

8th IEEE India International Conference on Power Electronics (IICPE) 2018
13th – 15th December, 2018
Oral Presentation Schedule

The following is the schedule for IICPE 2018 for the oral sessions. The paper titles with session details (name, date, time and venue) are given.

Day 1: 13th December, 2018

Oral Session 1

Time: 2:00pm – 6:00pm

Track: SGT I

Venue: Room 1

	Paper ID	Paper Name
1.	28	Effect of Plug-in Electric Vehicles on Load Frequency Control
2.	31	Six Phase Transmission Line Boundary Protection Using Wavelet Transform
3.	40	An Online Adaptive Intelligent Framework for Customer Willingness Interpretation in Demand Response Exchange
4.	85	Moth Search Optimization for Optimal Integration of DERs for Annual Energy Loss Minimization in Distribution Systems
5.	101	Modelling & Steady State Compliance Testing of an Improved Time Synchronized Phasor Measurement Unit Based on IEEE Standard C37.118.1
6.	188	Wide-area PMU-ANN based monitoring of low frequency oscillations in a wind integrated power system
7.	204	Improving Performance of UPQC-DG for Compensation of Unbalanced Loads
8.	247	Discrete Time mode PSS Controller Techniques to Improve Stability of AC Microgrid
9.	264	Locating The Source of Forced Oscillation in Power Systems using System Oscillating Energy
10.	265	Wavelet Ridge Based Technique to Detect the Presence of Sustained Oscillation in Power System
11.	320	Smart Household Energy Management by Employing EV and BESS as Enabling Technologies
12.	343	A Singular Spectrum Analysis based Approach to Price Forecasting for a Day Ahead Electricity Market
13.	347	Comparative Evaluation of different PD of TD-PLL Using Small Signal Modelling for Single Phase Grid Tied Inverters under Grid Disturbances

Track: TEV I

Venue: Room 2

	Paper ID	Paper Name
1.	5	EV Benefit Evaluation in a Collaborative Scheduling Environment with Penalties for Unscheduled EVs
2.	45	Impact of Renewable Energy Sources and Electric Vehicle Penetration on Generation Scheduling
3.	140	Planning of Fast Charging Stations in Distribution System Coupled with Transportation Network for Capturing EV flow
4.	172	Integrated TOU Price-Based Demand Response and Dynamic G2V Charge Scheduling of Electric Vehicle Aggregator
5.	175	Decentralized PEV's Energy Management Scheme for Supplementary Frequency Regulation Considering Mobility Behaviour
6.	179	Solar PV Fed Fast Charging Converter with Isolated Unidirectional Dual-Bridge Topology
7.	199	Performance Improvement Using Self-Tuning Fuzzy Logic Control with Application in LEV Using SRM
8.	214	Optimally controlled driving cycle in parallel hybrid power train based hybrid electric vehicle
9.	250	CAPSA based Control of Solar PV Array Integrated EV Charging Station Operating in Standalone, and Grid Connected Modes
10.	255	A Modified Duty Cycle Frequency Control Soft Switching of Full Bridge DC-DC Converter for Electric Vehicle Battery Charging
11.	256	A Comparison of Switching Techniques of DC-DC Converter for Improved Electric Vehicle Efficiency
12.	272	An Improved Bidirectional dc/dc Converter with Split Battery Configuration for Electric Vehicle Battery Charging/Discharging
13.	324	An Electric Vehicle Battery Charger with Interleaved PFC Cuk Converter
14.	355	Reference Signal Generation for BLDC Motor Drives based on Different Sector Identification Methodologies using Hall Based Sensor

Track: PE I

Venue: Room 3

	Paper ID	Paper Name
1.	18	Fault Diagnosis of the Newfangled Cascaded H-Bridge Multilevel Inverter
2.	118	Low Voltage Ride-Through Capability of a Novel Grid Connected Inverter Suitable for Transformer-less solar PV grid interface
3.	67	Switched-Capacitor-Based Three-Phase Five-Level Inverter Topology With Reduced Components
4.	72	Realization of novel Single-phase N-level Multilevel Inverter
5.	90	Xilinx FPGA Based Single Phase Five-Level Cascaded Z-Source Inverter
6.	102	A Reduced Switch Count Hybrid Fifteen-level Inverter for an Open-End Winding Induction Motor (OEWM) Drive
7.	105	Solar PV Fed Induction Motor Driven Water Pumping System utilizing Quadratic Boost Converter
8.	107	Hybrid SPWM Techniques for Five Level Cascaded H-Bridge Inverter
9.	121	Human Muscle Energy Harvesting: Models and Application for Low Power Loads
10.	176	Peak Current Mode Control of Coupled Inductor based High Step-Up Gain Boost Converter
11.	178	Single-Phase Grid Interfaced Hybrid Solar PV and Wind System using STF-FLL for Power Quality Improvement
12.	133	Space Vector based Zero Sequence Voltage Elimination Technique for an Even Level Inverter
13.	177	A Novel Hybrid Quasi Z-Source Based T-Type Seven-Level Inverter
14.	248	Prototype Non-Volatile FPGA SVPWM Controller for 3-Level Inverter
15.	328	100 kW Induction Motor for Hybrid Electric Tracked Vehicle- Design steps and challenges

