BOOK CHAPTERS

1. **Y. M. Asha Latha**, "RF Power Amplifier Circuits for Wireless Communications," In book: Advanced Wireless Communication Technologies, Taylor & Francis, CRC Press, 2025. (Accepted)

TRANSFER OF PATENTS

1. K. Rawat**, Y. M. Asha Latha,** "Multi-octave Modes for Switching Power Amplifiers," Patent No. 509990 (Granted), transferred to *Linearized Amplifier Technologies and Services Private Limited.* on 19/02/2024.

PATENTS

1. K. Rawat**, Y. M. Asha Latha,** "Multi-octave Modes for Switching Power Amplifiers," Indian Patent No. 509990, Feb. 2024 (Granted).

PUBLICATIONS

REFEREED JOURNALS

6. **Y. M. Asha Latha**, L. C. Nunes, F. M. Barradas and J. C. Pedro, "Theory and Design of Doherty Power Amplifier with Active Harmonic Injection" in *IEEE Access,* vol. 12, pp. 41631-41642, Mar. 2024. DOI: 10.1109/ACCESS.2024.3377901.
Link: (https://ieeexplore.ieee.org/document/10473060**)**

5. **Y. M. Asha Latha**, and K. Rawat, "Continuous Class F^{-1} Ku Band GaN MMIC Power Amplifier with an Effect of Nonlinear Output Capacitance" in *IEEE Transactions on Circuits and Systems II: Express Briefs*, vol. 70, no. 10, pp. 3887-3891, Oct. 2023. DOI: 10.1109/TCSII.2023.3289841. **Link: (**https://ieeexplore.ieee.org/document/10164628**)**

4. **Y. M. Asha Latha**, and K. Rawat, "Extending the Design Space of Class E Mode to Design a Multi-Octave Power Amplifier" in *IEEE Transactions on Circuits and Systems II: Express Briefs*, vol. 69, no. 12, pp. 4829-4833, Dec. 2022. DOI: 10.1109/TCSII. 2022.3195730.
Link: (https://ieeexplore.ieee.org/document/9847373**)**

3. **Y. M. Asha Latha**, and K. Rawat, "Design of Ultra-Wideband Power Amplifier Based on Extended Resistive Continuous Class B/J Mode," in *IEEE Transactions on Circuits and Systems II: Express Briefs*, vol. 69, no. 2, pp. 419-423, Feb. 2022. DOI: 10.1109/TCSII.2021.3095379. **Link:** (https://ieeexplore.ieee.org/document/9475979)

2. **Y. M. Asha Latha**, K. Rawat and P. Roblin, "Nonlinear Embedding Model-Based Continuous Class E/F Power Amplifier," in *IEEE Microwave and Wireless Components Letters*, vol. 29, no. 11, pp. 714-717, Nov. 2019. DOI: 10.1109/LMWC.2019.2941919
Link: (https://ieeexplore.ieee.org/abstract/document/8855081)

1. **Y. M. Asha Latha**, K. Rawat, M. Helaoui and F. M. Ghannouchi, "Broadband continuous mode power amplifier with on-board harmonic injection," in *IET Microwaves, Antennas & Propagation*, vol. 13, no. 9, pp. 1402-1407, July 2019. DOI: 10.1049/iet-map.2018.5885
Link: (https://digital-library.theiet.org/content/journals/10.1049/iet-map.2018.5885)

CONFERENCES

15. B. Sharath Naik, A. Ranjan, **Y. M. Asha Latha**, "Design of RF Matching Networks Using Retrieval-Augmented Deep Learning for Power Amplifiers," 2025 IEEE India Council International Conference **(INDICON 2025)**, Bangalore, India, Dec. 18-20, 2025.
Link: https://ieeexplore.ieee.org/abstract/document/11392842

14. **Y. M. Asha Latha**, "An X Band GaN MMIC Power Amplifier Harnessing the Effect of Nonlinear Output Capacitance in CCE Mode," 2025 IEEE International Conference on Microelectronics **(ICM 2025)**, Cairo, Egypt, Dec. 14-17, 2025.
Link: https://ieeexplore.ieee.org/document/11322508

13. **Y. M. Asha Latha**, "The Effect of Nonlinear Output Capacitance of GaN HEMTs in Continuous Mode Power Amplifiers," 2025 IEEE National Conference on Communications **(ICEE 2025)**, Bangalore, India, Dec. 13-16, 2025.

