

Poster Presentation

TT1- TT7 19-11-2024, 10:30-11:00 am (Tulika Bhattacharya CPRI Bangalore, CMC Krishnan, Prajof P)

Venue: LHC-C, Ground Floor

Paper ID	Paper Details (Title & Authors)
134	PSO-Based Optimised Type-III Controller for Dual-Input Bipolar Triple-Output Coupled Inductor Buck Converter; Isac Daimary and Rajib Jana
247	Non-Linear PID based Power Quality Improvement using Single-Phase Shunt Active Power Filter; Jotirmoy Samanta, Ralli Sangno, and Rajen Pudur
436	Performance optimization of FCL in DC Microgrid using Meta-Heuristic Techniques; Rachita R Sarangi, Prakash K. Ray, Sudarsan Swain, Monalisa Sahoo, and Asit Mohanty
441	Optimized IGWO based MPPT for High-Gain 13-Level Switched Capacitor Multilevel Inverter; Arya Singh, Dr. V. N Lal and Ranjit Mahanty
774	d-axis Disturbance Injection and Wavelet Transform Based Islanding Detection; Senthil Kumar M, Suman Murugesan
220	Soft Switching Range Extension of Bidirectional DC-DC Converter for Applications Demanding Wide Voltage Gain; Roja Roy and Jayakumar P
105	Satellite Tumbling Control Using Magnetorquers; Malavika S, Merin Anna John, S Meenakshi, Advait P S, Nisha G K, and Vrinda Prasad
125	Transformer Current Stress Minimization Using Voltage Matching Control in a Solar PV Fed Dual Active Bridge Converter; Vivek Agarwal and Shashank Kurm
127	Integrated Speed and Current Control with Adaptive Sliding Mode Based Deadbeat Predictive Strategy Considering Disturbances for In-Wheel PMSMs; Vinod Rajeshwar Chiliveri, Kalpana R, and Dharavath Kishan
131	A Simplified Primary Side Control Strategy for Resonant Inductive Power Transfer Systems; Avishek Muni Sushan Pradhan and Kunwar Aditya
138	Development of FPGA-based Interface Card for Power Electronic Converter Control; Hitesh Malviya and Chandan Kumar
627	Current Ripple Analysis of 72° Phase-Clamping PWM Techniques for Five-Phase Drive; Sourabh Ashok Sadale, Devendra R Dhore and Ramsha Karampuri
175	Optimized IGWO based MPPT for High-Gain 13-Level Switched Capacitor Multilevel Inverter; Arya Singh, V. N Lal, and Ranjit Mahanty
219	Comparative Studies of Wire-wound and Planar Transformers in a PSFB Converter for Welding; Gourab Banerjee, Abhishek Kar, Dona Chakraborty, Sayantan Chanda, and Mainak .Sengupta
911	Design, Analysis and Comparison of 5kW Synchronous Reluctance Motor and Interior PM Synchronous Motor for EV Application; Anurag Sharma, Durgesh Kumar Banchhor, and Amit Kumar Jain
279	Sustainable Maritime Transportation through Modular Wireless Shore-to-Ship Charging; Gyanendra Tiwari, Rakesh Pulletikurthi, and Deepak Ronanki
287	Assessment of Unbalance Factor in Line Currents during Fault Tolerant Operation of Five Phase Induction Motor-Drive System; Jahera Shaik and R Chudamani
417	A Comprehensive Analyses of Single-Phase Grid-tied Bidirectional Electric Vehicle Charger; Satyabrata Behera and Venkata Ramana Naik N
322	Loop Shaping based Robust Controller Design for Boost Converter in DC Microgrid; Akanksha Dwivedi and Ahmad Ali
332	A New Control Scheme for V2G Power Transfer in Modified Series-Parallel Resonant Converter; N. J. Merlin Mary and Shelas Sathyan
347	Transient Stability Enhancement of a Synchronous Generator Using DFIG Considering its LVRT Capability; Jitendra Kumar Mahawar, Gururaj M Vishwanath, and Saikat Chakrabarti
349	Minimization of DC Bus Side Current Ripple in DFIG Supported DC Micro Grid; Saumya Tripathi and Amit Kumar Jain
488	Design of a Robust H-Infinity Plasma Position Controller for Aditya-U Tokamak; Sachin Kumar, Bidyadhar Subudhi, and Rohit Kumar
364	Comparative Analysis of Multiport Boost Converter and Z-Source Multiport Converter for EV Charging; Sneha Mahobiya and Jose Thankachan
381	A Critical Analysis of Flywheel Energy Storage Systems' Technologies, Applications, and Prospects; Rupesh Kumari and Kumkum Dubey
149	A Platform-less Voltage-Sourced Wind Energy Collection System for Offshore Wind Farms Using Single Active Bridge (SAB) Converters; Sakshi Singh, Dheeman Chatterjee, and Tanmoy Bhattacharya
418	A Novel Approach to Accurate Small Signal Modeling of Resonant Converters; Goutam Ghosh, Soumitro Vyapari, and Viju Nair
576	A Novel Control Technique for Dual Active Bridge Converter; Gudelli Shivakumar, Paila Lokanadham, Bighnaraj Panda, and Amarendra Edpuganti
308	Analysis of Power Deployment Characteristics and Costs of Energy Storage Systems for Frequency Regulation in Renewable-rich Power Grid; Khwrwmdao Basumatary, Hafiz Zubyrul Kazme, and Anup Shukla
564	Design and Analysis of High Torque Toroidal Motor for Low-speed Spacecraft Actuators; Smitha Krishnan, Srirama Srnivas, and Ravichandran MH
569	Audio-Susceptibility in Peak Current Controlled CI-SIDO Buck Converter; Gayatri Nayak, Paban Bujor Barua, and Shabari Nath
358	Decentralized Frequency and DC-Voltage Deviation Control in Multi-Terminal HVDC (MTDC) Grids with High Penetration of Renewable Sources; Satish Kumar Ancha and Bibhu Prasad Padhy
644	Design of Ferrite Magnet assisted Synchronous Reluctance Motors for Electric Vehicle applications; Sandeep Reddy Tukkani, Sai Krishna Mulpuri, Om Jee Singh, and Praveen Kumar
648	Modified Field Oriented Control Based Kramer Drive for Wound Rotor Induction Motor with Sinusoidal Machine Current and Voltage; Indrasis Roy and Amit Kumar Jain
698	Modular Multilevel Converter Control by Using Sorting Algorithm and Smoothing Of Arm Inductor Current; Narayana Murthy Malladi, Mohd Alam, and Narendrababu A
824	Inspecting Cascaded Boost Configuration Linking LVDC and CDC Bus in DC Microgrid; Himansu Sahoo, Santanu Kapat, and Bhim Singh

