## Dr.M.GULAM NABI ALSATH

## **PUBLICATIONS (2015-2020)**

- 1. J. K. Pakkathillam, M. Kanagasabai and M. G. N. Alsath, "Compact Multiservice UHF RFID Reader Antenna for Near-Field and Far-Field Operations," in *IEEE Antennas and Wireless Propagation Letters*, vol. 16, pp. 149-152,2017.doi: 10.1109/LAWP.2016.2561960
- 2. R. Sivasamy, B. Moorthy, M. Kanagasabai, V. R. Samsingh and M. G. N. Alsath, "A Wideband Frequency Tunable FSS for Electromagnetic Shielding Applications," in *IEEE Transactions on Electromagnetic Compatibility*, vol. 60, no. 1, pp. 280-283, Feb. 2018. doi: 10.1109/TEMC.2017.2702572
- 3. **M. G. N. Alsath**, L. Lawrance and M. Kanagasabai, "Bandwidth-Enhanced Grid Array Antenna for UWB Automotive Radar Sensors," in *IEEE Transactions on Antennas and Propagation*, vol. 63, no. 11, pp. 5215-5219, Nov. 2015. doi: 10.1109/TAP.2015.2478143
- K. Pushjpalatha, S. Rajalakshmi, P. Balaji, G. N. Alsath Mohammed and S. N. R. M., "Design of Combined UWB and MIMO UWB Antenna for Mobile Terminals," 2018 Fourth International Conference on Advances in Electrical, Electronics, Information, Communication and Bio-Informatics (AEEICB), Chennai, 2018, pp. 1-5. doi: 10.1109/AEEICB.2018.8480973
- 5. **M. Gulam Nabi Alsath** and M. Kanagasabai, "Ultra-wideband grid array antenna for automotive radar sensors," in *IET Microwaves, Antennas & Propagation*, vol. 10, no. 15, pp. 1613-1617, 10 12 2016. doi: 10.1049/ietmap.2015.0730
- 6. N. Vimalesh and **G. Nabi Alsath**, "Design and Implementation of an Interactive Road Safety System for Young Bikers," 2018 Fourth International Conference on Advances in Electrical, Electronics, Information, Communication and Bio-Informatics (AEEICB), Chennai, 2018, pp. 1-4. doi: 10.1109/AEEICB.2018.8480944

- 7. N. Rajesh, K. Malathi, S. Raju, V. Abhai Kumar, S. Deepak Ram Prasath and M. G. N. Alsath, "Design of Vivaldi Antenna With Wideband Radar Cross Section Reduction," in *IEEE Transactions on Antennas and Propagation*, vol. 65, no. 4, pp. 2102-2105, April 2017. doi: 10.1109/TAP.2017.2670566
- 8. R. Natarajan, M. Kanagasabai and **M. Gulam Nabi Alsath**, "Dual mode antipodal Vivaldi antenna," in *IET Microwaves, Antennas & Propagation*, vol. 10, no. 15, pp. 1643-1647, 10 12 2016. doi: 10.1049/iet-map.2015.0840
- 9. **M. G. N. Alsath** and M. Kanagasabai, "Compact UWB Monopole Antenna for Automotive Communications," in *IEEE Transactions on Antennas and Propagation*, vol. 63, no. 9, pp. 4204-4208, Sept. 2015. doi: 10.1109/TAP.2015.2447006
- 10.R. Sivasamy, L. Murugasamy, M. Kanagasabai, E. F. Sundarsingh and M. Gulam Nabi Alsath, "A Low-Profile Paper Substrate-Based Dual-Band FSS for GSM Shielding," in *IEEE Transactions on Electromagnetic Compatibility*, vol. 58, no. 2, pp. 611-614, April 2016. doi: 10.1109/TEMC.2015.2498398
- 11.S. Sreelekha, D. Navya, P. Balaji, **G. N. A. Mohammed**, K. Savarimuthu and R. Natesan, "Design of Ultra-Wideband Antenna Array for Mobile Terminals," *2019 Fifth International Conference on Science Technology Engineering and Mathematics (ICONSTEM)*, Chennai, India, 2019, pp. 497-500. doi: 10.1109/ICONSTEM.2019.8918701
- 12.S. Venkatraman, **M. G. N. Alsath** *et al.*, "High Gain Reflectarray Antenna for Satellite Applications," 2019 Fifth International Conference on Science Technology Engineering and Mathematics (ICONSTEM), Chennai, India, 2019, pp. 1-4. doi: 10.1109/ICONSTEM.2019.8918915
- 13.Y. P. Selvam, L. Elumalai, **M. G. N. Alsath**, M. Kanagasabai, S. Subbaraj and S. Kingsly, "Novel Frequency- and Pattern-Reconfigurable Rhombic Patch Antenna With Switchable Polarization," in *IEEE Antennas and Wireless Propagation Letters*, vol. 16, pp. 1639-1642, 2017. doi: 10.1109/LAWP.2017.2660069

