transaction	manuscript title	manuscript area	Session type	Day	Session
WF-001449	Multi-Port DC Microgrids: Online Parameter Adaptation in Model Predictive Control	SS Advanced Control of Power Converters in Distributed Generation Systems	Oral	October 21	S2 09:15-11:45
WF-003352	Improved Voltage Controlled Three Phase Voltage Source Inverter Using Model Predictive Control for Standalone System	SS Advanced Control of Power Converters in Distributed Generation Systems	Oral	October 21	S2 09:15-11:45
WF-016047	A Direct PI Controller without the Feedforward Terms for a VSC-based Permanent Magnet Synchronous Generator for a Wind Turbine	SS Advanced Control of Power Converters in Distributed Generation Systems	Oral	October 21	S2 09:15-11:45
WF-020761	PSO Based Harmonic Current Control in an Islanded Microgrid	SS Advanced Control of Power Converters in Distributed Generation Systems	Oral	October 21	S2 09:15-11:45
WF-023132	A Droop Based-Control Strategy of Stand-Alone Single-Phase Converters for Microgrid Applications	SS Advanced Control of Power Converters in Distributed Generation Systems	Oral	October 21	S2 09:15-11:45
WF-023353	A Robust Fuzzy-based Control Technique for Grid-Connected Operation of Sensor-Less PUC5 Inverter	SS Advanced Control of Power Converters in Distributed Generation Systems	Oral	October 21	S2 09:15-11:45
WF-024767	Extended State Observer-Based Sliding-Mode Control for Floating Interleaved Boost Converters	SS Advanced Control of Power Converters in Distributed Generation Systems	Oral	October 21	S2 09:15-11:45
WF-030333	Frequency Regulation Strategy for Modular Two-Stage Grid-Connected Photovoltaic Systems	SS Advanced Control of Power Converters in Distributed Generation Systems	Oral	October 21	S2 09:15-11:45
WF-031194	Performance of Intelligent Control of an Autonomous Wind-Battery Based Microgrid System	SS Advanced Control of Power Converters in Distributed Generation Systems	Oral	October 21	S2 09:15-11:45
WF-035041	Power Device Lifetime Extension of dc-dc Interleaved Converters via Power Routing	SS Advanced Control of Power Converters in Distributed Generation Systems	Oral	October 21	S2 09:15-11:45
WF-004103	Tracking Design of Omnidirectional Drive Service Robot Using Hierarchical Adaptive Finite-Time Control	SS Intelligent Control and Motion Planning in Robotic Systems	Oral	October 21	S2 09:15-11:45
WF-009334	Convergence Time Estimation of Flexible Manipulator Control System with NTSM	SS Intelligent Control and Motion Planning in Robotic Systems	Oral	October 21	S2 09:15-11:45
WF-011223	Intelligent Motion Control of Ultrasonic Motor for an Ear Surgical Device	SS Intelligent Control and Motion Planning in Robotic Systems	Oral	October 21	S2 09:15-11:45
WF-011843	An Optimized Algorithm Based on Energy Efficiency for Gait Planning of Humanoid Robots	SS Intelligent Control and Motion Planning in Robotic Systems	Oral	October 21	S2 09:15-11:45
WF-012432	Adaptive Robust Position/thrust Tracking Control of Linear Induction Motor with Unknown End-effect	SS Intelligent Control and Motion Planning in Robotic Systems	Oral	October 21	S2 09:15-11:45
WF-019259	Development of an Autonomous Unmanned Surface Vehicle with Object Detection Using Deep Learning	SS Intelligent Control and Motion Planning in Robotic Systems	Oral	October 21	S2 09:15-11:45
WF-021792	A Novelty Crawling Robot with Hybrid Locomotion	SS Intelligent Control and Motion Planning in Robotic Systems	Oral	October 21	S2 09:15-11:45
WF-025682	Sliding mode SLAM for robust simultaneous localization and mapping	SS Intelligent Control and Motion Planning in Robotic Systems	Oral	October 21	S2 09:15-11:45
WF-031356	A Comparative Study of Two Approaches for UAV Emergency Landing Site Surface Type Estimation	SS Intelligent Control and Motion Planning in Robotic Systems	Oral	October 21	S2 09:15-11:45
WF-031364	Unconditionally Secure Control and Diagnostic Systems	SS Intelligent Control and Motion Planning in Robotic Systems	Oral	October 21	S2 09:15-11:45
WF-007501	Generation of Multi-Level Disparity Map from Stereo Wide Angle Fovea Vision System	SS Intelligent Sensing Applications for Human Assistive Systems	Oral	October 21	S2 09:15-11:45

WF-011363	Visual Tracking Control for Stereo Vision Robot ｔo the Target in Arbitrary Motion	SS Intelligent Sensing Applications for Human Assistive Systems	Oral	October 21	S2 09:15-11:45
WF-013234	Position and Attitude Control Method Using Disturbance Observer for Station Keeping in Underwater Vehicle	SS Intelligent Sensing Applications for Human Assistive Systems	Oral	October 21	S2 09:15-11:45
WF-013404	An Approach to Balance Sensing and Visual Servo Control based on Vision Space Observer for Biped Walking Robot	SS Intelligent Sensing Applications for Human Assistive Systems	Oral	October 21	S2 09:15-11:45
WF-013544	Performance analysis of an indoor localization and mapping system using 2D laser range finder sensor	SS Intelligent Sensing Applications for Human Assistive Systems	Oral	October 21	S2 09:15-11:45
WF-017132	High Backdrivability Control Based on Estimation of Shaft Torsion Using Load Side Angle Sensor	SS Intelligent Sensing Applications for Human Assistive Systems	Oral	October 21	S2 09:15-11:45
WF-024015	Temporal Analysis of CFO in Cooperative Task for Teamwork Assist	SS Intelligent Sensing Applications for Human Assistive Systems	Oral	October 21	S2 09:15-11:45
WF-024058	Bilateral Control of Two Finger Joints Using Functional Electrical Stimulation	SS Intelligent Sensing Applications for Human Assistive Systems	Oral	October 21	S2 09:15-11:45
WF-033553	Digital Map based Signal State Recognition of Far Traffic Lights with Low Brightness	SS Intelligent Sensing Applications for Human Assistive Systems	Oral	October 21	S2 09:15-11:45
WF-033901	Saliency Map for Wide Angle Fovea Vision Sensor	SS Intelligent Sensing Applications for Human Assistive Systems	Oral	October 21	S2 09:15-11:45
WF-001376	Individual scans fusion in virtual knowledge base for navigation of mobile robotic group with 3D TVS	SS Machine Vision, Control and Navigation	Oral	October 21	S2 09:15-11:45
WF-002267	Application of fast frequency shift measurement method for INS in navigation of drones.	SS Machine Vision, Control and Navigation	Oral	October 21	S2 09:15-11:45
WF-007595	Reduction of Angular Position Error of a Machine Vision System using the Digital Controller LM629	SS Machine Vision, Control and Navigation	Oral	October 21	S2 09:15-11:45
WF-007951	Two-Parameter Pressure and Temperature Measuring Transducer Based on a Voltage-Controlled MEMS-Elements	SS Machine Vision, Control and Navigation	Oral	October 21	S2 09:15-11:45
WF-010871	Implementing k-Nearest Neighbor Algorithm on Scanning Aperture for Accuracy Improvement	SS Machine Vision, Control and Navigation	Oral	October 21	S2 09:15-11:45
WF-024473	Intelligent Transportation Scheme for Autonomous Vehicle in Smart Campus	SS Machine Vision, Control and Navigation	Oral	October 21	S2 09:15-11:45
WF-030791	Selection and Recognition of Statistically Deﬁned Signals in Learning Systems	SS Machine Vision, Control and Navigation	Oral	October 21	S2 09:15-11:45
WF-033626	Determination of landmarks by mobile robot's vision system based on detecting abrupt changes of echo signals parameters	SS Machine Vision, Control and Navigation	Oral	October 21	S2 09:15-11:45
WF-035521	Fast And Accurate, Convolutional Neural Network Based Approach For Object Detection From Uav	SS Machine Vision, Control and Navigation	Oral	October 21	S2 09:15-11:45
WF-001643	Control Method of the Current Injection Bridge in Hybrid Active Front-End Matrix Converter	SS Multi-Functional Grid Connected Converters: Design, Operation and Control	Oral	October 21	S2 09:15-11:45
WF-005835	Selective Power Management Control for Hybrid Active Power Filter	SS Multi-Functional Grid Connected Converters: Design, Operation and Control	Oral	October 21	S2 09:15-11:45
WF-014141	Reduced-Order Modelling Method of Grid-Connected Inverter With Long Transmission Cable	SS Multi-Functional Grid Connected Converters: Design, Operation and Control	Oral	October 21	S2 09:15-11:45

WF-017213	Dual Mode Controller Configuration of PV System for On-Grid and Off-Grid Application.	SS Multi-Functional Grid Connected Converters: Design, Operation and Control	Oral	October 21	S2 09:15-11:45
WF-031291	Flexible Control Strategy for MMC to Comply with Voltage Support Requirement under Unbalanced Grid Faults	SS Multi-Functional Grid Connected Converters: Design, Operation and Control	Oral	October 21	S2 09:15-11:45
WF-032077	Z-Source Inverter Based On CUK Converter	SS Multi-Functional Grid Connected Converters: Design, Operation and Control	Oral	October 21	S2 09:15-11:45
WF-032085	A Novel SEPIC-Based Z-Source Inverter	SS Multi-Functional Grid Connected Converters: Design, Operation and Control	Oral	October 21	S2 09:15-11:45
WF-032158	Selection of Impedance Network Parameters for Three-phase Voltage-fed Quasi-Z-source Photovoltaic Grid-connected Inverter with High Boost Capacity	SS Multi-Functional Grid Connected Converters: Design, Operation and Control	Oral	October 21	S2 09:15-11:45
WF-034576	Zero-Sequence Injection Technique for Capacitor Lifetime Extension on the Low-Voltage Converter of a Smart Transformer	SS Multi-Functional Grid Connected Converters: Design, Operation and Control	Oral	October 21	S2 09:15-11:45
WF-034673	DC-Series PV Collection DC/DC Converter with Wide Output Voltage Regulation Range	SS Multi-Functional Grid Connected Converters: Design, Operation and Control	Oral	October 21	S2 09:15-11:45
WF-003166	Intelligent mechantronic system with decentralised control and multi-agent planning	TT Cloud Computing, Big Data, Industrial Informatics	Oral	October 21	S2 09:15-11:45
WF-008508	TMk-anonymity: Perturbation-based Data Anonymization Method for Improving effectiveness of Secondary Use	TT Cloud Computing, Big Data, Industrial Informatics	Oral	October 21	S2 09:15-11:45
WF-014958	Failure Analysis and Characterization of Scheduling Jobs in Google Cluster Trace	TT Cloud Computing, Big Data, Industrial Informatics	Oral	October 21	S2 09:15-11:45
WF-025852	Information Retrieval from redlined Circuit Diagrams and its Model-Based Representation for automated Engineering	TT Cloud Computing, Big Data, Industrial Informatics	Oral	October 21	S2 09:15-11:45
WF-026344	Automatic Generation of a Simulation-based Digital Twin of an Industrial Process Plant	TT Cloud Computing, Big Data, Industrial Informatics	Oral	October 21	S2 09:15-11:45
WF-028657	An Ambient Assisted Living Research Approach Targeting Real-Time	TT Cloud Computing, Big Data, Industrial Informatics	Oral	October 21	S2 09:15-11:45
WF-030589	Data-driven Approach to Support Experts in the Identification of Operational Statesin Industrial Process Plants	TT Cloud Computing, Big Data, Industrial Informatics	Oral	October 21	S2 09:15-11:45
WF-030686	Heterogeneity Reduction for Data Refining within Ontology Learning Process	TT Cloud Computing, Big Data, Industrial Informatics	Oral	October 21	S2 09:15-11:45
WF-035696	Intelligent Detection of Driver Behavior Changes for Effective Coordination between Autonomous and Human Driven Vehicles	TT Cloud Computing, Big Data, Industrial Informatics	Oral	October 21	S2 09:15-11:45
WF-035726	Bio-Inspired Multisensory Fusion for Autonomous Robots	TT Cloud Computing, Big Data, Industrial Informatics	Oral	October 21	S2 09:15-11:45
WF-029114	Experimental Derivation of Thermal Parameters of the Stator-Winding Region in Thermal Analysis of PM Electrical Machines	TT Electrical Machines and Industrial Drives	Oral	October 21	S2 09:15-11:45
WF-028738	Permanent Magnet Synchronous Machines Inter-Turn Short Circuit Fault Detection by Means of Model-Based Residual Analysis	TT Electrical Machines and Industrial Drives	Oral	October 21	S2 09:15-11:45
WF-029866	Diagnostics and Prognostics for Multiple Induction Machines Using A Single Set of Current Transducers	TT Electrical Machines and Industrial Drives	Oral	October 21	S2 09:15-11:45
WF-036048	Sensitivity of leakage inductance for detecting winding movements in transformers	TT Electrical Machines and Industrial Drives	Oral	October 21	S2 09:15-11:45

WF-007463	Experimental Verification of a Passively Cooled Large Air-Gap 6/8-Flux-Switching Permanent Magnet Machine Including Manufacturing	TT Electrical Machines and Industrial Drives	Oral	October 21	S2 09:15-11:45
WF-015202	Novel Toroidal Winding for Efficiency Improvement of a Line-Start Induction Motor	TT Electrical Machines and Industrial Drives	Oral	October 21	S2 09:15-11:45
WF-012971	Determination of Transient Eddy Current Losses in Induction Motors with High Torque Dynamics	TT Electrical Machines and Industrial Drives	Oral	October 21	S2 09:15-11:45
WF-021067	Comparison of Magnetic Field Distribution in Induction Machines with Different Types of Combined Star-Delta Stator Windings	TT Electrical Machines and Industrial Drives	Oral	October 21	S2 09:15-11:45
WF-000027	External-Rotor Switched Reluctance Motor for Direct-Drive Home Appliances	TT Electrical Machines and Industrial Drives	Oral	October 21	S2 09:15-11:45
WF-029734	A Novel Flux Switching Magnetic Gear for High Speed Motor System	TT Electrical Machines and Industrial Drives	Oral	October 21	S2 09:15-11:45
WF-005495	A Single-stage Integrated Charger for Electric Vehicles (EVs) and Plug-in Electric Vehicles (PEVs) Incorporating Induction Motor Drive	TT Power Electronics Converters	Oral	October 21	S2 09:15-11:45
WF-029793	Comparative Stability Analysis of Several Single-Phase Grid-Connected Inverters with Harmonic Compensation	TT Power Electronics Converters	Oral	October 21	S2 09:15-11:45
WF-003298	Performance Evaluation of A Non-Isolated Three-Port Converter for PV-Battery Hybrid Energy System	TT Power Electronics Converters	Oral	October 21	S2 09:15-11:45
WF-021393	Coupled Inductor Based Hybrid DC Circuit Breaker Topologies for DC Grid Application	TT Power Electronics Converters	Oral	October 21	S2 09:15-11:45
WF-019941	Control of Grid-Tied Inverter with L Filter in Weak Grid Considering Grid Impedance and Harmonics	TT Power Electronics Converters	Oral	October 21	S2 09:15-11:45
WF-006483	Fault-Tolerant PMSG Direct-Drive Wind Turbines, using Vector Control Techniques with Reduced DC-Link Ratings	TT Power Electronics Converters	Oral	October 21	S2 09:15-11:45
WF-010561	An Average Model-Based Transistor Open-Circuit Fault Diagnosis Method for Grid-Tied Single-Phase Inverter	TT Power Electronics Converters	Oral	October 21	S2 09:15-11:45
WF-034061	An Easily Implementable Gate Charge Controlled Active Gate Driver for SiC MOSFET	TT Power Electronics Converters	Oral	October 21	S2 09:15-11:45
WF-027847	PV Configuration and Maximization Applied to Parallel Inverters Using Updated Droop Control	TT Power Electronics Converters	Oral	October 21	S2 09:15-11:45
WF-007579	Efficiency enhancement of Bridgeless Buck-Boost PFC Converter with Unity PF and DC Split to Reduce Voltage Stresses	TT Power Electronics Converters	Oral	October 21	S2 09:15-11:45
WF-019127	Microgrid modeling and power quality enhancements using low-level control methods based on robust RST controller	TT Power Systems and Smart Grids	Oral	October 21	S2 09:15-11:45
WF-005266	Impedance Analysis of Solid Iron Conductors	TT Power Systems and Smart Grids	Oral	October 21	S2 09:15-11:45
WF-016527	Series Arc Fault Detection in DC Microgrid Using Hybrid Detection Method	TT Power Systems and Smart Grids	Oral	October 21	S2 09:15-11:45
WF-010367	Power-sharing based on open-loop synchronization of Inverters in an Islanded AC Microgrid	TT Power Systems and Smart Grids	Oral	October 21	S2 09:15-11:45
WF-014753	A Synchrophasor-based Decision Tree Approach for Identification of Most Coherent Generating Units	TT Power Systems and Smart Grids	Oral	October 21	S2 09:15-11:45

WF-021644	Assessing the correlation between impedance and reference voltage of varistor arresters using linear regression model	TT Power Systems and Smart Grids	Oral	October 21	S2 09:15-11:45
WF-003336	A FPGA Implementation of DFIG Wind Turbines for Analog-Digital Hybrid Real-Time Simulation	TT Power Systems and Smart Grids	Oral	October 21	S2 09:15-11:45
WF-014028	Teager Energy Operator Based Fault Detection and Classification Technique for Converter Dominated Autonomous AC Microgrid	TT Power Systems and Smart Grids	Oral	October 21	S2 09:15-11:45
WF-013692	Voltage-based Load Control for frequency support provision by HVDC systems	TT Power Systems and Smart Grids	Oral	October 21	S2 09:15-11:45
WF-019364	Implementation of new consumer model in RAPSim to allow home management system integration	TT Power Systems and Smart Grids	Oral	October 21	S2 09:15-11:45
WF-008362	Analysis of Photovoltaic Systems Power Losses in Partial Shading Conditions	TT Renewable Energy and Energy Storage Systems	Oral	October 21	S2 09:15-11:45
WF-024201	A system approach to harnessing wind energy in a railway infrastructure	TT Renewable Energy and Energy Storage Systems	Oral	October 21	S2 09:15-11:45
WF-007587	Active Magnetic Bearing Control and Hardware for an Experimental Flywheel Energy Storage System	TT Renewable Energy and Energy Storage Systems	Oral	October 21	S2 09:15-11:45
WF-005797	A Model-based MPPT with Improved Tracking Accuracy	TT Renewable Energy and Energy Storage Systems	Oral	October 21	S2 09:15-11:45
WF-021776	Analysis of AC Dynamic Parameters of PV solar cells Under Partial Shading for Breakdown and Hot Spot Detections	TT Renewable Energy and Energy Storage Systems	Oral	October 21	S2 09:15-11:45
WF-005215	A Hierarchical Distributed Energy Management for Multiple PV-Based EV Charging Stations	TT Renewable Energy and Energy Storage Systems	Oral	October 21	S2 09:15-11:45
WF-015873	Energy Management in Battery/Supercapacitor Hybrid System Using DC/DC Resonant Converters	TT Renewable Energy and Energy Storage Systems	Oral	October 21	S2 09:15-11:45
WF-011169	A Generalized Platform for Optimal Planning of Isolated Microgrids, Considering Operation Constraints	TT Renewable Energy and Energy Storage Systems	Oral	October 21	S2 09:15-11:45
WF-000922	Comparative Study of Three Power Management Strategies of a Wind PV Hybrid Stand-alone System for Agricultural Applications	TT Renewable Energy and Energy Storage Systems	Oral	October 21	S2 09:15-11:45
WF-023728	A Review of Flywheel Energy Storage Systems for Grid Application	TT Renewable Energy and Energy Storage Systems	Oral	October 21	S2 09:15-11:45
WF-013307	Finite Set MPC Algorithm for Achieving Thermal Redistribution in a Neutral-Point-Clamped Converter	SS Advanced Control of Power Converters in Distributed Generation Systems	Oral	October 21	S3 13:15-15:15
WF-032646	Cascaded Model Predictive Control of Grid Connected Converter with LCL Filter	SS Advanced Control of Power Converters in Distributed Generation Systems	Oral	October 21	S3 13:15-15:15
WF-033782	A Novel Digital Signal Processing Modular Technique for a Grid-tie Indirect Matrix Converter	SS Advanced Control of Power Converters in Distributed Generation Systems	Oral	October 21	S3 13:15-15:15
WF-035459	Online Grid Support Inverter Parameters Identification Using Extended Kalman Filters	SS Advanced Control of Power Converters in Distributed Generation Systems	Oral	October 21	S3 13:15-15:15
WF-036382	Flexible Harmonic Control for Three-Level Selective Harmonic Modulation using the Exchange Market Algorithm	SS Advanced Control of Power Converters in Distributed Generation Systems	Oral	October 21	S3 13:15-15:15
WF-010235	Electrical Parameters Characterization of Aged IGBTs by Thermo-Electrical Overstress	SS Advanced Prognostics and Health Management of Industrial Systems	Oral	October 21	S3 13:15-15:15
WF-017523	Exploring the detectability of short-circuit faults in inverter-fed induction motors.	SS Advanced Prognostics and Health Management of Industrial Systems	Oral	October 21	S3 13:15-15:15

WF-024244	Machine Condition Prediction Based on Long Short Term Memory and Particle Filtering	SS Advanced Prognostics and Health Management of Industrial Systems	Oral	October 21	S3 13:15-15:15
WF-033898	Lévy Process-Based Stochastic Modeling for Machine Performance Degradation Prognosis	SS Advanced Prognostics and Health Management of Industrial Systems	Oral	October 21	S3 13:15-15:15
WF-010928	Wireless Monitoring and Record of Intravenous Medication	SS Biomedical Applications of Industrial Electronics	Oral	October 21	S3 13:15-15:15
WF-018961	The µ-BiMO method for needle pair optimization in ECT	SS Biomedical Applications of Industrial Electronics	Oral	October 21	S3 13:15-15:15
WF-036277	Flexible Functional Electrical Stimulation Architecture with External Remote Controller for Unilateral Facial Paralysis Patients	SS Biomedical Applications of Industrial Electronics	Oral	October 21	S3 13:15-15:15
WF-036889	Efficient PPG Signal Acquisition for Atrial Fibrillation Screening with Wearable Devices	SS Biomedical Applications of Industrial Electronics	Oral	October 21	S3 13:15-15:15
WF-034207	Simualtion Framework for Cooperative Adatpive Cruise Control with Empirical DSRC Module	SS Connected and Automated Vehicle Integration, Safety, and Environment Design	Oral	October 21	S3 13:15-15:15
WF-035068	Network Edge Assisted Efficient Data Annotation for Real-time Video Big Data	SS Connected and Automated Vehicle Integration, Safety, and Environment Design	Oral	October 21	S3 13:15-15:15
WF-035254	Increasing Traffic Flows with DSRC Technology: Field Trials and Performance Evaluation	SS Connected and Automated Vehicle Integration, Safety, and Environment Design	Oral	October 21	S3 13:15-15:15
WF-006831	Assessing the Impact of Full–Duplex Wireless in Real–time Industrial Networks	SS Innovative Approaches to Industrial Wireless Systems	Oral	October 21	S3 13:15-15:15
WF-007242	Authentication Based on Channel State Information for Industrial Wireless Communications	SS Innovative Approaches to Industrial Wireless Systems	Oral	October 21	S3 13:15-15:15
WF-007714	Fundamental Constraints for Time-slotted MAC Design in Wireless High Performance: the Realistic Perspective of Timing	SS Innovative Approaches to Industrial Wireless Systems	Oral	October 21	S3 13:15-15:15
WF-009709	Wireless Communication Technologies in Automated Guided Vehicles: Survey and Analysis	SS Innovative Approaches to Industrial Wireless Systems	Oral	October 21	S3 13:15-15:15
WF-033596	Industrial LoRa: a Novel Medium Access Strategy for LoRa in Industry 4.0 Applications	SS Innovative Approaches to Industrial Wireless Systems	Oral	October 21	S3 13:15-15:15
WF-037001	Feasibility Studies on Smart Pole Connectivity based on LPWA IoT Communication Platform for Industrial Applications	SS Innovative Approaches to Industrial Wireless Systems	Oral	October 21	S3 13:15-15:15
WF-006165	Hardware-Efficient Velocity Estimation of Dynamic Obstacles Based on a Novel Radix-4 CORDIC and FPGA Implementation	SS Intelligent Robotics: Control, Sensors and Navigation	Oral	October 21	S3 13:15-15:15
WF-010421	Evaluation of Magnetic Absolute Encoder Using an Eccentric Structure with Feedback Correction	SS Intelligent Robotics: Control, Sensors and Navigation	Oral	October 21	S3 13:15-15:15
WF-014095	Development of Autonomous Networked Robots (ANR) for Surveillance: Conceptual Design and Requirements	SS Intelligent Robotics: Control, Sensors and Navigation	Oral	October 21	S3 13:15-15:15
WF-015776	Robotized Early Plant Health Monitoring System	SS Intelligent Robotics: Control, Sensors and Navigation	Oral	October 21	S3 13:15-15:15
WF-021369	Nonlinear Robust Control of a Quadcopter: Implementation and Evaluation	SS Intelligent Robotics: Control, Sensors and Navigation	Oral	October 21	S3 13:15-15:15
WF-025739	Nonlinear optimal control of the UAV and suspended payload system	SS Intelligent Robotics: Control, Sensors and Navigation	Oral	October 21	S3 13:15-15:15
WF-029297	Social Norm Based Collision Avoidance in Human-Robot Coexistence Environment	SS Intelligent Robotics: Control, Sensors and Navigation	Oral	October 21	S3 13:15-15:15
WF-031348	Path Planning for UAVs with Engine Failure in the Presence of Winds	SS Intelligent Robotics: Control, Sensors and Navigation	Oral	October 21	S3 13:15-15:15

