



## Best Papers for PECTEA-2025

S.no	Paper ID	Title	Authors	Institute
1	3	RZA-GSRS-Based Utility-Interfaced PV System for EV Charging	Shishupal, Sumit Ghatak Choudhuri	IIT Roorkee
2	37	Link Current Optimization for Triple Port Active Bridge Converter with Series Voltage Injection	Silpashree Sahu, Dipankar De, Alberto Castellazzi	IIT Bhubaneswar
3	48	New Systematic Design Methodology of Modular Multilevel Converters in Rectifier Applications	Meddi Tharun, Ashok Mankani, Kumar Saurabh, Aritra Chakraborty, Aditya Naugraiya, Amal S	Institute For Plasma Research, Homi Bhabha National Institute
4	79	Design of Synchronous Reluctance Motor for Electric Two-wheeler Application	Saddikuti Sriharitha, Jitendra Gautam, Dr. Ankit Dalal	IIT Bhubaneswar
5	81	Dynamic Analysis of Quadratic Gain Single Input Dual Output DC-DC Converter	Divya K, Kumaravel S, K. Sundararaju	M. Kumarasamy College of Engineering, NIT Calicut
6	82	Thermal and Reliability Analysis of a Dual-Switch Switched Inductor-Capacitor Network-Based HighGain DC-DC Converter	Vinu Varshath S, Kumaravel S	NIT Calicut
7	129	Analysis of Optimal Deep Neural Network for Enhanced Battery SOC Estimation	Prashant Aher, Dev Rai, Sanjaykumar Patil, Rhugved Rane, Tanmayee Rathod, Janyaa Tikoo	HELLA India Automotive Pvt. Ltd, COEP Technological University
8	141	Dynamic Duty Cycle based Pulse Charging of Parallel Lithium-Ion Batteries for Electric Vehicles	Supriya Chakrabarty, Niranjana Behera, Sankarsan Mohapatra and Abhinav Arya	IIT Bhubaneswar

9	175	Performance Characteristics of Low Vibrating Bridge-Configured Squirrel Cage Induction Motor	Rakesh Deore, Bipul Brahma, Karuna Kalita	IIT Guwahati
10	178	Modified State-Space Modeling and Voltage Mode Control Implementation for an Interleaved Boost Converter in Discontinuous Conduction Mode	Nabhomoni Ghoshal, Dalija Rath, Susovon Samanta	NIT Rourkela
11	184	Kriging-Based Prediction of Air Delivery Performance in Ceiling Fans and Its Validation	Sharankumar Shastri, Bhim Singh, Vipin Kumar Singh	IIT Delhi
12	200	Enhanced Inertia Estimation in Microgrids using a Modified RoCoF Method	R. Venkatesh, P. C. Sekhar, C. N. Bhende	IIT Bhubaneswar
13	219	Cyber Resilient Fully Distributed Secondary Control for Inverter Dominant AC microgrid	Phani Swecha Tadepalli, M. N. Alam, Deepak Pullaguram	NIT Warangal IIT Kharagpur
14	225	A Universal Input Single-Stage Bidirectional Charger for Light Electric Vehicles	Akash Kumar Swain, Vivek Agarwal	IIT Bombay
15	226	A Robust Data Driven FDI attack Detection Framework for Inverter based Microgrids	Suprabhath Sriranga Koduru, Venkata Siva Prasad Machina, Sreedhar Madichetty, Sukumar Mishra	IIT Dhanbad Mahendra University
16	66	Direct Torque Control of an 8/6 Switched Reluctance Motor Using a Shared Switch Converter	Akshat Sharma, Himanshu Misra	<i>Indian Institute of Technology, Mandi</i>
17	10	Online Corrective Contingency Analysis for Floating Green Microgrid Using Holomorphic Embedding Method and Extreme Learning Machine	Mrutyunjaya Sahani, Sanjib Kumar Panda	<i>National University of Singapore, Singapore</i>
18	77	Electromagnetic Emission Estimation Using Common-Mode	Ratnakar Nutenki, Aurobinda Routray, Ashok Kumar Pradhan	<i>Indian Institute of Technology Kharagpur</i>

		Current for Arc Fault Detection in Low Voltage Systems		
19	98	A Novel High Voltage Gain SiC-based Three Port DC-DC Converter for Standalone PV Applications	Mr.Nagaraju Kothapalli, Dr.Sateesh Kumar Kuncham	National Institute of Technology Tiruchirappalli
20	127	Fixed Voltage Based P&O Method for Battery Charging from Partial Shaded PV String	Durgesh Chandra Nautiyal, Jenis Jain, Himanshu Sekhar Sahu, Vijay Kumar Chakka	<i>Shiv Nadar Institution of Eminence Deemed to be University, Delhi</i>
21	138	Permanent-Magnet Biased Inductor for DC Fault-Current Limiting Applications	Aravind G, Shivendra Pratap Singh, Amarkumar Kushwaha	<i>Indian Institute of Technology Dharwad</i>
22	60	Magnetic Loss Comparison for Link Current Optimized Triple Active Bridge Converters with Soft Switching	Harikrishnan A, Silpashree Sahu, Varri Chandra Sekhar Pavan Kumar, Dipankar De	<i>Indian Institute of Technology Bhubaneswar</i>
23	176	Enhancing Predictive Maintenance of Urban Streetlights through Hyperparameter-Tuned Machine Learning Techniques	Ashok Ganga, Kanaka Raju Kalla,Kumaraswamy Simhadri, P. Maheswara Rao, Akhilash Pennam Matcha Nikhitha Kelli Akshara Pydisetti Prasanthi	Aditya Institute of Technology and Management Tekkali
24	207	Enhanced Half-Bridge Sub-module Modular Multilevel Converter and its Capacitor Voltage Balancing Control	Akshaya D. Bonde1, Pradyumn Chaturvedi, Vijay B. Borghate	Visvesvaraya National Institute of Technology, Nagpur
25	147	A Modular Three-Phase Induction Heating Generator with Enhanced Power Factor	Anshal S Padole, Monish Rane, Rajendra R Sawant, Yerramreddy Srinivasa Rao, Bhalchandra N Chaudhari	<i>Sardar Patel Institute of Technology Mumbai</i>