

Bio-Data

Dr. N. PUSHPA M.Sc., Ph.D.

Assistant Professor & Head
PG Department of Physics
JSS College of Arts, Commerce & Science
Ooty Road, Mysore-570025
Karnataka, India
Phone: 9449223824
e-mail: pushpagnp1975@gmail.com

Educational Qualification:

Doctor of Philosophy, Ph. D., (Physics) with UGC 2009 regulation: 2008-2013, University of Mysore, India

Research Topic: “Studies on the Effect of Radiation on the Electrical Characteristics of Bipolar and MOS Devices”

Research Guide: Prof. D. Revannasiddaiah, DOS in Physics, University of Mysore

Master of Science, M.Sc., (Physics): 1996-1998, Bangalore University, India

Grade & Specialization: First Class with Distinction (72%), Nuclear Physics.

Teaching and Research Experience: 16 Years of Teaching/ Research Experience in PG/UG

1. Assistant Professor and Head, PG Department of Physics, JSS College of Arts, Commerce & Science, Ooty Road, Mysore (08/2013 to till date)
2. JRF (Junior Research Fellow) and SRF (Senior Research Fellow), DAE-BRNS Project at DoS in Physics, University of Mysore, Manasagangotri, Mysore (2008-2013)
3. Lecturer in Physics, B.P.Indian College, Bangalore (06/2003 to 04/2005)
4. Lecturer in Physics, St. Joseph's College, Bangalore (07/2001 to 05/2003)
5. Lecturer in Physics, Lowry Memorial College, Bangalore (08/1998 to 06/2001)

AWARDS AND FELLOWSHIPS

- Junior Research Fellowship awarded from DAE-BRNS, Government of India (2009-2012)
- Senior Research Fellowship awarded from DAE-BRNS, Government of India (2012-2013)

RESEARCH INTERESTS

- Characterization of semiconductor devices using I-V, C-V, DLTS and other electrical techniques
- Reliability studies on semiconductor devices and circuits
- Low temperature and high temperature studies on semiconductor devices
- High energy radiation effects on semiconductor devices and circuits (space/high energy physics applications)

TEACHING COURSES

Nuclear and Particle Physics, Nuclear Physics, Classical Mechanics, Statistical Mechanics, Mathematical Methods in Physics (Special functions), Accelerator Physics

Books: 1

1. **N. Pushpa** and A. P. Gnana Prakash “Application of Pelletron Accelerator to Study Total Dose Radiation Effects on MOS and Bipolar Devices” Lambert *Academic Publishers Germany*, 2016. (ISBN No. 978-3-659-92596-2)

RESEARCH PUBLICATIONS

Refereed Journal Papers/Proceedings: 46

1. **N. Pushpa** “⁶⁰Co Gamma and High Energy Ion Impacts on Threshold Characteristics and its Recovery in N-Channel Depletion MOSFETs”, *Indian Journal of Physics*, September 2021 (Impact factor-1.377) Accepted
2. **N. Pushpa** and A. P. Gnana Prakash, “The Influence of Radiation on the Electrical Characteristics of MOSFET and its revival by Different Annealing Techniques”, *Radiation Effects and Defects in Solids*, October 2021 (Impact factor-0.67) Accepted
3. **N. Pushpa**, “An Influence of Linear Energy Transfer of High Energy Ions on the Electrical Characteristics of NPN rf Power Transistors” *International Journal of Innovation in Advanced Physics*, Vol. 01, (1), pp5-11, 2021.
4. **N. Pushpa**, “⁶⁰Co Gamma Influence on Transconductance in N-Channel MOS Device and its Revival under Isochronal Annealing Technique” *International Journal of Innovation in Advanced Physics*, Vol. 01, (1), pp 40-43, 2021.
5. T. M. Pradeep, Vinayakprasanna N. Hegde, **N. Pushpa**, K.G. Bhushan, Mukesh and A. P. Gnana Prakash, “An Investigation of 10 MeV Electron Irradiation on Silicon NPN Transistors”, *AIP Conf. Proc.*, Vol. 2265, pp 030482-1-4, 2020.
6. Arshiya Anjum, T. M. Pradeep, N. H. Vinayakprasanna, **N. Pushpa**, Ambuj Tripathi and A. P. Gnana Prakash, “Analysis of 80 MeV Carbon and 80 MeV Nitrogen ion irradiation effects on N-channel MOSFETs”, *IEEE Transactions on Device and Materials Reliability*, Vol. 19, No.4, pp 696-703, December 2019.(Impact factor- 1.512).
7. T. M. Pradeep, Vinayakprasanna N. Hegde, **N. Pushpa**, K. G. Bhushan, Ambuj Tripathi, K. Asokan and A. P. Gnana Prakash, “Swift Heavy Ions Induced Degradation on the Electrical Characteristics of Silicon NPN Power Transistors”, *Radiation Effects and Defects in Solids*, Vol.174, Nos. 9-10, pp 859-872, November 2019 (Impact factor-0.513).
8. Vinayakprasanna N. Hegde, K. C. Praveen, T. M. Pradeep, **N. Pushpa**, John D. Cressler, Ambuj Tripathi, K. Asokan and A. P. Gnana Prakash, “High Energy Swift Heavy Ion Irradiation and Annealing Effects on DC Electrical Characteristics of 200 GHz SiGe HBTs”, *Nuclear Engineering and Technology*, Vol. 51, pp 1428-1435, July 2019 (Impact factor- 1.55).
9. Vinayakprasanna N. Hegde, K. C. Praveen, T. M. Pradeep, **N. Pushpa**, John D Cressler, Ambuj Tripathi, K. Asokan and A. P. Gnana Prakash, “A Comparison of Electron, Proton and Gamma Irradiation Effects on the I-V Characteristics of 200 GHz SiGe HBTs”, *IEEE Transaction on Device and Materials Reliability*, Vol. 18, No.4, pp 592-598, December 2018.(Impact factor- 1.512).
10. T. M. Pradeep, Vinayakprasanna N. Hegde, **N. Pushpa**, K. G. Bhushan and A. P. Gnana Prakash, “Comparisons of 5 MeV Proton and 1 MeV Electron Irradiation on Silicon NPN RF Power Transistors”, *Indian Journal of Pure and Applied Physics*, Vol.56, pp 646-649, August 2018 (Impact factor- 0.882).
11. A. P. Gnana Prakash, M. N. Bharathi, Vinayakprasanna N. Hegde, T. M. Pradeep, **N. Pushpa** and Ambuj Tripathi, “The Effects of High Energy Ion Irradiations on the I-V Characteristics of Silicon NPN Transistors”, *Radiation Effects and Defects in Solids*, Vol.173, Nos. 7-8, pp 683-693, July 2018 (Impact factor-0.513).
12. A. P. Gnana Prakash, T. M. Pradeep, Vinayakprasanna N. Hegde, **N. Pushpa**, P. K. Bajpai, S. P. Patel, Tarkeshwar Trivedi and K.G. Bhushan, “A Comparison of 5 MeV Proton and Co-60 Gamma Irradiation on Silicon NPN rf Power Transistors and N-Channel Depletion MOSFETs”, *Radiation Effects and Defects in Solids*, Vol.172, Nos. 11-12, pp 952-963, January 2018 (Impact factor-0.513).
13. A. P. Gnana Prakash, Vinayakprasanna N. Hegde, T. M. Pradeep, **N. Pushpa**, P. K. Bajpai, S. P. Patel, Tarkeshwar Trivedi and J. D. Cressler, “5 MeV Proton Irradiation Effects on 200 GHz Silicon-Germanium Heterojunction Bipolar Transistors”, *Radiation Effects and Defects in Solids*, Vol.172, Nos. 11-12, pp 922-930, January 2018 (Impact factor-0.513).
14. M. N. Bharathi, N. H. Vinayakprasanna, Arshiya Anjum, T. M. Pradeep, **N. Pushpa**, K. C. Praveen, K. G. Bhushan and A. P. Gnana Prakash, “Comparison of 1 MeV Electron, Co-60 Gamma and