WF-008117	A three-phase THSeAF based on Packed U-Cell and P+R controller to improve power quality of MEA	SS Power Electronics for the More Electric Aircraft	Oral	October 21	S3 13:15-15:15
WF-009695	Packaging with double-side cooling capability for SiC devices, based on silver sintering	SS Power Electronics for the More Electric Aircraft	Oral	October 21	S3 13:15-15:15
WF-016195	Design Considerations of Bidirectional SiC based DC Solid-State Power Controller for MEA systems	SS Power Electronics for the More Electric Aircraft	Oral	October 21	S3 13:15-15:15
WF-026093	Real-Time Simulation of a More Electric Aircraft Using a multi-FPGA Architecture	SS Power Electronics for the More Electric Aircraft	Oral	October 21	S3 13:15-15:15
WF-026476	Deadbeat Predictive Direct Power Control of Neutral-Point-Clamped Converter Based Active Front End Rectifier for More Electric Aircraft Applications	SS Power Electronics for the More Electric Aircraft	Oral	October 21	S3 13:15-15:15
WF-005207	Asynchronous Static Output Feedback Control of Discrete-time Markov Jump Systems	SS Stability Analysis and Security Control of Hybrid Networked Systems	Oral	October 21	S3 13:15-15:15
WF-011738	False Data Injection Attack Detection in a Power Grid Using RNN	SS Stability Analysis and Security Control of Hybrid Networked Systems	Oral	October 21	S3 13:15-15:15
WF-011975	Optimal Jamming Attack Strategy against Wireless State Estimation: A Game Theoretic Approach	SS Stability Analysis and Security Control of Hybrid Networked Systems	Oral	October 21	S3 13:15-15:15
WF-013161	A Two-Stage Economic Optimization Based on Predictive Control for EV Microgrid	SS Stability Analysis and Security Control of Hybrid Networked Systems	Oral	October 21	S3 13:15-15:15
WF-014079	Event-Triggered Control on Quasi-Average Consensus in the Cooperation-Competition Network	SS Stability Analysis and Security Control of Hybrid Networked Systems	Oral	October 21	S3 13:15-15:15
WF-014982	Event-Triggered Consensus for General Linear Leader-Following Multi-Agent Systems Under Directed Topologies	SS Stability Analysis and Security Control of Hybrid Networked Systems	Oral	October 21	S3 13:15-15:15
WF-018333	Collaborative Model-based Fallback Control for Secured Networked Control Systems	SS Stability Analysis and Security Control of Hybrid Networked Systems	Oral	October 21	S3 13:15-15:15
WF-002623	Analysis of a Symmetrical Nine-phase Machine with Highly Non-Sinusoidal Back-Electromotive Force	SY Students and Young Professionals Forum	Oral	October 21	S3 13:15-15:15
WF-016322	A Data-Driven Method for SKR Identification and Application to Stability Margin Estimation	SY Students and Young Professionals Forum	Oral	October 21	S3 13:15-15:15
WF-023582	A Data-Driven Fault Detection Approach for Periodic Rectangular Wave Disturbance	SY Students and Young Professionals Forum	Oral	October 21	S3 13:15-15:15
WF-036641	Comparison of Energy Harvesting Concepts for Heating, Ventilation and Air Conditioning Systems	SY Students and Young Professionals Forum	Oral	October 21	S3 13:15-15:15
WF-021105	Design and Fabrication of the Trans-Rotary Magnetic Gear Using Quasi-Halbach Arrays	TT Electrical Machines and Industrial Drives	Oral	October 21	S3 13:15-15:15
WF-028401	Synchronous Generators Stator Ground Fault Detection Using Wavelet Theory	TT Electrical Machines and Industrial Drives	Oral	October 21	S3 13:15-15:15
WF-028223	Experimental Validation of a Novel Synchronous Reluctance Motor with a Sinusoidal Rotor Shape	TT Electrical Machines and Industrial Drives	Oral	October 21	S3 13:15-15:15
WF-027588	Analysis of Current for Fault-Tolerant Control of Excitation Fault in DSEG	TT Electrical Machines and Industrial Drives	Oral	October 21	S3 13:15-15:15

WF-028231	Design Key Aspects and Analysis of a Novel Synchronous Reluctance Motor with Sinusoidal Rotor Lamination Shape	TT Electrical Machines and Industrial Drives	Oral	October 21	S3 13:15-15:15
WF-000582	Current Control of AC Drives Using Shunt Current Sensors and Delta-Sigma Modulation	TT Electrical Machines and Industrial Drives	Oral	October 21	S3 13:15-15:15
WF-027006	A Model Predictive Control for Synchronous Motor Drive with Integral Action	TT Electrical Machines and Industrial Drives	Oral	October 21	S3 13:15-15:15
WF-034347	Optimal feedforward torque control of synchronous machines with time-varying parameters	TT Electrical Machines and Industrial Drives	Oral	October 21	S3 13:15-15:15
WF-005584	Digital planning of complex production systems based on life-cycle costs	TT Industrial Electronics and Education	Oral	October 21	S3 13:15-15:15
WF-016551	Soft-Switching Control Circuit Based on Traveling and Reflected Waves for High-Frequency Resonant Inverter Applicable to Capacitive Load Impedance	TT Industrial Electronics and Education	Oral	October 21	S3 13:15-15:15
WF-019755	Digital Circuit Simulator Project at Undergraduate Level	TT Industrial Electronics and Education	Oral	October 21	S3 13:15-15:15
WF-028037	A Networked Cyber-Physical System Testbed for Undergraduate Education	TT Industrial Electronics and Education	Oral	October 21	S3 13:15-15:15
WF-029343	Educational Game theme based Instructional module for teaching introductory programming.	TT Industrial Electronics and Education	Oral	October 21	S3 13:15-15:15
WF-030155	Low Power Design of a Wireless Sensor Node to Monitor Electric Car Batteries	TT Industrial Electronics and Education	Oral	October 21	S3 13:15-15:15
WF-030538	Bibliometric analysis of 50 years of IEEE Industrial Electronics Society publications	TT Industrial Electronics and Education	Oral	October 21	S3 13:15-15:15
WF-002321	Dual Optimization of an H-Bridge SPWM Microinverter by an Optimal Switching Frequency Tracking Technique	TT Power Electronics Converters	Oral	October 21	S3 13:15-15:15
WF-002429	Disturbance Rejection Enhancement for Three-Phase Converters by Active Inductance	TT Power Electronics Converters	Oral	October 21	S3 13:15-15:15
WF-009016	A Method for Decoupling control Current of　Three-port Isolated DC-AC-DC Converter	TT Power Electronics Converters	Oral	October 21	S3 13:15-15:15
WF-031801	A Hierarchical Power Routing Scheme for Interlinking Converters in Unbalanced Hybrid AC-DC Microgrids	TT Power Systems and Smart Grids	Oral	October 21	S3 13:15-15:15
WF-020273	Current-limiting droop control design of paralleled AC/DC and DC/DC converters in DC micro-grids	TT Power Systems and Smart Grids	Oral	October 21	S3 13:15-15:15
WF-029769	DQ Synchronous Frame Nonlinear Controller Design for a Single-Phase Stand-Alone and Grid-Connected Hybrid Wind/Battery System	TT Power Systems and Smart Grids	Oral	October 21	S3 13:15-15:15
WF-001678	Solar Generation Forecasting by Recurrent Neural Networks optimized by Levenberg-Marquardt Algorithm	TT Power Systems and Smart Grids	Oral	October 21	S3 13:15-15:15
WF-013048	Design of a distributed signal processing unit for transmission line protection in a centralized substation protection architecture	TT Power Systems and Smart Grids	Oral	October 21	S3 13:15-15:15
WF-020095	Reactive Power Pricing Based on FTR in the deregulated power market	TT Power Systems and Smart Grids	Oral	October 21	S3 13:15-15:15
WF-005738	An Optimal Approach for Offering Multiple Demand Response Programs Over a Power Distribution Network	TT Power Systems and Smart Grids	Oral	October 21	S3 13:15-15:15
WF-005819	A Hybrid Customer Baseline Load Estimator for Small and Medium Enterprises	TT Power Systems and Smart Grids	Oral	October 21	S3 13:15-15:15
WF-020222	Super-short Term Wind Speed Prediction based on Artificial Neural Networks for Wind Turbine Control Applications	TT Renewable Energy and Energy Storage Systems	Oral	October 21	S3 13:15-15:15

WF-029025	Multi-Reservoir Echo State Network for Proton Exchange Membrane fuel cell Remaining Useful Life prediction	TT Renewable Energy and Energy Storage Systems	Oral	October 21	S3 13:15-15:15
WF-000698	MPPT based on One Cycle Control and Temperature Method Embedded in a DSP	TT Renewable Energy and Energy Storage Systems	Oral	October 21	S3 13:15-15:15
WF-008869	Optimization of the Excitation Capacitor of a STATCOM assisted Self Excited Induction Generator based Wind Energy Conversion System	TT Renewable Energy and Energy Storage Systems	Oral	October 21	S3 13:15-15:15
WF-010669	Convex Optimization Design of Multi-Model Controller for Pitch-Regulated Wind Turbine Systems	TT Renewable Energy and Energy Storage Systems	Oral	October 21	S3 13:15-15:15
WF-027812	Optimal Sizing Of Battery Energy Storage System For An Islaned Microgrid	TT Renewable Energy and Energy Storage Systems	Oral	October 21	S3 13:15-15:15
WF-013021	Supervisory Controller for Smoothing Wind Turbine Power Output based on FESS using ANNs for Short-Term Ahead Prediction	TT Renewable Energy and Energy Storage Systems	Oral	October 21	S3 13:15-15:15
WF-029653	Robust Model Reference Adaptive Individual Pitch Control for Wind Turbine Load Reduction	TT Renewable Energy and Energy Storage Systems	Oral	October 21	S3 13:15-15:15
WF-004774	An Identification Approach for the Data-Driven SIR in the PnP Monitoring and Control Architecture	SS Advances in Data-Driven Process Monitoring and Control for Complex Industrial Systems	Oral	October 21	S4 15:45-18:00
WF-006203	An adaptive data-driven fault detection method for monitoring dynamic process	SS Advances in Data-Driven Process Monitoring and Control for Complex Industrial Systems	Oral	October 21	S4 15:45-18:00
WF-011096	Design approach to MIMO diagnostic observer and its application to fault detection	SS Advances in Data-Driven Process Monitoring and Control for Complex Industrial Systems	Oral	October 21	S4 15:45-18:00
WF-013412	Closed-Loop Identification of the Data-Driven SKR with Deterministic Disturbance for Fault Detection	SS Advances in Data-Driven Process Monitoring and Control for Complex Industrial Systems	Oral	October 21	S4 15:45-18:00
WF-013447	Smoothed Fisher Discriminant Analysis for Incipient Fault Diagnosis	SS Advances in Data-Driven Process Monitoring and Control for Complex Industrial Systems	Oral	October 21	S4 15:45-18:00
WF-013471	DOSS: Dual Over Sampling Strategy for Imbalanced Data Classification	SS Advances in Data-Driven Process Monitoring and Control for Complex Industrial Systems	Oral	October 21	S4 15:45-18:00
WF-015172	A Geometric Approach to Clustering Based Anomaly Detection for Industrial Applications	SS Advances in Data-Driven Process Monitoring and Control for Complex Industrial Systems	Oral	October 21	S4 15:45-18:00
WF-023574	RBF Neural Networks Modeling Methodology Compared to Non-Parametric Auto-Associative Models for Condition Monitoring Applications.	SS Advances in Data-Driven Process Monitoring and Control for Complex Industrial Systems	Oral	October 21	S4 15:45-18:00
WF-024724	Nonlinear VW-SAE based deep learning for quality-related feature learning and soft sensor modeling	SS Advances in Data-Driven Process Monitoring and Control for Complex Industrial Systems	Oral	October 21	S4 15:45-18:00
WF-008478	An Application of MBD Based Inspection in Cloud Manufacturing	SS Cloud Manufacturing	Oral	October 21	S4 15:45-18:00
WF-016535	Achieving Real-Time Quality of Service in Software Defined Networks	SS Cloud Manufacturing	Oral	October 21	S4 15:45-18:00
WF-020648	Simulation model of dynamic service scheduling in cloud manufacturing	SS Cloud Manufacturing	Oral	October 21	S4 15:45-18:00
WF-033065	Self-Organizing Map Using Classification Method for Services in Multilayer Computing Environments	SS Cloud Manufacturing	Oral	October 21	S4 15:45-18:00
WF-033227	Key Issues of Cloud Manufacturing Applied to Agricultural Production	SS Cloud Manufacturing	Oral	October 21	S4 15:45-18:00
WF-034797	IoT-based senses for virtual enterprises	SS Cloud Manufacturing	Oral	October 21	S4 15:45-18:00
WF-035084	An Architecture of Knowledge Cloud Based on Manufacturing Big Data	SS Cloud Manufacturing	Oral	October 21	S4 15:45-18:00

WF-011231	Synthetic loading for symmetrical and asymmetrical nine-phase machines	SS Control of Multiphase Drive Systems	Oral	October 21	S4 15:45-18:00
WF-015725	Vector Control of Multiple Three-Phase Permanent Magnet Motor Drives	SS Control of Multiphase Drive Systems	Oral	October 21	S4 15:45-18:00
WF-035246	Predictive Control Of Parallel Induction Motors Fed by Single Inverter With Common Current Sensors	SS Control of Multiphase Drive Systems	Oral	October 21	S4 15:45-18:00
WF-002445	Improvement of Postfault Performance of Multiphase Drives in Terms of Operating Region and Stator Copper Loss	SS Control of Multiphase Drive Systems	Oral	October 21	S4 15:45-18:00
WF-002437	Carrier-Based PWM With Enhanced DC-Link Exploitation for Five-Phase Machines With Circulating-Current Filters	SS Control of Multiphase Drive Systems	Oral	October 21	S4 15:45-18:00
WF-014222	Discrete-Time Sliding Mode with Time Delay Estimation of a Six-Phase Induction Motor Drive	SS Control of Multiphase Drive Systems	Oral	October 21	S4 15:45-18:00
WF-033235	PWM for Open-End Winding Drive in Fault Tolerant Mode with Minimum Infinity Norm Calculation of Modulation Signals	SS Control of Multiphase Drive Systems	Oral	October 21	S4 15:45-18:00
WF-033685	Performance Evaluation of Five Phase PUC Inverter Fed Five Phase Induction Motor Drive under Different Carrier Based PWM Schemes	SS Control of Multiphase Drive Systems	Oral	October 21	S4 15:45-18:00
WF-016608	Fuzzy Logic Control of a Low Speed Six-Phase Induction Generator for Wind Turbines	SS Control of Multiphase Drive Systems	Oral	October 21	S4 15:45-18:00
WF-015954	Design and Control of a Solar Photovoltaic Powered Electric Vehicle Adapted to the Mobility of Wheelchair Users on Beaches	SS Modeling, Management and Control of Energy Storage Systems in Electric Vehicles	Oral	October 21	S4 15:45-18:00
WF-016179	Research on LC filter Cascaded with Buck Converter Supplying Constant Power Load Based on IDA-Passivity-Based Control	SS Modeling, Management and Control of Energy Storage Systems in Electric Vehicles	Oral	October 21	S4 15:45-18:00
WF-023175	Reactive Power Compensation using Plugged-in Electric Vehicles for an AC Power Grid	SS Modeling, Management and Control of Energy Storage Systems in Electric Vehicles	Oral	October 21	S4 15:45-18:00
WF-023809	Small Signal Analysis and Control Design of Snubberless Naturally Clamped ZCS/ZVS Current-fed Half-Bridge DC/DC Converter for EV	SS Modeling, Management and Control of Energy Storage Systems in Electric Vehicles	Oral	October 21	S4 15:45-18:00
WF-025275	Derating strategies for lithium-ion batteries in electric vehicles	SS Modeling, Management and Control of Energy Storage Systems in Electric Vehicles	Oral	October 21	S4 15:45-18:00
WF-031372	Advances in Li-Ion Battery Management for Electric Vehicles	SS Modeling, Management and Control of Energy Storage Systems in Electric Vehicles	Oral	October 21	S4 15:45-18:00
WF-033049	A Group Control Energy Management Strategy Based on Lithium Battery SOC	SS Modeling, Management and Control of Energy Storage Systems in Electric Vehicles	Oral	October 21	S4 15:45-18:00
WF-033545	Li-ion battery pack SoC estimation for electric vehicles	SS Modeling, Management and Control of Energy Storage Systems in Electric Vehicles	Oral	October 21	S4 15:45-18:00
WF-034975	Voltage Control Comparison for Low-Power DC-DC Converters in EVs: PI and Explicit MPC	SS Modeling, Management and Control of Energy Storage Systems in Electric Vehicles	Oral	October 21	S4 15:45-18:00
WF-024708	Sleep Apnea Monitoring for Smart Healthcare	SS Smart Technologies and Case Study for Industrial Applications and Safety	Oral	October 21	S4 15:45-18:00
WF-025097	Analysis of Energy Inefficiency Challenges in Cognitive Radio Sensor Network	SS Smart Technologies and Case Study for Industrial Applications and Safety	Oral	October 21	S4 15:45-18:00

WF-026069	Software Defined Wireless Sensor Networks Management and Security Challenges: A Review	SS Smart Technologies and Case Study for Industrial Applications and Safety	Oral	October 21	S4 15:45-18:00
WF-026077	Analysis of Notable Security Issues in SDWSN	SS Smart Technologies and Case Study for Industrial Applications and Safety	Oral	October 21	S4 15:45-18:00
WF-031267	A Case Study on Knowledge Driven Code Generation for Software-Defined Industrial Cyber-Physical Systems	SS Smart Technologies and Case Study for Industrial Applications and Safety	Oral	October 21	S4 15:45-18:00
WF-032301	Applicability of Context-Aware Health Monitoring to Hydraulic Circuits	SS Smart Technologies and Case Study for Industrial Applications and Safety	Oral	October 21	S4 15:45-18:00
WF-034568	Smart Manufacturing Systems: Climbing the DIKW Pyramid	SS Smart Technologies and Case Study for Industrial Applications and Safety	Oral	October 21	S4 15:45-18:00
WF-036307	Refining IOPT Petri Nets class for embedded system controller modeling	SS Smart Technologies and Case Study for Industrial Applications and Safety	Oral	October 21	S4 15:45-18:00
WF-032301	Applicability of Context-Aware Health Monitoring to Hydraulic Circuits	SS Smart Technologies and Case Study for Industrial Applications and Safety	Oral	October 21	S4 15:45-18:00
WF-007234	A novel high frequency signal injection strategy for self-sensing control of electric AC machine drives	TT Electrical Machines and Industrial Drives	Oral	October 21	S4 15:45-18:00
WF-028746	An Improved Speed and Position Estimator for Transient Performance of Back-EMF Self-Sensing for IPMSM	TT Electrical Machines and Industrial Drives	Oral	October 21	S4 15:45-18:00
WF-036773	An effective ellipse fitting technique of the current response locus to rotating HF voltage injection in IPMSM for sensorless rotor position estimation	TT Electrical Machines and Industrial Drives	Oral	October 21	S4 15:45-18:00
WF-003654	Quiet Position Sensorless Drive of IPMSM using Ultrasonic Three-phase Triangular-wave Carrier	TT Electrical Machines and Industrial Drives	Oral	October 21	S4 15:45-18:00
WF-003662	Acoustic Noise Removal of Sensorless Control for an IPMSM Based on Extended EMF and Voltage Injection Synchronized with PWM Carrier	TT Electrical Machines and Industrial Drives	Oral	October 21	S4 15:45-18:00
WF-009008	Post-Fault FOC Transformation Matrix for Unequal Amplitude Currents during Dual Open-Phase Fault	TT Electrical Machines and Industrial Drives	Oral	October 21	S4 15:45-18:00
WF-025836	Multiphysics modeling and optimal current profiling for Switched reluctance machine drive	TT Electrical Machines and Industrial Drives	Oral	October 21	S4 15:45-18:00
WF-016136	Sliding Mode Speed Control Applied to the Switched Reluctance Motor	TT Electrical Machines and Industrial Drives	Oral	October 21	S4 15:45-18:00
WF-018074	Torque Ripple Suppression for Open-End Multi-Phase PMSMs Operating under Open-Phase Faults	TT Electrical Machines and Industrial Drives	Oral	October 21	S4 15:45-18:00
WF-006238	Hardware-In-the-Loop simulation of a DC-machine with INTEL FPGA boards	TT Electronic Systems On Chip and Embedded Systems	Oral	October 21	S4 15:45-18:00
WF-030635	Modular Multi-level Converter Hardware-in-the-Loop Simulation on low-cost System-on-Chip devices	TT Electronic Systems On Chip and Embedded Systems	Oral	October 21	S4 15:45-18:00
WF-030783	100fps Camera-Based UGV Localization System Using Cyclone V FPSoC	TT Electronic Systems On Chip and Embedded Systems	Oral	October 21	S4 15:45-18:00
WF-030813	Spatially Distributed Water Quality Monitoring using Floating Sensors	TT Electronic Systems On Chip and Embedded Systems	Oral	October 21	S4 15:45-18:00
WF-030856	Interoperability Enhancement in Health Care at Remote Locations using Thread Protocol in UAVs	TT Electronic Systems On Chip and Embedded Systems	Oral	October 21	S4 15:45-18:00

WF-031631	A SIAR Transmitting Waveform Design Approach Based on Positive and Negative Sequential Carrier Frequency Coding	TT Electronic Systems On Chip and Embedded Systems	Oral	October 21	S4 15:45-18:00
WF-036528	An Embedded Cascade SVM Approach for face detection in the IoT Edge Layer	TT Electronic Systems On Chip and Embedded Systems	Oral	October 21	S4 15:45-18:00
WF-018619	Sliding Mode Control of Three-Phase series Hybrid Power Filter with Reduced cost and Rating	TT Power Electronics Converters	Oral	October 21	S4 15:45-18:00
WF-002151	Isolated Single Stage AC-DC Converter Topologies with a Regenerative Snubber Circuit for EV Application	TT Power Electronics Converters	Oral	October 21	S4 15:45-18:00
WF-036501	A Design Guide of Direct Matrix Converter Open Circuit Online Fault Diagnosis in Industrial Applications	TT Power Electronics Converters	Oral	October 21	S4 15:45-18:00
WF-007064	Comparison of Carrier Based PWM Strategies for a Five Level Unidirectional Hybrid Rectifier	TT Power Electronics Converters	Oral	October 21	S4 15:45-18:00
WF-006211	Gate Driver Circuit for Short Pulse Generation in Solid-State Pulsed Power Modulators	TT Power Electronics Converters	Oral	October 21	S4 15:45-18:00
WF-000744	State Plane Trajectory Control of a Soft Switching AC-Link DC-DC Converter	TT Power Electronics Converters	Oral	October 21	S4 15:45-18:00
WF-028959	High-Frequency Single-Switch Inverter for Driving Capacitive Loads	TT Power Electronics Converters	Oral	October 21	S4 15:45-18:00
WF-016705	Class D Series-Resonant DC/DC Converter Using Switch-Controlled Capacitor with ON-OFF Feedback Control	TT Power Electronics Converters	Oral	October 21	S4 15:45-18:00
WF-011967	A 20MHz Isolated Synchronous Rectification DC-DC Converter Based on GaN HEMT	TT Power Electronics Converters	Oral	October 21	S4 15:45-18:00
WF-026433	Secure Blockchain-based Energy Transaction Framework in Smart Power Systems	TT Power Systems and Smart Grids	Oral	October 21	S4 15:45-18:00
WF-004499	A Hierarchical Multiagent-based Protection Structure for Meshed Microgrids	TT Power Systems and Smart Grids	Oral	October 21	S4 15:45-18:00
WF-019097	High Impedance Fault Detection in Real-Time and Evaluation using Hardware-in-Loop Testing	TT Power Systems and Smart Grids	Oral	October 21	S4 15:45-18:00
WF-027197	Robust IDA-PBC based Load Voltage Controller for Power Quality Enhancement of Standalone Microgrids	TT Power Systems and Smart Grids	Oral	October 21	S4 15:45-18:00
WF-005843	Impact of supervisory control inputs in multi-inverter distribution systems	TT Power Systems and Smart Grids	Oral	October 21	S4 15:45-18:00
WF-019003	Dynamic Microgrids with Voltage Unbalance Mitigation Using Distributed Secondary Control	TT Power Systems and Smart Grids	Oral	October 21	S4 15:45-18:00
WF-016519	A Hybrid FACTS topology for Reactive Power Support in High Voltage Transmission Systems.	TT Power Systems and Smart Grids	Oral	October 21	S4 15:45-18:00
WF-024066	Application and Validation of Virtual Synchronous Machines in Power System Operation	TT Power Systems and Smart Grids	Oral	October 21	S4 15:45-18:00
WF-023671	Single-Phase Smart Load Controller With A Battery Storage	TT Power Systems and Smart Grids	Oral	October 21	S4 15:45-18:00
WF-018163	Photovoltaic Module Integrated Microinverter with Gradationally Controlled Voltage Sources and Series Connected Active Filter	TT Renewable Energy and Energy Storage Systems	Oral	October 21	S4 15:45-18:00
WF-011819	Analysis of Bifurcation Behaviors in MMC Connected to a Weak Grid	TT Renewable Energy and Energy Storage Systems	Oral	October 21	S4 15:45-18:00
WF-016071	Powering 12-V LED luminiaries with supercapacitor-based energy storage in DC-microgrid systems	TT Renewable Energy and Energy Storage Systems	Oral	October 21	S4 15:45-18:00

