. Ramprabhu, S.; Kanagasabai, Malathi; George, J., Lawrance, L., Moorthy, B., Rajendran, D.,, "Polarization Independent Single Layer Ultra Wideband Frequency Selective Surface", International Journal of Microwave and Wireless Technologies, published by Cambridge University Press. Vol. 9, Issue 1, pp. 93-97 (2017).
- 72. Sangeetha, V., Kanagasabai, Malathi, "A Compact Single Layer Branch-Line Coupler for Ultra-wideband (UWB) Applications", International Journal of Microwave and Wireless Technologies, published by Cambridge University Press. Vol. 9, Issue 3, pp. 505-508 (2017).

- 73. Ramprabhu, S.; Sridhar, B.;Kanagasabai, Malathi;Alsath, MGN;S. Baisakhiya, "Miniaturized band stop FSS using convoluted swastika structure", Frequenz Journal, published by De Gruyter, Germany. Vol. 71, Issue 1, pp. 51-56 (2017).
- 74. Pakkathillam, J.K.; Kanagasabai, Malathi, "A Circularly Polarized Multiservice RFID Antenna", IET Microwaves, Antennas & Propagation, published by IET. Vol. 11, Issue 2, pp. 232-239 (2017).
- 75. M. Sindhadevi, Kanagasabai, M., Henridass Arun and A. K. Shrivastav;, "Signal Integrity performance analysis of mutual coupling Reduction techniques using DGS in High speed Printed Circuit Boards", Wireless Personal Communications, published by Springer. Vol. 94, Issue 4, pp. 3233-3249 (2017).
- 76. saffrine,Sangeetha.V,Malathi Kanagasabai,Sangeetha.S,Yogeshwari.P,Bhuvaneshwari, "Signal integrity analysis on a microstrip ultra -wideband coupled -line coupler", International journal of Electronics, published by Taylor and Francis. (2018).
- 77. Malathi Kanagasabai,Gulam Nabi Alsath,A.K.Shrivastav,Sangeetha.s,Yogeshwari.P,Ramprabhu,Ramana Rao.Y.V, "Compact frequency and bandwidth tunable bandpass-bandstop microstrip filer ", IEEE Microwave and Wireless component letters, published by IEEE. Vol. 28, Issue 9, pp. 786-788 (2018).
- 78. Saffrine,Malathi Kanagasabai,Gulam Nabi Alsath,A.K.Shrivastav,Sangeetha.s,Yogeshwari.P,Ramprabhu,Ramana Rao.Y.V, "Compact frequency and bandwidth tunable bandpass-bandstop microstrip filer ", IEEE Microwave and Wireless component letters, published by IEEE. Vol. 28, Issue 9, pp. 786-788 (2018).
- 79. S. Kingsly; T. Deepa; Kanagasabai, Malathi; Alsath, M.G.N; S. Palaniaswamy; T. Rama Rao; S. Padma, "Multiband Reconfigurable Filtering Monopole Antenna for Cognitive Radio Applications", IEEE Antennas and Wireless Propagation Letters, published by IEEE. Vol. 18, Issue 1, pp. 1416-1420 (2018).
- 80. S. Kingsly; Kanagasabai, Malathi; Alsath, M.G.N; Y. P. Selvam; S. Subbaraj; N. Rajesh, "Multi-band Reconfigurable Microwave Filter using Dual Concentric Resonators", International Journal of RF and Microwave Computer Aided Engineering, published by Wiley. Issue 1, pp. 1-1 (2018).
- 81. S. Subbaraj; Kanagasabai, Malathi; Alsath, M.G.N.; G. Ganesan; Y. Panneer Selvam.; S. Kingsly;, "Compact Multiservice Monopole Antenna for Tablet Devices", International Journal of Electronics, published by Taylor and Francis. Vol. 108, Issue 8, pp. 1374-1387 (2018).
- 82. Y. P. Selvam.; Alsath, M.G.N.; Kanagasabai, Malathi; L. Elumalai; S. K. Palaniswamy; S. Subbaraj; S. Kingsly; G. Konganathan; I. Kulandhaisamy, "A Patch-Slot Antenna Array with Compound Reconfiguration", IEEE Antennas and Wireless Propagation Letters, published by IEEE. Vol. 17, Issue 3, pp. 525-528 (2018).
- 83. S. Subbaraj; Kanagasabai, Malathi; Alsath, M.G.N.; Y. Panneer Selvam.; S. Kingsly; Y.V.Ramana Rao, "Miniaturized Quad-Band Coplanar-Fed Monopole Antenna for Tablet Computers", COMPEL International Journal for Computation and Mathematics in Electrical and Electronic Engineering, published by Emerald. Vol. 37, Issue 3, pp. 1118-1130 (2018).

