

Dr. M. Ganesh Madan
HOD, Department of Electronics
MIT Campus, Anna University

1. S.Piramasubramanian, Ganesh Madhan. M, Ramya. R. & D.Rebecca. "Effect of Collector Voltage on the Large and Small Signal Modulation Characteristics of 980 nm Transistor Laser", Defence science journal. 70. 529-533. 10.14429/dsj.70.16341. (2020)
2. Krishna. K, Ganesh Madhan. M, & Panchapakesan Ashok, "Simulation studies on Polarization modulated Vertical cavity surface emitting laser for combined fiber and free space optical links". Optik. 219. 165018. 10.1016/j.ijleo.2020.165018.(2020)
3. Panchapakesan Ashok, Ganesh Madhan. M, Deepiha. P & Chitravelu Rimmya & S. Piramasubramanian. "An Efficient Chaotic Optical signal generation scheme using Gain Lever Effect in bi-section laser diodes". Optics Communications. 475. 126202. 10.1016/j.optcom.2020.126202.(2020)
4. Panchapakesan Ashok & Ganesh Madhan. M. "Effect of cold finger temperature on optical pulse modulation characteristics in a 2.59 terahertz quantum cascade laser". Laser Physics Letters. 17. 055302. 10.1088/1612-202X/ab7dcd. (2020)
5. Ganesh Madhan. M, "Design and simulation of 3.5 GHz hybrid photonic antenna system for 5G applications".(2020).
6. Kumaran A, Ajay. S, Manoj. K, Ganesh Madhan. M, Logeswaran. J & S. Piramasubramanian. "Design and simulation of 3.5 GHz hybrid photonic antenna system for 5G applications", AIP Conference Proceedings, 2222. 030021. 10.1063/5.0004642.(2020).
7. Panchapakesan. Ashok & Ganesh Madhan. M, "Numerical Analysis on Capacity Improvement in Free Space Optical Link employing Two-Segment Quantum Cascade Laser based Repeater", Optik. 204. 164216. 10.1016/j.ijleo.2020.164216. (2020).
8. Manoharan. Shalini & Ganesh Madhan. M, "Performance predictions of slotted graphene patch antenna for multi-band operation in terahertz regime". Optik. 204. 164223. 10.1016/j.ijleo.2020.164223. (2020).
9. Senthilkumar. Chithra, Chitravelu Rimmya & Ganesh Madhan. M. "Photonic Generation of 60 GHz MM Wave Based on Frequency Multiplication Techniques Using DP-MZM". 1-5. 10.1109/ic-ETITE47903.2020.241.(2020).
10. Mohan Haritha, George Jemima & Ganesh Madhan. M. "Design Of CSRR Based Band stop Filter For Terahertz Frequencies".1-4,10.1109/ic-ETITE47903. 2020.228.(2020).
11. Vignesh. R, S. Piramasubramanian, Ganesh Madhan. M & Murugan. V. "Design and Development of Planar Antennas for wearable sensor applications". Materials Today- Proceedings. 24. 531-537. 10.1016/j.matpr.2020.04.306.(2020).

12. Chander. U, Poornachari. Prakash & S.Piramasubramanian & Ganesh Madhan. M. "Effects of added Secondary Dielectric material on the Performance of a Microstrip patch Antenna", IOP Conference Series: Materials Science and Engineering. 577. 012061. 10.1088/1757-899X/577/1/012061.(2019)
13. Ganesh Madhan. M, & S. Piramasubramanian & A.G Sanjeev. "A comparative study of various levels of RPG missile modeling for radar cross section analysis at 10 GHz".(2019).
14. Panchapakesan. Ashok & Ganesh Madhan, M. "Effect of device parameters on gain switching in quantum cascade lasers". Laser Physics Letters. 16. 095301. 10.1088/1612-202X/ab39dc. (2019).
15. George. Jemima & Ganesh Madhan. M. "A Narrow Spectrum Terahertz Emitter Based on Graphene Photoconductive Antenna". Plasmonics.14.10.1007/s11468- 019-00998-7.(2019).
16. Manoharan. Shalini & Ganesh Madhan. M. "Design and analysis of a dual-polarized graphene based microstrip patch antenna for terahertz applications." Optik. 194. 163050. 10.1016/j.ijleo.2019.163050. (2019).
17. S. Piramasubramanian & Ganesh Madhan. M. & Gopikasri. S. "Dual Port Dual Polarized Patch Antenna with Integrated Defected Ground Structure for 2.5 GHz In - Band Full Duplex Application". 1-4. 10.1109/ICESIP46348.2019.8938368.(2019)
18. Koshy. Thomas & S. Piramasubramanian & Ganesh Madhan. M. "Performance Analysis of RF Energy Harvesting Unit for IoT Applications". 1-5. 10. 1109/ ICESIP 46348.2019.8938252.(2019).
19. S V, Vinodhini & S., Piramasubramanian & Ganesh Madhan, M.. (2019). Analysis of nonlinear distortion and its reduction using feedback injection schemes in an $1.3 \mu\text{m}$ transistor laser. Optics Communications. 439. 10.1016/j.optcom.2019.01.065.
20. Panchapakesan. Ashok & Ganesh Madhan. M, "Performance analysis of various pulse modulation schemes for a FSO link employing gain switched quantum cascade lasers." Optics & Laser Technology. 111.358-371.10.1016/j.optlastec.2018.10.004. (2019)
21. Chitravelu Rimmya & Ganesh Madhan. M, "An efficient scheme for simultaneous 60 GHz MM wave generation and CSRZ-DQPSK transmission in a passive optical network". Microwave and Optical Technology Letters. 61.10.1002/mop.31764. (2019)
22. Chinnusamy. Kavitha & Ganesh Madhan. M, "A Novel Equivalent Circuit Approach for Modal Analysis of MEMS Cantilever Beam", Proceeding of NCCS 2017. 10.1007/978-981-13-0776-8_28. (2019)