849	Analysis of Integrated On-Board Charger for 400 V and 800 V EV Battery Using Dual-Mode Three-Leg LLC Resonant Converter; <i>Dharavath Kishan, Bussa Vinusha, Marupuru Vinod, and Kalpana R</i>
816	A Grid Resilient Wide EV Segment Portable DC Charger with Seamless Phase Transition Adaptability Over Consistent Power Processing; <i>Saran Chaurasiya and Bhim Singh</i>
840	Model Predictive Control of a New Common-Mode Current Free EV Charger with a Wide Output Voltage Range; <i>Preetha Philip and Deepak Ronanki</i>
841	Design of a Multi-Mode DC-DC Converter for High-Power Wireless Charging of Electric Vehicles; <i>Dharavath Kishan, Mallikarjuna Balimidi, Md Waseem Ahmad, and Andrii Chub</i>
866	DC Link Capacitor Loss Minimization for Medium Voltage High Power Railway Traction Converter; <i>Pooja Kumari, Sourav Ghimirey, and Avaniish Tripathi</i>
887	Peak Current Mode Controlled Phase Shifted Multi-phase Buck Converter for 48V/72V EV Battery Charging; <i>Amit Kumar Singh, Anirban Ghoshal, and Sukanta Das</i>
974	Design and Analysis of Wide Bandgap Device Based DAB Converter for EV On-Board Chargers; <i>Abhishek Kumar, Kalpana R, and Phaneendra Babu Bobba</i>
448	Reconfigurable Type I And Type II Buck-Boost Partial Power Converter for EV Fast Chargers; <i>Daniel Pesantez, Hugues Renaudineau, Samir Kouro, Sebastian Rivera, and José Rodríguez</i>
945	Congestion Management in Distribution Systems Through Distribution Congestion Prices, <i>Etesola Imchen and Dr.Dipu Sarkar</i>