- 1MeV Proton Irradiation Effects on Silicon NPN Transistors”, *Radiation Effects and Defects in Solids*, Vol.172, No.3-4, pp 235-249, May 2017. (Impact factor-0.513).
15. T. M. Pradeep, N. H. Vinayakprasanna, B.C. Hemaraju, K.C. Praveen, Arshiya Anjum, **N. Pushpa**, K. G. Bhushan and A. P. Gnana Prakash, “An Investigation of 80 MeV Nitrogen Ion Irradiation on Silicon NPN Transistors”, *AIP Conf. Proc.* 1832, 120004-1-3, 2017. (Impact factor-0.5).
 16. Arshiya Anjum, N. H. Vinayakprasanna, T. M. Pradeep, **N. Pushpa**, J. B. M. Krishna and A. P. Gnana Prakash, “A Comparison of 4 MeV Proton and Co-60 Gamma Irradiation Induced Degradation in the Electrical Characteristics of N-Channel MOSFETs”, *Nucl. Instr. Meth. Phys. Res. B*, Vol. 379, pp 265–271, June 2016 (Impact factor-1.124).
 17. B. C. Hemaraju, M. A. Ahlam, **N. Pushpa**, K. M. Mahadevan and A. P. Gnana Prakash, “Synthesis, Growth and Characterization of a New Promising Organic Nonlinear Optical Crystal: 3-[(1-(2-phenylhydrazinylidene) ethyl]-2H-chromen-2-one”, *Journal of Optics*, Vol. 45, No.1, pp 73-80, March 2016(Impact factor-2.059).
 18. M. N. Bharathi, **N. Pushpa**, N. H. Vinayakprasanna and A. P. Gnana Prakash, “A Comparison of Lower LET and Higher LET Heavy Ion Irradiation Effects on Silicon NPN rf Power Transistors”, *Nucl. Instr. Meth. Phys. Res. A.*, Vol. 822, pp 34-42, June 2016 (Impact factor-1.216).
 19. M. N. Bharathi, **N. Pushpa**, N. H. Vinayakprasanna, and A. P. Gnana Prakash, “80 MeV C⁶⁺ Ion Irradiation Effects on the DC Electrical Characteristics of Silicon NPN Power Transistors”, *AIP Conf. Proc.* 1731, 120013-1–120013-3, 2016 (Impact factor-0.5).
 20. T. M. Pradeep, N. H. Vinayakprasanna, Arshiya Anjum, M. N. Bharathi, **N. Pushpa** and A. P. Gnana Prakash, " High Total Dose Co-60 Gamma Irradiation and Annealing Studies on NPN rf Power Transistors”, *ISST Journal of Applied Physics*, Vol. 6, No. 2, pp 16-21, December 2015.
 21. **N. Pushpa**, K. C. Praveen, A. P. Gnana Prakash, P. S. Naik, S. K. Gupta and D. Revannasiddaiah, “Swift Heavy Ion Irradiation and Annealing Studies on the I-V Characteristics of N-channel Depletion MOSFETs”, *Indian Journal of Physics*, Vol.89(9), pp 943-950, September 2015 (Impact factor-1.377).
 22. **N. Pushpa** and A. P. Gnana Prakash “High Energy Proton Irradiation Effects on Subthreshold Characteirstics of N-Channel DMOSFETS” *JSSCM Journal*, Vol. 4 (1) 45-46, 2015 (ISSN: 2277-145X).
 23. B. C. Hemaraju, M. A. Ahlam, **N. Pushpa**, K. M. Mahadevan and A. P. Gnana Prakash, “Synthesis, Growth and Characterization of a New Promising Organic Nonlinear Optical Crystal: 4–nitrophenyl hydrazone”, *Spectrochimica Acta Part A*, Vol.151, pp 854-860, December 2015 (Impact factor-2.353).
 24. A. P. Gnana Prakash and **N. Pushpa** , “Application of Pelletron Accelerator to Study High Total Dose Radiation Effects on Semiconductor Devices”, *Solid State Phenomena*, Vol. 239, pp 37-71, 2015 (Review Paper).
 25. N. H. Vinayakprasanna, K. C. Praveen, **N. Pushpa**, John D. Cressler and A. P. Gnana Prakash, “A Comparison of 100 MeV Oxygen Ion and Co-60 Gamma Irradiation Effects on Advanced 200 GHz SiGe heterojunction bipolar transistors”, *Indian Journal of Physics*, Vol.89(8), pp 789-796, August 2015. (Impact factor-1.377).
 26. N. H. Vinayakprasanna, K. C. Praveen, **N. Pushpa**, Ambuj Tripathi, John D. Cressler and A. P. Gnana Prakash, “80 MeV Carbon Ion Irradiation Effects on Advanced 200 GHz SiGe Heterojunction Bipolar Transistors” *Advanced Material Letters*, Vol. 6(2), pp 120-126, February 2015. (Impact factor-1.90).
 27. A. P. Gnana Prakash, K. C. Praveen, **N. Pushpa** and John D. Cressler, “The Reliability Studies of Nano-Engineered SiGe HBTs Using Pelletron Accelerator”, *AIP Conf. Proc.* 1661, 050008-1–050008-6, 2015 (Impact factor-0.5).
 28. **N. Pushpa** and A. P. Gnana Prakash, “Damage Correlations in Semiconductor Devices Exposed to Gamma and High Energy Swift Heavy Ions”, *AIP Conf. Proc.* 1661, 050007-1–050007-6, 2015 (Impact factor-0.5).
 29. M. N. Bharathi, K. C. Praveen, **N. Pushpa** and A. P. Gnana Prakash, “High Total Dose Proton and ⁶⁰Co Gamma Irradiation Effects on Silicon NPN rf Power Transistors”, *International Journal of Latest Technology in Engineering, Management and Applied Science*, Vol. 3(6), pp 40-47, June 2014