- 84. Alsath, M.G.N.; Arun, H.; Y. P. Selvam.; Kanagasabai, Malathi; S. Kingsly; S. Subbaraj; Sivasamy, R.; S. K. Palaniswamy; Rajesh, N., "An Integrated Tri-band/UWB Polarization Diversity Antenna for Vehicular Networks", IEEE Transactions on Vehicular Technology, published by IEEE. Vol. 67, Issue 7, pp. 5613-5620 (2018).
- 85. Sivasamy, R.; Balaji, M.; Kanagasabai, Malathi; Vimal R Samsingh; Alsath, M.G.N, "A Wide Band Frequency Tunable FSS for Electromagnetic Shielding Applications", IEEE Transactions on Electromagnetic Compatibility, published by IEEE. Vol. 60, Issue 1, pp. 280-283 (2018).
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### Papers Presented in Programmes

Research Papers Presented in International Programmes : 42
Research Papers Presented in National Programmes : 1

- 1. Henridass, A, Sindhadevi, M, Karthik, N, Gulam Nabi Alsath, M, Rajesh Kumar, R & Malathi, K, "Broadband Crosstalk Analysis and Reduction Using Defective Ground Plane Structures in Printed Circuit Boards'" presented in a International level conference on International Conference on Computing, Communication and applications (ICCCA), 2012,, India.
- 2. Henridass, A, Sindhadevi, M, Karthik, N, Gulam Nabi Alsath, M, Rajesh Kumar, R & Malathi, K, "Crosstalk Analysis and Reduction Using Defective Ground Plane Structures in Printed Circuit Boards'" presented in a International level conference on International Conference on Science, Engineering and Technology SET 2011, , India.
- 3. Henridass, A, Sindhadevi, M, Karthik, N, Gulam Nabi Alsath, M, Rajesh Kumar, R & Malathi, , "Electromagnetic bandgap structures for crosstalk reduction in printed circuit boards'" presented in a International level conference on Communication Networks and Sensor Technology-NCCNS'12, India.
- 4. Archana Priyadarshini, D, Malathi, K, Sindhadevi, M, Razmah, M & Antony Peeris, A, "Parametric Study And Analysis Of Crosstalk In Coupled Microstrip Lines For High Speed Interconnects'" presented in a International level conference on National Conference on Communication and Informatics, India.
- 5. Archana Priyadarshini, D, Malathi, K, Sindhadevi, M, Razmah, M & Antony Peeris, A, "Crosstalk minimization in microstrip lines using EBG structures'" presented in a International level conference on International Conference on System-on-chip (ICSoC).
- 6. Indhumathi K, Malathi K, Rhaghuram P R, Sathish Babu S, "Analysis of Radiation Characteristics of Electromagnetic BandGap (EBG) Structures over Patch Antenna" presented in a International level conference on International Conference on System-on-chip (ICSoC), India.
- 7. Sathish Babu S, Malathi K, Rhaghuram P R, Indhumathi K, ""Broadband Dual Frequency Planar Antenna" " presented in a International level conference on International Conference on System-on-chip (ICSoC), India.