Poster Presentation

TT1- TT7	19-11-2024, 3.00-3.30 pm	(Pradyumn Chaturvedi VNIT Nappur, Shashidhar Mecha Kotian)	Venue: LHC-C, Ground Floor
Paper ID	Paper Details (Title & Authors)		
139	Digitally Controlled PWM Rectifier for Harmonic Reduction and Bidirectional Power Flow; <i>Bonagiri Bhanuprakash, Manoj Leelachand Gandhi, Seema Singhai Sheth, and Dr. M S Ansari</i>		
168	A Fault Tolerant N-Level Isolated Inverter Topology to Handle All Open Circuit Switch Faults, <i>Venkataramanaiah Jammala, Gulshan Yadav, Deep M. Gohil, and Suresh Lakhimsetty</i>		
271	Hybrid Converter with Simultaneous DC and AC Outputs; <i>Jotirmoy Samanta, Ralli Sangno, Rajen Pudur, and Mohan Aware</i>		
483	Staircase Modulation for 17-level Packed E-Cell Multilevel Inverter; <i>Mohammad Alhassan and Santosh K Singh</i>		
608	A Sensing Coil in Inductive EV Charging Systems for Estimating the Coupling Coefficient and Receiver Resonant Frequency; <i>Nakkeeran R, Bharatiraja C</i>		
786	An Isolated High Gain Quadratic DC-DC Boost Converter for Fuel Cell Application; <i>Soumyarupa Saha and Subhendu Dutta</i>		
953	A Unique Z-Source DC-DC Converter with Reduced Stresses on Passive Components; <i>Roshan Pariyar and Aurobinda Panda</i>		
970	Universal Three-Phase On-Board EV Charger Using Bridgeless Non-Isolated Boost-Buck Converter Topology; <i>Devachandra Pukhrabam Singh, Hage Kaku, and M Deben Singh</i>		
19	FPGA Based Digital Controller for Two Stage On-Board EV Charger; <i>Pawan Kumar</i>		
79	Reduced Power Processing High Efficient LED Driver; <i>Sai Rohit Chikatimarla, Haroon Saqib Mohammed, Ramesh Babu Pallapati, and Dr. Ramulu Chintam</i>		
311	Modelling and Analysis of A Dual-Loop Current Control Strategy For Grid-Tied Inverters With LCL Filter, <i>Avinash V S N Bhamidipati and Krishna Vasudevan</i>		
558	A Novel Hybrid Harmonic Estimation Technique based on Recursive Least Square and Artificial Protozoa Optimizer; <i>Ashok Bhoi, Ranjan Kumar Mallick, Pravati K Nayak, Sairam Mishra, Gayadhar panda, and Renu Sharma</i>		
956	Optimized Power Quality Using Integrated Current and Voltage PFC for Energy Storage Application, <i>Mahi Teja Talluri, Amalina Das, Suman Murugesan, and V. Karthikeyan</i>		
799	Taxonomy of Fault Analysis Methods for Protection of Transmission Lines; <i>Mallikarjuna Balimidi, Gopakumar P, and Dharavath Kishan</i>		
216	Intelligent Algorithms for Fault Localization in Unbalanced Active Distribution System; <i>Archana Tamrakar and Saumendra Sarangi</i>		
896	Analysis of the Correlation Between Axial Force And Movement of A Rotor Magnet In A Four-Layered Stack Structured Permanent Magnet Bearing Using The Finite Element Method, <i>RAJEEV KUMAR, PABITRA KUMAR BISWAS, and Suraj Gupta</i>		
710	Dual LUT-based DTC Strategy for Optimized Energy Efficiency in Electric Vehicles Powertrains; <i>Amit kumar and Ranjan Kumar Behera</i>		
768	Detection and Discrimination between Stator Winding Faults and Unbalanced Supply Voltage by Monitoring Rotor Bar Voltage; <i>Tushar Gulabrao Vilhekar and Makarand Ballal</i>		
807	Optimized Super Twisting Sliding Mode Based Direct Torque Control for BLDC Motor; <i>Utkal Ranjan Muduli</i>		
854	Grid Power Quality Management with SCR-Based CSI fed Medium Voltage Induction Motor Drive, <i>Pratyush Pandey, Harikrishnan P, and Kamalesh Hatua</i>		
467	Multi-Stage CC-CV Charging of an Off-board Charger using Modulated Model Predictive Control; <i>Durga Prasad Pilli, Deepak Ronanki, and Jose Ramon Rodriguez Perez</i>		
550	Planar Magnetics based Onboard Electric Vehicle Charger with Auxiliary Supply; <i>Vrundesh S Pawde, Ritesh Kumar Keshri, Suman Saurav, Pankaj R. Sawarkar, Hiralal Suryawanshi, and VP Shamal</i>		
556	Triple Active Bridge Converter for Electric Vehicle Applications, <i>Amit Upadhyay, Dr. Venkata Ramana Naik N, Satyabrata Behera, and Markala Karthik</i>		
562	Real-Time Experimental Validation for Assessing Efficiency of On-Board Chargers, <i>Archana A N, Priya Poullose, Sruthimol T, Megha V Thomas, and Bharath Vinod</i>		
757	Grid Forming control of THSSC under unbalanced grid condition, <i>Ajay Singh Negi, Ibhanchand Rath, and Siba Kumar Patro</i>		
540	Enhanced Canvasback Swarm Algorithm for Active Power Loss Diminution and Voltage Stability Enhancement; <i>Lenin Kanagasabai</i>		
610	Model Order Reduction of A Single Area Power System using Direct Truncation with Mihailov Criteria Technique, <i>Salik Ram Dewangan, Pushkar Dewangan, Vinay Pratap Singh, And Umesh Kumar Sahu</i>		
673	Circulating Current Mitigation Among Sources in DC Microgrid Using Distributed Secondary Controllers; <i>Ayman Khalfalla, Shirazul Islam, Atif Iqbal, and Farhad Ilahi Bakhsh</i>		
705	Enhanced Finite Control Set Predictive Current Control for Modular Multilevel Converters; <i>Vempali Bhuma Naga Satya Sai, Deepak Ronanki, and Apparao Dekka</i>		
869	AI-Driven Control of Flexible Bevel-tip Needles in Minimally Invasive Surgery Utilizing Adaptive Multi-layer Perceptron Architecture, <i>Kaushik Halder, Felix Orlando Maria Joseph, and Radhey Shyam Anand</i>		
385	Charging Area Based State of Health Estimation of Lithium-Ion Battery Pack for EV Applications, <i>Monu Kumar, Makarand Ballal, and Devang Pramod Kubitkar</i>		
396	Experimental Study and State of Charge Estimation of A123 Li-Ion Cylindrical Cell Using Passivity Observer in Different Temperatures, <i>Aakash P.A, and Manivannan R</i>		
400	Modelling and Simulation Analysis of Innovative Offshore Wind Energy Plant; <i>Kundan Kumar, Wairopkam Dhanraj, Sanjeet K Dwivedi, Vima P Mali, and Subrata Banerjee</i>		
401	State Space Mathematical Modeling and State of Charge Estimation of 18650 Panasonic Li-ion Battery Using L2-L1 Observer Design, <i>Ajay Kumar R.B and Manivannan R</i>		
478	Integration of Fuel Cell with Doubly Fed Induction Generator for Distributed Power Generation with Improved Power Quality, <i>Kushal Verma, Shailendra Kumar, Suryansh Pandey, and Tanu Prasad</i>		

