

Agnel Charities

Fr. C. Rodrigues Institute of Technology, Vashi, Navi Mumbai, Maharashtra

Journal / Conference Publications of Dr. Mini Rajeev

2003-2023

Journal papers

1. Chinmay V., Soham T, Nivedita Y., Hrithik W., Mini Rajeev, "Small Scale Implementation of Smart Farming using Internet of Things", in SAMRIDDHI, A Journal for Physical Sciences, Engineering and Technology (S-JPSET), vol.13, Special issue 2, pp.174-181, Dec. 2021.
2. Mini Rajeev and V. Agarwal, "Low Voltage Ride-Through Capability of a Novel Grid Connected Inverter Suitable for Transformer-Less Solar PV-Grid Interface," in **IEEE Trans. on Industry Applications**, vol. 56, no. 3, pp. 2799-2806, May-June 2020. <https://doi.org/10.1109/TIA.2020.2979134> . **Received K. Shankar meritorious paper award from IEEE Bombay section.**
3. Mini Rajeev and V. Agarwal, "Analysis and Control of a Novel Transformer-Less Micro-inverter for PV-Grid Interface," **IEEE Journal of Photovoltaics**, vol. 8, no. 4, pp. 1110-1118, July 2018. <https://doi.org/10.1109/JPHOTOV.2018.2825298>.
4. Mini Rajeev and V. Agarwal, "Single Phase Current Source Inverter with Multi loop Control for Transformer-less Grid-PV Interface," **IEEE Trans. on Industry Applications**, vol. 54, no. 3, pp. 2416-2424, May-June 2018. <https://doi.org/10.1109/TIA.2017.2788414>
5. F. Khan and Mini Rajeev, "A Multi-Port Half Bridge DC-DC Converter for PV Application", Int. Journal of Electrical Electronics & Computer Science Engineering Volume 4, Issue 6, Dec.2017.
6. Ramkumar L M. and Mini Rajeev, "Introduction to Multilevel DC-Link Inverter and Comparison of Switching Strategies for Cascaded Half Bridge Multilevel DC-Link Inverter", Int. Journal of Global Technology Initiatives, vol.5, no.1,B8-B16, 2016.
7. Ramkumar L M. and Mini Rajeev, "Comparative Evaluation of Cascaded Half-Bridge Multilevel DC-Link Inverter and Conventional H Bridge Multilevel Inverter", Int. Journal for Research in Applied Science & Engg. Technology, vol.3, no.10, 460-467, Oct.2015.
8. Pratik D. R., and Mini Rajeev, "Single Phase Transformer-less Inverter and its Closed Loop Control for Grid Connected PV Applications", Int. journal of Electrical, Electronics and Computer Systems, vol.3, no.5,33-37,2015. ISSN (Online): 2347-2820.
9. Parimal P. and Mini Rajeev "Comparison of three different topologies of a five level Multi level inverter", Int. Journal of Engineering Research & Technology

(IJERT), ICNTE – 2015, vol. 3, issue 01, ISSN (Online) : 2278-0181.

10. Sangita R N. and Mini Rajeev, “Modeling Simulation and Design of Photovoltaic Array with MPPT Control Techniques”, Int. Journal of Applied Power Engineering, vol.3, no.1, 41-50, 2014. <http://doi.org/10.11591/ijape.v3.i1.pp41-50>
11. Sreedevi S. Nair and Mini Rajeev, “Effect of luminaries and Heat sink on the performance of PV powered HPLED lighting for Indoor Applications”, Int. Journal of Current Engineering and Technology, vol.6, no.2, June 2013. ISSN 2277 – 4106.
12. Mini Rajeev, Shiva. B, Varun. B, Hiten. M, “The implementation of a microcontroller based boost converter for Photovoltaic interface”, Int. Journal on Recent trends in Engg. and Technology, vol.6, no.2, Nov.2011, ACEEE, USA.