Track: RE I

Venue: Room 4

	Paper ID	Paper Name
1.	75	Real Time Implementation of Solar PV Energy System under Weak Grid Conditions
2.	82	A Grid Interactive Microgrid Based on Wind Driven DFIG and Solar PV Array with Regulated Power Flow Functionality
3.	104	Voltage and Frequency Control with Load Levelling of PMSG Based Small-Hydro System
4.	108	Automatic Power Control of a Wind- Hydro- Grid based Interconnected System for Rural Electrification
5.	126	Improved Damped Quadrature SOGI Control algorithm for Solar PV-Hydro Battery Based Microgrid
6.	130	Natural Genetics Adapted Control for an Autonomous Wind-Battery Based Microgrid
7.	136	Hybrid Islanding Detection Method based on ROCOF over Reactive Power and d-Axis Current Injection
8.	137	Neuro-Fuzzy Logic Based Control Scheme for PV-Battery Integrated Sensorless Induction Motor Drive for Water Pumping
9.	138	Riemann-Liouville Operator Based FNLMS Algorithm for 3 Phase- 4 Wire SyRG-PV-BES Based Microgrid
10.	159	Control of Renewable Energy Integrated Universal Active Filter for Modern Distribution Systems
11.	161	Comparative Study on Solar Photovoltaic Array Configurations Under Irregular Irradiance Conditions
12.	180	Solar Power Based Water Pump Employing Z-Source Inverter For PMSM Drive
13.	230	Multifunctional Capability with Seamless Transition of Three-Phase Grid using FLMF Control Approach
14.	235	System Inertia Prediction for Primary Frequency Response Adequacy Under Uncertain Wind Generation
15.	276	A Maximum Power Point Tracking Technique for PV under Partial Shading Condition

Day 2: 14th December, 2018

Oral Session 2

Time: 10:45am – 12:45pm

Track: EMD I

Venue: Room 1

	Paper ID	Paper Name
1.	78	Single Stage Solar PV Powered Water Pump with a Storage System
2.	110	Modeling, Simulation, and Analysis of Series Connected Split-Phase Synchronous Motor Drive
3.	193	Space Vector PWM Techniques for Parallel Connected Dual-Split-Phase IMs for Full Power Range Using Capacitive Filters
4.	224	Super Twisting SMC Based Speed Sensorless PMSM Driven Solar PV Water Pumping System
5.	229	Voltage Unbalance: Impact of Various Definitions on Severity Assessment for Adjustable Speed Drives
6.	243	Modeling and Simulation of Slip-Ring Induction Motors with Stator and Rotor Inter-turn Faults for Diagnostics
7.	244	Bearing Fault Detection in Induction Motors Using Discrete-time Extended Kalman Filter
8.	246	Model-Based Fault Detection and Diagnosis of Slip-Ring Induction Motors: A Simulation Study

Track: EDC

Venue: Room 2

	Paper ID	Paper Name
1.	14	An Improved Power Loss Modeling of the MOSFET Using the Flyback SMPS
2.	206	Effect of a thick buffer in the OFF state simulation of AlGa _N /Ga _N HEMT
3.	254	An Effect of the Electromagnetic Compatibility (EMC) in the Flyback Converters
4.	274	A Direct-Digitizer Interface Based on Dual-Slope Technique for Giant Magneto-Resistance Sensors
5.	322	An Improved Temperature Invariant Ring Oscillator for Low Power Application
6.	333	Investigation of Power Quality in Power Distribution System using Real-time Simulator
7.	457	Frequency Reconfigurable Double-sided Slot Antenna Using Close-coupled Biasing Technique

Track: PE II

Venue: Room 3

	Paper ID	Paper Name
1.	187	Indirect Current Control of Single-stage Grid-tied Photovoltaic using PSO Assisted PI Controller
2.	202	Switched Inductor-Switched Capacitor based high gain hybrid dc-dc converter
3.	211	Standalone Solar PV System Using DCMLI-DAB Converter with Battery Storage
4.	226	Single Stage SEGS Tied to the Three Phase Grid
5.	236	Utility Integrated Variable Speed Wind Energy Conversion System Using Innovation Sequence based Modified Kalman Type Estimator and Improved Robust Control Technique
6.	252	State Estimation for Cascaded Hybrid Multi-level Inverter Fed Induction Motor Drive Using Derivative-free Extended Kalman Filter
7.	273	Simplified Controller Design Approach for Quadratic Boost Converter
8.	332	An Asymmetric Seven Level Multilevel Converter for Grid Integrated Systems