- (Impact factor – 2.115).
30. K. C. Praveen, **N. Pushpa**, M. N. Bharathi, John D. Cressler, A. P. Gnana Prakash, “A Comparison of Hot Carrier and 50 MeV Li^{3+} Ion Induced Degradation in the Electrical Characteristics of Advanced 200 GHz SiGe HBT”, *Physics of Semiconductor Devices: Environmental Science and Engineering*, pp 113-116, 2014.
 31. M. N. Bharathi, K. C. Praveen and **N. Pushpa** and A. P. Gnana Prakash “High Total Dose Proton Irradiation Effects on Silicon NPN rf Power Transistors”, *AIP Conf. Proc.* 1591, 1446-1448, 2014 (Impact factor-0.5).
 32. K. C. Praveen, **N. Pushpa**, P. S. Naik, John. D. Cressler, H. B. Shiva, Shammi Verma, Ambuj Tripathi and A. P. Gnana Prakash, “In-Situ Investigation of 75 MeV Boron and 100 MeV Oxygen Ion Irradiation Effects on 50 GHz SiGe HBTs” *Radiation Effects and Defects in Solids*, Vol. 168, No. 7-8, pp 620-624, July 2013. (Impact factor-0.513)
 33. K. C. Praveen, **N. Pushpa**, H. B. Shiva, J. D. Cressler, Ambuj Tripathi and A. P. Gnana Prakash, “A Comparison of 75 MeV Boron And 50 MeV Lithium Ion Irradiation Effects on 200 GHz SiGe HBTs”, *AIP Conf. Proc.* 1512, 1030-1031, 2013. (Impact factor-0.5).
 34. **N. Pushpa**, K. C. Praveen, A. P. Gnana Prakash, S. K. Gupta and D. Revannasiddaiah, “An Analysis of 175 MeV Nickel Ion Irradiation and Annealing Effects on NPN rf Power Transistors”, *Current Applied Physics*, Vol. 13, No.1, pp 66-75, January 2013. (Impact factor-2.212)
 35. K. C. Praveen, **N. Pushpa**, P. S. Naik, John. D. Cressler, Ambuj Tripathi and A. P. Gnana Prakash, “Application of a Pelletron Accelerator to Study Total Dose Radiation Effects on 50 GHz SiGe HBTs”, *Nucl. Instr. Meth. Phys. Res. B*, Vol. 273, pp 43-46, Feb 2012. (Impact factor-1.124)
 36. **N. Pushpa**, K. C. Praveen, A. P. Gnana Prakash, P. S. Naik, John. D. Cressler, S. K. Gupta and D. Revannasiddaiah, “Reliability Studies on NPN RF Power Transistors under Swift Heavy Ion Irradiation”, *Nucl. Instr. Meth. Phys. Res. B*, Vol. 273, pp 36-39, Feb 2012. (Impact factor-1.124)
 37. **N. Pushpa**, K. C. Praveen, A. P. Gnana Prakash, P. S. Naik, Ambuj Tripathi, S. K. Gupta and D. Revannasiddaiah, “The Effect of Swift Heavy Ion Irradiation on Threshold Voltage, Transconductance and Mobility of DMOSFETs”, *Nucl. Instr. Meth. Phys. Res. B*, Vol. 273, pp 40-42, Feb 2012. (Impact factor-1.124)
 38. A. P. Gnana Prakash, **N. Pushpa**, K. C. Praveen, P. S. Naik and D. Revannasiddaiah, “Evaluation of Pelletron Accelerator Facility to Study Radiation Effects on Semiconductor Devices”, *AIP Conf. Proc.* 1447, 489-490, 2012 (Impact factor-0.5).
 39. **N. Pushpa**, K. C. Praveen, A. P. Gnana Prakash, P. S. Naik, S. K. Gupta and D.Revannasiddaiah, “The Influence of 175 MeV Ni^{13+} Ion and Co-60 Gamma Irradiation Effects on Subthreshold Characteristics of N-Channel Depletion MOSFETs”, *AIP Conf. Proc.* 1447, 1043-1044, 2012 (Impact factor-0.5).
 40. K. C. Praveen, **N. Pushpa**, AmbujTripathi, D. Revannasiddaiah, John D. Cressler and A. P. Gnana Prakash, “50 MeV Li^{3+} Ion Irradiation Effects on Advanced 200 GHz SiGe HBTs”, *Radiation Effects and Defects in Solids.*, Vol.166, No.8-9, pp 710-717, Aug-Sept 2011. (Impact factor-0.513)
 41. K.C. Praveen, **N. Pushpa**, John D Cressler and A. P. Gnana Prakash, “Analysis of High Energy Ion, Proton and Co-60 Gamma Radiation Induced Damage in Advanced 200 GHz SiGe HBTs”, *International Journal of Nano-Electronics and Physics.*, Vol.3, No.1, pp 348-357, 2011.
 42. **N. Pushpa**, A. P. Gnana Prakash, S. K. Gupta and D. Revannasiddaiah, “Swift Heavy Ion Irradiation Effects on NPN rf Power Transistors”, *AIP Conf. Proc.* 1349, 1007-1008, 2011 (Impact factor-0.5).
 43. K. C. Praveen, **N. Pushpa**, Y. P. Prabhakara Rao, G. Govindaraj, John D. Cressler and A. P. Gnana Prakash, “Application of Advanced 200 GHz Si-Ge HBTs for High Dose Radiation Environments”, *Solid State Electronics*, Vol. 54, No.12, pp 1554-1560, December 2010. (Impact factor-1.504)
 44. **N. Pushpa**, K. C. Praveen, A. P. Gnana Prakash, Y. P. Prabhakara Rao, AmbujTripathi and D.Revannasiddaiah, “An Analysis of 100 MeV F^{8+} Ion and 50 MeV Li^{3+} Ion Irradiation Effects on Silicon NPN rf Power Transistors”, *Nucl. Instr. Meth. Phys. Res. A*. Vol. 620, No.2-3, pp 450-455, August 2010. (Impact factor-1.216)
 45. **N. Pushpa**, K. C. Praveen, A. P. Gnana Prakash, Y. P. Prabhakara Rao, AmbujTripathi, G. Govindaraj and D.Revannasiddaiah, “A Comparison of 48 MeV Li^{3+} Ion, 100 MeV F^{8+} Ion and Co-60 Gamma Irradiation Effect on N-channel MOSFETs”, *Nucl. Instr. Meth. Phys. Res. A*, Vol. 613,

No.2, pp 280-289, February 2010. (Impact factor-1.216)

46. **N. Pushpa**, A. P. Gnana Prakash, K. C. Praveen and D. Revannasiddaiah, “An Investigation of Electron and Oxygen Ion Damage in Si NPN RF Power Transistors”, *Radiation Effects and Defects in Solids*, Vol.164, No.10, pp 592-603, September 2009. (Impact factor-0.513)