WF-027448	The Design and Implementation of Improved Software Phase-Locked Loop for Single-phase Grid-connected Inverter.	TT Renewable Energy and Energy Storage Systems	Oral	October 21	S4 15:45-18:00
WF-027952	Vibration Energy Harvesting Circuit with Impedance Matching and Wake-up for Freight Railcars	TT Renewable Energy and Energy Storage Systems	Oral	October 21	S4 15:45-18:00
WF-022322	High-Frequency Grid Current Control of Parallel Inverters	TT Renewable Energy and Energy Storage Systems	Oral	October 21	S4 15:45-18:00
WF-025984	Hybrid Control for a Power Interface of a PEM-FC System Supplying Residential Thermostatic Loads	TT Renewable Energy and Energy Storage Systems	Oral	October 21	S4 15:45-18:00
WF-022888	DC Arc-Fault Detection in PV Systems Using Multistage Morphological Fault Detection Algorithm	TT Renewable Energy and Energy Storage Systems	Oral	October 21	S4 15:45-18:00
WF-006645	Online I-V Tracer for per string monitoring and maintenance of PV panels	TT Renewable Energy and Energy Storage Systems	Oral	October 21	S4 15:45-18:00
WF-004111	Novel Balancing Approach for Multilevel Diode Clamped Converters in Medium Voltage Hybrid STATCOM Applications	SS Advanced Multilevel Converters with DC Capacitors: Modulation, Voltage Balancing, and Their Control Strategies.	Oral	October 22	M1 08:00-09:00
WF-015792	Sliding-Mode and Proportional-Resonant Based Control Strategy for Three-Phase Two-Leg T-Type Grid-Connected Inverters with LCL Filter	SS Advanced Multilevel Converters with DC Capacitors: Modulation, Voltage Balancing, and Their Control Strategies.	Oral	October 22	M1 08:00-09:00
WF-023639	Control of A Modular-Concatenated-Cell (MCC) Multilevel Converter Topology Exploiting Logic-Equations Method	SS Advanced Multilevel Converters with DC Capacitors: Modulation, Voltage Balancing, and Their Control Strategies.	Oral	October 22	M1 08:00-09:00
WF-027227	Space Vector Modulation Technique On Single Phase Sensor-less PUC5 Inverter and Voltage Balancing at Flying Capacitor	SS Advanced Multilevel Converters with DC Capacitors: Modulation, Voltage Balancing, and Their Control Strategies.	Oral	October 22	M1 08:00-09:00
WF-010308	An Active Assistant Robotic System based on High-Speed Vision and Haptic Feedback for Human-Robot Collaboration	SS Collaborative Robots in Smart Manufacturing	Oral	October 22	M1 08:00-09:00
WF-012823	Automatic Construction of Real-World Datasets for 3D Object Localization using Two Cameras	SS Collaborative Robots in Smart Manufacturing	Oral	October 22	M1 08:00-09:00
WF-013226	Knowledge Based Hierarchical Decomposition of Industry 4.0 Robotic Automation Tasks	SS Collaborative Robots in Smart Manufacturing	Oral	October 22	M1 08:00-09:00
WF-000094	Image Noise Cancellation by Taking Advantage of the Principal Component Analysis Technique	SS Machine Vision, Control and Navigation	Oral	October 22	M1 08:00-09:00
WF-010294	Reservoir Computing based Neural Image Filters	SS Machine Vision, Control and Navigation	Oral	October 22	M1 08:00-09:00
WF-033324	An energy saving approach for active object recognition and localization	SS Machine Vision, Control and Navigation	Oral	October 22	M1 08:00-09:00
WF-008966	Nearest Half Level Modulation for the MMC applied to DC Distribution Grids	SS Modular Multilevel Converters and Applications	Oral	October 22	M1 08:00-09:00
WF-010464	Optimal Control Of Modular MultiLevel Converters (MMCs)	SS Modular Multilevel Converters and Applications	Oral	October 22	M1 08:00-09:00
WF-012297	Pseudo Derivative Feedback Circulating Current Suppression Controller for Modular Multilevel Converter with Flying Capacitor Submodules	SS Modular Multilevel Converters and Applications	Oral	October 22	M1 08:00-09:00
WF-034991	Reducing Computation Effort by Parallel Optimization for Modular Multilevel Converters	SS Modular Multilevel Converters and Applications	Oral	October 22	M1 08:00-09:00
WF-005444	An Online Estimation Algorithm of State-of-Charge of Li-ion Batteries	SS Recent Developments in Sliding Mode Control and Its Applications	Oral	October 22	M1 08:00-09:00
WF-010383	Sliding Mode Control of Three-Phase Three-Level Two-Leg NPC Inverter with LCL Filter for Distributed Generation Systems	SS Recent Developments in Sliding Mode Control and Its Applications	Oral	October 22	M1 08:00-09:00
WF-014125	Modified MIMO Sliding-Mode Controller with Constant Switching Frequency for Grid-Connected LCL-Filtered Quasi-Z-Source Inverter	SS Recent Developments in Sliding Mode Control and Its Applications	Oral	October 22	M1 08:00-09:00

WF-017531	Dynamic Gains Robust Differentiator based Fault Detection Approach for Cascaded H-Bridge Multilevel Inverters	SS Recent Developments in Sliding Mode Control and Its Applications	Oral	October 22	M1 08:00-09:00
WF-018937	An Energy-Stored Quasi-Z Source Converter for Hybrid AC/DC Microgrid	SS Reliability and Resilience for Smart Grids by Big Data, Power Electronics and Energy Storage	Oral	October 22	M1 08:00-09:00
WF-020796	Dynamic Hosting Capacity Management and Demand Charge Reduction via a Hybrid Storage System	SS Reliability and Resilience for Smart Grids by Big Data, Power Electronics and Energy Storage	Oral	October 22	M1 08:00-09:00
WF-028665	A Fast Average Model-based Method for IGBT and Current Sensor Fault Diagnosis in Grid-Tied Inverters	SS Reliability and Resilience for Smart Grids by Big Data, Power Electronics and Energy Storage	Oral	October 22	M1 08:00-09:00
WF-035882	Active Fault Management for Microgrids	SS Reliability and Resilience for Smart Grids by Big Data, Power Electronics and Energy Storage	Oral	October 22	M1 08:00-09:00
WF-019011	Evaluation in Real World of the Measuring Position Determination for Visual Inspection using UAV	TT Computational Intelligence and Signal and Image Processing	Oral	October 22	M1 08:00-09:00
WF-009156	384 TMAC/s FIR filtering on an Artix-7 FPGA using Prism signal processing	TT Computational Intelligence and Signal and Image Processing	Oral	October 22	M1 08:00-09:00
WF-017477	Tool Wear Prediction using Function Approximation Driven by Signal Processing	TT Computational Intelligence and Signal and Image Processing	Oral	October 22	M1 08:00-09:00
WF-017744	A New Recognition Algorithm for Shockable Arrhythmias and Its Performance Analysis	TT Computational Intelligence and Signal and Image Processing	Oral	October 22	M1 08:00-09:00
WF-026719	LTCL-Filter Active-Damping Design Considerations for Low-Switching-Frequency Grid-Tied VSCs	TT Power Electronics Converters	Oral	October 22	M1 08:00-09:00
WF-014192	A Comparison of Extrapolation Techniques for Model Predictive Direct Current Control	TT Power Electronics Converters	Oral	October 22	M1 08:00-09:00
WF-023876	Carrier Phase Shift Modulation for Reducing the Common Mode Voltage in a Two-Level Three-Phase Inverter	TT Power Electronics Converters	Oral	October 22	M1 08:00-09:00
WF-033979	Harmonic elimination procedure for cascaded multilevel inverters with even number of dc sources	TT Power Electronics Converters	Oral	October 22	M1 08:00-09:00
WF-004871	Fire detection of Unmanned Aerial Vehicle in a Mixed Reality-based System	TT Sensors, Actuators and Micro-Nanotechnology	Oral	October 22	Fire 08:00-09:00
WF-007358	Investigation of Non-Contact Biometric System Using Capacitive Coupling Electrodes	TT Sensors, Actuators and Micro-Nanotechnology	Oral	October 22	M1 08:00-09:00
WF-016616	Hysteresis Compensation in Force/Torque Sensor based on Machine Learning	TT Sensors, Actuators and Micro-Nanotechnology	Oral	October 22	M1 08:00-09:00
WF-018465	Sensorless Position Estimation with Thermal Compensation for Compact Dual Solenoid Actuator	TT Sensors, Actuators and Micro-Nanotechnology	Oral	October 22	M1 08:00-09:00
WF-000868	A Hybrid Seven Level Inverter Topology Formed By Cascading T-type and Active Neutral Point Clamped Inverter For Induction Motor Drives	SS Advanced Multilevel Converters with DC Capacitors: Modulation, Voltage Balancing, and Their Control Strategies.	Oral	October 22	M2 09:30-11:45
WF-001198	A Thirteen Level Twenty-Four Sided Polygonal Voltage Space Vector Structure for Drives	SS Advanced Multilevel Converters with DC Capacitors: Modulation, Voltage Balancing, and Their Control Strategies.	Oral	October 22	M2 09:30-11:45
WF-001988	Detroit Rectifier	SS Advanced Multilevel Converters with DC Capacitors: Modulation, Voltage Balancing, and Their Control Strategies.	Oral	October 22	M2 09:30-11:45
WF-003972	A Novel Inductor Based Balancing Circuit for Diode Clamped Converters	SS Advanced Multilevel Converters with DC Capacitors: Modulation, Voltage Balancing, and Their Control Strategies.	Oral	October 22	M2 09:30-11:45

WF-015849	CHB Converter DC voltage control based on Feedback Linearization	SS Advanced Multilevel Converters with DC Capacitors: Modulation, Voltage Balancing, and Their Control Strategies.	Oral	October 22	M2 09:30-11:45
WF-026484	Sensor-Less Logic-Equation-Based Modultion Method for Grid-Connected PUC5 Converter	SS Advanced Multilevel Converters with DC Capacitors: Modulation, Voltage Balancing, and Their Control Strategies.	Oral	October 22	M2 09:30-11:45
WF-029475	Space Vector Modulation for Packed-U-Cell Converters (PUC)	SS Advanced Multilevel Converters with DC Capacitors: Modulation, Voltage Balancing, and Their Control Strategies.	Oral	October 22	M2 09:30-11:45
WF-036919	New Nine-Level Inverter with Self Balancing of Capacitors Voltages	SS Advanced Multilevel Converters with DC Capacitors: Modulation, Voltage Balancing, and Their Control Strategies.	Oral	October 22	M2 09:30-11:45
WF-037028	Self-Balancing Trinary Asymmetric Three-Phase Multilevel Inverter	SS Advanced Multilevel Converters with DC Capacitors: Modulation, Voltage Balancing, and Their Control Strategies.	Oral	October 22	M2 09:30-11:45
WF-004944	A Reduced-Switching-Frequency Modulation Method for Hybrid MMCs under Over-Modulation Conditions	SS Modular Multilevel Converters and Applications	Oral	October 22	M2 09:30-11:45
WF-013366	An Efficient Topology of Modular-Multilevel Converter with Alternative Arm Operation	SS Modular Multilevel Converters and Applications	Oral	October 22	M2 09:30-11:45
WF-015865	Indirect Control of Capacitor Voltage Ripple and Circulating Current in a Modular Multilevel Converter	SS Modular Multilevel Converters and Applications	Oral	October 22	M2 09:30-11:45
WF-018538	Control of Modular Multilevel Converters Based on the State-Plane Analysis and Coordinate Transformation	SS Modular Multilevel Converters and Applications	Oral	October 22	M2 09:30-11:45
WF-019623	Optimal Design of a LCL Filter for LV Modular Multilevel Converters in Hybrid ac/dc Microgrids Application	SS Modular Multilevel Converters and Applications	Oral	October 22	M2 09:30-11:45
WF-027901	Performance Comparison of Detailed and Averaging Model of a Grid Connected 401-level MMC System under System Fault Conditions	SS Modular Multilevel Converters and Applications	Oral	October 22	M2 09:30-11:45
WF-029742	Channel Modeling for Powerline Communications in Series-Connected Inverters	SS Modular Multilevel Converters and Applications	Oral	October 22	M2 09:30-11:45
WF-031828	An improved Alternate Arm Converter for HVdc applications	SS Modular Multilevel Converters and Applications	Oral	October 22	M2 09:30-11:45
WF-033634	Generating the Arm Voltage References of Modular Multilevel Converters Employing Predictive Technique	SS Modular Multilevel Converters and Applications	Oral	October 22	M2 09:30-11:45
WF-013536	Digital Predistortion of Hammerstein Systems Using the Nonlinear Filtered-x PEM Algorithm with Initial Subsystem Estimates	TT Computational Intelligence and Signal and Image Processing	Oral	October 22	M2 09:30-11:45
WF-026263	Remaining Useful Life Estimation of Batteries using Dirichlet Process with Variational Bayes Inference	TT Computational Intelligence and Signal and Image Processing	Oral	October 22	M2 09:30-11:45
WF-009148	Ultra narrowband filtering with Prism signal processing: design and simulation	TT Computational Intelligence and Signal and Image Processing	Oral	October 22	M2 09:30-11:45
WF-013609	Three-Dimensional Localization of Known Objects for Robot Arm Application based on a Particle Swarm Optimized Low End Stereo Vision System	TT Computational Intelligence and Signal and Image Processing	Oral	October 22	M2 09:30-11:45
WF-026891	Intelligent Wireless Sensor Network for Ornamental Plant Care	TT Computational Intelligence and Signal and Image Processing	Oral	October 22	M2 09:30-11:45
WF-004936	A Z Structure Convolutional Neural Network Implemented by FPGA in Deep Learning	TT Computational Intelligence and Signal and Image Processing	Oral	October 22	M2 09:30-11:45
WF-016632	Dataset for Web Traffic Security Analysis	TT Computational Intelligence and Signal and Image Processing	Oral	October 22	M2 09:30-11:45

WF-021733	A Machine Learning Approach Applied to Energy Prediction in Job Shop Environments	TT Computational Intelligence and Signal and Image Processing	Oral	October 22	M2 09:30-11:45
WF-018279	Combining Pixel Selection with Covariance Similarity Approach in Hyperspectral Face Recognition	TT Computational Intelligence and Signal and Image Processing	Oral	October 22	M2 09:30-11:45
WF-006696	Improved Angle Estimation for PM Synchronous Machines with non Sinusoidal Saliency	TT Electrical Machines and Industrial Drives	Oral	October 22	M2 09:30-11:45
WF-003077	Finite Control Set Model Predictive Speed Control with a Voltage Smoother	TT Electrical Machines and Industrial Drives	Oral	October 22	M2 09:30-11:45
WF-031011	A Smooth and Stable Open-Loop I-F Control for a Surface Mount PMSM Drive by Ensuring Controlled Starting Torque	TT Electrical Machines and Industrial Drives	Oral	October 22	M2 09:30-11:45
WF-027391	Permanent Magnet Machine Position Sensorless Drive at Low Speed with Phase Voltage Measurement	TT Electrical Machines and Industrial Drives	Oral	October 22	M2 09:30-11:45
WF-024597	Torque Ripple Minimization of PPMIM Drives with Phase-Shifted Carrier PWM	TT Electrical Machines and Industrial Drives	Oral	October 22	M2 09:30-11:45
WF-004189	Comparitive Analysis of Hysteresis Current Control Strategies to Achieve Nearly Constant Switching Frequency for a Two-Level Inverter fed IM Drive	TT Electrical Machines and Industrial Drives	Oral	October 22	M2 09:30-11:45
WF-014281	Predictive Current Control of Five Phase Permanent Magnet Motor with Non-sinusoidal Back-EMF	TT Electrical Machines and Industrial Drives	Oral	October 22	M2 09:30-11:45
WF-006726	Design of a linear actuator for railway turnouts	TT Electrical Machines and Industrial Drives	Oral	October 22	M2 09:30-11:45
WF-020974	An Adjustable Sensorless Shoot-through Protection for H-bridges	TT Electrical Machines and Industrial Drives	Oral	October 22	M2 09:30-11:45
WF-010782	Time Optimal Rendezvous for Multi-Agent Systems Amidst Obstacles - Theory and Experiments	TT Mechatronics and Robotics	Oral	October 22	M2 09:30-11:45
WF-028045	Robustness Margin for Leader-based Multi-agent Consensus Systems in Presence of Parametric Uncertainty	TT Mechatronics and Robotics	Oral	October 22	M2 09:30-11:45
WF-028428	Kinematic and Dynamic Analysis and Design Toolbox of High-DOF Hybrid Multibody Systems	TT Mechatronics and Robotics	Oral	October 22	M2 09:30-11:45
WF-018201	Programming robot work flows with a task modeling approach	TT Mechatronics and Robotics	Oral	October 22	M2 09:30-11:45
WF-025569	Kinetic Energy Attenuation Method for Posture Balance Control of Humanoid Biped Robot under Impact Disturbance	TT Mechatronics and Robotics	Oral	October 22	M2 09:30-11:45
WF-002402	Hard-to-predict routing algorithm from intruders for autonomous surveillance robots	TT Mechatronics and Robotics	Oral	October 22	M2 09:30-11:45
WF-026506	Intelligent Networked Navigation of Mobile Robots with Collision Avoidance	TT Mechatronics and Robotics	Oral	October 22	M2 09:30-11:45
WF-018562	Nonlinear Disturbance Observer-Based Control for Quadrotor UAV	TT Mechatronics and Robotics	Oral	October 22	M2 09:30-11:45
WF-005282	Measurement Uncertainty Analysis of a Robotic Total Station Simulation	TT Mechatronics and Robotics	Oral	October 22	M2 09:30-11:45
WF-034851	Overcoming design challenges in low voltage GaN based PSFB battery charger	TT Power Electronics Converters	Oral	October 22	M2 09:30-11:45
WF-008958	Analysis and Simulation of Transformer Isolated High Current 48 V DC Power Supply with DC-UPS Capability Based on SCALDO Technique for Google's New Open Rack Power Architecture	TT Power Electronics Converters	Oral	October 22	M2 09:30-11:45
WF-012831	A Plug-in Electric Vehicle (PEV) with Compact Bidirectional CuK converter and Sturdier Induction motor drive	TT Power Electronics Converters	Oral	October 22	M2 09:30-11:45
WF-018945	Power Loss Analysis of a Multiport DC-DC Converter for DC Grid Applications	TT Power Electronics Converters	Oral	October 22	M2 09:30-11:45

WF-006114	A 2MHz Constant-Frequency AOT V2 Buck Converter with Adaptive Dead Time Control for Data Centers	TT Power Electronics Converters	Oral	October 22	M2 09:30-11:45
WF-023531	Analysis and Output Voltage Control of a High-Efficiency Converter for DC Microgrids	TT Power Electronics Converters	Oral	October 22	M2 09:30-11:45
WF-013498	A single-switch high boost ratio active rectifier interface for low-voltage wind generators	TT Power Electronics Converters	Oral	October 22	M2 09:30-11:45
WF-010316	Variable Step-Size Switching Frequency Modulation for Synchronous Buck Converter	TT Power Electronics Converters	Oral	October 22	M2 09:30-11:45
WF-006785	A Family of Nonisolated Active Switched Boost Quasi-Z-Source Inverters	TT Power Electronics Converters	Oral	October 22	M2 09:30-11:45
WF-017876	Synchronous Rectifier for High-Power Wireless Transfer Applications	TT Power Systems and Smart Grids	Oral	October 22	M2 09:30-11:45
WF-012602	An Effective PCC Voltage Harmonic Compensation and Harmonic Power Sharing in Islanded Microgrid	TT Power Systems and Smart Grids	Oral	October 22	M2 09:30-11:45
WF-019828	SRF-based current-limiting droop controller for three-phase grid-tied inverters	TT Power Systems and Smart Grids	Oral	October 22	M2 09:30-11:45
WF-014176	Networked Control Approach for Voltage Regulation with Optimal Reactive Power-Sharing	TT Power Systems and Smart Grids	Oral	October 22	M2 09:30-11:45
WF-009911	Opportunity for Military Microgrid Fuel Savings Through Direct Load Control	TT Power Systems and Smart Grids	Oral	October 22	M2 09:30-11:45
WF-026832	Capacity Limit Allocation for Active Congestion Management of Distribution Grids using Flexible User's Profiles in Microgrids	TT Power Systems and Smart Grids	Oral	October 22	M2 09:30-11:45
WF-007684	A Two-layer Model Predictive Control based secondary control with economic performance tracking for islanded microgrids	TT Power Systems and Smart Grids	Oral	October 22	M2 09:30-11:45
WF-013315	Seamless Mode Transfer Control for a Master-Slave Microgrid	TT Power Systems and Smart Grids	Oral	October 22	M2 09:30-11:45
WF-034266	Upper-Middleware Development of Smart Energy Profile 2.0 for Demand-Side Communications in Smart Grid	TT Power Systems and Smart Grids	Oral	October 22	M2 09:30-11:45
WF-003476	Development of Hybrid Blade Angle Control System for Traversing Wind Turbines	TT Renewable Energy and Energy Storage Systems	Oral	October 22	M2 09:30-11:45
WF-008931	Combined Droop and Master-Slave Method for Load Sharing in Stand-alone AC Microgrid	TT Renewable Energy and Energy Storage Systems	Oral	October 22	M2 09:30-11:45
WF-004529	A SiC-Based Dual-Input Buck-Boost Converter with Independent MPPT For Photovoltaic Power Systems	TT Renewable Energy and Energy Storage Systems	Oral	October 22	M2 09:30-11:45
WF-017353	Control method of energy storage system to increase output power from power conditioning systems (PCS)	TT Renewable Energy and Energy Storage Systems	Oral	October 22	M2 09:30-11:45
WF-009105	Economic Operation of PV-DG-Battery Based Microgrid with Seamless Dual Mode Control	TT Renewable Energy and Energy Storage Systems	Oral	October 22	M2 09:30-11:45
WF-023361	Control of Simulated Solar PV Microgrid Operating in Grid-Tied and Islanded Modes	TT Renewable Energy and Energy Storage Systems	Oral	October 22	M2 09:30-11:45
WF-015962	PV Farm Operation with Independent Reactive Power Compensation Regardless of the Active Power Level Generation	TT Renewable Energy and Energy Storage Systems	Oral	October 22	M2 09:30-11:45
WF-024104	Model Predictive Control of H5 Inverter for Transformerless PV Systems with Maximum Power Point Tracking and Leakage Current Reduction	TT Renewable Energy and Energy Storage Systems	Oral	October 22	M2 09:30-11:45

