

## 2026 Symposium Poster List

Advisor	Presenter	Title	Pillar
Bhattacharya	Harshal Talur Lokesh	Impedance Based Stability Analysis of Cascaded Dual Active Bridge Converter for Battery Charging Applications	Power Electronics
Bhattacharya	Vasishtha Burugula	Improved DC Link Voltage Balancing in an MV-Compliant Solid-State Transformer	Power Electronics
Bhattacharya	Srijan Singh	Design and Characterization of GaN Bidirectional Switches Enabled Commutation Cell for Three-phase Current Source Converter Applications	Wide Bandgap
Bhattacharya	Vignesh Kumar R C	Performance Evaluation of MOS-Gated Thyristors as Auxiliary Switches in the ARCP Inverter	Wide Bandgap
Chakraborty	Alex Haines, Owen Mank	Coordinated Control of Energy Storage in Networked Microgrids	Microgrids
Chakraborty	Rahul Roy	Data-Driven Robust Control of Nonlinear Power Systems with Communication Delays	Power Systems
Chakraborty	Riddhi Khatua	A Hardware-Assisted Machine Learning Framework for Real-Time Detection of DoS Attacks in Power Grids	Power Systems
Cui	Nabindra Raj Shrestha	A Cache-Ready, High-Speed PMU Data Streaming Architecture for Online Applications	Power Systems
Cui	Zilin Zhuang	Modeling and Characterization of Hybrid Parallel Grid-Forming and Grid-Following Inverter in ANDES	Power Systems
Cui	Teng Wang	Transmission-Distribution Co-Simulation Using ANDES and OpenDSS	Power Systems
Cui	Zhuorong Wang	Physical-Informed Neural Networks for Power System Dynamics	Power Systems
Cui	Ahmad Ali	Accelerated Simulation of Power System Transients Power Systems	Power Systems
Hopkins	Muhammad PE Wahyudi	EPack-LAB – An Electronic Packaging Lab in A Box for Economic & Workforce Development	Power Electronics
Hopkins	Muhammad PE Wahyudi	Optimization of MV SSCB: A Trade-Off Study of Switching Devices, Snubber Topologies, and Energy Absorption Methode	Wide Bandgap
Husain	Md Junaed Al Hossain	Asymmetric Dual Three Phase Slotless Hybrid Flux Motor (ADTP-HFM) for Traction Applications	Electric Transportation
Husain	Junyeong Jung	Design of Aluminum/Copper Hybrid Coils for Slotless PMSMs	Electric Transportation
Husain	Theophilus Wakemeh	A Frequency-Adaptive Space Vector PWM Control Method for PMSMs Based on Real-Time Torque and Current Ripple Prediction	Electric Transportation
Husain	Md Didarul Alam	Decentralized Control through Multi-Active Bridge for Medium Voltage Extreme Fast Charging Station	Electric Transportation
Husain	Al Raji Billah	Microgrid-Enabled Tow Testing of a Coaxial Turbine: Testbed Development	Microgrids
Husain	Md Didarul Alam	Computationally Scalable Model-Free Predictive Control of Multi-Active Bridge Converters with Inherent Power Flow Decoupling	Microgrids
Husain	Amiya Haque	Power Curve Modeling and Maximum Power Point Tracking of a Paddle-Type Wave Energy Converter	Microgrids
Lukic	Shweta Meena	Plant Control Co-Design for AC Microgrids	Microgrids
Lukic	Muhammad Anees	Advanced control practices in Direct Current Microgrids	Microgrids
Lukic	Nazmul Hassan	Novel integrated APS design for MV SST	Power Electronics
Lukic	Ayman AlZawaideh	Estimation of Inertia and Damping for Grid-forming and Grid-following IBRs and Synchronous Generator Based On Ambient Conditions	Power Systems
Pantic	Muhammad Abdelraziq	Gravimetric Power Density and Efficiency Optimization of Inductive Power Transfer Systems for UAS Applications	
Pantic	Shokoufeh Valadkhani	Smart Battery Management for Personal Mobility Devices Using Artificial Neural Networks and Enhanced Coulomb Counting	Electric Transportation
Pantic	Katha Pandey	Drone Power and Propulsion system modelling and simulation	Electric Transportation
Pantic	Shokoufeh Valadkhani	Real-Time CHIL Evaluation of Electrolyzer System for Hydrogen Production	Microgrids
Pantic	Zhansen Akhmetov	Applications, Modeling, and Analysis of a Novel Self-Resonant Open Bifilar Coil Structure	Power Electronics
Pantic	Syed Muhammad Hassan Gillani	Analysis and Design of Pressure-Tolerant Power Electronics	Power Electronics
Pantic	Hatif Bin Abdul Majeed	Inverter with Integrated Energy Buffer for Input Power Management	Power Electronics
Ryu	Pouria Zaghari	A Physics-Informed, AI-Driven Digital Twin for Lifetime Prediction in SiC Power Switches	Wide Bandgap
Tang	Buyi Yu	Peak Demand Probability Density Forecasting for Risk-Averse Scheduling	Power Systems
Tang	Matt Gosnell	The Dynamic Stability Impact of Extended Transmission System Faults Considering High Penetrations of Distribution-Level IBRs	Power Systems
Wensong Yu	Mohammad Mahinur Rahman	Regenerative Efficiency Evaluation of Dual Active Bridge Converters in Medium-Voltage Applications	Power Electronics
Wensong Yu	Tanvir Ahammed	Decoupled Digital Control of Isolated C-DC Converters Using Integrated DAB With Interleaved Buck Topologies	Power Electronics
Wensong Yu	Mahmoodreza Eskandarpour Azizkandi	Bidirectional Isolated DC-DC Converters with Ultra-Wide Gain Range for Universal EV Chargers	Power Electronics
Wensong Yu	Haris Ataullah	Shared-Switch Hybrid DC-DC Converter for 3-in-1 EV Applications	Electric Transportation
Wensong Yu	Tohfa Haque	Power Electronics Building Blocks Using 2 kV Discrete SiC MOSFETs for 1 MW SST	Power Electronics
Wensong yu	Mahmoodreza Eskandarpour Azizkandi	Transformer Design with Enhanced Ap Method using Readily Available and Customizable Magnetics in DAB Converters for Wide Range EV Chargers	Electric Transportation