Conference Papers

13. Mini Rajeev, “An input current shaper with Boost and Flyback converter using Integrated Magnetics”, Fifth International IEEE conference on Power Electronics & Drives Systems (PEDS 2003), Singapore, Nov. 17-21, 2003. <https://doi.org/10.1109/PEDS.2003.1283073>
14. Mini Rajeev, Seema Jadhav, Kirtish, “Design and Implementation of MPPT System for Battery Charging Application using Solar Panel”, International Conference, Renewable Energy Asia-2008 (REA 2008), IIT Delhi, 11-13, Dec. 2008. [Proceedings published as a book.](#)
15. Mini Rajeev, Divya .M, Ruchi .H “A comparative study of Boost and Buck Converter Topologies for Solar Photovoltaic Standalone Systems”, National Conference on Alternate Energy Sources”, Pune, 31st Jan. 2009.
16. Mini Rajeev, Divya .M, Ruchi .H “A study of replacing CFL by LED light for Solar Powered Street Light in Standalone Systems”, NCNTE 2010, Fr.C.R.I.T., Vashi, Feb.25-26, 2010. **Received third Best paper award.**
17. Mini Rajeev, Sreedevi. S. Nair, Seema Jadhav, “Design Considerations of a Solar Powered Street Light for Standalone PV Systems”, CCPE 2010, Chennai, 28-29, July, 2010.
18. Mini Rajeev and Sreedevi S. Nair, “Economic Feasibility of solar powered street light using high power LED –A case study”, Int. conference ICREU- 2012, Coimbatore.
19. Sreedevi S. Nair and Mini Rajeev, “Performance of solar powered HPLED lamp for indoor lighting-A Case Study”, international conference ISG-2012, Pune.
20. Sangita R N. and Mini Rajeev, “Design and Simulation of three phase Inverter for grid connected Photo voltaic systems”, NCNTE-2012, Fr.C.R.I.T., Vashi.
21. Sreedevi S. Nair and Mini Rajeev “Design and Implementation of driver circuit for high power LED”, NCNTE-2012, Fr.C.R.I.T., Vashi.

22. Jisha S. and Mini Rajeev, "Fuel Cell based Power supply system for Residential Applications", National Conference NIRMAN 2013, A. C. P.C.E, Navi Mumbai.
23. Sreedevi. S. Nair and Mini Rajeev "Design and implementation of PMBLDC motor for solar powered pumps", RACEM-2013, V.I.T, Mumbai.
24. Mini Rajeev and V. Agarwal, "Novel transformer-less inverter topology for single-phase grid connected photovoltaic system," IEEE 42nd Photovoltaic Specialist Conference (PVSC), New Orleans, USA, pp. 1-5, Jun. 2015. <https://doi.org/10.1109/PVSC.2015.7356271>
25. C. Phani Kumar, Mini Rajeev and V. Agarwal, "A novel single stage zero leakage current transformer-less inverter for grid connected PV systems," 42nd PVSC 2015, New Orleans, USA, pp. 1-5, Jun. 2015. <https://doi.org/10.1109/PVSC.2015.7356292>
26. Mini Rajeev and V. Agarwal, "Closed loop Control of Novel Transformer-less Inverter Topology for Single Phase Grid Connected Photovoltaic system," IEEE PECTI 2016, Illinois, pp.1-7, Feb.2016. <https://doi.org/10.1109/PECTI.2016.7459232>
27. Mini Rajeev and Vivek Agarwal, "Current Source Inverter with reduced leakage current for Transformer-less Grid -PV interface", presented at the 7th Power India Int. Conference IEEE PIICON 2016, Bikaner,25-27, Nov. 2016.
28. Ram kumar L Maurya, Mini Rajeev, "Implementation of multilevel DC-link inverter for standalone application", Int. conference, IEEE-ICNTE-2017, Fr.C.R.I.T., Vashi, 27-28th Jan 2017. <https://doi.org/10.1109/ICNTE.2017.7947933>.
29. Shahbaz G. S. and Mini Rajeev, "Active Power Decoupling method using active buffer in a single phase Photovoltaic (PV) inverter", Int. Conference, EIT-2017, New Delhi, June 2017.
30. Mini Rajeev and Vivek Agarwal, "Realization of a novel transformer-less grid-PV interfaced inverter", IEEE Int. conference, CCUBE-2017, Bangalore, 15-17, Dec.2017. <https://doi.org/10.1109/CCUBE.2017.8394158>, **Awarded as "Best Paper of the conference"**
31. S. Salvi, A. Antony, A. Parab, T. Pokale and Mini Rajeev, "Renewable Energy Application of Push Pull Converter", all India seminar on Recent Trends in Renewable Energy Application & Research, The Institution of Engineers (India), Gujarat State Centre,16-17th Feb.2018.
32. Mini Rajeev, Vivek Agarwal, "Low Voltage Ride-Through Capability of a Novel Grid Connected Inverter Suitable for Transformer-less solar PV grid interface",8th IEEE Int. conference IICPE-2018, MNIT, Jaipur,13-15th Dec.2018. <https://doi.org/10.1109/IICPE.2018.8709514>
33. Mini Rajeev, Divya S., "Harmonic Compensation by Transformer-less Grid- tied PV inverter using Conservative Power Theory",5th IEEE Int. conference for Convergence in Technology, I2CT2019, Pune, 29th-31st Mar.2019. <https://doi.org/10.1109/I2CT45611.2019.9033657>

