

List of Publications by Dr. Rekha T. K

Journals

1. **Rekha T. K.**, P. Abdulla, P. M. Raphika, and P. M. Jasmine, "Compact Microstrip Lowpass Filter With Ultra-Wide Stopband Using Patch Resonators And Open Stubs," *Progress In Electromagnetics Research C*, Vol. 72, 15-28, 2017.
2. **Rekha T K**, Abdulla P, Jasmine P M, Raphika P M, "Improved frequency response of microstrip low pass filter using defected ground structures," *Progress In Electromagnetics Research C*, Vol. 81, 31-40, 2018.
3. **T K Rekha** , Parambil Abdulla , Puthenveetil M. Jasmine, Arunodayam R. Anu, "Compact microstrip lowpass filter with high harmonics suppression using defected structures", *Elsevier International Journal of Electronics and Communications (AEU)*, 115 (2020), 153032
4. A R Anu, P Abdulla, P M Jasmine, **T K Rekha** "A Varactor-Tuned Aperture Coupled Dual Band Cylindrical Dielectric Resonator Antenna for C-Band Application." *Progress In Electromagnetics Research C*, 94, 261-272,2019.
5. A R Anu, P Abdulla, P M Jasmine, **T K Rekha** "Circularly Polarized Single Feed Hemispherical Dielectric Resonator Antenna for Wi-Max Applications" *Progress In Electromagnetics Research M*, 92, 21-30, 2020.
6. Jasmine P M, Abdulla P, Raphika P M, A R Anu , **Rekha T K**, Ami iqbal "Coupling Enhancement of Rectangular Waveguide-fed Hemispherical DRA" *International Journal of Scientific Progress and Research*, Vol. 25, No. 02, pp. 78-80, 2016.
7. Thevaruparambil Abdulnazer Nisamol, Parambil Abdulla, and **Thulaseedharan K Rekha**, "Poly-Resonator Lowpass Filter for 26th Order Harmonic Suppression," *Progress In Electromagnetics Research M*, Vol. 109, 179-189, 2022. doi:10.2528/PIERM22022502 <http://www.jpier.org/PIERM/pier.p>
8. T.A. Nisamol, P. Abdulla, **T.K. Rekha**, Integrated lowpass and C spectrum band pass filter using miniaturized stub based model, *AEU - International Journal of Electronics and Communications*, Volume 145, 2022, 154080, ISSN 1434-8411, <https://doi.org/10.1016/j.aeue.2021.154080>. (<https://www.sciencedirect.com/science/article/pii/S1434841121004775>)

Conferences

9. **Rekha T K**, Abdulla P, Anu A R, Ami iqbal, "Compact microstrip low pass filter with sharp roll off using folded stepped impedance resonator," *Proc. of International Symposium on Antennas & Propagation APSYM 2016*, Dec. 15-17
10. **T. K. Rekha**, P. Abdulla, A. R. Anu, P. M. Jasmine and P. M. Raphika, "High selectivity and ultra-wide stopband microstrip lowpass filter using high-low impedance resonators," *IEEE International Conference on Information, Communication, Instrumentation and Control (ICICIC)*, Indore, 2017, pp. 1-5.