497	A Smart Control for Multi-Functional 3P4W Grid Interfaced PV-BES System, <i>Rajesh Poola, Sumit Ghatak Choudhuri, and Dr. R N Patel</i>
520	Enhancing The Frequency Deviation in MPS Utilizing Demand Response Techniques for Irregularity Between Sources and Load. <i>Prabhat Kumar Vidyarthi, Ashiwani Kumar, and Ravi Shankar</i>
528	A Multi-Objective Approach for Energy Management of Data Center Microgrid Considering Carbon Emission and Operational Cost, <i>Rahul Khajuria, Ravita Lamba, and Rajesh Kumar</i>
542	Validation of a Novel Hybrid On-Board Charging System for Light Electric Vehicles in Hilly Terrain; <i>Shyamantak R Barman, Anish Ahmad, and Asim Datta</i>
289	Secondary side control of Multi-vehicle Inductive charger by using a Semi-Active Bridge Rectifier for Constant Power; <i>Bibek Kumar and Avik Bhattacharya</i>
893	Dynamic power sharing between charging guns in off-board chargers; <i>Nagesh Kumar Kamma, Shivani Shrikhande, Gautam Kumar, Eswara Rao</i>
906	Accurate Modeling Approach of Litz-Wire based Planar DD Spiral Coils for WPT Applications; <i>Avanish Pandey, Suvendu Samanta, and Amarendra Edpuganti</i>
910	Review and Comparison of Modulation Schemes for Inductive Power Transfer Systems; <i>Rakesh Pulletikurthi and Deepak Ronanki</i>
930	An Optimized Hexagonal Geometry Magnetic Coupler for Floor-Mounted Electric Vehicles Wireless Charging System; <i>Bharatiraja C, Nakkeeran R, and Mahesh Aganti</i>
560	A Novel Signal Processing and Deep learning Approach for Fault Diagnosis in Grid integrated AC microgrid, <i>Nityananda Giri, Ranjan Kumar Mallick, Pravati K Nayak, Sairam Mishra, Debadatta Amaresh Gadanayak, and Anasuya Roy Choudhury</i>

Poster Presentation

TT1- TT7		20-12-2024, 10:30-11:00 am (Sanjeet Kumar Dwivedi Danfoss, Arun Dominic)	Venue: LHC-C, Ground Floor
Paper ID	Paper Details (Title & Authors)		
181	Coded Power Transfer for Power Electronic Converter System , <i>Visuno Naleo, Hitesh Malviya, Anandh N, and Chandan Kumar</i>		
265	A Novel Five-Level Double Boost Inverter with Reduced Spike Current , <i>Gudipati Maheswari, K Manjunatha Sharma, and Prajof P</i>		
419	Common-Mode Voltage Mitigation in 3-Phase 3-Level VSI with DC-bus Midpoint switching , <i>S S Phaniram Musti, and Ravikumar Bhimasingu</i>		
493	Switch Fault Diagnosis in Single Switch DC-DC Converters , <i>Vaishali Chapparya, Anubrata Dey, P Singh, Jose Rodriguez, and Cristian Garcia</i>		
523	Diamond(m-switch) converter topology for four-phase switched reluctance motor(SRM) drives , <i>Sagar Gupta and Amit Kumar Jain</i>		
555	High Step-Down Gain Bridgeless Cuk PFC Converter for Battery Charging Applications , <i>Balaram Jena and Sumit GhatakChoudhuri</i>		
566	Modelling of Coupled Inductor-Based Single Input Triple Output Boost Converter , <i>Paban Bujor Barua and Shabari Nath</i>		
797	Robust PID Controller for DC-DC Boost Converter Feeding CPL , <i>Chandrasekhar Azad Narlapati, Jeyasenthil Ramamurthy, Tarakanath Kobaku, and Vivek Agarwal</i>		
802	A Non-Isolated Multiport Converter with Wide Input Voltage Range to Enhance Ultracapacitor Utilization for Electrified Vehicles , <i>Siddheswar Sen, Pratim Bhattacharyya, Santu Kumar Giri, Subrata Banerjee, and Hanumath Prasad Ikkurti</i>		
861	Coupled Inductor Based Regenerative Cascaded Multicell Converter for Drives with Reduced Transformer VA Rating and DC-link Capacitor , <i>Satyam Jha and Shambhu Sau</i>		
267	An Effective Fault Detection Technique for Grid Connected Electric Vehicle Charging Station , <i>Md Sajid Alam, Javeed Bashir, Mir Uzair Kanth, and Premalata Jena</i>		
411	A Data-Driven Deep Learning-based Prognostication for Power Grid Stability , <i>Abhishek Saxena, Prashant Kumar, Kalpana Beura</i>		
415	A Versatile Reinforced Inverter Station Control Strategy for Hybrid HVDC-based Offshore DFIG Wind Farm , <i>Rashmi Ranjan Patra and Asha Rani M. A.</i>		
598	Harmonic Profile of Various Loads used in Distribution System of Qatar Utility , <i>Abdulkarim Chemidi, Shirazul Islam, and Dr. Farhad Ilahi Bakhsh</i>		
363	Improved Active Frequency Drift Islanding Detection Method for Grid-Tied Distributed Energy Resources , <i>Vijay Mohale, Rajkumar Chougale, Praveenkumar A Patel, and Vilas Bugade</i>		
182	Model Reference Adaptive System Based on Ultra-Local Model for Induction Motor Drives , <i>Md Asif Hussain, Ananda Shankar Hati, and Vinod Khadkikar</i>		
226	Development of Multi-Pulse Rectifier System Based on Multi-phase Conversion and Phase Displacement Technique for Medium Voltage Motor Drive , <i>Rohit Kumar and Bhim Singh</i>		
309	Investigation of the Impact of Holes on the Performance of Multilayer Interior Permanent Magnet Synchronous Machines , <i>Abhishek Shukla and Saptarshi Basak</i>		
372	Enhancing Drive Performance using Mixed-Order Flux Observer driven Sensorless Control of PMSM , <i>Alok Ranjan and Vijaya Bhaskar Devara</i>		
642	Design and Analysis of Linear Electromagnetic Actuator for Automobile Active Suspension System , <i>Don Vinit X V, Sai Krishna Mulpuri, and Praveen Kumar</i>		
857	Realization of Machine Learning Algorithms for Diagnosing Winding Faults in Induction Motors , <i>Abitha Memala W, Mercy Paul Selvan, Mohan Ram S, Brindavan T.V, and Raja Singh R</i>		
45	MTPA Control of Interior PMSM and BLDC Motor using FE and MATLAB Co-simulation , <i>Akriti Sonkar, Sashidhar Sampathirao, and Bidyadhar Subudhi</i>		
201	Finite Element-Based Inter-turn Fault Analysis in Closed Loop Induction Motor Drive Using Machine Learning , <i>Praveen Kumar N</i>		
37	Modelling of Cross-Saturation in a PMA-SyRM using Polynomial Reduction Method , <i>Saipriya Chelluboyina and Sashidhar Sampathirao</i>		
57	Enhanced Direct Torque Control Strategies for In-Wheel Switched Reluctance Motors: Evaluating Sector and Voltage Vector Selection Techniques , <i>Deepak M and Bharatiraja C</i>		
646	Load Matching in Single-Stage Constant Power Series-Parallel Compensated Inductive Charging with High Voltage Gain , <i>Rohan Sandeep Burye and Sheron Figarado</i>		
667	Comprehensive Analysis of Thermal Effects on PMSM Drive Control in Small Commercial Vehicles , <i>Alok Ranjan, Vijaya Bhaskar Devara, Prashant Kumar, and Utkal Ranjan Muduli</i>		
674	FPGA Based Improved State-of-Charge Estimation Using Modified Coulomb Counting method for Lithium-Ion Battery , <i>Sourabh Das, Susovon Samanta, and Supratim Gupta</i>		
722	Advanced Control and Modeling for Enhanced BLDC Motor Efficiency and Performance , <i>Amitesh Prakash, Vijaya Bhaskar Devara, Alok Ranjan Prashant Kumar, and Utkal Ranjan Muduli</i>		
749	Enhancing Efficiency in Dual-Motor Four-Wheel Drive Electric Vehicles via Power Sharing Optimisation , <i>Amit kumar, Ranjan Kumar Behera</i>		
835	MRAS and $\alpha\beta'$- framed SVPWM based modified FS-MPC for PMSM Drive Powered by Five-Level TF-type Inverter for EV Applications , <i>Priyanka Roy, Haricharan Nannam, Pothuraju Ramakrishna, and A Bandyopadhyay</i>		
581	ISTE and IST2E Based PID Control for Frequency Control of Shipboard Microgrid , <i>Akanksha V Waghmare, Vinay Pratap Singh, Akhilesh Mathur, Subho Paul, and Krishna Murari</i>		
609	Adaptive Neuro-Fuzzy Inference-Based Control of Parallel Connected DC-DC Converters for DC Microgrid Application , <i>Musharraf Ali Haider Ali Saddriwala, Mohd Alam, Narayana Murthy Malladi</i>		
615	Modelling and Identification of Lithium-Ion Battery Using Relay Feedback Response , <i>Saurabh Pandey, Bheemaiah Chikondra, and Vijay Kumar Singh</i>		