23. Krishna. K. & Ganesh Madhan. M. “Numerical Simulation of High-Temperature VCSEL Operation and Its Impact on Digital Optical Link Performance”, Proceeding of NCCS 2017. 10.1007/978-981-13-0776-8_31.(2019).
24. Panchapakesan. Ashok & Ganesh Madhan. M, “Numerical Analysis on the Phenomenon of Absorptive Bistability in Quantum Cascade Lasers”: Proceedings of IWPSD 2017. 10.1007/978-3-319-97604-4_160. (2019)
25. George. Jemima & Ganesh Madhan. M, “Graphene-Based Photoconductive Antenna Structures for Directional Terahertz Emission”. Plasmonics.14.10.1007/s11468-018-0871-7.(2018).
26. Karunakaran. Murali & Ganesh Madhan. M, “Theoretical Investigations on the Thermal Effects of VCSEL and Its Impact on the Frequency Response of Multimode Fiber Optic Link”. 10.1007/978-981-10-3812-9_5. (2018)
27. Samiappan, Vinothkumar & S., Piramasubramanian & Ganesh Madhan, M.. (2018). A Meandered Transmission Line-based Microstrip Filter for Multiband OFDM Applications. 10.1007/978-981-10-3812-9_48.
28. Vincentraj. G, Dineshmoorthy. S, Thomas George & Ganesh Madhan. M, Analysis of Horn Antenna calibration as per SAE ARP958D Standard and three antenna method prescribed by ANSI C63.5 standard”.1-4.10.1109/INCCEMIC. 2018.8704600.(2018).
29. Krishna. K, & Ganesh Madhan. M, “Vertical cavity surface emitting laser based hybrid fiber- free space optic link for passive optical network applications.” Optik. 171. 10.1016/j.ijleo.2018.06.079. (2018)
30. Panchapakesan, Ashok & Ganesh Madhan, M.. (2018). Particle Swarm Optimization approach to identify optimum electrical pulse characteristics for efficient Gain Switching in Dual Wavelength Quantum Cascade Lasers. Optik. 171. 10.1016/j.ijleo.2018.06.137.
31. S., Piramasubramanian & Ganesh Madhan, M. & Radha, V. & Shajithaparveen, S.M.S. & Nivetha, G.. (2018). Effect of quantum well position on the distortion characteristics of transistor laser. Optics Communications. 414. 22-28. 10.1016/j.optcom.2017.12.055.
32. Kamalaveni. A, & Ganesh Madhan. M, “Halve dumbbell shaped DGS tapered ring antenna for dual-band notch characteristics.” Electromagnetics. 38. 1-11.10.1080/02726343.2018.1446715. (2018).
33. S. Piramasubramanian, Ganesh Madhan. M & Sindhuja. A. “Performance analysis of a digital fiber optic link incorporating gain-levered laser diode transmitter”. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields. 31. e2321. 10.1002/jnm.2321. (2018).