Conference/Workshop Presentation: 64

1. T. M. Pradeep, Vinayakprasanna N. Hegde, **N. Pushpa**, K.G. Bhushan, Mukesh and A. P. Gnana Prakash, “An Investigation of 10 MeV Electron Irradiation on Silicon NPN Transistors”, 64th DAE Solid State Physics Symposium, IIT, Jodhpur, 18-22 December, 2019.
2. T. M. Pradeep, Vinayakprasanna N. Hegde, **N. Pushpa**, K.G. Bhushan, Mukesh Kumar, Ambuj Tripathi, K. Asokanand A. P. Gnana Prakash, “A Comparison of Swift Heavy Ion with Electron and Gamma Irradiated Silicon NPN RF Power Transistors”, International Conference on Ion Beams in Materials Engineering and Characterizations (IBMEC-2018), Inter-University Accelerator Center, New Delhi, 09-12 October, 2018.
3. N. H. Vinayakprasanna, T. M. Pradeep, **N. Pushpa**, John D. Cressler, Ambuj Tripathi, K. Asokan and A. P. Gnana Prakash, “Studies on the Low Temperature Lithium Ion Irradiation Effects on SiGe HBTs”, International Conference on Ion Beams in Materials Engineering and Characterizations (IBMEC-2018), Inter-University Accelerator Center, New Delhi, 09-12 October, 2018.
4. N. H. Vinayakprasanna, K. C. Praveen, T. M. Pradeep, **N. Pushpa**, John D. Cressler, Ambuj Tripathi, K. Asokanand A. P. Gnana Prakash, “In-situ Investigation of Ion Irradiation Effects on DC Electrical Characteristics of 200 GHz SiGe HBTs”, International Conference on Ion Beams in Materials Engineering and Characterizations (IBMEC-2018), Inter-University Accelerator Center, New Delhi, 09-12 October, 2018.
5. T. M. Pradeep, Vinayakprasanna N. Hegde, **N. Pushpa**, K. G. Bhushan and A. P. Gnana Prakash, “Comparisons of 5 MeV Proton and 1 MeV Electron Irradiation on Silicon NPN rf Power Transistors”, Proc. of National Conference on Radiation Physics, Department of Physics, Bangalore University, Bangalore, 23-24 November, 2017.
6. A. P. Gnana Prakash, Vinayakprasanna N. Hegde, T. M. Pradeep, **N. Pushpa**, P. K. Bajpai, S. P. Patel and Tarkeshwar Trivedi, “5 MeV Proton Irradiation Effects on 200 GHz Silicon-Germanium Heterojunction Bipolar Transistors”, International Conference on Accelerators in Materials and Medical Sciences, Amity University, Dubai, 05-07 October, 2017.
7. A. P. Gnana Prakash, T. M. Pradeep, Vinayakprasanna N. Hegde, **N. Pushpa**, P. K. Bajpai, S. P. Patel and Tarkeshwar Trivedi, “A Comparisons of 5 MeV Proton and Co-60 Gamma irradiation on Silicon NPN rf Power Transistors and N-channel Depletion MOSFETs”, International Conference on Accelerators in Materials and Medical Sciences, Amity University, Dubai, 05-07 October, 2017.
8. A. P. Gnana Prakash, M. N. Bharathi, N. H. Vinayakprasanna, T. M. Pradeep and **N. Pushpa**, “The Effects of High Energy Ion Irradiations on the I-V Characteristics of Silicon NPN Transistors”, International Conference on Accelerators in Materials and Medical Sciences, Amity University, Dubai, 05-07 October, 2017.
9. T. M. Pradeep, N. H. Vinayakprasanna, B.C. Hemaraju, K.C. Praveen, Arshiya Anjum, **N. Pushpa**, K. G. Bhushan and A. P. Gnana Prakash, “An Investigation of 80 MeV Nitrogen Ion Irradiation on Silicon NPN Transistors”, 61st DAE Solid State Physics Symposium, KIIT, Bhubaneswar, 26-30 December, 2016.
10. T. M. Pradeep, N. H. Vinayakprasanna, Arshiya Anjum, **N. Pushpa**, K.G. Bhushan and A. P. Gnana Prakash, “A Comparison of 10 MeV Electron and Co-60 Gamma Radiation Effects on NPN Silicon Transistors”, National symposium on Application of Radiation, Radiation environment and Human Health, University of Mysore, Mysore, 20-21 December, 2016.
11. Arshiya Anjum, N. H. Vinayakprasanna, T. M. Pradeep, M. N. Bharathi, **N. Pushpa**, J. B. M. Krishna, and A. P. Gnana Prakash, “The effects of Co-60 gamma irradiation on the I-V characteristics of the N-channel DMOSFETs”, National Symposium on Application of Radiation, Radiation Environment and Human Health, University of Mysore, Mysore, 20-21 December, 2016.