WF-029076	Global Maximum Power Point Tracking Scheme on a Partially Shaded Photovoltaic Array	TT Renewable Energy and Energy Storage Systems	Oral	October 22	M2 09:30-11:45
WF-000841	Fault-tolerant Control for Distributed-drive Electric Vehicles Considering Individual Driver Steering Characteristics	TT Transportation Electrification and Automotive Technologies	Oral	October 22	M2 09:30-11:45
WF-031437	Impact and Mitigation of Electric Vehicle Plug-in on the PV fed DC-bus Charging Station	TT Transportation Electrification and Automotive Technologies	Oral	October 22	M2 09:30-11:45
WF-007838	Development of 1d Distributed Electro-Thermal Li-Ion Cell Model	TT Transportation Electrification and Automotive Technologies	Oral	October 22	M2 09:30-11:45
WF-021423	Secondary Active Rectifier Control Scheme for a Wireless Power Transfer System with Double-Sided LCC Compensation Topology	TT Transportation Electrification and Automotive Technologies	Oral	October 22	M2 09:30-11:45
WF-006009	Fault Analysis of Grid Connected Multi-PM BLDC Motor Drive	TT Transportation Electrification and Automotive Technologies	Oral	October 22	M2 09:30-11:45
WF-005533	Thermal Uncertainty Simulation on LED Lighting Boards of Heavy Duty Transportation Vehicles	TT Transportation Electrification and Automotive Technologies	Oral	October 22	M2 09:30-11:45
WF-027162	Cascaded Adaptive Super Twisting controller for DC/DC converters in electrical vehicle applications	TT Transportation Electrification and Automotive Technologies	Oral	October 22	M2 09:30-11:45
WF-022683	Rear Steer Actuator-Less Four-Wheel Steering System for Four-Wheel Driving Electric Vehicles	TT Transportation Electrification and Automotive Technologies	Oral	October 22	M2 09:30-11:45
WF-006491	Fundamental Study on Driving Force Control Method for Independent-Four-Wheel-Drive Electric Vehicle Considering Tire Slip Angle	TT Transportation Electrification and Automotive Technologies	Oral	October 22	M2 09:30-11:45
WF-004154	Hybrid Optimization Method for High-performance Cascade Structure Feedback Controller Design	SS Advanced Motion Control for Mechatronic Systems	Oral	October 22	M3 13:15-15:15
WF-007749	Thermo-mechanical behavior in precision motion control: Unified framework for fast and accurate FRF identification	SS Advanced Motion Control for Mechatronic Systems	Oral	October 22	M3 13:15-15:15
WF-008729	Fiber Suspended Micro Force Transmission System using Scaling Bilateral Control	SS Advanced Motion Control for Mechatronic Systems	Oral	October 22	M3 13:15-15:15
WF-008982	Robustness Analysis of Two-Mass System Control Using Acceleration-Aided Kalman Filter	SS Advanced Motion Control for Mechatronic Systems	Oral	October 22	M3 13:15-15:15
WF-009164	Damping Control of Suspended Load for Truck Cranes in Consideration of Second Bending Mode Oscillation	SS Advanced Motion Control for Mechatronic Systems	Oral	October 22	M3 13:15-15:15
WF-013269	Seek Control of Hard Disk Drives Using Model Following Control: An Improved Result	SS Advanced Motion Control for Mechatronic Systems	Oral	October 22	M3 13:15-15:15
WF-033863	Optimal State Trajectory Regeneration for Nonminimum Phase Systems: No Preactuation Approach	SS Advanced Motion Control for Mechatronic Systems	Oral	October 22	M3 13:15-15:15
WF-004006	A Model to Estimate the Impact of Electrical Vehicle Displacement on the Medium Voltage Network	SS Electric Vehicle Charging Systems: Architectures, Communication, and Management	Oral	October 22	M3 13:15-15:15
WF-007536	Adaptive Control Of A Three-Phase Dual Active Bridge Based For Electric Vehicles Charging	SS Electric Vehicle Charging Systems: Architectures, Communication, and Management	Oral	October 22	M3 13:15-15:15
WF-011606	Extended Harmonic Analysis of Wireless Charging Systems	SS Electric Vehicle Charging Systems: Architectures, Communication, and Management	Oral	October 22	M3 13:15-15:15

WF-014265	Interfacing an Electric Vehicle to the Grid with Modular Conversion Unit: A Case Study of a Charging Station and its Control Framework	SS Electric Vehicle Charging Systems: Architectures, Communication, and Management	Oral	October 22	M3 13:15-15:15
WF-016888	Maximum Efficiency Operation in Wider Output Power Range of Wireless In-Wheel Motor with Wheel-side Supercapacitor	SS Electric Vehicle Charging Systems: Architectures, Communication, and Management	Oral	October 22	M3 13:15-15:15
WF-017264	New Perspectives for Vehicle-to-Vehicle (V2V) Power Transfer	SS Electric Vehicle Charging Systems: Architectures, Communication, and Management	Oral	October 22	M3 13:15-15:15
WF-024678	A Real-time Drivers' Status Monitoring Scheme with Safety Analysis	SS Electric Vehicle Charging Systems: Architectures, Communication, and Management	Oral	October 22	M3 13:15-15:15
WF-031879	Basic Study on Arrangement Design of In-motion Charging Facility on Urban Roads	SS Electric Vehicle Charging Systems: Architectures, Communication, and Management	Oral	October 22	M3 13:15-15:15
WF-000795	An ACO-KMT Energy Efficient Routing Scheme for Sensed-IoT Network	SS Low Power Smart Sensors in Industrial Applications	Oral	October 22	M3 13:15-15:15
WF-005126	On-chip Spectral Analysis with Low Power and Optimal Control for Energy Harvesting Using Piezoelectric Devices	SS Low Power Smart Sensors in Industrial Applications	Oral	October 22	M3 13:15-15:15
WF-008141	Energy Harvesting from Wastewater with a Single-Chamber Air-Cathode Microbial Fuel Cell	SS Low Power Smart Sensors in Industrial Applications	Oral	October 22	M3 13:15-15:15
WF-010855	Industrial Monitoring and Troubleshooting based on LoRa Communication Technology	SS Low Power Smart Sensors in Industrial Applications	Oral	October 22	M3 13:15-15:15
WF-015059	Performance Analysis of D2D Energy Efficient IoT Networks with Relay-Assisted Underlaying Technique	SS Low Power Smart Sensors in Industrial Applications	Oral	October 22	M3 13:15-15:15
WF-022918	The Need for Standardisation in Low Power Smart Sensing	SS Low Power Smart Sensors in Industrial Applications	Oral	October 22	M3 13:15-15:15
WF-023736	A Simulation and Experimental Study of Input Decoupled Partially Adiabatic Logic (IDPAL)	SS Low Power Smart Sensors in Industrial Applications	Oral	October 22	M3 13:15-15:15
WF-000353	Lightweight and Low-Energy Encryption Scheme for Voice over Wireless Devices	TT Communications for Industrial and Factory Automation	Oral	October 22	M3 13:15-15:15
WF-011894	OFDM Modulation Simulation and Analysis Applied in New Generation of Optical Networks	TT Communications for Industrial and Factory Automation	Oral	October 22	M3 13:15-15:15
WF-013293	A Testbed for Evaluating QoS of Different Classes of Industrial Ethernet Protocols Based on Raspberry Pi	TT Communications for Industrial and Factory Automation	Oral	October 22	M3 13:15-15:15
WF-013579	A Model-Based Approach to Calculate Maintainability Task Lists of PLC Programs for Factory Automation	TT Communications for Industrial and Factory Automation	Oral	October 22	M3 13:15-15:15
WF-016594	Dynamic Optimization of a Remote Control Cycle for Better Responsiveness	TT Communications for Industrial and Factory Automation	Oral	October 22	M3 13:15-15:15
WF-018058	An application of Cloud Robotics for enhancing the Flexibility of Robotic Cells at Factory Shop Floors	TT Communications for Industrial and Factory Automation	Oral	October 22	M3 13:15-15:15
WF-020842	Consistent Automated Production Systems Modelling in a Multi-disciplinary Engineering Workflow	TT Communications for Industrial and Factory Automation	Oral	October 22	M3 13:15-15:15
WF-028525	Data-driven and Event-driven Integration Architecture for Plant-wide Industrial Process Monitoring and Control	TT Communications for Industrial and Factory Automation	Oral	October 22	M3 13:15-15:15
WF-025127	Diurnal Thermal Dormant Landmine Detection using Unmanned Aerial Vehicles	TT Control Systems and Applications	Oral	October 22	M3 13:15-15:15

WF-011851	Sensor Fusion to Detect Scale and Direction of Gravity in Monocular Slam Systems	TT Control Systems and Applications	Oral	October 22	M3 13:15-15:15
WF-013986	Parameter sensitivity analysis of SPC-based control under different grid conditions	TT Control Systems and Applications	Oral	October 22	M3 13:15-15:15
WF-018597	ANFIS Based DC-Link Voltage Control of PWM Rectifier-Inverter System with Enhanced Dynamic Performance	TT Control Systems and Applications	Oral	October 22	M3 13:15-15:15
WF-013005	Discrete-time Path Tracking Control of Multiple UUVs Based on Virtual Leader under Time Varying Delay	TT Control Systems and Applications	Oral	October 22	M3 13:15-15:15
WF-017426	Vision-navigated Bilateral Control for Master-slave Teleoperation System	TT Control Systems and Applications	Oral	October 22	M3 13:15-15:15
WF-017396	Passivity-based Visual Feedback Control for an Endpoint Closed-loop System with a Movable Camera	TT Control Systems and Applications	Oral	October 22	M3 13:15-15:15
WF-016292	Trajectory Control of Wheeled Mobile Robot on Shaking Environments	TT Control Systems and Applications	Oral	October 22	M3 13:15-15:15
WF-019135	Sensorless Commutation Error Compensation of High Speed Brushless DC Motor based on RBF Neural Network Method	TT Electrical Machines and Industrial Drives	Oral	October 22	M3 13:15-15:15
WF-015989	Motor Current Regulation Based Direct DC-link Current Control of Wide Range Load Condition for IPMSM Drive System Without Passive Component	TT Electrical Machines and Industrial Drives	Oral	October 22	M3 13:15-15:15
WF-021865	A Variable Parameter Three-Phase Model for Linear Induction Machine Operating in Regenerative Brake Mode	TT Electrical Machines and Industrial Drives	Oral	October 22	M3 13:15-15:15
WF-028215	MPDCC Based High Efficiency Harmonic Reduction Control for IPMSM Driven by Electrolytic Capacitorless Inverter	TT Electrical Machines and Industrial Drives	Oral	October 22	M3 13:15-15:15
WF-022926	An Analytical Design Strategy and Implementation of a dv/dt Filter for WBG Devices based High Speed Machine Drives	TT Electrical Machines and Industrial Drives	Oral	October 22	M3 13:15-15:15
WF-005355	A Dynamic Braking Control Strategy for DC-Excited Flux Switching Machine	TT Electrical Machines and Industrial Drives	Oral	October 22	M3 13:15-15:15
WF-023663	Tolerant Design and Electromagnetic Response of Permanent Magnet Machine with Stator Turn Fault	TT Electrical Machines and Industrial Drives	Oral	October 22	M3 13:15-15:15
WF-026352	Optimization of Switched Reluctance Motor Drive Firing Angles using Grey Wolf Optimizer for Torque Ripples Minimization	TT Electrical Machines and Industrial Drives	Oral	October 22	M3 13:15-15:15
WF-016098	Leader-Follower Localization and Mapping using Range-Only Measurements	TT Mechatronics and Robotics	Oral	October 22	M3 13:15-15:15
WF-011541	Feedforward control of isolating photovoltaic DC-DC converter to reduce grid-side DC link voltage fluctuation	TT Power Electronics Converters	Oral	October 22	M3 13:15-15:15
WF-008095	Sequential Model Predictive Control of Direct Matrix Converter without Weighting Factors	TT Power Electronics Converters	Oral	October 22	M3 13:15-15:15
WF-013552	A generalized formulation of active power synchronization based control algorithms for grid connected converters	TT Power Electronics Converters	Oral	October 22	M3 13:15-15:15
WF-004014	Investigation of Different Balancing Methods for Modular 3-level T-type Voltage Source Converters with Distributed DC-link Capacitors	TT Power Electronics Converters	Oral	October 22	M3 13:15-15:15
WF-006718	Reduced Switch count 5-level Modules for Modular Multi-Level Converters	TT Power Electronics Converters	Oral	October 22	M3 13:15-15:15
WF-013587	Graph Theory-Based Power Routing in Modular Power Converters Considering Efficiency and Reliability	TT Power Electronics Converters	Oral	October 22	M3 13:15-15:15

WF-016659	Implementation Aspects of a Single Phase Boost PFC Converter	TT Power Electronics Converters	Oral	October 22	M3 13:15-15:15
WF-006866	A Hybrid Power Quality Conditioner (HPQC) with Reduced DC-Link Voltage Rating for Microgrid Applications	TT Power Electronics Converters	Oral	October 22	M3 13:15-15:15
WF-023426	Low-Voltage Ride-Through Operation of Permanent Magnet Synchronous Generator with Active and Reactive Power Injection	TT Renewable Energy and Energy Storage Systems	Oral	October 22	M3 13:15-15:15
WF-007994	Neural Generalized Predictive Control for Tracking Maximum Efficiency and Maximum Power Points of PEM Fuel Cell Stacks	TT Renewable Energy and Energy Storage Systems	Oral	October 22	M3 13:15-15:15
WF-021946	Dynamic Power System Modeling for the Integration of Energy Storage	TT Renewable Energy and Energy Storage Systems	Oral	October 22	M3 13:15-15:15
WF-027596	Electro-thermal behavior of four fast charging protocols for a lithium-ion cell at different temperatures	TT Renewable Energy and Energy Storage Systems	Oral	October 22	M3 13:15-15:15
WF-008001	Supercapacitor Energy Delivery Capability During a Constant Power Discharge Process	TT Renewable Energy and Energy Storage Systems	Oral	October 22	M3 13:15-15:15
WF-015504	Design and optimization of a grid connected residential PV-system with Battery Energy Storage System	TT Renewable Energy and Energy Storage Systems	Oral	October 22	M3 13:15-15:15
WF-030821	Adaptative Droop Control for Balancing the State of Charge of Multiple Energy Storage Systems in Decentralized Microgrids	TT Renewable Energy and Energy Storage Systems	Oral	October 22	M3 13:15-15:15
WF-006106	Fuzzy-based energy management of a residential electro-thermal microgrid based on power forecasting	TT Renewable Energy and Energy Storage Systems	Oral	October 22	M3 13:15-15:15
WF-002453	Real-time Adaptive Heuristic Control Strategy for Parallel Hybrid Electric Vehicles	TT Transportation Electrification and Automotive Technologies	Oral	October 22	M3 13:15-15:15
WF-026859	A Robust Vision-based Lateral Control Scheme of Autonomous Vehicle with Uneven Time Delays	TT Transportation Electrification and Automotive Technologies	Oral	October 22	M3 13:15-15:15
WF-022659	Noncooperative Distributed Social Welfare Optimization with EV Charging Response	TT Transportation Electrification and Automotive Technologies	Oral	October 22	M3 13:15-15:15
WF-028614	Design and Analysis of Synchronous Reluctance Motor for Light Electric Vehicle Application	TT Transportation Electrification and Automotive Technologies	Oral	October 22	M3 13:15-15:15
WF-002313	A Study of Fault-Tolerance for Electric Power Steering System with Safety Metric	TT Transportation Electrification and Automotive Technologies	Oral	October 22	M3 13:15-15:15
WF-027413	Comparison of Meander Track Primary Topologies for EV Roadway Charging	TT Transportation Electrification and Automotive Technologies	Oral	October 22	M3 13:15-15:15
WF-023485	Optimal trade-off between hard and soft-switching to achieve energy saving in industrial electric vehicles	TT Transportation Electrification and Automotive Technologies	Oral	October 22	M3 13:15-15:15
WF-034649	A Solid State Transformer based Fast Charging Station for all Categories of Electric Vehicles.	TT Transportation Electrification and Automotive Technologies	Oral	October 22	M3 13:15-15:15
WF-031852	Self-triggered Consensus for High-order Multi-agent Systems Subject to Input Saturations	SS Analysis and Synthesis of Networking Intelligent Systems	Oral	October 22	M4 15:45-18:00
WF-032328	Admissible leader-following consensus of fractional-order singular multi-agent system via observer-based protocol	SS Analysis and Synthesis of Networking Intelligent Systems	Oral	October 22	M4 15:45-18:00
WF-032913	Asymptotic consensus tracking of uncertain multi-agent systems with a high-dimensional leader: A neuro-adaptive approach	SS Analysis and Synthesis of Networking Intelligent Systems	Oral	October 22	M4 15:45-18:00

WF-032123	Attitude trajectory planning and finite-time attitude tracking control for a quadrotor aircraft	SS Analysis and Synthesis of Networking Intelligent Systems	Oral	October 22	M4 15:45-18:00
WF-031763	Controllability analysis of transcriptional regulatory networks for Saccharomyces cerevisiae	SS Analysis and Synthesis of Networking Intelligent Systems	Oral	October 22	M4 15:45-18:00
WF-034053	Leader-following Consensus of a Class of Multi-agent Systems With Saturations	SS Analysis and Synthesis of Networking Intelligent Systems	Oral	October 22	M4 15:45-18:00
WF-033502	A Parallel Model to Analyze Effectiveness of Peer Review for Academic Journals	SS Analysis and Synthesis of Networking Intelligent Systems	Oral	October 22	M4 15:45-18:00
WF-001724	Robot Companion for Industrial Process Monitoring Based on Virtual Fixtures	SS Close Proximity Human Robot Interaction	Oral	October 22	M4 15:45-18:00
WF-017248	Human-Robot Collaboration: Task sharing through Virtual Reality	SS Close Proximity Human Robot Interaction	Oral	October 22	M4 15:45-18:00
WF-026417	Human-Robot Collaboration with High-Payload Robots in Industrial Settings	SS Close Proximity Human Robot Interaction	Oral	October 22	M4 15:45-18:00
WF-005568	Smart distribution of IT load in energy efficient data centers with focus on cooling systems	SS Efficiency of Modern Data Centers	Oral	October 22	M4 15:45-18:00
WF-015334	Towards an Open Model for Data Center Research: from CPU to Cooling Tower	SS Efficiency of Modern Data Centers	Oral	October 22	M4 15:45-18:00
WF-018724	Comparison of hard floor and raised floor cooling of servers with regards to local effects	SS Efficiency of Modern Data Centers	Oral	October 22	M4 15:45-18:00
WF-019607	Detecting and modelling air flow overprovisioning / underprovisioning in air-cooled datacenters	SS Efficiency of Modern Data Centers	Oral	October 22	M4 15:45-18:00
WF-022233	Validated thermal air management simulations of data centers using remote graphics processing units.	SS Efficiency of Modern Data Centers	Oral	October 22	M4 15:45-18:00
WF-034789	Buck-Boost Unfolder Inverter as a Novel Solution for Single-Phase PV systems	SS Emerging Converter Topologies and Control for High-Performance PV Systems	Oral	October 22	M4 15:45-18:00
WF-017752	Novel LCL Filter for Non-Isolated Photovoltaic Inverters with CM Current Trapping Capability for Weak Grids	SS Emerging Converter Topologies and Control for High-Performance PV Systems	Oral	October 22	M4 15:45-18:00
WF-015407	Digital low-pass-filter-based single-loop damping for LCL-filtered grid-tied inverters	SS Emerging Converter Topologies and Control for High-Performance PV Systems	Oral	October 22	M4 15:45-18:00
WF-031089	Zero-Voltage Ride-Through of Flexible Power Control Strategy in Single-Phase Grid-Connected Photovoltaic Inverters	SS Emerging Converter Topologies and Control for High-Performance PV Systems	Oral	October 22	M4 15:45-18:00
WF-026212	Wear-Out Failure Analysis of Solar Optiverter Operating With 60- and 72-Cell Si Crystalline PV Modules	SS Emerging Converter Topologies and Control for High-Performance PV Systems	Oral	October 22	M4 15:45-18:00
WF-035564	A Long-Lifespan Single-Phase Single-Stage Multi-Module Inverter for PV Application	SS Emerging Converter Topologies and Control for High-Performance PV Systems	Oral	October 22	M4 15:45-18:00
WF-004456	A Simulation Framework for Validating Cellular V2X Scenarios	SS Emerging Solutions for Vehicular Embedded Systems	Oral	October 22	M4 15:45-18:00
WF-025763	A perspective on safety and real-time issues for GPU accelerated ADAS	SS Emerging Solutions for Vehicular Embedded Systems	Oral	October 22	M4 15:45-18:00
WF-025844	Towards QoS-Aware Service-Oriented Communication in E/E Automotive Architectures	SS Emerging Solutions for Vehicular Embedded Systems	Oral	October 22	M4 15:45-18:00
WF-025968	Towards Security Case Run-time Adaptation by System Decomposition into Services	SS Emerging Solutions for Vehicular Embedded Systems	Oral	October 22	M4 15:45-18:00

WF-026328	Timing Analysis Driven Design-Space Exploration of Cause-Effect Chains in Automotive Systems	SS Emerging Solutions for Vehicular Embedded Systems	Oral	October 22	M4 15:45-18:00
WF-032549	System Level LET: Mastering Cause-Effect Chains in Distributed Systems	SS Emerging Solutions for Vehicular Embedded Systems	Oral	October 22	M4 15:45-18:00
WF-020605	Survey of Proximity Based Authentication Mechanisms for the Industrial Internet of Things	SS Emerging Wireless Technologies for Industrial Internet of Things	Oral	October 22	M4 15:45-18:00
WF-021415	A Modelling Approach for the Narrowband IoT (NB-IoT) Physical (PHY) Layer Performance	SS Emerging Wireless Technologies for Industrial Internet of Things	Oral	October 22	M4 15:45-18:00
WF-021512	Smart Card Reader for Smartphone e-Commerce Applications	SS Emerging Wireless Technologies for Industrial Internet of Things	Oral	October 22	M4 15:45-18:00
WF-036129	Efficient Secure Access to IEEE 21451 based Wireless IIoT Using Optimized TEDS and MIB	SS Emerging Wireless Technologies for Industrial Internet of Things	Oral	October 22	M4 15:45-18:00
WF-035114	Virtual Synchronous Machine Control of VSC HVDC for Power System Oscillation Damping	SS HVDC Converters and Systems: Modelling, Control and Stability Analysis	Oral	October 22	M4 15:45-18:00
WF-021768	Frequency-Domain Modeling and Assessment of AC and DC Electromagnetic Stability in MMC-based VSC HVDC Links	SS HVDC Converters and Systems: Modelling, Control and Stability Analysis	Oral	October 22	M4 15:45-18:00
WF-024376	Fidelity Requirements with Fast Transients from VSC-HVdc	SS HVDC Converters and Systems: Modelling, Control and Stability Analysis	Oral	October 22	M4 15:45-18:00
WF-006548	Assisting the Configuration of Intelligent Safety Gateway	SS Networked Control and Its Applications	Oral	October 22	M4 15:45-18:00
WF-032336	Multi-Constrained Routing Based on Particle Swarm Optimization and Fireworks Algorithm	SS Networked Control and Its Applications	Oral	October 22	M4 15:45-18:00
WF-016365	A proposed Formation Control Algorithm for Robot Swarm based on Adaptive Fuzzy Potential Field Method	TT Control Systems and Applications	Oral	October 22	M4 15:45-18:00
WF-003824	Fault Detection for Uncertain Delta Operator Systems with Two-channel Packet Dropouts via Switched Systems Approach	TT Control Systems and Applications	Oral	October 22	M4 15:45-18:00
WF-028886	Building Strategies for Replicated IEC 61499 Industrial Applications	TT Control Systems and Applications	Oral	October 22	M4 15:45-18:00
WF-006173	A High-efficiency PMSM Sensorless Control Approach Based on MPC Controller	TT Control Systems and Applications	Oral	October 22	M4 15:45-18:00
WF-030171	Human Machine Interface Prototyping and Application for Advanced Control of Offshore Topside Separation Processes	TT Control Systems and Applications	Oral	October 22	M4 15:45-18:00
WF-021687	Forced Bipartite Consensus for Multi-Agent Systems	TT Control Systems and Applications	Oral	October 22	M4 15:45-18:00
WF-006653	Discrete-time Sliding Mode Control for Leader Following Discrete-time Multi-Agent System	TT Control Systems and Applications	Oral	October 22	M4 15:45-18:00
WF-019593	Robust Control for a Magnetically Suspended Control Moment Gyro with Strong Gyroscopic Effects	TT Control Systems and Applications	Oral	October 22	M4 15:45-18:00
WF-002976	Engine Controller using Implicit Fault-avoidance Learning of Control Parameters for Mixed-fuel Combustion	TT Control Systems and Applications	Oral	October 22	M4 15:45-18:00
WF-005924	Modeling Torque Characteristics and Control of a Single-Phase DC-Excited Flux Switcing Machine for Torque Ripple Reduction	TT Electrical Machines and Industrial Drives	Oral	October 22	M4 15:45-18:00
WF-028584	Non-smooth Control of PMSM Position Servo System Based on Model Compensation	TT Electrical Machines and Industrial Drives	Oral	October 22	M4 15:45-18:00