- 8. Rhaghuram P R, Malathi K, Sathish Babu S, ""Parameterization and Determination of Crosstalk for High Speed Interconnects in Mobile Devices" presented in a International level conference on International Conference on VLSI and Communication, India.
- 9. Archana Priyadarshini, D, Malathi, K, Sindhadevi, M, Razmah, M & Antony Peeris, A & Venkattappan, , on International Conference on VLSI and Communication,, India .
- 10. Esther Florence S, Bhuvaneswari B, Amrutha Harichandran, Alex Marin, Richards Joe S, Malathi K, "Dual band, Dual Polarized Microstrip Array Antenna with Parasitic Patch" presented in a International level conference on Proceedings of the RTCSP, India.
- 11. 40. Sandeep Kumar Palaniswamy, Malathi Kanagasabai, Jayaram Kizhekke Pakkathillam & Sangeetha Velan, "Compact Ultra-Wideband Monopole Antenna notched at 5.2 GHz WLAN" presented in a International level conference on International Conference on Electrical Electronics & Communication (ICEEC 2016), India.
- 12. Sangeetha Velan, Malathi Kanagasabai, Jayaram Kizhekke Pakkathillam & Sandeep Kumar Palaniswamy, "Compact Microstrip Branch-Line Coupler with Harmonic Suppression'" presented in a International level conference on International Conference on Electrical Electronics & Communication (ICEEC 2016), Karaikudi, India.
- 13. "Dual band slot antenna for near field rfid reader application" presented in a International level conference on International Conference on Electrical Electronics & Communication (ICEEC 2016), , India .
- 14. Sandeep Kumar Palaniswamy, Malathi Kanagasabai, Jayaram Kizhekke Pakkathillam & Sangeetha Velan, "Compact Ultra-Wideband Monopole Antenna notched at 5.2 GHz WLAN" presented in a International level conference on International Conference on Electrical Electronics & Communication (ICEEC 2016), India.
- 15. "'Compact Microstrip Branch-Line Coupler with Harmonic Suppression', " presented in a International level conference on International Conference on Electrical Electronics & Communication (ICEEC 2016), .
- 16. "Dual band slot antenna for near field rfid reader application" presented in a International level conference on International Conference on Electrical Electronics & Communication (ICEEC 2016),, India.
- 17. Dinesh Babu Rajendran, Indhumathi Kulandhaisamy, Malathi Kanagasabai, Balaji M, Jithila V George, Livya Lawrance, ""COMPACT PHASE SHIFTER DEPLOYING COMPLEMENTARY SPLIT RING RESONATOR" presented in a International level conference on National Conference on Digital Convergence conducted (NCDC), India.
- 18. ""Phase shifters with defective ground for Beam Steering Applications," " presented in a International level conference on Proc. Fourth Nation conf. on Information and Communication Engineering (NCICE-2014), , India .
- 19. ""A Compact Wearable monopole Antenna for Wearable applications,"" presented in a International level conference on Proc. Fourth Nation conf. on Information and Communication Engineering(NCICE-2014),, India.

- 20. A. K. Sarma, H. Arun, M. Kanagasabai, Sangeetha Velan, C. Raviteja,, "Polarization diverse MIMO Antenna with Enhanced Isolation," presented in a International level conference on Nation conf. on Information and Communication Engineering(NCICE-2014), , India.
- 21. "Polarization diverse MIMO Antenna with Enhanced Isolation,"" presented in a International level conference on Proc.Fourth Nation conf. on Information and Communication Engineering(NCICE-2014),, India.
- 22. 27. Henridass A, Sindhadevi M, Karthik N, Alsath, MGN, Rajesh Kumar R, Malathi K, , ""Electromagnetic Bandgap Structures for Crosstalk Reduction in Printed Circuit Boards", " presented in a International level conference on National Conference on Communication Networks and Sensor Technology,, India .
- 23. Karthik N, Bhuvaneshwari B, Henridass A, Malathi K, Rajesh Kumar R, Alsath, "Gain Improvement of Slot Antenna using Superrstrates" presented in a International level conference on National Conference on Communication Networks and Sensor Technology, , India .
- 24. Rajesh Kumar R, Malathi K, Alsath, MGN, Karthik N, Henridass A, , ""Numerical Analysis of Dielectric Resonator Antenna using Finite Difference Time Domain Method" presented in a International level conference on National Conference on Communication Networks and Sensor Technology, India .
- 25. Alsath, MGN, Esther Florence S, Malathi K,, "A Variable Length Microstrip Line Patch Reflectarray for C Band Applications"," presented in a National level conference on National Conference on Communication Networks and Sensor Technology,, India.
- 26. Henridass.A, Sindhadevi.M, Karthik.N, Alsath, MGN, Kumar.R.R, Malathi.K, ""Defective Ground Plane Structure for Broadband Crosstalk Reduction in PCBs"" presented in a International level conference on International Conference on Computing, Communication and Applications, , India .
- 27. Henridass.A, Sindhadevi.M, Karthik.N, Alsath, MGN, Kumar.R.R, Malathi.K, , ""Defective Ground Plane Structure for Broadband Crosstalk Reduction in PCBs"," presented in a International level conference on International Conference on Computing, Communication and Applications, India .
- 28. Henridass.A, Sindhadevi.M, Karthik.N, Alsath, MGN, Kumar.R.R, Malathi.K, , "Defective Ground Plane Structure for Broadband Crosstalk Reduction in PCBs" presented in a International level conference on International Conference on Computing, Communication and Applications,, India .
- 29. Rajesh Kumar.R, Alsath, MGN, Karthik.N, Henridass.A, K.Malathi, , "Analysis of Broadband Microstrip Patch Antenna using 3D FDTD" presented in a International level conference on International Conference on Science, Engineering and Technology SET 2011, India .
- 30. Karthik.N, Bhuvaneshwari.B, Rajesh Kumar.R, Alsath, MGN, Henridass.A, K.Malathi, "Study of Beam forming Algorithms for Smart Antennas"," presented in a International level conference on International Conference on Science, Engineering and Technology SET 2011, India.