619	A Modified HVAC Wind Energy Collection System Without Offshore Substation , Sakshi Singh, Dheeman Chatterjee, and Tanmoy Bhattacharya
640	Data-Driven Performance Degradation Prediction of PEM Fuel Cell using Bi-GRU , Janvi Sharma, Rahul Khajuria, Ravita Lamba, Rajesh Kumar, and Surender Hans
641	Inertia Synthesis for AHO Controlled Converters in Smart Transformer Based Distribution Systems , Sahil Gaurav and Chandan Kumar
643	Frequency Response Assessment of Inverter Dominated Power System under Grid Abnormalities , Komal Singh, Abhishek Dilipbhai Tank, Rabindra Mohanty, Avanish Tripathi, and Ashu Verma
663	A Practical Approach for Estimating State of Health of Li-Ion Batteries in Electric Vehicles , Prashant K Aher, Taufiq Ansar Patel, S.L. Patil, Abhishek Mandhana, and Rhugved Rane
790	A Regenerative Weak-Grid Emulator for Distributed Generation Test Benches ; Aravind G, Divyanshu Bansal, and L. Umanand
458	Voltage Stabilization of a SEIG-based micro-hydro System using Static Synchronous Series Compensator ; Swagat Pati, Amar Bijaya Nanda, Binod Sahu, Abhijeet Choudhury, and Subinay Das
978	Predictive Phase-Shift Control of Interleaved Quadratic Buck Converter as the Power Supply of the Electrolyzer in Green Hydrogen Technology ; S. Alireza Davari, Freddy Flores, Mahdi S. Mousavi, Shirin Azadi, Samir Kouro, Cristian Garcia, and Jose Rodriguez
677	Machine Learning Based State of Charge Estimation and Real-Time Battery Monitoring System , Sourabh Das, Shirsaa Mishra, Uttam Raghav, and Susovon Samanta
683	Parameter Estimation and Optimal Charging Discharging Pattern for Supercapacitor , Subash M, and Selvajyothi K