12. S. Verma, **Y. M. Asha Latha**, J. Mukherjee, "Generalized Class-X Power Amplifier Operating under Inverse Class-E Harmonic Constraints," 2025 IEEE International Conference on Modelling, Simulation, and Intelligent Computing **(MoSICom 2025)**, Dubai, UAE, Dec. 10-12, 2025.
Link: https://ieeexplore.ieee.org/abstract/document/11398322

11. **Y. M. Asha Latha**, "Continuous Class E Power Amplifier Mode in the Presence of Nonlinear Output Capacitance," 2025 IEEE National Conference on Communications **(NCC 2025)**, New Delhi, India, Mar. 6-9, 2025.

    Link: https://ieeexplore.ieee.org/document/10983337

10. A. Moores, **Y. M. Asha Latha**, and M. M. De Souza, "Model Extraction of GaN HEMT for Design of a High-Performance Class BJF^{-1} Power Amplifier," Fourth IEEE UK&I YP Postgrad STEM Research Symposium, Newcastle, United Kingdom, Nov 18, 2023.

9. **Y. M. Asha Latha**, and K. Rawat, " Methodology to Design a CCF^{-1} Ku Band GaN MMIC PA with Nonlinear Output Capacitance," 2023 IEEE MTT-S and AP-S Microwave, Antennas, and Propagation Conference **(MAPCON 2023)**, Ahmedabad, India, Dec 10-14, 2023. **Link:** https://ieeexplore.ieee.org/document/10463868

8. **Y. M. Asha Latha**, and K. Rawat, " Continuous Class F^{-1} Ku Band GaN MMIC Power Amplifier with an Effect of Nonlinear Output Capacitance," 2023 IEEE International Symposium on Integrated Circuits and Systems (**ISICAS 2023**), Jeju, Korea, Oct 24-25, 2023. DOI: 10.1109/TCSII.2023.3289841.
Link: https://ieeexplore.ieee.org/document/10164628

7. **Y. M. Asha Latha**, L. C. Nunes, F. M. Barradas and J. C. Pedro, " The Role of Nonlinear C_{out} in Continuous Class F PAs," 2023 IEEE MTT-S International Microwave Symposium **(IMS 2023)**, San Deigo, California, United States, Jun 11-14, 2023. DOI: 10.1109/IMS37964.2023.10188019. **(Early Career Paper Competition Finalist)**
Link: https://ieeexplore.ieee.org/document/10188019

6. **Y. M. Asha Latha**, M. Shariatifar and K. Rawat, "Performance Estimation of Continuous Class F^{-1} PA with Non-Ideal Harmonic Terminations," 2022 IEEE MTT-S and AP-S Microwave, Antennas, and Propagation Conference **(MAPCON 2022)**, Bangalore, India, Dec 12-16, 2022, DOI: 10.1109/MAPCON56011.2022.10047381.
Link: https://ieeexplore.ieee.org/abstract/document/10047381

5. **Y. M. Asha Latha** and K. Rawat, "Methodology to Design Multi-Octave Power Amplifier Using Extended Class B to Class J Continuous Mode," 2021 IEEE MTT-S International Microwave and RF Conference **(IMARC 2021)**, Kanpur, India, 2021, pp. 1-4. DOI: 10.1109/IMaRC49196.2021.9714641.
Link: https://ieeexplore.ieee.org/document/9714641

4. **Y. M. Asha Latha** and K. Rawat, "Methodology to Realize Wideband High Efficiency Power Amplifier Using Active Harmonic Injection," 2019 IEEE MTT-S International Microwave and RF Conference **(IMARC 2019)**, Mumbai, India, 2019, pp. 1-4. DOI: 10.1109/IMaRC45935.2019.9118719 **(Received Best student paper award second prize). Link:** https://ieeexplore.ieee.org/abstract/document/9118719

3. **Y. M. Asha Latha** and G. Khanna, "Design and Simulative Analysis of a Batteryless Teflon Coated Capacitive Pressure Sensor for Glaucoma Diagnosis," IEEE 19th International Conference on VLSI Design and Test **(VDAT 2015)**, Jun 26-29, 2015. DOI: 10.1109/ISVDAT.2015.7208118
Link: https://ieeexplore.ieee.org/abstract/document/7208118

2. **Y. M. Asha Latha** and G. Khanna, "A Diaphragm Capacitive Sensor with Improved Sensitivity for Intraocular Pressure Measurement," *International Conference on Science, Management, Engineering and Technology (ICSMET 2015), Dubai,* pp. 12-16, Mar 18-19, 2015. **(Received Best paper award)**

1. **Y. M. Asha Latha**, G. Khanna and N. Dhingra, "Bio MEMS Diagnostic Sensors for Glaucoma Disease in Eye," *2014 NIT-MTMI International Conference on Emerging Paradigms and Practices in Global Technology, Management & Business Issues, NIT Hamirpur,* pp. 93-98, Dec 22-24, 2014.