WF-009822	Moving Horizon Estimator of PMSM Nonlinearities	TT Electrical Machines and Industrial Drives	Oral	October 22	M4 15:45-18:00
WF-012882	Output Feedback Disturbance Rejection Control for DC-DC Buck Converter-DC Motor System Subject to Unmatched Load Torques	TT Electrical Machines and Industrial Drives	Oral	October 22	M4 15:45-18:00
WF-018309	Electric Vehicle Powertrain Multiphysics NVH Simulation	TT Electrical Machines and Industrial Drives	Oral	October 22	M4 15:45-18:00
WF-013056	A New Multiphase Rotor Model for the Squirrel Cage Rotor of a Six-phase Induction Machine	TT Electrical Machines and Industrial Drives	Oral	October 22	M4 15:45-18:00
WF-022462	Dynamic Modeling of an Integrated Flywheel Energy Storage System	TT Electrical Machines and Industrial Drives	Oral	October 22	M4 15:45-18:00
WF-028266	Influence of Air-Gap Length on the Performance of a Three-phase Induction Motor with a Capacitive Auxiliary Stator Winding	TT Electrical Machines and Industrial Drives	Oral	October 22	M4 15:45-18:00
WF-029173	Sensorless Starting Control of Permanent Magnet Synchronous Motors with Step-up Transformer for Downhole Electric Drilling	TT Electrical Machines and Industrial Drives	Oral	October 22	M4 15:45-18:00
WF-030864	Kidnapping and Re-Localizing Solutions for Autonomous Service Robotics	TT Mechatronics and Robotics	Oral	October 22	M4 15:45-18:00
WF-006017	On hands-off trajectory generation for a two-wheeled rover based on L1/L2-optimal control	TT Mechatronics and Robotics	Oral	October 22	M4 15:45-18:00
WF-011908	Continuum Robot Control Based on Virtual Discrete-Jointed Robot Models	TT Mechatronics and Robotics	Oral	October 22	M4 15:45-18:00
WF-017841	A nonlinear optimal control approach for the spherical robot	TT Mechatronics and Robotics	Oral	October 22	M4 15:45-18:00
WF-030031	New Design and Development of Reconfigurable-Hybrid Hexapod Robot	TT Mechatronics and Robotics	Oral	October 22	M4 15:45-18:00
WF-027758	Energy Regeneration-Based Hybrid Control for Transfemoral Prosthetic Legs Using Four-Bar Mechanism	TT Mechatronics and Robotics	Oral	October 22	M4 15:45-18:00
WF-019879	Formation Control of Unicycle Mobile Robots using Cluster Space Approach in Dynamic Environments	TT Mechatronics and Robotics	Oral	October 22	M4 15:45-18:00
WF-005312	Semi-Automatic Registration of a Robotic Total Station and a CAD Model Without Dedicated Control Points	TT Mechatronics and Robotics	Oral	October 22	M4 15:45-18:00
WF-021482	Flight Path Planning of Multiple UAVs for Robust Localization near Infrastructure Facilities	TT Mechatronics and Robotics	Oral	October 22	M4 15:45-18:00
WF-023868	Logic-Equations Method for Active Voltage-Control of a Flying-Capacitor Multilevel Converter Topology	TT Power Electronics Converters	Oral	October 22	M4 15:45-18:00
WF-018325	Design Optimization of a 100 kVA SiC Power Conversion System	TT Power Electronics Converters	Oral	October 22	M4 15:45-18:00
WF-016438	Reliability Analysis of a Novel Fault Tolerant Multilevel Inverter Topology	TT Power Electronics Converters	Oral	October 22	M4 15:45-18:00
WF-014788	PV Array Energized Standalone Water Pumping System Using Dual Output SE-CuCC Converter	TT Power Electronics Converters	Oral	October 22	M4 15:45-18:00
WF-027634	Multilevel Inverter Topology for Switching Loss Reduction	TT Power Electronics Converters	Oral	October 22	M4 15:45-18:00
WF-002992	Direct duty ratio control of connected converter in DC microgrid	TT Power Electronics Converters	Oral	October 22	M4 15:45-18:00
WF-015784	Actively Damped PI-based Control Design of Grid-Connected Three-Level VSC with LCL Filter	TT Power Electronics Converters	Oral	October 22	M4 15:45-18:00
WF-001082	Energy Recovery of the Linear Amplifier in the Parallel-Form Switch-Linear Hybrid Envelope Tracking Power Supply	TT Power Electronics Converters	Oral	October 22	M4 15:45-18:00
WF-017701	Analysis and Design of the Class-$\Phi _2$ Inverter	TT Power Electronics Converters	Oral	October 22	M4 15:45-18:00
WF-025631	Resilient Agent for Power System Operations and Protection	TT Resilient Control Architectures and Systems for Energy	Oral	October 22	M4 15:45-18:00

WF-032174	NeuralWave: Gait-based User Identification through Commodity WiFi and Deep Learning	TT Resilient Control Architectures and Systems for Energy	Oral	October 22	M4 15:45-18:00
WF-032867	Performance-Based Cyber Resilience Metrics: An Applied Demonstration Toward Moving Target Defense	TT Resilient Control Architectures and Systems for Energy	Oral	October 22	M4 15:45-18:00
WF-035874	Multi-Agent Protection Scheme for Resilient Microgrid Systems with Aggregated Electronically Coupled Distributed Energy Resources	TT Resilient Control Architectures and Systems for Energy	Oral	October 22	M4 15:45-18:00
WF-036137	Power Grid Resiliency Improvement Through Remedial Action Schemes	TT Resilient Control Architectures and Systems for Energy	Oral	October 22	M4 15:45-18:00
WF-037184	Generalization of Deep learning for Cyber-Physical System Security: A Survey	TT Resilient Control Architectures and Systems for Energy	Oral	October 22	M4 15:45-18:00
WF-010405	Novel Active Rectification for Extended ZVS Operation of Bidirectional Full Bridge DC/DC Converter for Energy Storage Application	TT Transportation Electrification and Automotive Technologies	Oral	October 22	M4 15:45-18:00
WF-007706	Design and Control of a Floating Interleaved Boost DC-DC Converter for Fuel Cell Applications	TT Transportation Electrification and Automotive Technologies	Oral	October 22	M4 15:45-18:00
WF-004987	Health Monitoring Scheme for Submodule Capacitors in Modular Multilevel Converter Utilizing Capacitor Voltage Fluctuations	TT Transportation Electrification and Automotive Technologies	Oral	October 22	M4 15:45-18:00
WF-018252	Design and Simulation of an On-board Integrated Charger using Cell Bypass Balancing Circuit for Electric Vehicles	TT Transportation Electrification and Automotive Technologies	Oral	October 22	M4 15:45-18:00
WF-016861	Proposal of Soft SOC Balancing Method to Two Battery HEECS Chopper Used for EV Power Train	TT Transportation Electrification and Automotive Technologies	Oral	October 22	M4 15:45-18:00
WF-012025	Intermittent Pulse Density Modulation of Two Battery HEECS Chopper for Electric vehicles	TT Transportation Electrification and Automotive Technologies	Oral	October 22	M4 15:45-18:00
WF-016411	Modular multilevel converter based topology for electric locomotive with medium frequency step-down transformer	TT Transportation Electrification and Automotive Technologies	Oral	October 22	M4 15:45-18:00
WF-017221	Output dv/dt Filter Design and Characterization for a 10 kW SiC Inverter	TT Transportation Electrification and Automotive Technologies	Oral	October 22	M4 15:45-18:00
WF-013722	Smart Integrated Charger with Wireless BMS for EVs	TT Transportation Electrification and Automotive Technologies	Oral	October 22	M4 15:45-18:00
WF-005711	A Smart Battery Charger Based on a Cascaded Boost-Buck Converter for Photovoltaic Applications	SS Advanced Techniques for Smart Home and Prosumers	Oral	October 23	T1 08:00-09:00
WF-014737	A Power Quality Indexes Measurement System Platform with Remote Alarm Notification	SS Advanced Techniques for Smart Home and Prosumers	Oral	October 23	T1 08:00-09:00
WF-032611	Framework for modeling and simulation of household appliances	SS Advanced Techniques for Smart Home and Prosumers	Oral	October 23	T1 08:00-09:00
WF-036803	A deep learning based method for heat pump dryer user classification	SS Advanced Techniques for Smart Home and Prosumers	Oral	October 23	T1 08:00-09:00
WF-000914	EKF for Power Estimation of Uncertain Time-varying CPLs in Shipboard DC MGs	SS DC Shipboard Power Systems for the Future All Electric Ships	Oral	October 23	T1 08:00-09:00
WF-019232	Port-Hamiltonian Modelling and Control of Single Phase DAB based MVDC Shipboard Power System	SS DC Shipboard Power Systems for the Future All Electric Ships	Oral	October 23	T1 08:00-09:00
WF-032581	Achieving protection selectivity in DC shipboard power systems employing additional bus capacitance	SS DC Shipboard Power Systems for the Future All Electric Ships	Oral	October 23	T1 08:00-09:00
WF-037044	Data-Driven Control of Converters in DC Microgrids for Bus Voltage	SS DC Shipboard Power Systems for the Future All Electric Ships	Oral	October 23	T1 08:00-09:00
WF-003212	Characterization and Modeling of Low-Cost Contact-Mode Triboelectric Devices for Energy Harvesting	SS Energy Harvesting for The Industrial IoT	Oral	October 23	T1 08:00-09:00

WF-009229	Force Transmission Interfaces for Pressure Fluctuation Energy Harvesters	SS Energy Harvesting for The Industrial IoT	Oral	October 23	T1 08:00-09:00
WF-010278	Vibration Energy Harvesting Powered Wireless Sensor Network for Structural Health Monitoring	SS Energy Harvesting for The Industrial IoT	Oral	October 23	T1 08:00-09:00
WF-028169	Energy Harvesting Circuit for Road Speed Bumps Using a Piezoelectric Cantilever	SS Energy Harvesting for The Industrial IoT	Oral	October 23	T1 08:00-09:00
WF-001619	Detection of the body schema modification induced by a visual-proprioceptive mismatch	SS Recent Progress in Human Factors	Oral	October 23	T1 08:00-09:00
WF-003808	Development of the agricultural support system based on proposal actions and farmland informations	SS Recent Progress in Human Factors	Oral	October 23	T1 08:00-09:00
WF-015105	Standing assistance with non-verbal cues based on intended movement	SS Recent Progress in Human Factors	Oral	October 23	T1 08:00-09:00
WF-026727	Development of a Finger Force Distribution Measurement System for Hand Dexterity	SS Recent Progress in Human Factors	Oral	October 23	T1 08:00-09:00
WF-029203	Prediction of Short-Term Voltage Instability Using a Digital Faster Than Real-Time Replica	SS Smart Automation, Control and ICT Concepts Applied to Power and Energy Systems	Oral	October 23	T1 08:00-09:00
WF-034983	On Automated Co-Simulation Testing of Functional Requirements for Distributed Substation Automation Systems	SS Smart Automation, Control and ICT Concepts Applied to Power and Energy Systems	Oral	October 23	T1 08:00-09:00
WF-036536	Towards Model-driven Development of Hybrid Simulation Models in Industrial Engineering	SS Smart Automation, Control and ICT Concepts Applied to Power and Energy Systems	Oral	October 23	T1 08:00-09:00
WF-037109	Integrated Networked Streetlighting Infrastructure Simulation with Crossing as Use Case	SS Smart Automation, Control and ICT Concepts Applied to Power and Energy Systems	Oral	October 23	T1 08:00-09:00
WF-028878	Fault-tolerance Implementation for IEC 61499 Applications	TT Control Systems and Applications	Oral	October 23	T1 08:00-09:00
WF-019186	Robust Composite Non-linear Feedback Control For Descriptor Systems With General Reference Tracking	TT Control Systems and Applications	Oral	October 23	T1 08:00-09:00
WF-022802	An LMI-based Design Method of a Variable Gain Robust Controller Giving Consideration to Nominal L2 Gain Performance and Allowable Uncertainty Region for a Class of Uncertain Linear Systems	TT Control Systems and Applications	Oral	October 23	T1 08:00-09:00
WF-020303	Discrete Time Intermittent Sliding Mode Control With Multirate Output Feedback	TT Control Systems and Applications	Oral	October 23	T1 08:00-09:00
WF-028762	UPQC-Based High Precision Impedance Measurement Device and its Switching Control Method	TT Power Electronics Converters	Oral	October 23	T1 08:00-09:00
WF-028789	An Approach to Unified Full-order Modeling of Dual Active Bridge Type Converters	TT Power Electronics Converters	Oral	October 23	T1 08:00-09:00
WF-015717	An Improved Physics-based LTSpice Compact Electro-Thermal Model for a SiC Power MOSFET with Experimental Validation	TT Power Electronics Converters	Oral	October 23	T1 08:00-09:00
WF-006769	Energy Savings with LQR Control of DC/DC converters	TT Power Electronics Converters	Oral	October 23	T1 08:00-09:00
WF-008303	Torque-sensorless Control for a Powered Exoskeleton Using Highly Back-drivable Actuators	SS Advanced Motion Control for Physical Human-Robot-Interaction	Oral	October 23	T2 09:30-11:45
WF-008427	Autonomous Grading Work Using Deep Reinforcement Learning Based Control	SS Advanced Motion Control for Physical Human-Robot-Interaction	Oral	October 23	T2 09:30-11:45

WF-009466	Using a Nonlinear Disturbance Observer to Estimated the Human Force Applied to a Two-wheeled Cane For Walking Assistance	SS Advanced Motion Control for Physical Human-Robot-Interaction	Oral	October 23	T2 09:30-11:45
WF-012394	Design of A Multi-stage Stiffness Enhancing Unit for a Soft Robotic Finger and its Robust Motion Control	SS Advanced Motion Control for Physical Human-Robot-Interaction	Oral	October 23	T2 09:30-11:45
WF-022608	Filtered Disturbance Observer for High Backdrivable Robot Joint	SS Advanced Motion Control for Physical Human-Robot-Interaction	Oral	October 23	T2 09:30-11:45
WF-031305	Estimation of Relationship between Stimulation Current and Force Exerted during Isometric Contraction	SS Advanced Motion Control for Physical Human-Robot-Interaction	Oral	October 23	T2 09:30-11:45
WF-032115	Position and Torque Sensorless Motion Transmission Using Parameter Identification Based on Least Mean Squares Method	SS Advanced Motion Control for Physical Human-Robot-Interaction	Oral	October 23	T2 09:30-11:45
WF-032956	Task-Based Control and Human Activity Recognition for Human-Robot Collaboration	SS Advanced Motion Control for Physical Human-Robot-Interaction	Oral	October 23	T2 09:30-11:45
WF-034223	Rationale for researching in DOB/OC-based rehabilitation robots: simulation results	SS Advanced Motion Control for Physical Human-Robot-Interaction	Oral	October 23	T2 09:30-11:45
WF-004693	Design and Analysis of Single-phase Adaptive Passive Part coupling Hybrid Active Power Filter (HAPF)	SS Advanced Power Quality Conditioning Systems	Oral	October 23	T2 09:30-11:45
WF-006025	DC-Link Voltage Reduction Design Method for Three-Phase Four-Wire LC-Hybrid Active Power Filters Under Reactive and Unbalanced Current Compensation	SS Advanced Power Quality Conditioning Systems	Oral	October 23	T2 09:30-11:45
WF-010057	Design and Analysis of a New Model High-frequency 3-phase Static Distributed Compensator (HFDSC)	SS Advanced Power Quality Conditioning Systems	Oral	October 23	T2 09:30-11:45
WF-036765	Study of Reactive Power Compensation Capabilities and LC Filter Design for a Multilevel Three-Phase Current-Source D-STATCOM	SS Advanced Power Quality Conditioning Systems	Oral	October 23	T2 09:30-11:45
WF-033081	Learning Experiences Involving Digital Twins	SS Aspects of Digital Twins for Power Electronics and Energy Systems	Oral	October 23	T2 09:30-11:45
WF-033421	Tracking of aging processes in power electronic converters using the rainflow method	SS Aspects of Digital Twins for Power Electronics and Energy Systems	Oral	October 23	T2 09:30-11:45
WF-017299	The Low DC-link Capacitance Design Consideration for Cascaded H-Bridge STATCOM	SS Power Electronics Based New Techniques for Improving Medium Voltage Electric Grid Performance	Oral	October 23	T2 09:30-11:45
WF-017698	Low-Capacitance StatCom with Thyristor Switched Filter Inductor	SS Power Electronics Based New Techniques for Improving Medium Voltage Electric Grid Performance	Oral	October 23	T2 09:30-11:45
WF-033316	Identification of Mathematical Model of Arc Suppression Coil	SS Power Electronics Based New Techniques for Improving Medium Voltage Electric Grid Performance	Oral	October 23	T2 09:30-11:45
WF-000388	Development of a Manufacturing Equipment for a Concavo-Convex Pattern Sheet to Protect Fruits	SS Recent Progress in Human Factors	Oral	October 23	T2 09:30-11:45
WF-007315	Consideration of Landscape Recognition for Topological Localization	SS Recent Progress in Human Factors	Oral	October 23	T2 09:30-11:45
WF-008311	Predicting a Pedestrian Trajectory Using Seq2Seq for Mobile Robot Navigation	SS Recent Progress in Human Factors	Oral	October 23	T2 09:30-11:45
WF-014109	A Support System for Gross Motor Assessment of Preschool Children	SS Recent Progress in Human Factors	Oral	October 23	T2 09:30-11:45
WF-016314	A Multi-Source Wind Speed Fusion Method for Wind Power Prediction based on kNN-SVR	SS Recent Progress in Human Factors	Oral	October 23	T2 09:30-11:45

WF-023981	Position Estimation of the Drone based on the Tensile Force of Cooperatively Towed Tube - In case of cooperative towing by two hovering two drones -	SS Recent Progress in Human Factors	Oral	October 23	T2 09:30-11:45
WF-024538	Robot Shape Design to Easily Recognize Robots' Movement for Human	SS Recent Progress in Human Factors	Oral	October 23	T2 09:30-11:45
WF-032166	Improvement of the Handling and Spreading Machine for Automated Bed Sheet Ironing Machine	SS Recent Progress in Human Factors	Oral	October 23	T2 09:30-11:45
WF-034193	Study on Control Method for Improving Straightness of Front-wheel-drive Wheelchair	SS Recent Progress in Human Factors	Oral	October 23	T2 09:30-11:45
WF-008524	Experimental Verification on Thermal Modeling of Medium Frequency Transformers	SS Smart Transformer: Design, Control and Impact on Future Distribution Grids	Oral	October 23	T2 09:30-11:45
WF-013102	Smart Transformer for the Provision of Coordinated Voltage and Frequency Support in the Grid	SS Smart Transformer: Design, Control and Impact on Future Distribution Grids	Oral	October 23	T2 09:30-11:45
WF-017175	High Power Quality Voltage Control of Smart Transformer-fed Distribution Grid	SS Smart Transformer: Design, Control and Impact on Future Distribution Grids	Oral	October 23	T2 09:30-11:45
WF-031771	Protection Design Considerations of a 10 kV SiC MOSFET Enabled Mobile Utilities Support Equipment based Solid State Transformer (MUSE-SST)	SS Smart Transformer: Design, Control and Impact on Future Distribution Grids	Oral	October 23	T2 09:30-11:45
WF-034878	Flexible Power Transfer in Smart Transformer Interconnected Microgrids	SS Smart Transformer: Design, Control and Impact on Future Distribution Grids	Oral	October 23	T2 09:30-11:45
WF-036161	General Space Vector Modulation of A High-Frequency AC Linked Universal Converter for Distributed Generations	SS Smart Transformer: Design, Control and Impact on Future Distribution Grids	Oral	October 23	T2 09:30-11:45
WF-036331	Multi-port Power Conversion Systems for the More Electric Aircraft	SS Smart Transformer: Design, Control and Impact on Future Distribution Grids	Oral	October 23	T2 09:30-11:45
WF-004138	Transferred Power Leveling/Energy Maximization in Dynamic WPT Systems	SS Wireless Power Transfer	Oral	October 23	T2 09:30-11:45
WF-006777	A Modified LCC-Compensated Pickup Topology for Dynamic Wireless Power Transfer Systems	SS Wireless Power Transfer	Oral	October 23	T2 09:30-11:45
WF-008893	Construction and Analysis of Communication Channels for Simultaneous Wireless Power and Data Transmission	SS Wireless Power Transfer	Oral	October 23	T2 09:30-11:45
WF-016357	Basic Study of Solar Battery Powered Wireless Power Transfer System with MPPT mode and DC Bus Stabilization for Lunar Rover	SS Wireless Power Transfer	Oral	October 23	T2 09:30-11:45
WF-017027	An IPT System with Constant Current and Constant Voltage Output Features for EV Charging	SS Wireless Power Transfer	Oral	October 23	T2 09:30-11:45
WF-017205	An Evaluation of Wireless Power Transfer System with Plural Repeater Coils for Moving Objects	SS Wireless Power Transfer	Oral	October 23	T2 09:30-11:45
WF-034738	Development of Wireless Power Transfer with Primary-Side Current Mode Control Capability Using Virtual-Current Source Resonant Inverter	SS Wireless Power Transfer	Oral	October 23	T2 09:30-11:45
WF-035467	Adaptive Wireless Charging Using Resonant Coupling with Multiple Transmit Coils	SS Wireless Power Transfer	Oral	October 23	T2 09:30-11:45
WF-004162	Adaptive Control of Two-Mass Drive System with Nonlinear Stiffness and Damping	TT Control Systems and Applications	Oral	October 23	T2 09:30-11:45

WF-017388	Fixed Switching Frequency Direct Model Predictive Control Based on Output Current Gradients	TT Control Systems and Applications	Oral	October 23	T2 09:30-11:45
WF-017965	A New Solving Method for Non-Linear Optimal Control Problem and Its Application to Real System	TT Control Systems and Applications	Oral	October 23	T2 09:30-11:45
WF-024007	On Experimental validation of Whitelist Auto-Generation Method for Secured Programmable Logic Controllers	TT Control Systems and Applications	Oral	October 23	T2 09:30-11:45
WF-002712	Dimmable LED current control with compact fuzzy rules network and embedded system	TT Control Systems and Applications	Oral	October 23	T2 09:30-11:45
WF-030422	Programmable Logic Controller: Open Source Hardware and Software for Massive Training	TT Control Systems and Applications	Oral	October 23	T2 09:30-11:45
WF-013463	Adaptive Fault Tolerant Control of Quadcopter by Using Minimum Projection Method	TT Control Systems and Applications	Oral	October 23	T2 09:30-11:45
WF-010243	Speed Ripple Cancellation in a Rolling Piston Compressor via a Nonlinear Adaptive Speed Controller	TT Control Systems and Applications	Oral	October 23	T2 09:30-11:45
WF-019151	Advanced Digital Control Design for Ionic Polymer-Metal Composite Actuators	TT Control Systems and Applications	Oral	October 23	T2 09:30-11:45
WF-018376	SiC MOSFET Switching Waveform Profiling Through Passive Networks	TT Power Electronics Converters	Oral	October 23	T2 09:30-11:45
WF-015423	Low CM Leakage Current and High Efficiency H6 Inverter with Active Clamping for Transformerless PV System	TT Power Electronics Converters	Oral	October 23	T2 09:30-11:45
WF-005932	Comparions of Differnet Hybrid Inverters for Power Quality Compensation with/without Active Power Injection	TT Power Electronics Converters	Oral	October 23	T2 09:30-11:45
WF-016462	Fault Tolerance and Energy Sharing Analysis of a Single Phase Multilevel Inverter Topology	TT Power Electronics Converters	Oral	October 23	T2 09:30-11:45
WF-024716	Modular Multilevel DC-DC Converter Configuration for Bipolar HVDC Links	TT Power Electronics Converters	Oral	October 23	T2 09:30-11:45
WF-003247	Nine-Switch Detroit Rectifier	TT Power Electronics Converters	Oral	October 23	T2 09:30-11:45
WF-018228	Real-Time Simulation of a High-Power Cycloconverter Drive	TT Power Electronics Converters	Oral	October 23	T2 09:30-11:45
WF-007978	Active gate driver and management of the current switching speed in GaN transistors during turn-On	TT Power Electronics Converters	Oral	October 23	T2 09:30-11:45
WF-005746	A Primary-Sided CLC Compensated Wireless Power Transfer System Based on the Class D Amplifier	TT Power Electronics Converters	Oral	October 23	T2 09:30-11:45
WF-003255	Hybrid Detroit Rectifier	SS DC Shipboard Power Systems for the Future All Electric Ships	Oral	October 23	T3 13:15-15:15
WF-013838	Testing Operation and Coordination of DC Solid State Circuit Breakers	SS DC Shipboard Power Systems for the Future All Electric Ships	Oral	October 23	T3 13:15-15:15
WF-015237	Early Design of AC/DC Interface Converters and Control System for a MW-scale MVDC Shipboard Power System	SS DC Shipboard Power Systems for the Future All Electric Ships	Oral	October 23	T3 13:15-15:15
WF-015857	Large-scale Distributed Control Demonstration for MVDC Ship Power Systems	SS DC Shipboard Power Systems for the Future All Electric Ships	Oral	October 23	T3 13:15-15:15
WF-017272	An analysis of the small-signal voltage stability in MVDC power systems with two cascade controlled DC-DC converters	SS DC Shipboard Power Systems for the Future All Electric Ships	Oral	October 23	T3 13:15-15:15
WF-034843	Distributed Power Management Implementation for Zonal MVDC Ship Power Systems	SS DC Shipboard Power Systems for the Future All Electric Ships	Oral	October 23	T3 13:15-15:15