12. M. N. Bharathi, N. H. Vinayakprasanna, Arshiya Anjum, T. M. Pradeep, **N. Pushpa** and A. P. Gnana Prakash, "The effects of Co-60 gamma irradiation and isochronal annealing on the I-V characteristics of silicon NPN transistors", National symposium on Application of Radiation, Radiation environment and Human Health, University of Mysore, Mysore, 20-21 December, 2016.
13. Arshiya Anjum, N. H. Vinayakprasanna, T. M. Pradeep, K. C. Praveen, B. C. Hemaraju, **N. Pushpa**, J. B. M. Krishna, Ambuj Tripathi, K. Asokan and A. P. Gnana Prakash, "Analysis of 80 MeV Carbon and 80 MeV Nitrogen Ion Induced Degradation in N-channel DMOSFET", International Conference on Ion Beams in Materials Engineering and Characterizations (IBMEC-2016), Inter University Accelerator Center, New Delhi, 28th September – 1st October, 2016.
14. N. H. Vinayakprasanna, K. C. Praveen, T. M. Pradeep, B. C. Hemaraju, Arshiya Anjum, **N. Pushpa**, John D. Cressler, Ambuj Tripathi, K. Asokan and A. P. Gnana Prakash, "80 MeV Nitrogen and 100 MeV Phosphorous Ion Irradiation Effects on DC Electrical Characteristics of 200 GHz SiGe HBTs", International Conference on Ion Beams in Materials Engineering and Characterizations (IBMEC-2016), Inter-University Accelerator Center, New Delhi, 28th September – 1st October, 2016.
15. **N. Pushpa**, Ambuj Tripathi and A. P. Gnana Prakash, "Study of Recovery in the Electrical Characteristics of High Energy Swift Heavy Ion Irradiated NPN rf Power Transistors by Different Annealing Techniques", International Conference on Ion Beams in Materials Engineering and Characterizations (IBMEC-2016), Inter-University Accelerator Center, New Delhi, 28th September – 1st October, 2016.
16. T. M. Pradeep, N. H. Vinayakprasanna, K. C. Praveen, B. C. Hemaraju, Arshiya Anjum, **N. Pushpa**, Ambuj Tripathi, K. Asokan, K. G. Bhushan and A. P. Gnana Prakash, "An In-situ Investigation of 100 MeV Phosphorous Ion Irradiation on the Electrical Characteristics of NPN rf Power Transistors", International Conference on Ion Beams in Materials Engineering and Characterizations (IBMEC-2016), Inter-University Accelerator Center, New Delhi, 28th September – 1st October, 2016.
17. A. P. Gnana Prakash, N. H. Vinayakprasanna, **N. Pushpa**, K. C. Praveen and John D. Cressler, "Recovery of Electrical Characteristics of Swift Heavy Ion Irradiated Nano- Engineered SiGe HBTs By Electrical Biasing Technique", International Conference on Advanced Materials and Technology (ICMAT-2016), Sri Jayachamarajendra College of Engineering, Mysuru, 26-28 May, 2016.
18. **N. Pushpa** and A. P. Gnana Prakash, "High Energy Proton Irradiation Effects on Subthreshold Characteristics of N-Channel DMOSFETS", International Conference on Advanced Materials and Technology (ICMAT-2016), Sri Jayachamarajendra College of Engineering, Mysuru, 26-28 May, 2016.
19. N. H. Vinayakprasanna, T. M. Pradeep, Arshiya Anjum, K. C. Praveen, K. G. Bhushan, John D. Cressler, **N. Pushpa** and A. P. Gnana Prakash, "High Energy Electron Irradiation Effects on 200 GHz Silicon-Germanium Heterojunction Bipolar Transistors", International Conference on Advanced Materials and Technology (ICMAT-2016), Sri Jayachamarajendra College of Engineering, Mysuru, 26-28 May, 2016.
20. T. M. Pradeep, N. H. Vinayakprasanna, Arshiya Anjum, **N. Pushpa**, K. G. Bhushan and A. P. Gnana Prakash, "The Effects of 10 MeV Electron Irradiation on DC Electrical Characteristics of NPN rf Power Transistors", International Conference on Advanced Materials and Technology (ICMAT-2016), Sri Jayachamarajendra College of Engineering, Mysuru, 26-28 May, 2016.
21. Arshiya Anjum, N. H. Vinayakprasanna, T. M. Pradeep, **N. Pushpa**, K. G. Bhushan, J. B. M. Krishna and A. P. Gnana Prakash, "A Comparison of Gamma and Electron Radiation Effects on N-Channel D-MOSFETs", International Conference on Advanced Materials and Technology (ICMAT-2016), Sri Jayachamarajendra College of Engineering, Mysuru, 26-28 May, 2016.
22. M. N. Bharathi, **N. Pushpa**, N. H. Vinayakprasanna, T. M. Pradeep and A. P. Gnana Prakash, "180 MeV Gold Ion Irradiation Effects on the DC Electrical Characteristics of Silicon NPN rf Power Transistors", International Conference on Advanced Materials and Technology (ICMAT-2016), Sri Jayachamarajendra College of Engineering, Mysuru, 26-28 May, 2016.

23. M. N. Bharathi, **N. Pushpa**, N. H. Vinayakprasanna, and A. P. Gnana Prakash, “80 MeV C⁶⁺ Ion Irradiation Effects on the DC Electrical Characteristics of Silicon NPN Power Transistors”, 60th DAE-SSPS, Amity University, Noida, Uttar Pradesh, 21-25 December, 2015.
24. Arshiya Anjum, N. H. Vinayakprasanna, T. M. Pradeep, **N. Pushpa**, J. B. M. Krishna and A. P. Gnana Prakash, “A comparison of 4 MeV Proton and Co-60 Gamma Irradiation Induced Degradation in the Electrical Characteristics of N-Channel MOSFETs”, International Conference on Radiation Effects in Insulators (REI-2015), Jaipur, 26-31 October, 2015.
25. M. N. Bharathi, N. H. Vinayakprasanna, **N. Pushpa**, Ambuj Tripathi and A. P. Gnana Prakash, “A Comparative Study of Lower LET and Higher LET Swift Heavy Ion Irradiation Effects and Annealing Effects on the DC Electrical Characteristics of Silicon NPN *rf* Power Transistors”, International Conference on Radiation Effects in Insulators (REI-2015), Jaipur, 26-31 October, 2015.
26. A. P. Gnana Prakash, N. H. Vinayakprasanna and **N. Pushpa**, “Swift Heavy Ion Irradiation to Study High Total Dose Radiation Effects on Different Semiconductor Devices” National Conference on Advances in Engineering Materials (NAEM-2015), Department of Physics, DIT University, Dehradun, 20-22 March, 2015.
27. A. P. Gnana Prakash, K. C. Praveen, **N. Pushpa** and John D. Cressler, “The Reliability Studies of Nano-Engineered SiGe HBTs Using Pelletron Accelerator” International Conference on Condensed Matter Physics (ICOMP-2014), Himachal Pradesh, Shimla, 4-6 November, 2014.
28. **N. Pushpa** and A. P. Gnana Prakash, “Damage Correlations in Semiconductor Devices Exposed to Gamma and High Energy Swift Heavy Ions” International Conference on Condensed Matter Physics (ICOMP-2014), Himachal Pradesh, Shimla, 4-6 November, 2014.
29. N. H. Vinayakprasanna, K. C. Praveen, **N. Pushpa**, Ambuj Tripathi, John D. Cressler and A. P. Gnana Prakash, “80 MeV Carbon Ion Irradiation Effects on Advanced 200 GHz Silicon-Germanium Heterojunction Bipolar Transistors.” International Conference on Swift Heavy Ion in Materials Engineering and Characterization (SHIMEC 2014) IUAC, New Delhi, 14-17 October, 2014.
30. M. N. Bharathi, **N. Pushpa**, K. C. Praveen, Ambuj Tripathi and A. P. Gnana Prakash, “The Effects of 80 MeV C⁶⁺ and 150 MeV Ag¹²⁺ Ion Irradiation on I-V Characteristics of Silicon NPN *rf* Power Transistors.” International Conference on Swift Heavy Ion in Materials Engineering and Characterization (SHIMEC 2014) IUAC, New Delhi, 14-17 October, 2014.
31. B. C. Hemaraju, **N. Pushpa** and A. P. Gnana Prakash, “Synthesis, Growth and Optical Properties of 5-Chloro-2(3H) benzoxazolone picrate Crystal for Nonlinear Optical (NLO) Applications.” Proc. of National Seminar on Materials Science and Engineering, pp 51-53, JSS College, Mysore 21-22 March, 2014.
32. Vinayakprasanna, K. C. Praveen, **N. Pushpa**, N. Bharathi and A. P. Gnana Prakash, “The High Energy Swift Heavy Ion Induced Effects on 200 GHz SiGe Heterojunction Bipolar Transistors”, Proc. of National Seminar on Materials Science and Engineering, pp 67-70, JSS College, Mysore, 21-22 March, 2014.
33. Nagaraja Sannakki, P. S. Naik, Arshiya Anjum, D. Sahana, B. S. Samatha, S. Pallavi, M. N. Bharathi, **N. Pushpa**, K. C. Praveen, Vinayakprasanna and A. P. Gnana Prakash, “The Effects of 80 MeV Carbon Ion Irradiation on Threshold Voltage, Trapped Charge, Transconductance and Mobility of N-Channel Depletion MOSFETs”, Proc. of National Seminar on Materials Science and Engineering, pp 63-66, JSS College, Mysore, 21-22 March, 2014.
34. M. N. Bharathi, **N. Pushpa**, K. C. Praveen, Vinayakprasanna and A. P. Gnana Prakash, “A Comparison of 80 MeV Carbon Ions and Co-60 Gamma Irradiation Effects on Silicon NPN *rf* Power Transistors”, Proc. of National Seminar on Materials Science and Engineering, pp 59-62, JSS College, Mysore, 21-22 March, 2014.
35. **N. Pushpa**, K. C. Praveen and A. P. Gnana Prakash, “Study of Radiation Effects on the Electrical Characteristics of Semiconductor Devices”, Proc. of National Seminar on Materials Science and Engineering, pp 54-58, JSS College, Mysore 21-22 March, 2014.
36. M. N. Bharathi, K. C. Praveen and **N. Pushpa** and A. P. Gnana Prakash “High Total Dose Proton Irradiation Effects on Silicon NPN *rf* Power Transistors” 58th DAE Solid State Physics Symposium,