Poster Presentation

TT1- TT7		20-12-2024, 3:00-3:30 pm (Bharthi Raj SRM, Janani T)	Venue: LHC-C, Ground Floor
Paper ID	Paper Details (Title & Authors)		
31	An Improved Soft Switched SEPIC Topology for High Gain Static Power Supply , <i>Tapas Halder</i>		
113	A Novel Sampling Mechanism for a Digital Average Current-Mode Controlled Buck Converter Under Leading-Edge Modulation , <i>Snehamoy Patra and Amit Kumar Singha</i>		
831	Seamless Mode Transition of a VSI in a 3-Phase Standalone Microgrid , <i>Sounavo Ghosh and Parthasarathi Sensarma</i>		
244	A Quadruple Boost Nine Level Inverter Performance in Power Conversion , <i>Biswajit Sarangi, Sukhdev Singh Neti, and Varsha Singh</i>		
262	Fixed Frequency-Based Oscillation Mitigation Technique for Solid State Circuit Breaker in DC Microgrid Applications , <i>Salai Thavakkodi S V, Senthil Kumar Subramaniam, and Aravind C K</i>		
274	Amplitude Error Based Frequency Deviation Detection for Grid Voltage Parameters Tracking , <i>Chandrasekaran S and Sandeep Negi</i>		
283	Implementation of a Novel Nine-Level Quadruple Boosting Inverter , <i>Gudipati Maheswari, K Manjunatha Sharma, and Prajof P</i>		
300	Third harmonic injection with carrier-reassignment PWM for a nine-level grid connected CHB inverter , <i>Little Pradhan and Abhijit Kshirsagar</i>		
371	Adaptive Model Predictive Control of Dual Output Three-Level Inverter , <i>Rangoli Singh, Dhawal Dwivedi, Sandip Ghosh, and Chinmaya K A</i>		
404	OPTIMAL DESIGN AND PERFORMANCE ANALYSIS OF MODEL PREDICTIVE CONTROL FOR EV CHARGING APPLICATION , <i>Kaumudi Kumari and Mukhtiar Singh</i>		
503	Triple Active Bridge Converter for Solar PV-Assisted EV Charging , <i>Gudelli Shivakumar, Bighnaraj Panda, and Amarendra Edpuganti</i>		
570	Power Electronic Implementation of Adjustable Finite Bandwidth Constant Power Loads , <i>Arnab Dey, Utsab Kundu, and Vinod John</i>		
623	A Multiport Converter as an Onboard Electric Vehicle Charger: Enabling 800V Battery Charging from 400V EVSE , <i>Jay Damodar Pandya, Arun Chandrasekharan Nair, Anilkumar Davu, and Surender Elumalai</i>		
748	Single Source Floating Capacitor Fed Multi-Level Open-End Winding Induction Motor Drive with Extended Linear Modulation Range and Minimum Number of Switches , <i>Vasuda K V, Remya K P, and Jaison Mathew</i>		
815	Voltage Multiplier Cell-Based Enhanced Quadratic Buck-Boost DC-DC Converter with Reduced Switch Current Stress , <i>Kumaravel S and NINU JOY</i>		
813	Volt/Var Control of Smart Transformer fed Active Distribution Networks , <i>Arunima Dutta, Sanjib Ganguly, and Chandan Kumar</i>		
884	Impact Analysis of EV Charging System on Grid With and Without Solar PV Integrated System , <i>Akash Prakash Ganne, Lalit Kumar Sahu, and Hemachander Allamsetty</i>		
356	An Enhanced Voltage Support Control strategy with Improved Active Power Deliverability of a DG During Unbalanced Microgrid Faults , <i>Suresh Maganti, Naveen Yalla, Jayaram Nakka, Ali Hussain Almarzooqi, Sajan K Sadanandan, and Tareq Ghaoud</i>		
272	Performance of Distributed OPF Algorithm with ZIP Loads and Different PV Inverter Modes , <i>Subho Paul</i>		
115	Closed Loop Control of Induction Motor Operated with Hybrid PWM(SVM+SOPWM) at Low Switching Frequency for Traction Applications , <i>Gudaru Venkaiah Katuri and Amit Kumar Jain</i>		
280	Vulnerability Analysis of Torque Controlled PMSM Drives against Sophisticated Data Integrity Attacks , <i>Chandni Asok, Easwar Veeragandham, Deepak Ronanki, and Apparao Dekka</i>		
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863	Peer-to-Peer Energy Trading among Electricity-Hydrogen DC Microgrids , <i>Avirup Maulik, Alok Kumar, and Chinmaya K A</i>		
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838	Fractional Order Relaxation Model for Supercapacitors , <i>Geethi Krishnan and Vivek Agarwal</i>		
689	Sliding Mode Current Control in Multiple Batteries based DC Microgrid , <i>Rohan Lalwani, Barjeev Tyagi, and Vishal Kumar</i>		
690	Enhanced Grid Stability using Virtual Inertia Control Strategy for DC Microgrids , <i>Suryakant Kumar, Gauri Shankar, Lakshmi Srinivas Vedantham and Prashant Kumar</i>		
712	An Islanding Identification Strategy based on Disturbance Injection and Wavelet Transform , <i>Suman Murugesan and Senthil Kumar M</i>		
716	Pre-Processing Measurement Data for Computing Internal DC Resistance with Anomaly Detection Techniques , <i>Shaurya Pandey, Sarbani Mandal, Bikash Sah, Sai Krishna Mulpuri, and Praveen Kumar</i>		
720	Performance Evaluation of Charging Techniques for Lithium-Ion Batteries , <i>Sanjeev S Raja, Harish Karneddi, and Deepak Ronanki</i>		
743	Enhanced Power Management in a DC Microgrid through Virtual Inertia Integration , <i>Suryakant Kumar, Gauri Shankar, Lakshmi Srinivas Vedantham, and Prashant Kumar</i>		
761	An Improved Maximum Power Point Tracking of PV Source using Parametric Estimation , <i>Seelam Poornima, Kotapati Anuradha, Shiva Prasad, and Vamshi Krishna Bandaru</i>		
764	A Novel Passive Islanding Detection Strategy for DC Microgrid , <i>Suman Murugesan and Sweety Yadav</i>		
770	Performance Characteristics Assessment of Dual Rotor Single Stator Five-Phase Surface-Inset PMSG for Hydroelectric Systems , <i>Raja Ram Kumar, Arpita Roy, Priyanka Pal, Kundan Kumar, and Shekha Rai</i>		
775	Modeling & Control of SPV Integration with HESS , <i>Annavarapu Ankamma Naidu, Barjeev Tyagi, and Vishal Kumar</i>		
776	Modeling and Analysis of Frequency Modulated LLC Resonant Converter for Deeply Depleted Battery Charging Applications , <i>Anil Marneni, Thatipelli Shivaji, Pravin Murugesan, and Senthil Kumar Subramaniam</i>		