WF-001686	A quasi-Z-source Converter to Feed a Switched Reluctance Drive with Multilevel Voltages	SS Impedance Source Converter Topologies and Applications	Oral	October 23	T3 13:15-15:15
WF-012262	High Frequency Transformer based Improved Gamma ZSI with Lossless Snubber	SS Impedance Source Converter Topologies and Applications	Oral	October 23	T3 13:15-15:15
WF-013501	An Embedded Enhanced-boost Z-source Inverter Topology with Fault-Tolerant Capabilities	SS Impedance Source Converter Topologies and Applications	Oral	October 23	T3 13:15-15:15
WF-014052	A Novel PWM Strategy for Current Ripple and Output Harmonic Minimization of Current-Fed Trans-Quasi-Z-Source Inverters	SS Impedance Source Converter Topologies and Applications	Oral	October 23	T3 13:15-15:15
WF-017019	Modeling and Control of Single-Phase Quasi-Z-Source Inverters	SS Impedance Source Converter Topologies and Applications	Oral	October 23	T3 13:15-15:15
WF-017108	Modified Modulation Techniques for Quasi-Z-Source Cascaded H-Bridge Inverters	SS Impedance Source Converter Topologies and Applications	Oral	October 23	T3 13:15-15:15
WF-025941	Digital Control Strategy for Interleaved Quasi-Z-Source Inverter with Active Power Decoupling	SS Impedance Source Converter Topologies and Applications	Oral	October 23	T3 13:15-15:15
WF-036455	Design of Multiphase Single-Switch Impedance-Source Converters	SS Impedance Source Converter Topologies and Applications	Oral	October 23	T3 13:15-15:15
WF-010545	Inductor system evaluation for simultaneous wireless energy transfer and induction heating	SS Induction Heating Systems	Oral	October 23	T3 13:15-15:15
WF-018031	3D Finite Element Simulation of Litz Wires with Multilevel Bundle Structure	SS Induction Heating Systems	Oral	October 23	T3 13:15-15:15
WF-026182	Combined PDM with Frequency-Temperature Profile Adaptation Control for Induction Metal Hardening	SS Induction Heating Systems	Oral	October 23	T3 13:15-15:15
WF-033936	Multi-objective optimization of induction surface hardening process	SS Induction Heating Systems	Oral	October 23	T3 13:15-15:15
WF-034215	Improved Thin Heating Coil Structure of Copper Foil Feasible for Induction Cookers	SS Induction Heating Systems	Oral	October 23	T3 13:15-15:15
WF-034258	Electronic System for Graphical Representation on Cooking Surfaces of Domestic Induction Hobs	SS Induction Heating Systems	Oral	October 23	T3 13:15-15:15
WF-006882	A Flow-Based Heuristic Algorithm for Network Operations Planning in Smart Grids	SS Smart Automation, Control and ICT Concepts Applied to Power and Energy Systems	Oral	October 23	T3 13:15-15:15
WF-008583	Fuzzy Logic Controller for Efficient Energy Management of a PV System with HESS	SS Smart Automation, Control and ICT Concepts Applied to Power and Energy Systems	Oral	October 23	T3 13:15-15:15
WF-031062	Experiences of laboratory and field demonstrations of distribution network congestion management	SS Smart Automation, Control and ICT Concepts Applied to Power and Energy Systems	Oral	October 23	T3 13:15-15:15
WF-032107	Formal verification of protection functions for power distribution networks	SS Smart Automation, Control and ICT Concepts Applied to Power and Energy Systems	Oral	October 23	T3 13:15-15:15
WF-033308	Local Balancing of Low-Voltage Networks by Utilizing Distributed Flexibilities as Part of the InterFlex Field Trial	SS Smart Automation, Control and ICT Concepts Applied to Power and Energy Systems	Oral	October 23	T3 13:15-15:15
WF-033383	A Distributed Voltage Controller for Medium Voltage Grids with Storage-containing Loads	SS Smart Automation, Control and ICT Concepts Applied to Power and Energy Systems	Oral	October 23	T3 13:15-15:15
WF-036722	Development and Stability Analysis of LSD-Based Virtual Synchronous Generator for HVDC Systems	SS Smart Automation, Control and ICT Concepts Applied to Power and Energy Systems	Oral	October 23	T3 13:15-15:15

WF-026379	Differential Geometric Approach to Robust Control of an Oscillatory Base Robot Manipulator	TT Control Systems and Applications	Oral	October 23	T3 13:15-15:15
WF-013455	Disturbance rejection control of rigid body attitude based on nonsmooth control Lyapunov function	TT Control Systems and Applications	Oral	October 23	T3 13:15-15:15
WF-010553	Motion Planning for a Knife-Edge Moving on the Surface of a Torus	TT Control Systems and Applications	Oral	October 23	T3 13:15-15:15
WF-012858	Observer-Based Sliding Mode Control of a 6-DOF Quadrotor UAV	TT Control Systems and Applications	Oral	October 23	T3 13:15-15:15
WF-014524	Nonlinear H-infinity control for optimization of the functioning of mining products mills	TT Control Systems and Applications	Oral	October 23	T3 13:15-15:15
WF-010537	Delay Dependent Robust Stability of Reset Systems	TT Control Systems and Applications	Oral	October 23	T3 13:15-15:15
WF-022446	A New Hybrid Intelligent Approach for Traffic Flow Forecasting based on Fuzzy Controllers	TT Control Systems and Applications	Oral	October 23	T3 13:15-15:15
WF-006998	Comparison of Joint Friction Estimation Models For Laboratory 2 DOF Double Dual Twin Rotor Aero-dynamical System	TT Control Systems and Applications	Oral	October 23	T3 13:15-15:15
WF-028606	Industry 4.0, How to Integrate Legacy Devices: A Cloud IoT Approach	TT Cyber Physical Systems and Internet of Things in Industry	Oral	October 23	T3 13:15-15:15
WF-021148	Software-based Monitoring for Calibration of Measurement Units in Real-time Systems	TT Cyber Physical Systems and Internet of Things in Industry	Oral	October 23	T3 13:15-15:15
WF-000183	Cyber Security Risk Assessment of Solar PV Units with Reactive Power Capability	TT Cyber Physical Systems and Internet of Things in Industry	Oral	October 23	T3 13:15-15:15
WF-007293	IoT for Healthcare: An architecture and prototype implementation for the remote e-health device management using Continua and LwM2M protocols	TT Cyber Physical Systems and Internet of Things in Industry	Oral	October 23	T3 13:15-15:15
WF-026468	Enhancing the behaviour of System of Cyber-Physical Systems through environment parameters	TT Cyber Physical Systems and Internet of Things in Industry	Oral	October 23	T3 13:15-15:15
WF-036072	An Approach of Cyber-Physical Production Systems Architecture for Robot Control	TT Cyber Physical Systems and Internet of Things in Industry	Oral	October 23	T3 13:15-15:15
WF-031607	An Overview of Trends and Developments of Internet of Things Applied to Industrial Systems	TT Cyber Physical Systems and Internet of Things in Industry	Oral	October 23	T3 13:15-15:15
WF-016713	A Behavior Profiling Model for User Authentication in IoT Networks based on App Usage Patterns	TT Cyber Physical Systems and Internet of Things in Industry	Oral	October 23	T3 13:15-15:15
WF-002283	Extraction of Loop Inductances of SiC Half-Bridge Power Module Using An Improved Two-port Network Method	TT Power Electronics Converters	Oral	October 23	T3 13:15-15:15
WF-023515	A Gate Driver Design for Medium Voltage Silicon Carbide Power Devices with High dv/dt	TT Power Electronics Converters	Oral	October 23	T3 13:15-15:15
WF-008826	Pulse Generator with Fast Switching Speed and Short Pulse Width based on Semiconductor Switches for Wide Applications	TT Power Electronics Converters	Oral	October 23	T3 13:15-15:15
WF-019542	Non-Isolated Bipolar Gate Driver with Self-Driven Negative Bias Generator in High-Side Driving	TT Power Electronics Converters	Oral	October 23	T3 13:15-15:15
WF-029165	Control of Dual Inverter with Power Losses Minimization Using SVPWM and Prediction with Extended Horizon	TT Power Electronics Converters	Oral	October 23	T3 13:15-15:15

WF-026573	Lossless bi-directional current sense circuit for low-voltage high-current DCDC converters	TT Power Electronics Converters	Oral	October 23	T3 13:15-15:15
WF-029378	Investigation into Component Losses and Efficiency of a Bidirectional Full-Bridge DC-DC Converter	TT Power Electronics Converters	Oral	October 23	T3 13:15-15:15
WF-009482	Support Vector Regression Assisted Auxiliary Particle Filter based Remaining Useful Life Estimation of GaN FET	TT Power Electronics Converters	Oral	October 23	T3 13:15-15:15
WF-014036	Multi-port bidirectional high gain converter system for hybrid electric vehicle applications	SS Energy Storage Management Systems for Transportation Electrification	Oral	October 23	T4 15:45-18:00
WF-031402	Bank Switching Technique in Supercapacitor Energy Storage Systems for Line Voltage Regulation in Pulsed Power Applications	SS Energy Storage Management Systems for Transportation Electrification	Oral	October 23	T4 15:45-18:00
WF-008648	An Induction Generator Scheme with Series Compensation for Frequency Insensitive Loads	SS Energy Storage Management Systems for Transportation Electrification	Oral	October 23	T4 15:45-18:00
WF-021024	An Integrated EV Battery Charger With Retrofit Capability	SS Energy Storage Management Systems for Transportation Electrification	Oral	October 23	T4 15:45-18:00
WF-031704	Multiport Interface Converter with an Energy Storage for Nanogrids	SS Energy Storage Systems for Smart Grids: Advanced Topologies and Control Algorithms	Oral	October 23	T4 15:45-18:00
WF-034614	Improved Forecasting-Based Battery Energy Management Strategy for Prosumer Systems	SS Energy Storage Systems for Smart Grids: Advanced Topologies and Control Algorithms	Oral	October 23	T4 15:45-18:00
WF-032786	Bidirectional Soft Switching Current Source DC-DC Converter for Residential DC Microgrids	SS Energy Storage Systems for Smart Grids: Advanced Topologies and Control Algorithms	Oral	October 23	T4 15:45-18:00
WF-036927	Energy Storage Systems to prevent distribution transformers overload with high NZEB penetration	SS Energy Storage Systems for Smart Grids: Advanced Topologies and Control Algorithms	Oral	October 23	T4 15:45-18:00
WF-033642	Control Scheme of a Current-Source IPT Charger for Electric Vehicles with a Battery Model as a Load	SS Energy Storage Systems for Smart Grids: Advanced Topologies and Control Algorithms	Oral	October 23	T4 15:45-18:00
WF-007056	A Method for Detection and Evaluation of Driver Distraction Induced by In-Vehicle Information Systems	SS Motion Control in Highly Dynamic Mechatronic Systems	Oral	October 23	T4 15:45-18:00
WF-007072	Estimation of Power Dissipation in Disc Brakes and Tires for Motion Control Applications in Electric Vehicles	SS Motion Control in Highly Dynamic Mechatronic Systems	Oral	October 23	T4 15:45-18:00
WF-011401	Linearized Piecewise Affine in the Control and States Hydraulic System: Modeling and Identification	SS Motion Control in Highly Dynamic Mechatronic Systems	Oral	October 23	T4 15:45-18:00
WF-012238	Control of a Directly Driven Four-Stroke Free Piston Engine	SS Motion Control in Highly Dynamic Mechatronic Systems	Oral	October 23	T4 15:45-18:00
WF-012289	Comparison of Active Torque Damping Methods for a Power Unit in Relation to Implementation Complexity	SS Motion Control in Highly Dynamic Mechatronic Systems	Oral	October 23	T4 15:45-18:00
WF-018066	Proposal of Lateral Force Disturbance Estimation Method for In-Wheel-Motored Electric Vehicles	SS Motion Control in Highly Dynamic Mechatronic Systems	Oral	October 23	T4 15:45-18:00
WF-010839	An Eddy Current-Capacitive Crack Detection Probe with High Insensitivity to Lift-Off	SS Smart Sensors for Industrial Applications Forum	Oral	October 23	T4 15:45-18:00
WF-010456	Towards Plug-and-Play Microgrids	SS Stability of Low-Inertia Power Systems and Microgrids	Oral	October 23	T4 15:45-18:00

WF-011428	Modeling and Non-linear Stability Analysis of AC/DC Interconnected Microgrid using dq-Transformation Considering Generator Dynamics	SS Stability of Low-Inertia Power Systems and Microgrids	Oral	October 23	T4 15:45-18:00
WF-016764	Simultaneous Regulation of Active and Reactive Output Power of Parallel-Connected Virtual Oscillator Controlled Inverters	SS Stability of Low-Inertia Power Systems and Microgrids	Oral	October 23	T4 15:45-18:00
WF-020532	Impact of Inverter-Interfaced Renewable Generation on Transient Stability at Varying Levels of Penetration	SS Stability of Low-Inertia Power Systems and Microgrids	Oral	October 23	T4 15:45-18:00
WF-022047	Stability Assessment of a System Comprising a Single Machine and a Virtual Oscillator Controlled Inverter with Scalable Ratings	SS Stability of Low-Inertia Power Systems and Microgrids	Oral	October 23	T4 15:45-18:00
WF-022314	Large-Signal Impedance Modeling of Three-Phase Voltage Source Converters	SS Stability of Low-Inertia Power Systems and Microgrids	Oral	October 23	T4 15:45-18:00
WF-030147	Modeling, control, and stability of smart loads toward grid of nanogrids for smart cities	SS Stability of Low-Inertia Power Systems and Microgrids	Oral	October 23	T4 15:45-18:00
WF-015245	Simultaneous Wireless Information and GaN-based Power Transfer Exploiting a Dual Frequency Band	SS Wireless Power Transfer	Oral	October 23	T4 15:45-18:00
WF-018473	Vehicle to Vehicle Charging (V2V) Bases on Wireless Power Transfer Technology	SS Wireless Power Transfer	Oral	October 23	T4 15:45-18:00
WF-018716	Development of Multi-axis High-Precision Stage using Multistep Wireless Power Transfer	SS Wireless Power Transfer	Oral	October 23	T4 15:45-18:00
WF-018732	Optimization of the Compensation Networks for WPT Systems	SS Wireless Power Transfer	Oral	October 23	T4 15:45-18:00
WF-029149	Asymmetrical Multi-Coil Wireless EV Charger with Enhanced Misalignment Tolerance	SS Wireless Power Transfer	Oral	October 23	T4 15:45-18:00
WF-032859	Selective Wireless Power Transfer via Magnetic Resonant Coupling by Using Variable Load Impedance Circuit	SS Wireless Power Transfer	Oral	October 23	T4 15:45-18:00
WF-035661	Improvement of Efficiency of Multi-Parallel Dynamic Wireless Power Transfer System with LCC Topology	SS Wireless Power Transfer	Oral	October 23	T4 15:45-18:00
WF-029416	Experimental State Feedback Estimators Based-Pole Placement Control applied on Welding Robot Velocity Regulation	TT Control Systems and Applications	Oral	October 23	T4 15:45-18:00
WF-019836	A Finite-time Sliding Mode Observer for a Class of Perturbed Nonholonomic Systems	TT Control Systems and Applications	Oral	October 23	T4 15:45-18:00
WF-002518	Research on Low Voltage Ride Through of DFIG Under SWITSC Fault Based on Crowbar and DC Chopper Circuit Protection	TT Control Systems and Applications	Oral	October 23	T4 15:45-18:00
WF-003433	On-line Parameter Identification and Self-Commissioning of Current Controller for Servo Motor Drives Considering Time Delay in Both Modeling	TT Control Systems and Applications	Oral	October 23	T4 15:45-18:00
WF-017361	Complete Small-Signal Model of Three-Phase Photovoltaic Inverter Considering the Source and Load Effects	TT Control Systems and Applications	Oral	October 23	T4 15:45-18:00
WF-007471	Nonlinear Voltage Regulation Strategy for a Fuel Cell/Supercapacitor Power Source System.	TT Control Systems and Applications	Oral	October 23	T4 15:45-18:00
WF-007455	Development of FPGA based Hardware-in-the-loop Simulator for RF Cavity Resonator	TT Control Systems and Applications	Oral	October 23	T4 15:45-18:00

WF-008923	Multi-Layered Formation Control of Autonomous Marine Vehicles With Nonlinear Dynamics	TT Control Systems and Applications	Oral	October 23	T4 15:45-18:00
WF-008346	On the Choice of a Proper Initial Condition for Derivative Controllers	TT Control Systems and Applications	Oral	October 23	T4 15:45-18:00
WF-000728	Automatic Labeling For Personalized IoT Wearable Monitoring	TT Cyber Physical Systems and Internet of Things in Industry	Oral	October 23	T4 15:45-18:00
WF-007307	Orchestration of Services in Modular Process Plants	TT Cyber Physical Systems and Internet of Things in Industry	Oral	October 23	T4 15:45-18:00
WF-014214	Dynamic Resource Management for Virtualization in Industrial Automation	TT Cyber Physical Systems and Internet of Things in Industry	Oral	October 23	T4 15:45-18:00
WF-007889	Intelligent Content in System Level Model of Industrial Cyber Physical System	TT Cyber Physical Systems and Internet of Things in Industry	Oral	October 23	T4 15:45-18:00
WF-036471	Integration Patterns for Interfacing Software Agents with Industrial Automation Systems	TT Cyber Physical Systems and Internet of Things in Industry	Oral	October 23	T4 15:45-18:00
WF-028134	On the Applicability of ISO/IEC 25023 Measures for Integrating Agents with Automation Systems	TT Cyber Physical Systems and Internet of Things in Industry	Oral	October 23	T4 15:45-18:00
WF-030449	Automation System Generic Security Key Manager	TT Cyber Physical Systems and Internet of Things in Industry	Oral	October 23	T4 15:45-18:00
WF-011916	Identifying Design Pattern for Agent Based Production System Control	TT Cyber Physical Systems and Internet of Things in Industry	Oral	October 23	T4 15:45-18:00
WF-026972	Passivity-Based Trajectory Tracking Control for an Autonomous Bicycle	TT Mechatronics and Robotics	Oral	October 23	T4 15:45-18:00
WF-024775	Comparison of Energy Consumption of an Optimized Gait Cycle between Human-like and Bird-like Leg Models	TT Mechatronics and Robotics	Oral	October 23	T4 15:45-18:00
WF-020117	Path Planning using Model Predictive Controller based on Potential Field for Autonomous Vehicles	TT Mechatronics and Robotics	Oral	October 23	T4 15:45-18:00
WF-010073	A Novel Controller for Power Decoupling in a Single-Phase Grid-Tied Inverter Using a Boost Converter Buffer	TT Power Electronics Converters	Oral	October 23	T4 15:45-18:00
WF-036064	Modular Multilevel Converter for Multifunctional Battery Management System of Electric Vehicle	TT Power Electronics Converters	Oral	October 23	T4 15:45-18:00
WF-021458	An Exact Time Domain Analysis of DCM Boost Mode LLC Resonant Converter for PV applications	TT Power Electronics Converters	Oral	October 23	T4 15:45-18:00
WF-031488	Single Switch Open-Circuit Fault Detection for Three-Level NPC Inverter Using Conducted Emissions Signature	TT Power Electronics Converters	Oral	October 23	T4 15:45-18:00
WF-015326	Design strategy and simulation of medium-frequency transformers for a three-phase dual active bridge	TT Power Electronics Converters	Oral	October 23	T4 15:45-18:00
WF-019089	Controller-Hardware-in-the-Loop Testbed for Fast Switching SiC based 50 kW PV Inverter	TT Power Electronics Converters	Oral	October 23	T4 15:45-18:00
WF-012998	Adaptive and Predictive Control for Operating an Electronic Ballast HID-MH Lamp System without Acoustic Resonances	TT Power Electronics Converters	Oral	October 23	T4 15:45-18:00
WF-018783	Backstepping Control of a DC-DC Boost Converters Under Unknown Disturbances	TT Power Electronics Converters	Oral	October 23	T4 15:45-18:00
WF-000663	The Hybrid Control Strategy for The Wide Input of The LLC Converter	TT Power Electronics Converters	Oral	October 23	T4 15:45-18:00
WF-014362	Voltage Mode Control of Single-Phase Boost Inverter in dq Reference Frame	TT Power Electronics Converters	Oral Interactive	October 21	S2 09:15-11:45
WF-018651	Modeling of the Power Losses due to Coss in SJ MOSFETs Submitted to ZVS: Identification of the Passive Parameters by a Genetic Algorithm	TT Power Electronics Converters	Oral Interactive	October 21	S2 09:15-11:45

WF-019518	Steady-state equivalent circuit of LED bulbs accounting for the current harmonics	TT Power Electronics Converters	Oral Interactive	October 21	S2 09:15-11:45
WF-029858	An Investigation into the Thermal Benefits of Multilevel Converters	TT Power Electronics Converters	Oral Interactive	October 21	S2 09:15-11:45
WF-019917	Power factor correction and DC voltage control limits for arc welding application using pulsed current	TT Power Electronics Converters	Oral Interactive	October 21	S2 09:15-11:45
WF-020184	Nonlinear Control for Power Factor Correction of a Dual-Boost Bridgeless Circuit	TT Power Electronics Converters	Oral Interactive	October 21	S2 09:15-11:45
WF-011924	Research of Low Inductance Loop Design in GaN HEMT Application	TT Power Electronics Converters	Oral Interactive	October 21	S2 09:15-11:45
WF-003816	Optimal sizing of a power electronic traction transformer for railway applications	TT Power Electronics Converters	Oral Interactive	October 21	S2 09:15-11:45
WF-002089	Research on Overcurrent Detection and Protection of High-Power SiC MOSFET Driver	TT Power Electronics Converters	Oral Interactive	October 21	S2 09:15-11:45
WF-005193	Online Switch Open-Circuit Fault Diagnosis Using Reconfigurable Scheduler for Modular Multilevel Converter with Parallel Connectivity	TT Power Electronics Converters	Oral Interactive	October 21	S2 09:15-11:45
WF-004472	Grid-Interactive Dual-Paralleled Buck/Boost Converter	TT Power Electronics Converters	Oral Interactive	October 21	S2 09:15-11:45
WF-008044	A New Nine-Level Voltage Source Inverter with Capacitor Voltage Balancing	TT Power Electronics Converters	Oral Interactive	October 21	S2 09:15-11:45
WF-009288	A PIN Diode Model Based on Moving Mesh Method for Circuit Simulation	TT Power Electronics Converters	Oral Interactive	October 21	S2 09:15-11:45
WF-030724	A Multi-Source Energy Harvesting System From Automobiles to Microcontrollers	TT Power Electronics Converters	Oral Interactive	October 21	S2 09:15-11:45
WF-035734	Photovoltaic and Energy Storage Grid Integration with Fully Modular Architecture using Triple Port Active Bridges and Cascaded H-Bridge Inverter	TT Power Electronics Converters	Oral Interactive	October 21	S2 09:15-11:45
WF-019305	Boost Multi-port Converter with Simultaneous Isolated DC, Non-isolated DC and AC Outputs	TT Power Electronics Converters	Oral Interactive	October 21	S2 09:15-11:45
WF-005878	Study of Adaptive Hybrid Off-grid Inverter with Low DC-link Voltage and Active Part Rating	TT Power Electronics Converters	Oral Interactive	October 21	S2 09:15-11:45
WF-011932	Analysis of DC-Link Voltage Ripple in Voltage Source Inverters without Electrolytic Capacitor	TT Power Electronics Converters	Oral Interactive	October 21	S2 09:15-11:45
WF-028835	Loss Evaluation of Cascaded H-bridge and Modular Multilevel Converter for Motor Drive Applications	TT Power Electronics Converters	Oral Interactive	October 21	S2 09:15-11:45
WF-015032	A Level-Increment Circuit for Multilevel Inverter based on Cross-Connected Sources	TT Power Electronics Converters	Oral Interactive	October 21	S2 09:15-11:45
WF-002585	A Semi-Two-Stage H5 Inverter with Improved Efficiency and Low Leakage Current	TT Power Electronics Converters	Oral Interactive	October 21	S2 09:15-11:45
WF-013781	Test bench and data analysis towards an on-line Health Monitoring for emerging power modules	TT Power Electronics Converters	Oral Interactive	October 21	S2 09:15-11:45
WF-021822	Small-Signal Modeling and Analysis of VSM for Distributed Generation in a Weak Grid	TT Power Electronics Converters	Oral Interactive	October 21	S2 09:15-11:45
WF-023337	Dead-Time Analysis of a Universal SiC-GaN-Based DC-DC Converter for Plug-In Electric Vehicles	TT Power Electronics Converters	Oral Interactive	October 21	S2 09:15-11:45