- 31. Henridass.A, Sindhadevi.M, Karthik.N, Alsath, MGN, Rajesh Kumar.R, K.Malathi, , "Crosstalk Analysis and Reduction Using Defective Ground Plane Structures in Printed Circuit Boards" presented in a International level conference on International Conference on Science, Engineering and Technology SET 2011, , India .
- 32. 12. Archana Priyadarshini, D, Malathi, K, Sindhadevi, M, Razmah, M & Antony Peeris, A & Venkattappan, , "'Jitter Estimation in Meander Delay lines based on Near End Crosstalk'" presented in a International level conference on International Conference on VLSI and Communication, India from 21-Dec-2009 to 23-Dec-2009.
- 33. Sindhadevi, M & Malathi, K, "'Reduction of transients in PCB traces'" presented in a International level conference on International Conference (ICSSC 2009), , India from 13-Mar-2010 to 13-Mar-2010.
- 34. Archana Priyadarshini, D, Malathi, K, Sindhadevi, M, Razmah, M & Antony Peeris, A, "Design of Meander delay lines and near end crosstalk analysis (NEXT) in High Speed Printed Circuit Boards" presented in a International level conference on International Conference (ICSSC 2009), India from 13-Mar-2010 to 13-Mar-2010.
- 35. Amrutha Harichandran, A. Ameelia Roseline, Esther Florence S, Richards Joe S, Alex Marin, Malathi K, ""Compact Dual Layer Micro-strip Patch Antenna for Triple Frequency Applications" presented in a International level conference on Proceedings of the RTCSP, India from 01-Mar-2011 to 02-Mar-2011.
- 36. Esther Florence S, Bhuvaneswari B, Amrutha Harichandran, Alex Marin, Richards Joe S, Malathi K, "Dual band, Dual Slant Polarized Microstrip Array Antenna" presented in a International level conference on Proceedings of NCCI, India from 10-Mar-2011 to 11-Mar-2011.
- 37. Jithila V George, Rajesh Natarajan, Malathi Kanagasabai, Balaji M, Dinesh Babu Rajendran, Livya Lawrance, "ANTIPODAL VIVALDI ANTENNA WITH LOW CROSS POLARIZATION FOR UWB APPLICATIONS" presented in a International level conference on National Conference on Digital Convergence conducted (NCDC), Chennai from 23-Mar-2015 to 23-Mar-2015.
- 38. Jithila V George, Rajesh Natarajan, Malathi Kanagasabai, Balaji M, Dinesh Babu Rajendran, Livya Lawrance, "ANTIPODAL VIVALDI ANTENNA WITH LOW CROSS POLARIZATION FOR UWB APPLICATIONS" presented in a International level conference on National Conference on Digital Convergence conducted (NCDC), , India from 23-Mar-2015 to 23-Mar-2015.
- 39. ""COMPACT ULTRA-WIDEBAND ANGULAR AND POLARIZATION INDEPENDENT FREQUENCY SELECTIVE SURFACE" presented in a International level conference on National Conference on Digital Convergence conducted (NCDC),, India from 23-Mar-2015 to 23-Mar-2015.
- 40. Sindhadevi, M, Malathi, K, "Crosstalk reduction in High speed PCBs by the deployment of CSRR structures", " presented in a International level conference on Proceedings of the RTCSP, India from 31-Mar-2016 to 01-Apr-2016.