778	An agile solution to estimate the capacity of virtual energy of refrigerator using ANN, Praveenkumar Rajendiran and Vijayakumar Krishnasamy
785	Minimization of Simple Payback Time Through Reactive Power Injection & KVA Billing in MW Scale Solar PV Power Plant, Dev Kumar Manhar , Avnish Tripathi, Rabindra Mohanty
889	An optimal design and control of dynamically re-configurable DC-DC converter for off-board charger applications; Nagesh Kumar Kamma, Srirama Srnivas, Mohana Rao M, And Gautam Kumar
729	Reduced Order Modeling of Higher Order Fuel Cell System for Electric Vehicle Application; Rahila Parveen, P. D. Dewangan, S. L. Sinha, and Vinay Pratap Singh
740	Resilient PMSM Motor Control: Advanced Fault-Tolerant Strategies for Open-Phase Faults; Alok Ranjan and Vijaya Bhaskar Devara
180	Design and Testing of Coordinated Controller for PV Assisted Municipal Solid Waste Fueled EV Charging Station; Perwez Alam and Thanga Raj Chelliah
806	Real Coefficient Assessment with Improved Adaptive Control for Grid-Tied DSTATCOM, Utkal Ranjan Muduli
905	Comparative Analysis of optimal PV Array Reconfiguration under Partial Shaded Condition; Kayalvizhi Selvam, Sujeet Kumar Patel, and Arulraj R
873	Three-Phase Interleaved Bidirectional Resonant Converter for Charging / Discharging Infrastructure, Nishant Kumar, Mayank Kumar