WF-022403	Railway Traction Supply for Power Quality Issue	TT Power Electronics Converters	Oral Interactive	October 21	S2 09:15-11:45
WF-021784	A Novel Five-Level Semi-Bridgeless Power Factor Correction Topology	TT Power Electronics Converters	Oral Interactive	October 21	S2 09:15-11:45
WF-027472	Research on a novel DSTATCOM topology and its control strategy	TT Power Electronics Converters	Oral Interactive	October 21	S2 09:15-11:45
WF-019429	Real time realization of highly reliable Cascaded Full-bridge Interleaved Buck Inverter based APF using T1FLC id-iq Control Strategy	TT Power Electronics Converters	Oral Interactive	October 21	S2 09:15-11:45
WF-030074	Frequency Control Using V2G and Synchronous Power Controller based HVDC Links in Presence of Wind and PV Units	TT Power Electronics Converters	Oral Interactive	October 21	S2 09:15-11:45
WF-001635	Analysis of Variable Frequency Control for Dual-Input Switched-Capacitor Networks Converter	TT Power Electronics Converters	Oral Interactive	October 21	S2 09:15-11:45
WF-008974	Fault Diagnosis and Prevention of Flow Sensor for Fuel Supply System	SS Advances in Data-Driven Process Monitoring and Control for Complex Industrial Systems	Oral Interactive	October 21	S3 13:15-15:15
WF-034517	Design of a Performance-Driven Control System based on the Control Assessment	SS Advances in Data-Driven Process Monitoring and Control for Complex Industrial Systems	Oral Interactive	October 21	S3 13:15-15:15
WF-011487	Data Fusion Methods for Convolutional Neural Network Based on Self-sensing Motor Drive System	SS Advances in Data-Driven Process Monitoring and Control for Complex Industrial Systems	Oral Interactive	October 21	S3 13:15-15:15
WF-029351	Optimization of self bearing induction motor drive	SS Control of Multiphase Drive Systems	Oral Interactive	October 21	S3 13:15-15:15
WF-034525	Simplified Predictive Torque Control of Five Phase Permanent Magnet Motor with Non-sinusoidal Back-EMF	SS Control of Multiphase Drive Systems	Oral Interactive	October 21	S3 13:15-15:15
WF-006661	Performance Analysis of PMSM Drive using Ant Colony Optimization	SS Control of Multiphase Drive Systems	Oral Interactive	October 21	S3 13:15-15:15
WF-018317	Analysis Of An Application Of The Extended Electromotive Force Model Based Position Sensorless Control On The Wound-Field Synchronous Motor With Dual-Three Phases In Standstill/Low Speed Region	SS Control of Multiphase Drive Systems	Oral Interactive	October 21	S3 13:15-15:15
WF-011509	Comparison of Model Predictive Control Strategies for Six-Phase Permanent Magnet Synchronous Machines	SS Control of Multiphase Drive Systems	Oral Interactive	October 21	S3 13:15-15:15
WF-025178	Autonomous Robot Navigation in Diverse Terrain Using a Fuzzy Evolutionary Technique	SS Intelligent Control and Motion Planning in Robotic Systems	Oral Interactive	October 21	S3 13:15-15:15
WF-008338	Robotic Obstacle Avoidance for Visual Navigation based on Local Descriptors and Feasible Path	SS Intelligent Control and Motion Planning in Robotic Systems	Oral Interactive	October 21	S3 13:15-15:15
WF-012874	A Brief Review on Robotic Floor-tiling	SS Intelligent Control and Motion Planning in Robotic Systems	Oral Interactive	October 21	S3 13:15-15:15
WF-012912	Feature Regions Segmentation based RGB-D Visual Odometry in Dynamic Environment	SS Intelligent Control and Motion Planning in Robotic Systems	Oral Interactive	October 21	S3 13:15-15:15
WF-013773	Adaptive Backstepping Control For An Underwater Vehicle Manipulator System Using Fuzzy Logic	SS Intelligent Control and Motion Planning in Robotic Systems	Oral Interactive	October 21	S3 13:15-15:15
WF-018643	Development of Nano UAV Platform for Navigation in GPS-Denied Environment Using Snapdragon	SS Intelligent Control and Motion Planning in Robotic Systems	Oral Interactive	October 21	S3 13:15-15:15
WF-022284	Cooperative Search of Multiple Robots with A Distributed Algorithm	SS Intelligent Control and Motion Planning in Robotic Systems	Oral Interactive	October 21	S3 13:15-15:15
WF-025712	L1 Gain Control of the Skeleton Post-Stroke Rehabilitation Robot's Wrist Joint Subject to Magnitude, Rate and Output Saturation	SS Intelligent Control and Motion Planning in Robotic Systems	Oral Interactive	October 21	S3 13:15-15:15

WF-034495	Development of a semi-automatic 3D modeling system for phenotyping morphological traits in plants	SS Intelligent Sensing Applications for Human Assistive Systems	Oral Interactive	October 21	S3 13:15-15:15
WF-034118	Real-Time Foot Clearance and Environment Estimation based on Foot-Mounted Wearable Sensors	SS Intelligent Sensing Applications for Human Assistive Systems	Oral Interactive	October 21	S3 13:15-15:15
WF-008133	Tracking Control Method Considering Obstacle Avoidance by Reflective Motion for Mobile Robot	SS Intelligent Sensing Applications for Human Assistive Systems	Oral Interactive	October 21	S3 13:15-15:15
WF-034584	A Stereo Camera Based Static and Moving Obstacles Detection on Autonomous Visual Navigation of Indoor Transportation Vehicle	SS Intelligent Sensing Applications for Human Assistive Systems	Oral Interactive	October 21	S3 13:15-15:15
WF-029068	Load forecasting using statistical time series model in a medium voltage distribution network	SS Modeling, Management and Control of Energy Storage Systems in Electric Vehicles	Oral Interactive	October 21	S3 13:15-15:15
WF-031844	Optimal Scheduling for PV-Assited Charging Station Considering the Battery Life of Electric Vehicles	SS Modeling, Management and Control of Energy Storage Systems in Electric Vehicles	Oral Interactive	October 21	S3 13:15-15:15
WF-012653	Voltage Mode Controller Design and Experimental Verification of a Three-Phase Capacitive-coupling Grid Connected Inverter in PV system	SS Multi-Functional Grid Connected Converters: Design, Operation and Control	Oral Interactive	October 21	S3 13:15-15:15
WF-019682	Distributed Control and Redundancy for Input-Series-Output-Series LCL-Type Grid-Connected Inverter System	SS Multi-Functional Grid Connected Converters: Design, Operation and Control	Oral Interactive	October 21	S3 13:15-15:15
WF-010774	SAW: A Hybrid Prediction Model for Parking Occupancy under the Environment of Lacking Real-time Data	TT Cloud Computing, Big Data, Industrial Informatics	Oral Interactive	October 21	S3 13:15-15:15
WF-036439	A framework for evaluating security in multi-cloud environments	TT Cloud Computing, Big Data, Industrial Informatics	Oral Interactive	October 21	S3 13:15-15:15
WF-002895	AdaBoost-SVM for Electrical Theft Detection and GRNN for Stealing Time Periods Identification	TT Cloud Computing, Big Data, Industrial Informatics	Oral Interactive	October 21	S3 13:15-15:15
WF-025917	A New Algorithm to Automatic Extraction of Clusters Using Eccentricity and Typicality Analysis	TT Cloud Computing, Big Data, Industrial Informatics	Oral Interactive	October 21	S3 13:15-15:15
WF-006955	New hybrid mode current controller with fast response without sub-harmonic oscillation.	TT Power Electronics Converters	Oral Interactive	October 21	S3 13:15-15:15
WF-015547	Smart controller design for safety operation of the MEA electrical distribution system	SS Power Electronics for the More Electric Aircraft	Oral Interactive	October 21	S4 15:45-18:00
WF-012009	Sensitivity Analysis for the DC Electrical Power Distribution System of the More Electric Aircraft	SS Power Electronics for the More Electric Aircraft	Oral Interactive	October 21	S4 15:45-18:00
WF-020745	Reduction of the parasitic couplings in the EMI filters to improve the high frequency insertion loss	SS Power Electronics for the More Electric Aircraft	Oral Interactive	October 21	S4 15:45-18:00
WF-024619	Charging Techniques in Lithium-Ion Battery Charger: Review and New	SS Power Electronics for the More Electric Aircraft	Oral Interactive	October 21	S4 15:45-18:00
WF-001694	Three-Legged Converter for Dynamic Wireless Power Transfer	SS Wireless Power Transfer	Oral Interactive	October 21	S4 15:45-18:00
WF-008907	Magnetic Coupling Positioning Using Simultaneous Power and Data Transfer	SS Wireless Power Transfer	Oral Interactive	October 21	S4 15:45-18:00
WF-018198	SS and SP Topology Analysis for Capacitive Power Transfer with Resonance Coupling Based on Power Factor Consideration	SS Wireless Power Transfer	Oral Interactive	October 21	S4 15:45-18:00
WF-034029	Luxating Inverter for an Inductive Power Transfer System	SS Wireless Power Transfer	Oral Interactive	October 21	S4 15:45-18:00
WF-025909	Consensus Based Robust Adaptive Finite-time Tracking for Second-order Nonlinear Multi-agent Systems	TT Control Systems and Applications	Oral Interactive	October 21	S4 15:45-18:00

WF-026581	Load Mitigation and Power Regulation of Offshore Wind Turbines Using Multi-Objective Model Predictive Control	TT Control Systems and Applications	Oral Interactive	October 21	S4 15:45-18:00
WF-030929	Modeling and Control of Fuel Cell Power System with Varying Load and Temperature	TT Control Systems and Applications	Oral Interactive	October 21	S4 15:45-18:00
WF-030961	Two-channel periodic event-triggered observer-based repetitive control for periodic reference tracking	TT Control Systems and Applications	Oral Interactive	October 21	S4 15:45-18:00
WF-003301	Phase Trajectory Analysis of Non-singular Terminal Sliding Mode Controlled Flexible Manipulato	TT Control Systems and Applications	Oral Interactive	October 21	S4 15:45-18:00
WF-009563	Unknown Input Observer-Based Robust Sensor Fault Estimation in Discrete-Time Takagi-Sugeno Systems	TT Control Systems and Applications	Oral Interactive	October 21	S4 15:45-18:00
WF-014729	Sliding Mode combined VSG Control to Microgrid Inverters	TT Control Systems and Applications	Oral Interactive	October 21	S4 15:45-18:00
WF-020001	Control of a Hydraulic Elevator with a Variable-Speed Pump	TT Control Systems and Applications	Oral Interactive	October 21	S4 15:45-18:00
WF-020052	Energy-Optimal Single-Axis Motion Trajectories	TT Control Systems and Applications	Oral Interactive	October 21	S4 15:45-18:00
WF-024252	Input Correction Control of State Constrained Nonlinear System by Using Revived Transformation	TT Control Systems and Applications	Oral Interactive	October 21	S4 15:45-18:00
WF-036218	Hardware Assisted Security Architecture for Smart Grid	TT Cyber Physical Systems and Internet of Things in Industry	Oral Interactive	October 21	S4 15:45-18:00
WF-031461	An EKF Based Tracking Loop Filter Algorithm in GNSS Receiver for Ultra High Dynamic Environment: The Experiment Results	TT Electronic Systems On Chip and Embedded Systems	Oral Interactive	October 21	S4 15:45-18:00
WF-033952	Design of a test bed for teaching/research purposes in PHEVs	TT Industrial Electronics and Education	Oral Interactive	October 21	S4 15:45-18:00
WF-018244	Healing Effects by 1/f Fluctuating Vibration - Applications of voice-coil-type vibrator -	TT Sensors, Actuators and Micro-Nanotechnology	Oral Interactive	October 21	S4 15:45-18:00
WF-008249	Opportunities for power converters, motors and drives for electrification of mobile vehicles	TT Transportation Electrification and Automotive Technologies	Oral Interactive	October 21	S4 15:45-18:00
WF-009717	Design and Testing of PMSM for Aerospace EMA Applications	TT Transportation Electrification and Automotive Technologies	Oral Interactive	October 21	S4 15:45-18:00
WF-026441	A Novel Multi-Objective Off-Board EV Charging Station for Smart Homes	TT Transportation Electrification and Automotive Technologies	Oral Interactive	October 21	S4 15:45-18:00
WF-026794	New Predictive Control Method for Optimal Minimization of Plug-in Electric Vehicle (PEV) Charging Cost with Vehicle-to-Home (V2H) capability	TT Transportation Electrification and Automotive Technologies	Oral Interactive	October 21	S4 15:45-18:00
WF-026816	Optimal Charging of Plug-in Electric Vehicle (PEV) in Residential Area	TT Transportation Electrification and Automotive Technologies	Oral Interactive	October 21	S4 15:45-18:00
WF-006742	Branch Energy Control of the Three-Phase to Single-Phase Direct AC-AC Modular Multilevel Converter Under Equal Frequency Operation Condition	TT Transportation Electrification and Automotive Technologies	Oral Interactive	October 21	S4 15:45-18:00
WF-011029	LIN Bus Security Analysis	TT Transportation Electrification and Automotive Technologies	Oral Interactive	October 21	S4 15:45-18:00
WF-020257	Development of an IoT System with Smart Charging Current Control for Electric Vehicles	SS Emerging Wireless Solutions and Applications for Internet-of-Things and Smart City	Oral Interactive	October 22	M2 09:30-11:45
WF-021598	Continuous User Authentication in Smartphones using gait analysis	SS Emerging Wireless Solutions and Applications for Internet-of-Things and Smart City	Oral Interactive	October 22	M2 09:30-11:45
WF-025003	Packet loss analysis for LoRa-based heart monitoring system	SS Emerging Wireless Solutions and Applications for Internet-of-Things and Smart City	Oral Interactive	October 22	M2 09:30-11:45
WF-025011	Charing Infrastructure Planning for Giant Cities	SS Emerging Wireless Solutions and Applications for Internet-of-Things and Smart City	Oral Interactive	October 22	M2 09:30-11:45

WF-026085	Analysis of IoT-enabled Solutions in Smart Waste Management	SS Emerging Wireless Solutions and Applications for Internet-of-Things and Smart City	Oral Interactive	October 22	M2 09:30-11:45
WF-031976	A Survey on Vehicle Security Systems: Approaches and Technologies	SS Emerging Wireless Solutions and Applications for Internet-of-Things and Smart City	Oral Interactive	October 22	M2 09:30-11:45
WF-035106	Smart Comm: A Smart Home Middleware Supporting Information Exchange	SS Emerging Wireless Solutions and Applications for Internet-of-Things and Smart City	Oral Interactive	October 22	M2 09:30-11:45
WF-036714	Analysis of Machine Learning Techniques to Identify and Classify Traffic in Software Defined Wireless Sensor Networks: A Survey	SS Emerging Wireless Solutions and Applications for Internet-of-Things and Smart City	Oral Interactive	October 22	M2 09:30-11:45
WF-025259	Programmable Node in Software-Defined Wireless Sensor Networks: A Review	SS Emerging Wireless Solutions and Applications for Internet-of-Things and Smart City	Oral Interactive	October 22	M2 09:30-11:45
WF-001503	Human-robot interaction system for micromanipulation assistance	SS Human-System Interaction in Smart Environments	Oral Interactive	October 22	M2 09:30-11:45
WF-005541	Geometrical Feature Based Stairways Detection and Recognition using Depth Sensor	SS Human-System Interaction in Smart Environments	Oral Interactive	October 22	M2 09:30-11:45
WF-005851	Wearable Thermal Interface for Sharing Palm Heat Conduction	SS Human-System Interaction in Smart Environments	Oral Interactive	October 22	M2 09:30-11:45
WF-006254	Advanced Assistance Systems in the Process Industry: A Classification Attempt	SS Human-System Interaction in Smart Environments	Oral Interactive	October 22	M2 09:30-11:45
WF-011312	Verification of the Knee Exoskeleton Controller Using Novel Gait Phase Detection Method	SS Human-System Interaction in Smart Environments	Oral Interactive	October 22	M2 09:30-11:45
WF-016152	Action recognition based on sequential 2D-CNN for surveillance systems	SS Human-System Interaction in Smart Environments	Oral Interactive	October 22	M2 09:30-11:45
WF-016187	Dynamic 3D Surface Reconstruction Using a Hand-Held Camera	SS Human-System Interaction in Smart Environments	Oral Interactive	October 22	M2 09:30-11:45
WF-022039	Smart heating system for home extending utilization of renewable energy sources	SS Human-System Interaction in Smart Environments	Oral Interactive	October 22	M2 09:30-11:45
WF-022306	Towards Contactless, Hand Gestures-Based Control of Devices	SS Human-System Interaction in Smart Environments	Oral Interactive	October 22	M2 09:30-11:45
WF-024023	Road Condition Evaluation using Fusion of Multiple Deep Models on Always-on Vision Processor	SS Human-System Interaction in Smart Environments	Oral Interactive	October 22	M2 09:30-11:45
WF-037133	An Adversarial Approach for Explainable AI in Intrusion Detection Systems	SS Human-System Interaction in Smart Environments	Oral Interactive	October 22	M2 09:30-11:45
WF-037192	Improving User Trust on Deep Neural Networks based Intrusion Detection Systems	SS Human-System Interaction in Smart Environments	Oral Interactive	October 22	M2 09:30-11:45
WF-037214	Multi-Person Pose Estimation With Human Detection: A Parallel Approach	SS Human-System Interaction in Smart Environments	Oral Interactive	October 22	M2 09:30-11:45
WF-037249	Standing-Up Control of a Fallen Humanoid Robot Based on the Ground-contacting State of the Body	SS Human-System Interaction in Smart Environments	Oral Interactive	October 22	M2 09:30-11:45
WF-021857	Smart weighing scale with feet-sampled ECG	SS Human-System Interaction in Smart Environments	Oral Interactive	October 22	M2 09:30-11:45
WF-005347	Switch On/Interruption Control of Cooling Based on Estimated Acceptable Interruption Duration: An Office Case Study in Japan	TT Smart Building Technologies	Oral Interactive	October 22	M2 09:30-11:45
WF-007005	Ontology-based Optimization of Building Automation Systems	TT Smart Building Technologies	Oral Interactive	October 22	M2 09:30-11:45
WF-027308	Transient Event Classification based on Wavelet Neuronal Network and Matched Filters	TT Smart Building Technologies	Oral Interactive	October 22	M2 09:30-11:45
WF-029955	A Human Factors Study to Update a Recently Proposed Manual Blind Use Algorithm for Energy and Daylight Simulations	TT Smart Building Technologies	Oral Interactive	October 22	M2 09:30-11:45

WF-030104	Calibration of White-Box Whole-Building Energy Models Using a Systems-Identification Approach	TT Smart Building Technologies	Oral Interactive	October 22	M2 09:30-11:45
WF-037087	Developing a Process for Continuous Commissioning	TT Smart Building Technologies	Oral Interactive	October 22	M2 09:30-11:45
WF-037117	Information Integration and Semantic Interpretation for Building Energy System Operation and Maintenance	TT Smart Building Technologies	Oral Interactive	October 22	M2 09:30-11:45
WF-005657	Impact of emerging technologies on Facility Services - A mixed-methodic approach on Smart Building Technologies	TT Smart Building Technologies	Oral Interactive	October 22	M2 09:30-11:45
WF-029041	A New Asymmetrical Cascaded Multilevel Inverter with Reduced Number of Components	SS Advanced Multilevel Converters with DC Capacitors: Modulation, Voltage Balancing, and Their Control Strategies.	Oral Interactive	October 22	M3 13:15-15:15
WF-005037	A Product Platform Architecture for Cloud Manufacturing	SS Cloud Manufacturing	Oral Interactive	October 22	M3 13:15-15:15
WF-010642	An OSGi-based Adaptation Access of Machine Tool in the Cloud Manufacturing Environment	SS Cloud Manufacturing	Oral Interactive	October 22	M3 13:15-15:15
WF-009253	The Model Construction of Multi-Objective Job Shop Based on Data Information	SS Cloud Manufacturing	Oral Interactive	October 22	M3 13:15-15:15
WF-034959	Performance evaluation of the empirical method for online detection of power oscillations: a multiterminal HVDC application	SS HVDC Converters and Systems: Modelling, Control and Stability Analysis	Oral Interactive	October 22	M3 13:15-15:15
WF-035335	Analysis of MMC Dynamics in dqz Coordinates for Vertical and Horizontal Energy Balancing Control	SS HVDC Converters and Systems: Modelling, Control and Stability Analysis	Oral Interactive	October 22	M3 13:15-15:15
WF-023442	An AC-AC Modular Multilevel Converter-based Partially-Rated Solid-State Transformer for Power Flow Control	SS Modular Multilevel Converters and Applications	Oral Interactive	October 22	M3 13:15-15:15
WF-009644	Control of A Modular Multilevel Cascaded Converter based Unified Power Flow Controller	SS Modular Multilevel Converters and Applications	Oral Interactive	October 22	M3 13:15-15:15
WF-012769	Design and Cost Analysis for STATCOM in Low and Medium Voltage Systems	SS Modular Multilevel Converters and Applications	Oral Interactive	October 22	M3 13:15-15:15
WF-003689	H-infinity Filtering for Networked Control Systems with Two-channel Packet Dropouts and Mixed Random Delays using Delta Operator	SS Networked Control and Its Applications	Oral Interactive	October 22	M3 13:15-15:15
WF-031712	Multi-constrained routing optimization algorithm based on DAG	SS Networked Control and Its Applications	Oral Interactive	October 22	M3 13:15-15:15
WF-031321	Low Cost and Unconditionally Secure Communications for Complex UAS Networks	SS Networked Control and Its Applications	Oral Interactive	October 22	M3 13:15-15:15
WF-011991	NIDR: A QoS routing based on link interference degree in WSN	SS Networked Control and Its Applications	Oral Interactive	October 22	M3 13:15-15:15
WF-009539	Survey of Wearable EEG and ECG Acquisition Technologies for Body Area Network	SS Networked Control and Its Applications	Oral Interactive	October 22	M3 13:15-15:15
WF-011371	Distributed Self-triggered Constraint Control for Multi-Agent Systems: Semi-global Consensus Case	SS Networked Control and Its Applications	Oral Interactive	October 22	M3 13:15-15:15
WF-029394	Implementation of Deep Neural Networks for Industry Applications	TT Computational Intelligence and Signal and Image Processing	Oral Interactive	October 22	M3 13:15-15:15
WF-001538	An Encoder Generative Adversarial Network for Multi-modality Image Recognition	TT Computational Intelligence and Signal and Image Processing	Oral Interactive	October 22	M3 13:15-15:15
WF-012246	Determining Number of Speakers from Single Microphone Speech Signals by Multi-Label Convolutional Neural Network	TT Computational Intelligence and Signal and Image Processing	Oral Interactive	October 22	M3 13:15-15:15
WF-008915	Action Recognition Based on Multi-feature Depth Motion Maps	TT Computational Intelligence and Signal and Image Processing	Oral Interactive	October 22	M3 13:15-15:15

WF-028533	Associations of Second Life of Power Supply Units as Charge Controllers in PV Systems	TT Power Systems and Smart Grids	Oral Interactive	October 22	M3 13:15-15:15
WF-014702	The Development and Application of a DC Microgrid Testbed for Distributed Microgrid Energy Management System	TT Power Systems and Smart Grids	Oral Interactive	October 22	M3 13:15-15:15
WF-029386	Consensus Based Distributed Cooperative Load-Frequency Control for Multi-area Power Grid Networks	TT Power Systems and Smart Grids	Oral Interactive	October 22	M3 13:15-15:15
WF-006815	Grid fault detection and control of microgrid inverter according to the structure of three phase output transformer	TT Power Systems and Smart Grids	Oral Interactive	October 22	M3 13:15-15:15
WF-009571	Multiperiod Wind Speed Forecasting Approach based on ELM and Association Rules	TT Power Systems and Smart Grids	Oral Interactive	October 22	M3 13:15-15:15
WF-012106	Adequacy Assessment of Protective Enclosures for IEC Digital Energy Meters	TT Power Systems and Smart Grids	Oral Interactive	October 22	M3 13:15-15:15
WF-012416	Hierarchical Energy Management Strategy for a Community of Multi Smart Homes	TT Power Systems and Smart Grids	Oral Interactive	October 22	M3 13:15-15:15
WF-013099	Based on Virtual Generator Energy Router AC-DC Coordination Control	TT Power Systems and Smart Grids	Oral Interactive	October 22	M3 13:15-15:15
WF-021113	Laboroatory investigations of parallel connected inverters feeding medium voltage transformer	TT Power Systems and Smart Grids	Oral Interactive	October 22	M3 13:15-15:15
WF-027839	Harmonics Estimation of a Noisy Power System Signal using Cubature Kalman Filter	TT Power Systems and Smart Grids	Oral Interactive	October 22	M3 13:15-15:15
WF-029246	Frequency support and stability analysis for an integrated power system with wind farms	TT Power Systems and Smart Grids	Oral Interactive	October 22	M3 13:15-15:15
WF-033154	Two and Three Level FCMLI based SHAF with PI and Fuzzy Logic Controllers using Id-Iq control strategy for Power Quality Enhancement	SS Advanced Power Quality Conditioning Systems	Oral Interactive	October 22	M4 15:45-18:00
WF-010936	Dual-Buck Arbitrary Voltage Divider with one Output having Reduced Ripples	SS Advanced Power Quality Conditioning Systems	Oral Interactive	October 22	M4 15:45-18:00
WF-031186	A Hybrid Series Active Filter using Single-phase Low Rating Packed U-Cell Converter	SS Advanced Power Quality Conditioning Systems	Oral Interactive	October 22	M4 15:45-18:00
WF-031968	Research on Single-phase SVG Based on 2nd Harmonic Feedforward and Decoupling Control	SS Advanced Power Quality Conditioning Systems	Oral Interactive	October 22	M4 15:45-18:00
WF-004952	An Optimal Design and Analysis of A Hybrid Power Charging Station for Electric Vehicles Considering Uncertainties	SS Electric Vehicle Charging Systems: Architectures, Communication, and Management	Oral Interactive	October 22	M4 15:45-18:00
WF-016373	Comparison of Capacitor- and Ferrite-less 85kHz Self-resonant Coils Considering Dielectric Loss for In-motion Wireless Power Transfer	SS Electric Vehicle Charging Systems: Architectures, Communication, and Management	Oral Interactive	October 22	M4 15:45-18:00
WF-008834	State-of-Charge Co-estimation of Li-ion Battery based on on-line Adaptive Extended Kalman Filter Carrier Tracking Algorithm	TT Renewable Energy and Energy Storage Systems	Oral Interactive	October 22	M4 15:45-18:00
WF-012572	LQR based PID Voltage Controller for Photovoltaic Systems	TT Renewable Energy and Energy Storage Systems	Oral Interactive	October 22	M4 15:45-18:00
WF-016268	Energy management and sizing algorithm applied on a hybrid power system suppliying an isolated residential application	TT Renewable Energy and Energy Storage Systems	Oral Interactive	October 22	M4 15:45-18:00
WF-018414	Estimating Battery Pack SOC Using A Cell-to-Pack Gain Updating Algorithm	TT Renewable Energy and Energy Storage Systems	Oral Interactive	October 22	M4 15:45-18:00
WF-001422	Nonlinear Model Predictive Control of Photovoltaic-Battery System for Short-Term Dispatch	TT Renewable Energy and Energy Storage Systems	Oral Interactive	October 22	M4 15:45-18:00