- 41. Yogeshwari Paneer Selvam, M. Gulam Nabi Alsath, Malathi Kanagasabai, "Compact Frequency Reconfigurable Antenna" International Conference on Electrical Electronics & Communication ICEEC 2016" presented in a International level conference on International Conference on Electrical Electronics & Communication ICEEC 2016 from 31-Mar-2016 to 31-Mar-2016.
- 42. Saffrine Kingsly, Sangeetha Velan, Malathi Kanagasabai, "Compact Planar Multi-Band Coupled-Line Directional Coupler" presented in a International level conference on International Conference on Electrical Electronics & Communication ICEEC 2016, India from 31-Mar-2016 to 31-Mar-2016.
- 43. Sangeetha Subbaraj, Vimal R. Samsingh, Malathi Kanagasabai, "Measurement of Dielectric Constant Using SRR and CSRR"" presented in a International level conference on International Conference on Electrical Electronics & Communication ICEEC 2016, India from 31-Mar-2016 to 31-Mar-2016.

#### **Books Published**

1. "ELECTROMAGNETIC FIELDS AND WAVES" authored by A.BASKARAN AND K.MALATHI and published by SCITEXT, INDIA.(2013)

### **Programme Chaired**

- 1. National level workshop titled "HFSS WORKSHOP" conducted by COLLEGE OF ENGINEERING GUINDY, ANNA UNIVERSITY, CHENNAI.
- 2. Chairman, International level conference titled "Proceedings of the RTCSP".
- 3. International level workshop titled "INTERNATIONAL WORKSHOP ON RECENT ADVANCES IN ANTENNA DESIGN" conducted by COLLEGE OF ENGINEERING GUINDY, ANNA UNIVERSITY, CHENNAI from 18-Feb-2013.
- National level workshop titled "ANTENNA THEORY AND DESIGN USING FEKO" conducted by COLLEGE OF ENGINEERING GUINDY, ANNA UNIVERSITY, CHENNAI from 15-Mar-2013 to 16-Mar-2013.

# Programme Organized

1. CO COORDINATOR, National level conference on "NATIONAL CONFERENCE ON SIGNALS SYSTEMS AND COMMUNICATIONS".

#### Patents Filed

- 1. Filed patent rights for Dual Band Notched Dielectric Resonator Reflectarrain India. File number: 1374 Filed Date: 04-Apr-2012.
- 2. Filed patent rights for MUTUAL COUPLING REDUCTION IN MIMO ANTENNA USING SEIN India. File number: 2660 Filed Date: 13-Jun-2014.