34. G. Jemima & Ganesh Madhan. M, "Analysis of single band and dual band graphene based patch antenna for terahertz region." *Physica E: Low-dimensional Systems and Nanostructures*. 94. 10.1016/j.physe.2017.08.001.(2017)
35. S. Piramasubramanian & Ganesh Madhan. M. "Numerical analysis of extinction ratio improvement in gain lever laser diode". *Optoelectronics And Advanced Materials-Rapid Communications*. 11. 285-288.(2017).
36. Krishna. K & Ganesh Madhan. M. "A comparative study of thermal performance in two VCSEL structures for high bit rate digital optical links." 1-5. 10.1109/ICSCN.2017.8085649. (2017).
37. S., Piramasubramanian & Ganesh Madhan, M. "Analysis of Optical Short Pulse Generation in Gain Lever Laser Diodes." *Journal of Nanoelectronics and Optoelectronics*. 12. 152-161. 10.1166/jno.2017.1971. (2017)
38. Chitravelu. Rimmya & Ganesh Madhan. M. "Performance evaluation of simple CSRZ-QDPSK transmitter configurations for 20-Gbps PON applications". *Turkish Journal of Electrical Engineering & Computer Sciences*. 25. 1263-1277. 10.3906/elk-1509-117. (2017).
39. Kamalaveni, A. & Ganesh Madhan, M. "A compact TRM antenna with high impedance surface for SAR reduction at 1800MHz." *AEU - International Journal of Electronics and Communications*. 70. 10.1016/j.aeue.2016.06.002. (2016)
40. Panchapakesan. Ashok & Ganesh Madhan. M, " Numerical analysis on the influence of device parameters on the performance of quantum cascade lasers". *Opto Electronics and Advanced Materials - Rapid Communications*. 10. 133-142. (2016)
41. Chinnusamy. Kavitha & Ganesh Madhan, M. "An analysis of electrostatically actuated micro vibrating structures incorporating squeezed film damping effect using an electrical equivalent circuit". *Journal of the Brazilian Society of Mechanical Sciences and Engineering*. 39. 10.1007/s40430-016-0492-z.(2016)
42. G. Kamalaveni & Ganesh Madhan. M. "A Compact Parasitic Ring Antenna for ISM Band Applications." *Frequenz*. 70. 10.1515/freq-2015-0285.(2016).
43. Kumar S.Vinoth & Ganesh Madhan. M, & R. Koushik, "A simple UWB band pass filter design based on signal interference approach. *Communications on Applied Electronics*." 21-23.(2016).
44. S. Piramasubramanian, Ganesh Madhan. M. & Jyothsna Nagella, & G. Dhanapriya, Numerical analysis of distortion characteristics of heterojunction bipolar transistor laser. *Optics Communications*. 357. 177-184.(2015).
45. Ganesh Madhan. M. "Development of Microstrip filter for satellite downlink applications." *International Journal of Applied Engineering Research*. 10. 1-5. (2015).

46. Baskaran. M. & Ganesh Madhan. M. "Photonic millimeter-wave generation using stimulated brillouin scattering (SBS) for radio over fiber (RoF) systems." 10. 66-68. (2015).
47. S. Piramasubramanian & Ganesh Madhan. M, "Analysis of the effect of optical confinement factor on the distortion performance of gain lever laser diode". Optik - International Journal for Light and Electron Optics. 126. 4278. 10.1016/j.ijleo.2015.08.140. (2015)
48. A.P.Padmavathy, & Ganesh Madhan. M, "An improved UWB Patch Antenna Design using Multiple Notches and Finite Ground Plane. Journal of Microwaves," Optoelectronics and Electromagnetic Applications. 14. 73-82. 10.1590/2179-10742015v14i1428. (2015).
49. Sindhuja. A & S. Piramasubramanian & Ganesh Madhan. M, "Modulation performance of gain levered laser diode in a fiber optic link." (2015).
50. Ganesh Madhan. M, "A Comparative Study Of Different DOA Estimation Schemes and Adaptive Beam Forming Techniques for Target Detection and Tracking." International Journal of Computer Applications. 3. 21-25.(2015)
51. Chinnusamy, Kavitha & Ganesh Madhan, M. "Study of squeeze film damping characteristics under different gas mediums in a capacitive MEMS accelerometer." Journal of the Brazilian Society of Mechanical Sciences and Engineering. 38. 10.1007/s40430-015-0316-6. (2015).
52. Ayyadurai. Kamalaveni & Ganesh Madhan, M. "Bandwidth enhancement of capacitive fed monopole antenna using parasitic patches". International Journal of Microwave and Wireless Technologies. -1.1-7. 10.1017/S1759078714001597. (2015).
53. Ganesh Madhan. M, & Kumar. Jagadeesh & Jayaraman. Roopchand, "Computation and analysis of RCS for a kinetic energy type anti armour missile at Ka band." International Journal of Applied Electromagnetics and Mechanics. 47. 45-59. 10.3233/JAE-130139.(2015).
54. Jebin S. Rabia & Ganesh Madhan. M, "Design of compact Microstrip Filter for MBOFDM based UWB applications". International Journal of Applied Engineering Research. 10. 20511-20518. (2015).