- 14.S. Velan, S. Kingsly, M. Kanagasabai, M. G. N. Alsath, Y. Panneer Selvam and S. Subbaraj, "Quad-Band Rat-Race Coupler With Suppression of Spurious Pass-Bands," in *IEEE Microwave and Wireless Components Letters*, vol. 26, no. 7, pp. 490-492, July 2016. doi: 10.1109/LMWC.2016.2575017
- 15.Y. Tusharika, S. Sreelekha, P. Balaji, G. N. A. Mohammed, K. Savarimuthu and M. A. Sarathkumaran, "Dual-Band Complementary Slot Fed Antenna for RFID Applications," 2019 Fifth International Conference on Science Technology Engineering and Mathematics (ICONSTEM), Chennai, India, 2019, pp. 493-496. doi: 10.1109/ICONSTEM.2019.8918791
- 16.A. K. Sarma, H. Arun, M. Kanagasabai, S. Velan, C. Raviteja and **M. G. N. Alsath**, "Polarisation diverse multiple input—multiple output antenna with enhanced isolation," in *IET Microwaves, Antennas & Propagation*, vol. 9, no. 12, pp. 1267-1273, 17 9 2015. doi: 10.1049/iet-map.2015.0040
- 17.S. Kingsly, **M. G. N. Alsath** *et al.*, "Compact Frequency and Bandwidth Tunable Bandpass–Bandstop Microstrip Filter," in *IEEE Microwave and Wireless Components Letters*, vol. 28, no. 9, pp. 786-788, Sept. 2018. doi: 10.1109/LMWC.2018.2858005
- 18.**M. G. N. Alsath**, L. Lawrance, M. Kanagasabai, D. B. Rajendran, B. Moorthy and J. V. George, "Quad-Band Diversity Antenna for Automotive Environment," in *IEEE Antennas and Wireless Propagation Letters*, vol. 14, pp. 875-878, 2015. doi: 10.1109/LAWP.2014.2382974
- 19.R. Natarajan, **M. G. N. Alsath** *et al.*, "Modified antipodal Vivaldi antenna for ultra-wideband communications," in *IET Microwaves, Antennas* & *Propagation*, vol. 10, no. 4, pp. 401-405, 19 3 2016. doi: 10.1049/ietmap.2015.0089
- 20.S. Kingsly, **M. G. N. Alsath** *et al.*, "Multiband Reconfigurable Filtering Monopole Antenna for Cognitive Radio Applications," in *IEEE Antennas and Wireless Propagation Letters*, vol. 17, no. 8, pp. 1416-1420, Aug. 2018. doi: 10.1109/LAWP.2018.2848702

- 21.Y. P. Selvam, **M. G. N. Alsath** *et al.*, "A Low-Profile Frequency- and Pattern-Reconfigurable Antenna," in *IEEE Antennas and Wireless Propagation Letters*, vol. 16, pp. 3047-3050, 2017. doi: 10.1109/LAWP.2017.2759960
- 22.S. Subbaraj, **M. G. N. Alsath** *et al.*, "A Compact Frequency-Reconfigurable Antenna With Independent Tuning for Hand-Held Wireless Devices," in *IEEE Transactions on Antennas and Propagation*, vol. 68, no. 2, pp. 1151-1154, Feb. 2020. doi: 10.1109/TAP.2019.2938668
- 23.S. Subbaraj, **M. G. N. Alsath** *et al.*, "Performance enhancement and signal integrity analysis of multiband MIMO antenna for handheld electronic devices," in *IET Microwaves, Antennas & Propagation*, vol. 13, no. 5, pp. 631-641, 17 4 2019. doi: 10.1049/iet-map.2018.5562
- 24.S. K. Palaniswamy, Y. P. Selvam, **M. G. N. Alsath**, M. Kanagasabai, S. Kingsly and S. Subbaraj, "3-D Eight-Port Ultrawideband Antenna Array for Diversity Applications," in *IEEE Antennas and Wireless Propagation Letters*, vol. 16, pp. 569-572, 2017. doi: 10.1109/LAWP.2016.2590144
- 25.N. Ganeshwaran, J. K. Jeyaprakash, **M. G. N. Alsath** and V. Sathyanarayanan, "Design of a Dual-Band Circular Implantable Antenna for Biomedical Applications," in *IEEE Antennas and Wireless Propagation Letters*, vol. 19, no. 1, pp. 119-123, Jan. 2020. doi: 10.1109/LAWP.2019.2955140
- 26.**M. G. N. Alsath** *et al.*, "An Integrated Tri-Band/UWB Polarization Diversity Antenna for Vehicular Networks," in *IEEE Transactions on Vehicular Technology*, vol. 67, no. 7, pp. 5613-5620, July 2018. doi: 10.1109/TVT.2018.2806743
- 27. Panneer Selvam, Y., **Alsath, M**., Kanagasabai, M., Elumalai, L., Palaniswamy, S., Subbaraj, S., Kingsly, S., Konganathan, G. and Kulandhaisamy, I. "A Patch-Slot Antenna Array With Compound Reconfiguration," in *IEEE Antennas and Wireless Propagation Letters*, vol. 17, no. 3, pp. 525-528, March 2018. doi: 10.1109/LAWP.2018.2801124