- 3. Filed patent rights for SHARED APERTURE MULTI-SERVICE DESIGN FOR AUTOMOTIVin India. File number: 6413 Filed Date: 09-Jan-2015.
- 4. Filed patent rights for METHOD AND APPARATUS FOR NON-DESTRUCTIVE TESTING Oin India. File number: 5338 Filed Date: 23-Oct-2015.
- 5. Filed patent rights for UHF RFID READER ANTENNA INTEGRATED WITH FAR-FIELD in India. File number: 5336 Filed Date: 30-Oct-2015.
- 6. Filed patent rights for A DEVICE AND METHOD TO FABRICATE ULTRA-WIDEBAND Mlin India, File number: 5337 Filed Date: 30-Oct-2015.
- 7. Filed patent rights for A METHOD AND DEVICE FOR A PASSIVE RECONFIGURABLE Fin India. File number: 5621 Filed Date: 06-Nov-2015.
- 8. Filed patent rights for NOVEL FULLY INTEGRATED MULTI-LAYER WOVEN ELECTRO-Tin India. File number: 5620 Filed Date: 06-Nov-2015.
- 9. Filed patent rights for PLANAR QUAD BAND RAT RACE COUPLER WITH SPURIOUS PAin India. File number: 2147483647 Filed Date: 30-Sep-2016.
- 10. Filed patent rights for A MAGNETIC COUPLING UHF NEAR FIELD RFID READER ANTIN India. File number: 2147483647 Filed Date: 30-Sep-2016.
- 11. Filed patent rights for ELECTROMAGNETIC NONDESTRUCTIVE MATERIAL CHARACTERIIN India. File number: 2147483647 Filed Date: 30-Sep-2016.
- 12. Filed patent rights for POLARIZATION INDEPENDENT RECONFIGURABLE 3-D FREQUEIN India. File number: 2147483647 Filed Date: 30-Sep-2016.
- 13. Filed patent rights for A Multiservice Chipless RFID Transponderin India. File number: 2147483647 Filed Date: 30-Sep-2016.
- 14. Filed patent rights for INTEGRATED VIVALDI ANTENNA WITH SWITCHABLE RADIATIIN India. File number: 2147483647 Filed Date: 24-Mar-2017.
- 15. Filed patent rights for RHOMBIC COMPOUND RECONFIGURABLE ANTENNAin India. File number: 2147483647 Filed Date: 24-Mar-2017.
- 16. Filed patent rights for DUAL MODE POLARIZATION DIVERSE ANTENNA ARRAYin India. File number: 2147483647 Filed Date: 31-Mar-2017.
- 17. Filed patent rights for PLANAR MICROWAVE SENSOR FOR FRACTURE DETECTION IN in India. File number: 2147483647 Filed Date: 25-Aug-2017.
- 18. Filed patent rights for COMPOUND RECONFIGURABLE ANTENNA ARRAYin India. File number: 2147483647 Filed Date: 25-Aug-2017.
- 19. Filed patent rights for A METHOD TO ACHIEVE COMPOUND RECONFIGURATION IN Mlin India. File number: 2147483647 Filed Date: 01-Sep-2017.

- 20. Filed patent rights for A DESIGN TO ACHIEVE MULTIBAND OPERATION IN MINIATUIN India. File number: 2147483647 Filed Date: 08-Sep-2017.
- 21. Filed patent rights for MULTIBAND MIMO ANTENNA FOR TABLET APPLICATIONS in India. File number: 2147483647 Filed Date: 11-Jan-2018.
- 22. Filed patent rights for Multiband Reconfigurable Microwave Filtennain US. File number: 0 Filed Date: 02-Mar-2018.
- 23. Filed patent rights for TUNABLE BAND NOTCHED FILTENNAin India. File number: 2147483647 Filed Date: 15-Jun-2018.

#### Invited Lectures

- 1. Delivered a Lecture on "Transmission lines" in Conference organized by Valliammai engineering college.
- 2. Delivered a Lecture on "Fundamentals of Antennas" in FDTP organized by Easwari Engineering college, Chennai.
- 3. Delivered a Lecture on "Advances in antenna design" in National conference organized by Annamalai university, Chidambaram.
- 4. Delivered a Lecture on "Transmission lines" in Fdp organized by ACTECH Karaikudi.
- 5. Delivered a Lecture on "Electromagnetics" in FDTP organized by Alagappa Chettiar College of Engineering and Techn, Karaikudi.
- 6. Delivered a Lecture on "Antennas\_Next generation design" in 2015 organized by IET inaugural lecture, Chennai.
- 7. Delivered a Lecture on "Transmission lines and Waveguides in FDTP " in FDTP organized by RMK COLLEGE of Engineering and Technology-2016, Chennai.
- 8. Delivered a Lecture on "Dielectric Resonator Reflectarray Antenna" in Frontiers in Antenna Engineering organized by Hanoi University of Science and Engineering, Vietnam (26-Dec-2012).
- 9. Delivered a Lecture on "Fundamentals of antennas and introduction to next generation design " in FDTP organized by Panimalar Engineering College- (2016), Chennai (12-May-2016).
- 10. Delivered a Lecture on "Technical paper writing" in IET TECH DAIS LECTURE organized by College of engineering ,Pune, Pune (27-Jul-2018).