WF-005002	A Dual-Buck Inverter with H5 Configuration for Photovoltaic Grid-tied Applications	TT Renewable Energy and Energy Storage Systems	Oral Interactive	October 22	M4 15:45-18:00
WF-005134	A Grid Connected Photovoltaic Microinverter with Integrated Battery	TT Renewable Energy and Energy Storage Systems	Oral Interactive	October 22	M4 15:45-18:00
WF-006602	Enhanced Hierarchical Control of Hybrid Energy Storage System in Microgrids	TT Renewable Energy and Energy Storage Systems	Oral Interactive	October 22	M4 15:45-18:00
WF-009326	Optimal Control of an Interconnected Hydraulic Wind Farm	TT Renewable Energy and Energy Storage Systems	Oral Interactive	October 22	M4 15:45-18:00
WF-010596	Comprehensive Modelling of A Slotless Halbach Linear Generator Based Wave Energy Converter	TT Renewable Energy and Energy Storage Systems	Oral Interactive	October 22	M4 15:45-18:00
WF-011347	Energy Production Assessment of 3x50MW AC Photovoltaic Project based on Solar Resource with Uncertainty Analysis	TT Renewable Energy and Energy Storage Systems	Oral Interactive	October 22	M4 15:45-18:00
WF-014966	Study of the Boost type DC-DC Converter for Single Solar Cell	TT Renewable Energy and Energy Storage Systems	Oral Interactive	October 22	M4 15:45-18:00
WF-015121	Analysis of Brushless Wound Rotor Synchronous Generator with Unity Power Factor Rectifier for Series Offshore DC Wind Power Collection	TT Renewable Energy and Energy Storage Systems	Oral Interactive	October 22	M4 15:45-18:00
WF-015296	Fault Ride Through Testing Method Based on DVR for Offshore Wind Turbines	TT Renewable Energy and Energy Storage Systems	Oral Interactive	October 22	M4 15:45-18:00
WF-015466	Coordinated Voltage Control Scheme of an Adjustable-Speed Pumped Storage Hydropower and a Wind Power Plant	TT Renewable Energy and Energy Storage Systems	Oral Interactive	October 22	M4 15:45-18:00
WF-021431	A Review and Modeling of Different Droop Control Based Methods for Battery State of the Charge Balancing in DC Microgrids	TT Renewable Energy and Energy Storage Systems	Oral Interactive	October 22	M4 15:45-18:00
WF-021466	An Anti-islanding Protection for Inverters in Distributed Generation	TT Renewable Energy and Energy Storage Systems	Oral Interactive	October 22	M4 15:45-18:00
WF-021814	A New Nonlinear Double-Capacitor Model for Rechargeable Batteries	TT Renewable Energy and Energy Storage Systems	Oral Interactive	October 22	M4 15:45-18:00
WF-022071	Frequency Control of Hydraulic Wind Farm under Low and High Wind Conditions	TT Renewable Energy and Energy Storage Systems	Oral Interactive	October 22	M4 15:45-18:00
WF-022454	An Extremely Low-Cost Wind Emulator	TT Renewable Energy and Energy Storage Systems	Oral Interactive	October 22	M4 15:45-18:00
WF-023434	Power Quality Improvement in Single Phase Solar PV-APF Grid Tied System Using Robust Least-Mixed-Norm (RLMN) Algorithm	TT Renewable Energy and Energy Storage Systems	Oral Interactive	October 22	M4 15:45-18:00
WF-029262	A Novel Vector Control Scheme for PMSM Driven Encoder-Less Solar Water Pumping System	TT Renewable Energy and Energy Storage Systems	Oral Interactive	October 22	M4 15:45-18:00
WF-036838	Ampacity and Electro-Magnetic Modeling for High-Voltage Subsea Cables Installed in Saturated Seabed	TT Renewable Energy and Energy Storage Systems	Oral Interactive	October 22	M4 15:45-18:00
WF-009628	State Trajectory Generation of MIMO Multirate Feedforward for Perfect Tracking Control in High-Precision Stage	SS Advanced Motion Control for Mechatronic Systems	Oral Interactive	October 23	T2 09:30-11:45
WF-033219	Unknown Frequency Vibration Suppression Control of Linear Motor Stage	SS Advanced Motion Control for Mechatronic Systems	Oral Interactive	October 23	T2 09:30-11:45
WF-034398	Design of iterative learning control for force control considering environmental impedance	SS Advanced Motion Control for Mechatronic Systems	Oral Interactive	October 23	T2 09:30-11:45
WF-035432	High Precision Modeling for a Multi-Axis Robot Considering Interference Force based on Robot Dynamic Model	SS Advanced Motion Control for Mechatronic Systems	Oral Interactive	October 23	T2 09:30-11:45
WF-013439	A Human-Robot Interface System for WalkON Suit: a Powered Exoskeleton for Complete Paraplegics	SS Advanced Motion Control for Physical Human-Robot-Interaction	Oral Interactive	October 23	T2 09:30-11:45
WF-033294	Acceleration Based Force Estimation in Series Elastic Actuator	SS Advanced Motion Control for Physical Human-Robot-Interaction	Oral Interactive	October 23	T2 09:30-11:45

WF-034304	Haptic Rendering for Time-Variant System Based on FDTD Method Concidering Realtime Discretization	SS Advanced Motion Control for Physical Human-Robot-Interaction	Oral Interactive	October 23	T2 09:30-11:45
WF-013684	Multi-objective optimization of a solenoid for MFH: a comparison of methods	SS Biomedical Applications of Industrial Electronics	Oral Interactive	October 23	T2 09:30-11:45
WF-003719	An electrode for the treatment of large surfaces in ECT	SS Biomedical Applications of Industrial Electronics	Oral Interactive	October 23	T2 09:30-11:45
WF-019909	An Ultrasonic Indoor Positioning System for Harsh Environments	SS Emerging Wireless Technologies for Industrial Internet of Things	Oral Interactive	October 23	T2 09:30-11:45
WF-032689	Feasibility analysis of bluetooth 5 for real-time data transmission in HVAC and HVDC substations	SS Emerging Wireless Technologies for Industrial Internet of Things	Oral Interactive	October 23	T2 09:30-11:45
WF-034754	Low Cost Sensor to Measure Solid Concentrations in Wastewater	SS Emerging Wireless Technologies for Industrial Internet of Things	Oral Interactive	October 23	T2 09:30-11:45
WF-014133	Improving the Dynamic Response of Scalar Control of Induction Machine Drive using Phase Angle Control	TT Electrical Machines and Industrial Drives	Oral Interactive	October 23	T2 09:30-11:45
WF-000825	The Design, Control and Dynamic Performance of an Interior Permanent Magnet Synchronous Generator for a Wind Power System	TT Electrical Machines and Industrial Drives	Oral Interactive	October 23	T2 09:30-11:45
WF-012963	Performance of Adaptive MTPA Torque Per Amp Control at Multiple Operating Points for Induction Motor Drives	TT Electrical Machines and Industrial Drives	Oral Interactive	October 23	T2 09:30-11:45
WF-001414	Design Optimization of Axial Flux Permanent Magnet Brushless DC Micromotor Using Response Surface Methodology and Bat Algorithm	TT Electrical Machines and Industrial Drives	Oral Interactive	October 23	T2 09:30-11:45
WF-019771	Performance Comparison of Direct Torque Controlled Permanent Magnet Machines	TT Electrical Machines and Industrial Drives	Oral Interactive	October 23	T2 09:30-11:45
WF-012076	Modeling and Comparison of Space Vector PWM schemes for a Five-Phase Induction Motor Drive	TT Electrical Machines and Industrial Drives	Oral Interactive	October 23	T2 09:30-11:45
WF-023566	Angular Position Tracking Controller for PMSM based on Compensated Non-Linearities and Type-II Internal Model Control	TT Electrical Machines and Industrial Drives	Oral Interactive	October 23	T2 09:30-11:45
WF-028312	Modelling of Stray-Load Loss for Medium Power Induction Motors	TT Electrical Machines and Industrial Drives	Oral Interactive	October 23	T2 09:30-11:45
WF-002798	Convex optimization-based sensorless control for IPMSM drives with reduced complexity	TT Electrical Machines and Industrial Drives	Oral Interactive	October 23	T2 09:30-11:45
WF-008206	Research on Adaptive Sliding Mode Sensorless Observer Based on A Novel Deadbeat Predictive Torque Control Strategy for PMSM	TT Electrical Machines and Industrial Drives	Oral Interactive	October 23	T2 09:30-11:45
WF-008389	Study on a novel deadbeat predictive torque control strategy with flux and torque decoupling for PMSM	TT Electrical Machines and Industrial Drives	Oral Interactive	October 23	T2 09:30-11:45
WF-011207	Improved Sensorless Drive for Synchronous Motors Based on High-Frequency Sinusoidal Signal Injection With Simplified Extraction of Position-Error Information	TT Electrical Machines and Industrial Drives	Oral Interactive	October 23	T2 09:30-11:45
WF-023949	CFD and LPTN Hybrid Technique to Determine Convection Coefficient in End-winding of TEFC Induction Motor with Copper Rotor	TT Electrical Machines and Industrial Drives	Oral Interactive	October 23	T2 09:30-11:45
WF-026395	Applicability of Superposition Equivalent Loading Method for Induction Machine Temperature Tests	TT Electrical Machines and Industrial Drives	Oral Interactive	October 23	T2 09:30-11:45
WF-027111	Fast Characterization of AC Windings	TT Electrical Machines and Industrial Drives	Oral Interactive	October 23	T2 09:30-11:45
WF-028924	Insights Into Digital Twin Based on Finite Element Simulation of A Large Hydro Generator	TT Electrical Machines and Industrial Drives	Oral Interactive	October 23	T2 09:30-11:45

WF-034592	Transient Voltage Distribution in Induction Motor Stator Windings Using Finite Elements Method	TT Electrical Machines and Industrial Drives	Oral Interactive	October 23	T2 09:30-11:45
WF-030406	A Performance Comparison of Stationary Frame Control of Three-Leg and Four-Leg Voltage Source Inverters in Power System Applications	TT Power Electronics Converters	Oral Interactive	October 23	T2 09:30-11:45
WF-004219	Dissipative lithium-ion cell balancing by recharge control and detection of outliers for energy optimization and heat reduction	SS Energy Storage Management Systems for Transportation Electrification	Oral Interactive	October 23	T3 13:15-15:15
WF-017035	Energy Management System in Micro-grid with Storage and Hydrogen Production	SS Energy Storage Management Systems for Transportation Electrification	Oral Interactive	October 23	T3 13:15-15:15
WF-031615	Boost-Cascaded-by-Buck Power Factor Correction Converter for Universal On-board Battery Charger in Electric Transportation	SS Energy Storage Management Systems for Transportation Electrification	Oral Interactive	October 23	T3 13:15-15:15
WF-036323	Intelligent Energy Storage Management System for Smart Grid integration	SS Energy Storage Systems for Smart Grids: Advanced Topologies and Control Algorithms	Oral Interactive	October 23	T3 13:15-15:15
WF-010588	SoC Balancing of Different Energy Storage Systems in DC Microgrids Using Modified Droop Control	SS Energy Storage Systems for Smart Grids: Advanced Topologies and Control Algorithms	Oral Interactive	October 23	T3 13:15-15:15
WF-033677	Sensitivity analysis for the parameter identification of a PEM fuel cell	SS Novel Energy Storage Solutions for E-Transportation and Smart Grid	Oral Interactive	October 23	T3 13:15-15:15
WF-035092	Modeling, Control and Prototyping of a Highly Integrated Battery-Ultracapacitor System for Microgrids	SS Novel Energy Storage Solutions for E-Transportation and Smart Grid	Oral Interactive	October 23	T3 13:15-15:15
WF-035858	Power Market Price Forecasting via Deep Learning	SS Big Data and Cyber Security in Smart Grids	Oral Interactive	October 23	T3 13:15-15:15
WF-021326	Cyberattack to Cyber-Physical Model of Wind Farm SCADA	SS Big Data and Cyber Security in Smart Grids	Oral Interactive	October 23	T3 13:15-15:15
WF-019046	Nonverbal Human–Robot Communication for Ambient Assisted Living Applications Based on Ethologically Inspired Social Behavior Model	SS Close Proximity Human Robot Interaction	Oral Interactive	October 23	T3 13:15-15:15
WF-011142	Unsupervised Feature Extraction from RGB-D Data for Object Classification: a Case Study on the YCB Object and Model Set	SS Collaborative Robots in Smart Manufacturing	Oral Interactive	October 23	T3 13:15-15:15
WF-036897	Traffic Flow Stablization Strategy for Mitigating Automated and Human Driven Vehicles Interactions	SS Connected and Automated Vehicle Integration, Safety, and Environment Design	Oral Interactive	October 23	T3 13:15-15:15
WF-007188	Implementation of Superconducting Cables in Medium Voltage DC Integrated Power Systems on All Electric Ships	SS DC Shipboard Power Systems for the Future All Electric Ships	Oral Interactive	October 23	T3 13:15-15:15
WF-032093	Developing Diagnostics and Prognostics of Data Center Systems Implementing with Condition-Based Maintenance	SS Efficiency of Modern Data Centers	Oral Interactive	October 23	T3 13:15-15:15
WF-036315	A New DC-DC Multilevel Breed of XY Converter Family for Renewable Energy Applications: LY Multilevel Structured Boost Converter	SS Emerging Converter Topologies and Control for High-Performance PV Systems	Oral Interactive	October 23	T3 13:15-15:15
WF-032662	Feasibility Study on Thermal Energy Harvesting for Low Powered Electronics in High-Voltage Substations	SS Energy Harvesting for The Industrial IoT	Oral Interactive	October 23	T3 13:15-15:15
WF-013064	Analysis of Linear Interface Algorithms for Power Hardware-in-the-Loop Simulation	SS Geographically Distributed Real-Time Simulation and Lab-Based Testing of Power Systems	Oral Interactive	October 23	T3 13:15-15:15
WF-017914	Asynchronous Integration of a Real-Time Simulator to a Geographically Distributed Controller through a Co-Simulation Environment	SS Geographically Distributed Real-Time Simulation and Lab-Based Testing of Power Systems	Oral Interactive	October 23	T3 13:15-15:15
WF-020664	A Hardware-In-the-Loop Platform for Testing Networked Controllers for Microgrids	SS Geographically Distributed Real-Time Simulation and Lab-Based Testing of Power Systems	Oral Interactive	October 23	T3 13:15-15:15

WF-037095	Wave Transformation Based Interface Algorithm for Distributed Simulation of HVDC systems	SS Geographically Distributed Real-Time Simulation and Lab-Based Testing of Power Systems	Oral Interactive	October 23	T3 13:15-15:15
WF-014931	A Lyapunov Stability Theorem Based Control Strategy for Single-Phase Neutral-Point-Clamped Quasi-Impedance Source Inverter with LCL Filter	SS Impedance Source Converter Topologies and Applications	Oral Interactive	October 23	T3 13:15-15:15
WF-020176	Novel Control Algorithm for V/f Control of PWAM Based Induction Motor Drive	SS Impedance Source Converter Topologies and Applications	Oral Interactive	October 23	T3 13:15-15:15
WF-025496	FPGA-based Hardware in the Loop Test-Bench for Robust Software Development of Induction Heating Appliances	SS Induction Heating Systems	Oral Interactive	October 23	T3 13:15-15:15
WF-003832	A Combination Method of Fingerprint Positioning and Propagation Model Based Localization in 3D Large-Scale Indoor Space	SS Innovative Approaches to Industrial Wireless Systems	Oral Interactive	October 23	T3 13:15-15:15
WF-006351	Temperature prediction intelligent system based on BP neural network in wireless industrial IoT	SS Innovative Approaches to Industrial Wireless Systems	Oral Interactive	October 23	T3 13:15-15:15
WF-030414	A Navigation Method for Mobile Robots with 3D LiDAR and Monocular Camera	SS Machine Vision, Control and Navigation	Oral Interactive	October 23	T3 13:15-15:15
WF-036463	Predictive Sliding Mode Tracking Control for a Class of SISO Systems	SS Motion Control in Highly Dynamic Mechatronic Systems	Oral Interactive	October 23	T3 13:15-15:15
WF-000647	Direct Duty Ratio Control of Buck DC-DC Converters Using Disturbance Observer Based Integral Sliding Mode Control	SS Nonlinear Uncertain System Control With Application to Industrial Electronics	Oral Interactive	October 23	T3 13:15-15:15
WF-001171	Control of Electric Excitation Synchronous Motor Based on Hybrid Air Gap Flux Observation Model	SS Nonlinear Uncertain System Control With Application to Industrial Electronics	Oral Interactive	October 23	T3 13:15-15:15
WF-014591	Robust Output Feedback Control for a 3-DOF Helicopter System	SS Nonlinear Uncertain System Control With Application to Industrial Electronics	Oral Interactive	October 23	T3 13:15-15:15
WF-026204	Sliding Mode Control of Manipulator Based on Nominal Model and Nonlinear Disturbance Observer	SS Nonlinear Uncertain System Control With Application to Industrial Electronics	Oral Interactive	October 23	T3 13:15-15:15
WF-009873	Fault-Tolerant Predictive Control of a Doubly-Fed Induction Generator With Minimal Hardware Requirements	SS Recent Advances in Multilevel Inverters for Renewable Energy Integration	Oral Interactive	October 23	T4 15:45-18:00
WF-013617	Phase Power Balancing of An Interphase Grid-connected CHB-QAB PV Systems	SS Recent Advances in Multilevel Inverters for Renewable Energy Integration	Oral Interactive	October 23	T4 15:45-18:00
WF-032948	Proportional-Integral and Proportional-Resonant Based Control Strategy for PUC Inverters	SS Recent Advances in Multilevel Inverters for Renewable Energy Integration	Oral Interactive	October 23	T4 15:45-18:00
WF-016349	On the occurrence of nonlinear dynamic phenomena in the hysteresis-controlled switched reluctance motor drive	SS Recent Advances on Design and Control of Synchronous Reluctance and Switched Reluctance Machines	Oral Interactive	October 23	T4 15:45-18:00
WF-035904	Control System for Open-End Winding Sync-Rel Motors with a Floating Capacitor Bridge	SS Recent Advances on Design and Control of Synchronous Reluctance and Switched Reluctance Machines	Oral Interactive	October 23	T4 15:45-18:00
WF-015482	First Insights on the Electromagnetic Design of Axial-Flux Synchronous-Reluctance Maschine	SS Recent Advances on Design and Control of Synchronous Reluctance and Switched Reluctance Machines	Oral Interactive	October 23	T4 15:45-18:00
WF-027618	Optimal Design of SRMs for Comparable Output with PMSMs	SS Recent Advances on Design and Control of Synchronous Reluctance and Switched Reluctance Machines	Oral Interactive	October 23	T4 15:45-18:00
WF-036447	Event-triggered sliding-mode output consensus of the heterogeneous MAS with external disturbances	SS Recent Progress in Human Factors	Oral Interactive	October 23	T4 15:45-18:00

WF-033529	Probe Design for High-Precision Eddy-Current Displacement Sensors	SS Smart Sensors for Industrial Applications Forum	Oral Interactive	October 23	T4 15:45-18:00
WF-019968	Vibration Condition Monitoring using Machine Learning	SS Smart Technologies and Case Study for Industrial Applications and Safety	Oral Interactive	October 23	T4 15:45-18:00
WF-026174	An Overview of Technologies for Lower Energy Consumption in Smart Buildings	SS Smart Technologies and Case Study for Industrial Applications and Safety	Oral Interactive	October 23	T4 15:45-18:00
WF-027103	Robustness Analysis of Voltage Control Strategies of Smart Transformer	SS Smart Transformer: Design, Control and Impact on Future Distribution Grids	Oral Interactive	October 23	T4 15:45-18:00
WF-001511	Event-triggered Secure Estimation for Large-scale Interconnected Systems Based on Intermediate Estimator	SS Stability Analysis and Security Control of Hybrid Networked Systems	Oral Interactive	October 23	T4 15:45-18:00
WF-025577	Observer-Based Sliding Mode Control of a 2-DOF Helicopter System	TT Mechatronics and Robotics	Oral Interactive	October 23	T4 15:45-18:00
WF-014664	Fuzzy-Based Sliding Mode Control and Sliding Mode Control of a Spherical Robot	TT Mechatronics and Robotics	Oral Interactive	October 23	T4 15:45-18:00
WF-020109	Survey on Energy based Control for Brachiation Robots	TT Mechatronics and Robotics	Oral Interactive	October 23	T4 15:45-18:00
WF-026409	Wavelet-Based Visual Tracking System for Miniature Aerial Vehicle	TT Mechatronics and Robotics	Oral Interactive	October 23	T4 15:45-18:00
WF-027367	A Calibration Method for Laser Guided Robotic Manipulation for Industrial Automation	TT Mechatronics and Robotics	Oral Interactive	October 23	T4 15:45-18:00
WF-019445	Implementation of Emperical Decomposition Control in Shunt Active Filter Based On Cascaded Multilevel Inverter with Single Excited DC Source	TT Power Electronics Converters	Oral Interactive	October 23	T4 15:45-18:00
WF-023302	UDE-based Robust Control for AC/DC Converters	TT Power Electronics Converters	Oral Interactive	October 23	T4 15:45-18:00
WF-012181	Current Sensor-less Control for Boost DC-DC Converter Based on Switched Observer	TT Power Electronics Converters	Oral Interactive	October 23	T4 15:45-18:00
WF-013528	Development of 3.3 kV-100 kW Extremely High Efficiency SiC Chopper	TT Power Electronics Converters	Oral Interactive	October 23	T4 15:45-18:00
WF-024783	Current-fed Full-Bridge Boost DC-DC Converter with Adaptive Resonant	TT Power Electronics Converters	Oral Interactive	October 23	T4 15:45-18:00
WF-005436	Design considerations of the Class E dc-dc converter in wide input voltage range with ON-OFF control	TT Power Electronics Converters	Oral Interactive	October 23	T4 15:45-18:00
WF-009091	Two-Switch Reset Winding Forward Converter with Low Input Current Ripple	TT Power Electronics Converters	Oral Interactive	October 23	T4 15:45-18:00
WF-020982	Modular EV Fast Charging Station Architectures based on Multiphase-Medium-Frequency Transformer	TT Power Electronics Converters	Oral Interactive	October 23	T4 15:45-18:00
WF-029408	Nonlinear Modeling and Control of PWM DC-DC Buck-Boost Converter for CCM	TT Power Electronics Converters	Oral Interactive	October 23	T4 15:45-18:00
WF-031275	Voltage Feedback of an LLC Resonant Converter with a Rotary Transformer	TT Power Electronics Converters	Oral Interactive	October 23	T4 15:45-18:00
WF-003956	Design Considerations of a Flying Capacitor Multilevel Flyback Converter for DC-DC and Pulsed Power Applications	TT Power Electronics Converters	Oral Interactive	October 23	T4 15:45-18:00
WF-026565	A fault ride-through strategy based on MMC inner capacitor energy storage	TT Power Electronics Converters	Oral Interactive	October 23	T4 15:45-18:00