- 28.S. Kingsly, **M. G. N. Alsath** *et al.*, "Tunable Band-Notched High Selective UWB Filtering Monopole Antenna," in *IEEE Transactions on Antennas and Propagation*, vol. 67, no. 8, pp. 5658-5661, Aug. 2019. doi: 10.1109/TAP.2019.2920997
- 29.P. Sambandam, M. Kanagasabai, R. Natarajan, **M. G. N. Alsath** and S. Palaniswamy, "Miniaturized Button-Like WBAN Antenna for Off-Body Communication," in *IEEE Transactions on Antennas and Propagation*, vol. 68, no. 7, pp. 5228-5235, July 2020.
- 30. Sambandam, P., Kanagasabai, M., Ramadoss, S., Natarajan, R., **Alsath, M**., Shanmuganathan, S., Sindhadevi, M. and Palaniswamy, S, "Compact Monopole Antenna Backed With Fork-Slotted EBG for Wearable Applications," in *IEEE Antennas and Wireless Propagation Letters*, vol. 19, no. 2, pp. 228-232, Feb. 2020. doi: 10.1109/LAWP.2019.2955706
- 31. **Mohammed, GNA**, Savarimuthu, K, Erattaiselvam, V, Rapuru, S, Yarasi, T, Dommalapati, N. A compact tri-band microwave resonator for ethanol gas detection. *Int J RF Microw Comput Aided Eng.* 2019; 29:e21895. <a href="https://doi.org/10.1002/mmce.21895">https://doi.org/10.1002/mmce.21895</a>
- R, Gulam Nabi Alsath, M, Kanagasabai, 32. Natarajan, M, Bilvam, S, Meiyalagan, S. Integrated Vivaldi antenna for UWB/diversity applications vehicular environment. Int JRFAided in *Microw* Comput Eng. 2020; 30:e21989. https://doi.org/10.1002/mmce.21989
- 33.Potti, D, **Mohammed, GNA**, Savarimuthu, K, Narendhiran, S, Rajamanickam, G. An ultra-wideband rectenna using optically transparent Vivaldi antenna for radio frequency energy harvesting. *IntJRF Microw Comput Aided Eng.* 2020. https://doi.org/10.1002/mmce.22362
- 34.Narayanasamy, K, **Mohammed, GNA**, Savarimuthu, K, Sivasamy, R, Kanagasabai, M. A comprehensive analysis on the state-of-the-art developments in reflectarray, transmitarray, and transmit-reflectarray