Thapar University, 17-21 December, 2013.

37. A. P. Gnana Prakash, K. C. Praveen and **N. Pushpa**, “Application of nanoengineered SiGe HBTs for high dose radiation environments”, National Conference on Nanomaterials and Devices (NCONAD), NIT, Srinagar, October 2-5, 2013.
38. K. C. Praveen, **N. Pushpa**, John D. Cressler and A. P. Gnana Prakash, “A study on the radiation response of two generations of SiGe HBTs to Co-60 gamma and heavy ion irradiation”, Proc. of 19th National Symposium on Radiation Physics (NSRP-19), pp 244-247, IGCAR, Chennai, December 12-14, 2012.
39. **N. Pushpa**, K. C. Praveen, A. P. Gnana Prakash, P. S. Naik, S. K. Gupta and D. Revannasiddaiah, “Investigation of high total dose and radiation source effects on the I-V characteristics of NPN RF power transistors”, Proc. of 19th National Symposium on Radiation Physics (NSRP-19), pp 236-239, IGCAR, Chennai, December 12-14, 2012.
40. **N. Pushpa**, K. C. Praveen, A. P. Gnana Prakash, P. S. Naik, S. K. Gupta and D. Revannasiddaiah, “The total dose studies of different high energy ions and Co-60 gamma irradiation on the electrical characteristics of n-channel DMOSFETS”, Proc. of 19th National Symposium on Radiation Physics (NSRP-19), pp 240-243, IGCAR, Chennai, December 12-14, 2012.
41. K. C. Praveen, **N. Pushpa**, H. B. Shiva, J. D. Cressler, Ambuj Tripathi and A. P. Gnana Prakash, “A comparison of 75 MeV boron and 50 MeV lithium ion irradiation effects on 200 GHz SiGe HBTs”, 57th DAE Solid State Physics Symposium, IIT Bombay 03-07 December, 2012.
42. K. C. Praveen, **N. Pushpa**, J. D. Cressler, H. B. Shiva, Shammi Verma, Ambuj Tripathi and A. P. Gnana Prakash, “In-Situ Investigation of 75 MeV Boron and 100 MeV Oxygen Ion Irradiation Effects on 50 GHz SiGe HBTs” International Conference on Swift Heavy Ion in Materials Engineering and Characterization (SHIMEC 2012) IUAC, New Delhi, 9-12 October, 2012.
43. **N. Pushpa**, K. C. Praveen, A. P. Gnana Prakash, Ambuj Tripathi, S. K. Gupta and D. Revannasiddaiah, “The Effects of 175 MeV Nickel Ion Irradiation and Annealing Studies on N-Channel Depletion MOSFETS” International Conference on Swift Heavy Ion in Materials Engineering and Characterization (SHIMEC 2012) IUAC, New Delhi, 9-12 October, 2012.
44. A. P. Gnana Prakash, **N. Pushpa**, K. C. Praveen, P. S. Naik and D. Revannasiddaiah, “Evaluation of Pelletron Accelerator Facility to Study Radiation Effects on Semiconductor Devices”, 56th DAE Solid State Physics Symposium, SRM University, 19-23 December, 2011.
45. **N. Pushpa**, K. C. Praveen, A. P. Gnana Prakash, P. S. Naik, S. K. Gupta and D. Revannasiddaiah, “The Influence of 175 MeV Ni¹³⁺ Ion and Co-60 Gamma Irradiation Effects on Subthreshold Characteristics of N-Channel Depletion MOSFETS”, 56th DAE Solid State Physics Symposium, SRM University, 19-23 December, 2011.
46. K. C. Praveen, **N. Pushpa**, Ambuj Tripathi, D. Revannasiddaiah, P. S. Naik, John D Cressler and A. P. Gnana Prakash, “A Comparison of 100 MeV Oxygen Ion and Co-60 Gamma Irradiation Effect on 200 GHz SiGe HBTs”, 16th International Workshop on The Physics of Semiconductor Devices (IWPSD), IIT, Kanpur, December 19-22, 2011. (Proc.of SPIE, Vol. 8549, pp 85490J1-2).
47. **N. Pushpa**, K. C. Praveen, A. P. Gnana Prakash, P. S. Naik, S. K. Gupta and D. Revannasiddaiah, “The Influence of 175 MeV Nickel Ion Irradiation on the Electrical Characteristics of Power Transistors”, 16th International Workshop on The Physics of Semiconductor Devices (IWPSD), IIT, Kanpur, December 19-22, 2011. (Proc.of SPIE, Vol. 8549, pp 85490K1-3).
48. **N. Pushpa**, K. C. Praveen, A. P. Gnana Prakash, P. S. Naik, G. Govindaraj, S. K. Gupta and D. Revannasiddaiah, “Reliability studies on NPN RF power transistors under swift heavy ion irradiation”, 20th International Conference on Ion Beam Analysis, Itapema, Brazil, 10-15 April, 2011.
49. **N. Pushpa**, K. C. Praveen, A. P. Gnana Prakash, P. S. Naik, Ambuj Tripathi, S. K. Gupta and D. Revannasiddaiah, “The effects of swift heavy ion irradiation on threshold voltage, transconductance and mobility of DMOSFETS”, 20th International Conference on Ion Beam Analysis, Itapema, Brazil, 10-15 April, 2011.
50. K. C. Praveen, **N. Pushpa**, P. S. Naik, John D Cressler and A. P. Gnana Prakash “Application of Pelletron accelerator to study total dose radiation effects on 50 GHz SiGe HBTs, 20th International