11. **T. K. Rekha**, P. Abdulla and T. A. Nisamol, "Compact Microstrip Lowpass Filter with Ultra-Wide Stopband," *2018 Asia-Pacific Microwave Conference (APMC)*, Kyoto, Japan, 2018, pp. 1351-1353. doi: 10.23919/APMC.2018.8617485
12. **T K Rekha**, P Abdulla and T A Nisamol "Compact microstrip lowpass filter with high harmonic suppression" *Proceedings of IEEE MTT-S International Microwave & RF Conference (IMaRC)*, Kolkata , Nov. 28-30, 2018.
13. **Rekha T K**, Abdulla P, Anu A R, Ami iqbal, U. Sam Kollannore and T. A. Nisamol "Compact Multilayer Microstrip Lowpass Filter with Ultra wide Stopband for L-Band Applications," *Proc. of International Symposium on Antennas & Propagation APSYM* 2018, Dec. 03-05.
14. Anu A R, Abdulla P, **Rekha T K**, Ami iqbal, "Rectangular and semicircular shaped aperture coupled HDRA," *Proc. of International Symposium on Antennas & Propagation APSYM* 2016, Dec. 15-17.
15. Ami iqbal, Abdulla P, **Rekha T K**, Anu A R, Jasmine P M, Raphika P M, A novel band pass filter using dual mode chamfered square patch resonator with diamond shaped slots," *Proc. of International Symposium on Antennas & Propagation APSYM* 2016, Dec. 15-17.
16. Jasmine P M, Abdulla P, Raphika P M, **Rekha T K**, "Double step junction for coupling enhancement of rectangular wave guide fed cylindrical DRA," *Eighth International Joint Conference on Advances in Engineering and Technology - AET* 2017.
17. Raphika P M ,Abdulla P, Jasmine P M, **Rekha T K**, "Wide stop band low pass filter with sharp roll off using multiple resonators," *Eighth International Joint Conference on Advances in Engineering and Technology - AET* 2017.
18. Jyothishree Pillai, Abdulla P, and **Rekha T K** "Compact Microstrip Lowpass Filter with Ultra-wide Stopband Bandwidth," *Proc. of International Symposium on Antennas & Propagation APSYM* 2018, Dec. 03-05.
19. Nisamol T A, Abdulla P, **Rekha T K**, Aanandan C K, Raphika P M and Jasmine Muhammed,"Highly Compact Microstrip S-Band Hairpin Resonator Lowpass Filter with Ultra wide Stopband," *Proc. of International Symposium on Antennas & Propagation APSYM* 2018, Dec. 03-05.
20. Ami iqbal, Abdulla P, Anu A R, **Rekha T K**, U. Sam Kollannore, Jasmine P M and Raphika P M "A Novel Hextuple-Mode Wideband Bandpass Filter with Sharp Roll-Off and

Ultra-Wide Upper Stopband," *Proc. of International Symposium on Antennas & Propagation APSYM 2018*, Dec. 03-05.

21. Anu A R, Abdulla P, Jasmine P M, **Rekha T K**, Ami Iqbal and Sam Kollannore U," Frequency tuning of Cylindrical Dielectric Resonator Antenna Using Varactor Diode," *Proc. of International Symposium on Antennas & Propagation APSYM 2018*, Dec. 03-05.
22. Sam Kollannore U, Abdulla P, Sheeba Varghese, Anu A R, **Rekha T K** and Ami Iqbal," Simple and Compact Single Feed Circularly Polarized Microstrip Antenna for Ultra Wideband Applications," *Proc. of International Symposium on Antennas & Propagation APSYM 2018*, Dec. 03-05.
23. T A Nisamol, P Abdulla, P M Raphika, P M Jasmine, **T K Rekha** "35 GHz Prolonged Stopband Lowpass Filter using Multi-Resonator Structure" 2020 International Symposium on Antennas & Propagation (APSYM), 111-113
24. P M Raphika, P Abdulla, P M Jasmine, **T K Rekha**, Ami Iqbal "Design of Planar Low Pass Filter with Razor-sharp Roll-off" 2019 2nd IEEE Middle East and North Africa communications Conference
25. A R Anu, P Abdulla, **T K Rekha**, A Iqbal, U S Kollannore, P M Jasmine "Bandwidth Enhancement of Aperture Coupled Cylindrical Dielectric Resonator Antenna using Modified Feed Structure" TENCON 2019-2020 IEEE Region 10 Conference (TENCON), 1910-1912
26. A R Anu, P Abdulla, P M Jasmine, **T K Rekha** "Frequency Reconfigurable Hemispherical Dielectric Resonator Antenna Using Dual Split Rings" 2020 International Symposium on Antennas & Propagation (APSYM), 3-6
27. K K Ansha, P Abdulla, P M Jasmine, T K Rekha, "Triangular Ring With Dumbbell Slots on SIW for Sub-THz Applications," 2021 IEEE Indian Conference on Antennas and Propagation (InCAP), 2021, pp. 732-735, doi: 10.1109/InCAP52216.2021.9726493.

DESIGN AND DEVELOPMENT OF COMPACT MICROWAVE LOWPASS FILTERS WITH HIGHER ORDER HARMONICS SUPPRESSION FOR WIRELESS COMMUNICATION SYSTEMS