- antennas. *IntJRFMicrowComputAidedEng*. 2020; 30:e22272. <a href="https://doi.org/">https://doi.org/</a> 10.1002/mmce.22272
- 35. Veeraselvam, A, **Mohammed, GNA**, Savarimuthu, K, Marimuthu, M, Balasubramanian, B. Polarization diversity enabled flexible directional UWB monopole antenna for WBAN communications. *Int J RF Microw Comput Aided Eng.* 2020; 30:e22311. <a href="https://doi.org/10.1002/mmce.22311">https://doi.org/10.1002/mmce.22311</a>
- 36.Potti, DS, Balaji, P, **Gulam Nabi Alsath**, M, Savarimuthu, K, Selvam, U, Valavan, N. Reconfigurable bow tie-based filtering antenna for cognitive radio applications. *Int J RF Microw Comput Aided Eng.* 2020; 30:e22208. <a href="https://doi.org/10.1002/mmce.22208">https://doi.org/10.1002/mmce.22208</a>
- 37. Sambandam, P, Kanagasabai, M, **Mohammed, GNA**, et al. Low profile pattern switchable multiband antenna for on/off body communication. *Int J RFMicrowComputAidedEng*. 2020; 30:e22448.
- 38.Kingsly, S., Kanagasabai, M., **Mohammed, G.**, Thirunavukkarasu, M., Subbaraj, S., Palaniswamy, S., Bilvam, S. and Kulandhaisamy, I. Bandwidth reconfigurable microwave filter using stepped impedance c-shaped resonator. *MicrowOptTechnolLett*. 2020; 1–5. https://doi.org/10.1002/mop.3 2616
- 39. Kingsly, S, Kanagasabai, M, **Mohammed, GNA**, Subbaraj, S, Panneer Selvam, Y, Natarajan, R. Multi-band reconfigurable microwave filter using dual concentric resonators. *Int J RF Microw Comput Aided Eng.* 2018; 28:e21290.
- 40. Ashvanth, B, Partibane, B, **Nabi Alsath**, MG, Kalidoss, R. Tunable dual band antenna with multipattern reconfiguration for vehicular applications. *Int J RF MicrowComputAidedEng*. 2019; 29:e21973. <a href="https://doi.org/10.1002/mmce.2">https://doi.org/10.1002/mmce.2</a> 1973
- 41. Veluchamy, L, **Alsath**, MGN, Selvan, KT. Design and evaluation of a wideband reflectarray antenna using cross dipole with double-ring

- elements. *IntJRFMicrowComputAidedEng*. 2019; 29:e21865. <a href="https://doi.org/10.1002/mmce.21865">https://doi.org/10.1002/mmce.21865</a>
- 42. Ashvanth, B, Partibane, B, Alsath, **MGN**, Kalidoss, R. Design of a 16-beam pattern-reconfigurable antenna for vehicular environment. *Int J RF Microw Comput Aided Eng.* 2020; 30:e22157. <a href="https://doi.org/10.1002/mmce.22157">https://doi.org/10.1002/mmce.22157</a>
- 43. Ashvanth, B, Partibane, B, **Alsath, MGN**, Kalidoss, R. Gain enhanced multipattern reconfigurable antenna for vehicular communications. *Int J RF MicrowComputAidedEng*. 2020; 30:e22192. <a href="https://doi.org/10.1002/mmce.2">https://doi.org/10.1002/mmce.2</a> 2192.
- 44. Kulandhaisamy, I., Kanagasabai, M., Sannasi, I., ArunKumar, S., & **Alsath**, **G.** (2017). A planar microwave phase shifter using microstrip—CPW—microstrip transition with defected ground structures. *International Journal of Microwave and Wireless Technologies*, 9(1),71-77.
- 45. Palaniswamy, S., Kanagasabai, M., Arun Kumar, S., **Alsath, M**., Velan, S., & Pakkathillam, J. (2017). Super wideband printed monopole antenna for ultra wideband applications. *International Journal of Microwave and Wireless Technologies*, *9*(1), 133-141. doi:10.1017/S1759078715000951
- 46. Veluchamy, L., **Mohammed, G.**, Krishnasamy, T., & Jyoti, R. (2019). A wideband, single layer reflectarray antenna with cross loop and square ring slot loaded patch elements. *International Journal of Microwave and Wireless Technologies*, 11(7), 703-710. doi:10.1017/S1759078719000187
- 47. Sambandam, P., Subbaraj, S., Kanagasabai, M., **Mohammed Gulam Nabi Alsath**, *et al.* Integration of Slot Array with MIMO Antenna for 4G and 5G Applications. *Wireless Pers Commun* **109**, 2719–2731 (2019). <a href="https://doi.org/10.1007/s11277-019-06705-3">https://doi.org/10.1007/s11277-019-06705-3</a>
- 48. Veeraselvam Aruna, **Mohammed Gulam Nabi Alsath**, Savarimuthu Kirubaveni & Marimuthu Maheswari (2019) Flexible and Beam Steerable Planar UWB Quasi-Yagi Antenna for WBAN, IETE Journal of Research, DOI: 10.1080/03772063.2019.1694453

- 49. Sangeetha Subbaraj, Malathi Kanagasabai, Mohammed Gulam Nabi Alsath, Geetha Ganesan, Yogeshwari Panneer Selvam & Saffrine multiservice Kingsly (2018) Compact monopole antenna for tablet devices, International of Journal Electronics, 105:8, 1374-1387, DOI: <u>10.1080/00207217.2018.1440435</u>
- 50.Natarajan, Rajesh & George, Jithila & Kanagasabai, Malathi & Lawrance, Livya & R, Dineshbabu & M, Balaji & Mohammed, **Gulam Nabi Alsath**. (2015). Modified Antipodal Vivaldi Antenna for UWB Communications. IET Microwaves Antennas & Propagation.