- Conference on Ion Beam Analysis, Itapema, Brazil, 10-15 April, 2011.
51. K. C. Praveen, **N. Pushpa**, John D Cressler and A. P. Gnana Prakash, “Analysis of High Energy Ion, Proton and Co-60 Gamma Radiation Induced Damage in Advanced 200 GHz SiGe HBTs”, International Symposium on Semiconductor Materials and Devices (ISSMD-2011), M. S. University, Vadodara, 28-30 January, 2011.
 52. **N. Pushpa**, A. P. Gnana Prakash, S. K. Gupta and D. Revannasiddaiah, “Swift Heavy Ion Irradiation Effects on NPN rf Power Transistors”, 55th DAE Solid State Physics Symposium, Manipal University, 26-30 December, 2010.
 53. K. C. Praveen, **N. Pushpa**, AmbujTripathi, D. Revannasiddaiah, John D. Cressler and A. P. Gnana Prakash, “50 MeV Li³⁺ Ion Irradiation Effects on Advanced 200 GHz SiGe HBTs”, Conference on Swift Heavy Ion Induced Materials Engineering and Characterization (SHIMEC 2010), Inter University Accelerator Centre (IUAC), New Delhi, 6-8 October, 2010.
 54. **N. Pushpa**, K.C. Praveen, A. P. Gnana Prakash, AmbujTripathi and D. Revannasiddaiah, “A Comparison of 140 MeV Si¹⁰⁺ Ion and Co-60 Gamma Irradiation Effects on N-channel Depletion MOSFETs”, Conference on Swift Heavy Ion Induced Materials Engineering and Characterization (SHIMEC 2010), Inter University Accelerator Centre (IUAC), New Delhi, 6-8 October, 2010.
 55. **N. Pushpa**, K. C. Praveen, A. P. Gnana Prakash, AmbujTripathi and D. Revannasiddaiah, “The Influence of Linear Energy Transfer of High Energy Ions on the I-V Characteristics of NPN RF Power Transistors”, Conference on Swift Heavy Ion Induced Materials Engineering and Characterization (SHIMEC 2010), Inter University Accelerator Centre (IUAC), New Delhi, 6-8 October, 2010.
 56. A. P. Gnana Prakash, K. C. Praveen, **N. Pushpa** and John D Cressler, “High Energy Radiation Effects on Silicon-Germanium HBTs”, Proc. 18th National Symposium on Radiation Physics (NSRP-18), pp 83-85, M.L. Sukhadia University, Udaipur, 19-21 November, 2009.
 57. **N. Pushpa**, K.C. Praveen, Y. P. Prabhakar Rao, AmbujTripathi, A. P. Gnana Prakash and D. Revannasiddaiah, “Comparison of 50 MeV Li³⁺ and 100 MeV F⁸⁺ ion Irradiation on Silicon NPN RF Power Transistors”, Proc. 18th National Symposium on Radiation Physics (NSRP-18), pp 86-88, M.L. Sukhadia University, Udaipur, 19-21 November, 2009.
 58. K.C.Praveen, **N.Pushpa**, G. Govinda Raj, Somya Gupta, Navakanta Bhat, John D Cressler and A. P. Gnana Prakash, “The Radiation-Hard Silicon-Germanium Heterojunction Bipolar Transistors for Space Missions”, International Conference on Low-Cost Planetary Missions (LCPM-8), Goa, 31st August - 4th September, 2009.
 59. **N. Pushpa**, A. P. Gnana Prakash, K. C. Praveen, Y. P. Prabhakara Rao, AmbujTripathi, D. Kanjilal, D. K. Avsthi and D. Revannasiddaiah, “The Effect of 100 MeV F⁸⁺ and 48 MeV Li³⁺ Ion Irradiation on Oxide Material of N-Channel MOSFETs”, Workshop on Oxide Materials, Aligarh Muslim University, 12-13 May, 2009.
 60. **N. Pushpa**, A. P. Gnana Prakash, K. C. Praveen, Y. P. Prabhakara Rao, AmbujTripathi, D. Kanjilal, D. K. Avsthi and D. Revannasiddaiah, “Li³⁺ Ion Damage on Spacer Oxide of Silicon NPN Transistors”, Workshop on Oxide Materials, Aligarh Muslim University, 12-13 May, 2009.
 61. A. P. Gnana Prakash, K. C. Praveen, **N. Pushpa**, D. Revannasiddaiah, and John D. Cressler, “The Effects of High Energy Hydrogen Ion Irradiation on Emitter-Base and Shallow Trench Isolation Oxide of Advanced SiGe HBTs”, International Conference on Multifunctional Oxide Materials, Himachal Pradesh University, Shimla, 16-18 April, 2009.
 62. **N. Pushpa**, K. C. Praveen, D. Kanjilal, AmbujTripathi, A. P. Gnana Prakash and D. Revannasiddaiah, “The Effects of 50 MeV Li³⁺ Ion Irradiation on Emitter-Base Spacer Oxide of Silicon RF Power Transistors”, International Conference on Multifunctional Oxide Materials, Himachal Pradesh University, Shimla, 16-18 April, 2009.
 63. **N. Pushpa**, K. C. Praveen, D. Revannasiddaiah, John D. Cressler and A. P. Gnana Prakash, “High energy radiation effects on NPN transistors” National Conference on Semiconductor Materials and Technology, Gurukula Kangri Vishwavidyalaya, Haridwar, 16-18 October, 2008.
 64. A. P. Gnana Prakash, **N. Pushpa**, K. C. Praveen, and John D. Cressler, “Application of SiGe Heterojunction Bipolar Transistor Technology for Extreme Environment Electronics” National

Conference on Semiconductor Materials and Technology, Gurukula Kangri Vishwavidyalaya, Haridwar, 16-18 October, 2008.