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810	A PV Grid Tied Modified Z-Source Inverter for an Inductive Wireless EV Charging System, Bharatiraja C and Ramanathan G	
40	Optimized Design of The CUK Power Converter Topology, Tapas Halder	
56	A Novel High-Gain Non-Inverted Voltage-Lift Switched-Capacitor DC-DC Step-Up Converter, Miteshkumar Bharatbhai Patel, Jayaram Nakka, and Gaurav	
66	A novel six-switch isolated DC-DC converter with an isolated port providing DC Transformer gain and two non-isolated ports serving reciprocal non-inverting buck-boost voltage gain for EV applications, Arkabrata Dattaroy and Avik Bhattacharya	
75	Efficient Dual-Input DC-DC Converter Design for Fuel Cell Electric Vehicle Integration, Kalpana Chaudhary and Aman Gope	
166	Advanced Modulation Control for Three-Phase Single-Stage DC-AC Conversion with Optimized Filter Reduction, Venkataramanaiah Jammala and Anvi Gajjar	
169	Full Order Discrete Time Modelling of High Gain Switched Capacitor Converter, Ishita Biswas and Debaprasad Kastha	
223	Common-Ground-Type Dual-Source Switched-Capacitor Multilevel Inverter, Deepak Singh and Sandeep N	
276	Inductor current feed-forward based Single-loop dq control scheme for Standalone Inverter System, Vaishnavvignesh G Iyer, Cilaveni Satish Chandra, Ravindranath Adda, and Sreenath J G	
482	Optimized Dual Phase Shift Control for Dual Active Bridge DC-DC Converter, Pradyumn Chaturvedi, Harish R Bhawane, Saurabh P Kamble, and Aditya S Kulkarni	
579	Fault-Tolerant Operation of Hybrid Modular Multilevel Converter for MVDC Applications, Akshaya D Bonde, Pradyumn Chaturvedi, and Vijay Borghate	
599	Design of Input and Output Filter Capacitors of a DC-DC Dual Active Bridge Converter With Time-domain Analysis of Voltage Ripple, Prosen Dey, Sayan Paul, and Kaushik Basu	
624	Disturbance Observer-based Sliding Mode Control of Boost-Flyback SIDO Converter, Somesh K Thanvi, Aditya R. Gautam, and Hari Om Bansal	
632	Comparative Effects of Gate Pulse Shifting on CCM/DCM Boundary Current in CI-SIDO Converters, Angan Sarkar, and Shabari Nath	
752	Grid Forming Control of Delta-H Bridge Module Under Unbalanced Condition, Sajay Singh Negi, Ibhanchand Rath, and Siba Kumar Patro	
830	Extending the ZVS Range of Phase-Shifted Full-Bridge DC-DC Converters with a Variable Inductor, Mohammadreza Adib, Salar Sadeghian, Nazilasadat Talebi, and Prajof P	
94	A list of three novel dissimilar voltage multi-input isolated high gain DC-DC converters supplying multiple outputs with widely varying characteristics, Arkabrata Dattaroy and Avik Bhattacharya	
147	Electrolytic Capacitor-less Isolated Resonant Converter-fed BLDC Drive for Solar Water Pumping Application, Prakash Ji Barnawal, Manish Kumar Kumar, Manash Kumar Mishra, V. N Lal, and Rajeev Kumar Singh	
258	A Novel 7-Level Triple-Boost Common-Ground Switched Capacitor Based Inverter, Ajit Kumar Upadhiya, N. Lakshmi Narasamma, and Mahesh K. Mishra	
359	Bidirectional DC-DC Dual-Active-Bridge Converter with Symmetric Bipolar Outputs Using Triangular Modulation, Priyatosh Jena, Rajeev Kumar Singh, and V. N Lal	
67	A novel three-output port isolated DC-DC converter with four switches providing high gain quadratic non-inverting buck-boost or derived boost characteristics along with continuous input battery current operation, Arkabrata Dattaroy and Avik Bhattacharya	
461	Practical Considerations and Error Estimation in Hall Effect Current Sensors using 2D-FEMM, Ranjit A Farakate and Shashank Wekhande	
656	A Variable Switching Frequency PWM Technique to Reduce Conducted Emissions of SiC MOSFET Based Active Front End Converter, Tanmoy Dey, Vibhav Pandey, Kamallesh Hatua, and Arunava Mitra	
340	Analysis and Experiments on a lab-fabricated Inductor of improved composite material core in a High-Frequency Synchronous Buck Converter, Gourab Banerjee, Sunil Meti, Dona Chakraborty, Dibyendu Mandal, Sayantan Chanda, Navakanta Bhat, Ranajit Sai, Srinivasrao Shivashankar, and Mainak Sengupta	
812	Comprehensive Analysis of Grid Synchronization Enhancement in DFIG-Driven Wind System, Alok Ranjan, Vijaya Bhaskar Devara, Anish Kumar, and Utkal Ranjan Muduli	
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845	Addressing Fault Ride-Through Challenges in DC Microgrids via Supercapacitor Integration, Ankit Mishra, Narayana Prasad Padhy, and Abdul Saleem Mir	
855	Enhancing Ancillary Grid Services with Integrated PV System under Unbalanced Load and Weak Grid Scenario, Pranay Krishna Sahay and Vedantham Lakshmi Srinivas	
862	Control of a Microgrid Integrated PV-Assisted EV Charging Station for Active Power Management, Nirmal C M Mukundan, Prabhakaran Koothu Kesavan, Umashankar Subramaniam, and Dhafar Almakhles	
894	Active Disturbance Rejection Controller Approach for Boost Converter in PV Application, Surya Prakash, Mohamed Alkhatib and Utkal Ranjan Muduli	
923	Ultra High Gain DC-DC Converter With Reduced Voltage Stress for DC Microgrids, Sahendara Kumar, Sarita Kumari, and Avneet Kumar	
942	Design of Stand-Alone PV System for Interior Village of Mizoram, Chandersen Yadav (NIT Mizoram); Pabitra Kumar Biswas, Avinash Kumar, and Debarghya Dutta	
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543	Bidirectional Power Flow in Direct AC/AC SST with Selective Harmonic Elimination and Pulse Density Modulation <i>Archit Joshi and Shabari Nath</i>
409	Switched-Capacitors Based Five-Level Boost Common-Ground Type Inverter; <i>Anil Jakhar, Sandeep N and Arun Kumar Verma</i>
224	Extendable Multisource Multilevel Boosting Inverter; <i>Deepak Singh and Sandeep N</i>
445	A user-friendly reconfigurable testbed system and method to test and validate the power electronics circuits for educational and research purposes, <i>Samsaptak Ghosh and Sohom Chakrabarty</i>
496	Design and Development of Intelligent Power Module based Power Electronics Learning Kit, <i>Aaron P Barboza, Nishant Sharma, Kuppli Anirudh, Himanshu Bahirat (Indian Institute of Technology Bombay)</i>
132	A 25-Level Hybrid Cascaded Multilevel Converter with Capacitor Voltage Balancing Scheme; <i>Satyabrata Sahoo, Indrajit Sarkar and Venkata Ramana Naik N</i>
897	Hybrid Compensation System Using PV-DSTATCOM and SVC for Enhanced Power Quality in Low Voltage AC Distribution Grid <i>Anupriya K, Sooraj Suresh Kumar, Manoj Kumar M V, Jayaprakash P, Umashankar Subramaniam, and Dhafar Almakhles</i>
898	Shunt Active Power Filter Using Asymmetric Cascaded Multilevel Converter, <i>Mohsin Karim Ansari, Neha Tak, and Sumit Kumar Chattopadhyay</i>
920	A Bi-level Decision Support System for Home Energy Management in Smart Homes, <i>Ponraj P and Suman Murugesan</i>
944	Tilt Integral Derivative Frequency Controller for Isolated Microgrid, <i>Deepak Kumar, G. Lloyds Raja, Mohamed Alkhatib, Omar Al Zaabi, Khalifa Hassan Al Hosani, and Utkal Ranjan Muduli</i>
936	A Three-Port Converter for Integrating Solar PV-Battery Systems with DC Loads; <i>Sourav Prasad, Prajof P, and Arun Dominic D</i>
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846	PHIL Study on Fault Ride-Through Performance of Photovoltaic Converter in Active Distribution Networks <i>Ankit Mishra, Narayana Prasad Padhy, and Abdul Saleem Mir</i>
100	Frequency Control of Two Area Thermal Hydro System Using HSSDEA Based PIDF Controller: <i>Abhineet Prakash, kumar abhinav, priyesh Saini, and sanjoy kumar parida</i>
571	Symmetrical ASL Hybrid DC-DC Converter with Low Voltage Stress, <i>Motiur R Mohammed; Vinod Khadkikar; Bashar Zahawi and Omar Alzaabi</i>
565	Power Transfer from 400V Charging Piles to 800V Electric Vehicles Using Motor Winding and Inverter <i>Guanqun Qiu, Vinod Khadkikar, Motiur Reza Mohammed and Bashar Zahawi</i>