34. Omkar P., Mini Rajeev, "A Single Phase Inverter with Improved Gain Suitable for Transformer-Less PV Grid Interface", Int. Conference, ICATE-2019, DMCE, Navi-Mumbai, 4-5th April 2019.
35. Omkar P., Mini Rajeev, "Experimental Validation of a Transformer-less Inverter with improved gain for Grid-PV Interface", NPEC-2019, NIT Trichi, 13-15th Dec. 2019. <https://doi.org/10.1109/NPEC47332.2019.9034810>
36. Mini Rajeev et al, "Implementation of Bidirectional DC Converter and Inverter for Drive Application", ICESD-2020, Jadavpur University, Kolkata, 14-15th Feb. 2020.
37. E. Jennifer Isaac, Mini Rajeev, "A survey of Current Source Inverter Topologies and Control Schemes for Grid connected Photovoltaic Systems", Int. Conference, ICATE-2020, DMCE, Navi Mumbai, 3rd April 2020.
38. Mini Rajeev, Article on "Solar Photovoltaic Systems", IEI Souvenir, Jan. 2020.
39. Utkarsh M. and Mini Rajeev, "An Investigation in to the Parasitic Influence on the Performance of Buck-Boost converter", ICNTE-2021, 15-16th, Jan. 2021. <https://doi.org/10.1109/ICNTE51185.2021.9487664>
40. Mini Rajeev et al, "Design and Implementation of a Compact DC-DC Converter for powering FPGAs", IEEE CONECCT, IEEE Bangalore section, 9-11th July 2021. <https://doi.org/10.1109/CONECCT52877.2021.9622674>
41. Akash M., A., Indalkar, P., Kamath, K., Samant, P., Mini Rajeev. (2023). Compact Power Supply for Induction Heating in Shrink Fitting. In: Kumar, S., Singh, B., Sood, V.K. (eds) Recent Advances in Power Electronics and Drives. Lecture Notes in Electrical Engineering, vol 973. Springer, Singapore. https://doi.org/10.1007/978-981-19-7728-2_2.
42. Sreedevi S. Nair and M. Rajeev, "Exploration of Three-port DC to DC Converters and its Multidisciplinary Applications," 2022 IEEE 3rd Global Conference for Advancement in Technology (GCAT), Bangalore, India, 2022, pp. 1-6, [doi: 10.1109/GCAT55367.2022.9972214](https://doi.org/10.1109/GCAT55367.2022.9972214)
43. E. J. Isaac and M. Rajeev, "Improved Current Source Inverter with Lesser Input Inductor for PV-Grid Interface," 2022 International Conference on Emerging Trends in Engineering and Medical Sciences (ICETEMS), Nagpur, India, 2022, pp. 97-101, [doi: 10.1109/ICETEMS56252.2022.10093272](https://doi.org/10.1109/ICETEMS56252.2022.10093272).
44. Harsh Chaudhary, Gokul Narayanan, Khaliluddin S., Ayush Misra, Shaikh M. Owais, Seema Jadhav and Mini Rajeev, "Design and Development of a Small Scale EMU Model with Motorman Cabin Emulation," 2023 5th Biennial Int. Conference on Nascent Technologies in Engineering (ICNTE), Navi Mumbai, India, 2023, pp. 1-6, [doi: 10.1109/ICNTE56631.2023.10146617](https://doi.org/10.1109/ICNTE56631.2023.10146617). **Received "Best paper of the track" award.**
45. P. Chavan, K. Easwaran, H. Mahajan, P. Jaitpal and M. Rajeev, "Smart Gas Stove

- with Inbuilt Safety Features," 2023 5th Biennial Int. Conference on Nascent Technologies in Engineering (ICNTE), Navi Mumbai, India, 2023, pp. 1-5, [doi: 10.1109/ICNTE56631.2023.10146668](https://doi.org/10.1109/ICNTE56631.2023.10146668).
46. Sreedevi S. Nair and M. Rajeev, "A Novel High Gain Non-Isolated Three-port Converter for Stand-Alone PV Applications," 2023 Int. Conference on Computer, Electronics & Electrical Engineering & their Applications (IC2E3), Srinagar Garhwal, India, 2023, pp. 1-6, [doi: 10.1109/IC2E357697.2023.10262587](https://doi.org/10.1109/IC2E357697.2023.10262587).
47. Rishabh M. Komal P. Shivani S. and Mini Rajeev, "Power Factor Improvement using PWM Rectifier in Shrink Fitting", 2023 IEEE 2nd Int. Conference on Industrial Electronics: Developments & Applications (ICIDeA), NIT Manipur, 29-30 Sept. 2023.

Book Chapter

Book chapter titled "Power Electronic Converters and its FPGA based control applicable to Electric Vehicles", published in the edited book "Power Electronics for Electric Vehicles and Energy Storage: Emerging Technologies and Developments", CRC press, Taylor & Francis Group, March 2023.