Annual Reports: 13

1. **N. Pushpa**, K. C. Praveen, A. P. Gnana Prakash, AmbujTripathi, Y. P. Prabhakara Rao and D. Revannasiddaiah, "The Effect of 100 MeV Fluorine Ion Irradiation on Interface and Oxide Trapped Charge of MOS Devices", IUAC Annual Report, Page no. 252-253, 2008-2009.
2. **N. Pushpa**, K. C. Praveen, A. P. Gnana Prakash, AmbujTripathi, Y. P. Prabhakara Rao and D. Revannasiddaiah, "The Effect of 50 MeV Li³⁺ ion irradiation on generation-recombination centers in SiO₂", IUAC Annual Report, Page no. 253-254, 2008-2009.
3. K. C. Praveen, **N. Pushpa**, Y. P. Prabhakara Rao, AmbujTripathi, Somya Gupta, Navakanta Bhat and A. P. Gnana Prakash, "Effect of 50 MeV Li³⁺ ion irradiation on 200 GHz SiGe Heterojunction Bipolar Transistors", IUAC Annual Report, Page no. 254-256, 2008-2009.
4. **N. Pushpa**, K.C. Praveen, A.P. Gnana Prakash, Y.P. Prabhakara Rao, AmbujTripathi, G. Govindaraj and D. Revannasiddaiah, "The effects of linear energy transfer on degradation of I-V characteristics of N-Channel MOSFETs", IUAC Annual Report, Page no. 201-203, 2009-2010.
5. **N. Pushpa**, K. C. Praveen, A. P. Gnana Prakash, Y. P. Prabhakara Rao, AmbujTripathi and D. Revannasiddaiah, "Comparison of different LET high energy ion irradiation effects on Si BJTs", IUAC Annual Report, Page no. 203-205, 2009-2010.
6. **N. Pushpa**, K. C. Praveen, A. P. Gnana Prakash, AmbujTripathi, S. K. Gupta and D. Revannasiddaiah, "140 MeV Silicon Ion Irradiation Effects on the I-V Characteristics of NPN RF Power Transistors", IUAC Annual Report, Page no. 213-214, 2010-2011.
7. **N. Pushpa**, K. C. Praveen, A. P. Gnana Prakash, S. K. Gupta, AmbujTripathi and D. Revannasiddaiah, "The effect of 140 MeV Silicon Ion Irradiation on Subthreshold and Transconductance Characteristics of N-channel Depletion MOSFETs", IUAC Annual Report, Page no. 214-215, 2010-2011.
8. K. C. Praveen, **N. Pushpa**, John D Cressler, AmbujTripathi and A. P. Gnana Prakash, "Assessment of 50 GHz SiGe HBTs for Harsh Radiation Environment by Heavy Ion Irradiation", IUAC Annual Report, Page no. 215-217, 2010-2011.
9. T. M. Pradeep, N. H. Vinayakaprasanna, K. C. Praveen, B.C. Hemaraju, Arshiya Anjum, **N. Pushpa**, K.Asokan,Ambuj Tripathi, K.G. Bhushan and A. P. Gnana Prakash, "An in-situ Investigation of 100 MeV Phosphorous ion irradiation on the Electrical Characteristics of NPN rf Power Transistors", IUAC Annual Report, Page no.126-127, 2015-2016.
10. T. M. Pradeep, N. H. Vinayakaprasanna, K. C. Praveen, B.C. Hemaraju, Arshiya Anjum, **N. Pushpa**, K.Asokan,Ambuj Tripathi, K.G. Bhushan and A. P. Gnana Prakash, "80 MeV Nitrogen ion irradiation effects on the I-V characteristics of NPN rf Power Transistors", IUAC Annual Report, Page no.156-157, 2015-2016.
11. Arshiya Anjum, N. H. Vinayakaprasanna, K. C. Praveen, T. M. Pradeep, B. C. Hemaraju, **N. Pushpa**, Ambuj Tripathi, K. Asokan, J. B. M. Krishna,and A. P. Gnana Prakash, "Swift heavy ion induced radiation effects at Si/SiO₂ interface of MOS devices", IUAC Annual Report, Page no.157-158, 2015-2016.
12. T. M. Pradeep, N. H. Vinayakaprasanna, **N. Pushpa**, Ambuj Tripathi and A. P. Gnana Prakash, "An In-situ Investigation of Bromine and Copper Ion Irradiation on NPN Transistors", IUAC Annual Report, Page no.113-114, 2018-2019.
13. Arshiya Anjum, T. M. Pradeep, Vinayakaprasanna N Hegde, **N. Pushpa**, Ambuj Tripathiand A. P. Gnana Prakash, "Analysis of 140 MeV Copper and 160 MeV Bromine Ion Irradiation Effects on N-Channel MOSFETs", IUAC Annual Report, Page no.116, 2018-2019.

Invited Talk/ Special Lecture: 1

1. Presented special lecture “Advanced Physics”, on special lecture programme organized by SDM College, Mysore on 29th, August 2019.

Workshop/Conferences Organized

1. Two days National Webinar organized on “Recent Trends in Advanced Physics” during 29-30 July 2020 at PG Department of Physics, JSS College of Arts, Commerce and Science, Ooty Road, Mysore

Workshop/Conferences Attended

1. UGC-DAE sponsored “Thematic Workshop of Materials Science Using Ion Beams and Gamma Radiation” organized by VECC, Kolkata at Kolkata during May 28-29, 2019
2. UGC sponsored two day State Level Seminar on “Role of Nuclear Science in Energy Production and Societal Applications” at JSS College of Arts, Commerce & Science, Ooty Road, Mysore held on 1-2 March 2019.
3. UGC sponsored one day workshop on “Capacity Building” at JSS College of Arts, Commerce & Science, Ooty Road, Mysore held on 24th March 2018.
4. UGC Sponsored State Level Seminar on “Relativity and Gravitational Waves” at JSS College of Arts, Commerce & Science, Ooty Road, Mysore held on 10th March 2018.
5. UGC sponsored two day Workshop on “Research and Publication” at JSS College of Arts, Commerce & Science, Ooty Road, Mysore held on 18-19 March 2016.
6. UGC sponsored three days Workshop on “Statistical Physics” held at JSS College of Arts, Commerce & Science, Ooty Road, Mysore during 25-27, November 2015.
7. One day Workshop on “Computational Materials Science” organized by Department of Studies in Physics, University of Mysore, Mysore held on 24th Jan 2014.
8. Two days Regional Conference on “Science and Technology for Education and Health Care” Jointly organized by KSTA and JSS College of Arts, Commerce & Science during 21st and 22nd Feb 2014 at JSS College of Arts, Commerce & Science, Ooty Road, Mysore-570025.
9. Three days Workshop on “Theoretical Physics Lectures” organized by The Indian Academy of Sciences (Bangalore), Indian National Science Academy (New Delhi) and The National Academy of Sciences, India (Allahabad) in collaboration with DoS in Physics, University of Mysore, Mysore during 8th to 10th Nov 2012.
10. Two days National Workshop on “Science with ECR Based keV Ion Beams” organized jointly by VECC, Kolkata and UGC-DAE Consortium for Scientific Research-Kolkata Centre at VECC Kolkata during January 20-21, 2011.

Academic/Administrative Experience

Chairperson	PG Department of Physics, JSS College, Ooty Road, Mysore	2020-till date
Chairperson	BOE in Physics (PG), JSS College, Ooty Road, Mysore	2020-till date
Member	BOS in Physics (PG), JSS College, Ooty Road, Mysore	2018-22
Member	BOS in Physics (PG), JSS College, Ooty Road, Mysore	2013-15
Member	Admission Committee, JSS College, Ooty Road, Mysore	2013-till date