Track: RE II

Venue: Room 4

	Paper ID	Paper Name
1.	290	Performance Analysis of PMSG for Wind Turbine using Optimum Torque Control and D-Axis current Control
2.	296	Fault Classification for Single Phase Photovoltaic Systems using Machine Learning Techniques
3.	304	Single Phase Solar Inverter with Inertia Emulation
4.	309	Output Power Maximization of Wind Energy Conversion System using Doubly Fed Induction Generator
5.	313	Real Time Energy Management System and Control Strategy for DC Microgrid
6.	315	Distributed Control Framework for Autonomous Seamless Operation of Electronically Interfaced Distributed Generators in AC Microgrid
7.	334	EGI Based Control for a Grid Tied Double Stage Solar PV System
8.	434	A 3 Phase Grid Connected SPV System Using Synchroconverter

Day 2: 14th December, 2018

Oral Session 3

Time: 4:00pm – 6:00pm

Track: SGT II

Venue: Room 1

	Paper ID	Paper Name
1.	351	Impact of Optimal Scheduling of DRs and Network Reconfiguration on the Performance of Active Distribution Systems
2.	408	Investigation of Weather Influence in Day-Ahead Hourly Electric Load Power Forecasting with New Architecture Realized in Multivariate Linear Regression & Artificial Neural Network Techniques
3.	428	Frequency Control in an Autonomous Two-area Hybrid Microgrid using Grasshopper Optimization based Robust PID Controller
4.	452	IAE and ISE Performance Criterion Based Loop Filter Tuning of Transport Delay-Phase Locked Loop (TD-PLL) for Single Phase Grid Connected Inverters

Track: CS

Venue: Room 2

	Paper ID	Paper Name
1.	141	Receding Horizon Control of Greenhouse Integrated with Fogger and Rooftop Wind Turbine
2.	181	Self-sensing characteristics and analysis of the stiffness of the SMA spring actuator
3.	208	Design and development of electro mechanical bistable functions using shape memory alloy
4.	237	A study on different configurations of fractional order fuzzy logic controller scheme for robotic manipulator using NSGA-II
5.	263	Improved Internal Model Control based Closed Loop Controller Design for Second Order Piezoelectric System with Dead Time
6.	305	Discretization schemes Comparison for the Greenhouse Temperature Model
7.	483	State Feedback Generalized Based Controller for Utility Integrated PV System
8.	484	A Novel Control Scheme for Solar PV Fed PMSM riven Energy Efficient Water Pumping System

Track: PE III

Venue: Room 3

	Paper ID	Paper Name
1.	277	A Novel Three-Phase Low Voltage (LV) Dynamic Voltage Restorer (DVR) Employing Semi-Z-Source Inverter
2.	284	Hybrid Space Vector Modulation Scheme for Dual Inverter Fed Open End Winding Induction Motor Drive for Improved Harmonic Distortion
3.	289	An isolated hydro power generation using parallel asynchronous generators at variable turbine inputs using AC-DC-AC converter
4.	291	A Novel Reduced Device Count Multilevel Inverter Structure using Non-isolated Power Supplies
5.	295	Modified Gating Signal Controlled High-Frequency Transformer Isolated LCL-T Type DC-DC Resonant Power Converter
6.	386	Design and Modeling of High gain DC-DC Converter in Mixed Signal Domain Control for PV based Microgrid Application
7.	391	Power Quality Analysis of Single Phase Conventional AC Chopper Based Small Power Heating Oven Systems

Track: RE III

Venue: Room 4

	Paper ID	Paper Name
1.	335	Primary Frequency Response Constrained Interruptible Load Scheduling Under PV Generation
2.	336	Power Flow Analysis of Unbalanced Distribution Network with Integration of Various Characteristics DGR
3.	341	Implementation and Comparative Analysis of P&O and INC MPPT Method for PV System
4.	359	Evaluation of Wind Power Effects on Environmental/Economic Load Dispatch Problem by an Intelligent Algorithm
5.	361	Generalized Normalized Gradient Descent Based Control Algorithm for Solar PV Integrated 3P4W Distribution System
6.	371	Evaluating the shortest path for laying distribution network in a hilly area
7.	402	PV Connected Grid-tied Discreet Current Controller for Distribution System
8.	404	Disturbance Observer Based Robust Control Design of Variable Speed Wind Turbine

Day 3: 15th December, 2018

Oral Session 4

Time: 10:45am – 12:45pm

Track: OA

Venue: Room 1

	Paper ID	Paper Name
1.	23	Acuation Voltage Analysis Using FEM of RF MEMS Switch Design for Low Power Consumption Application
2.	64	Simulation and Analysis of Pulse Power Supply for Mercury-free Plasma UV-lamp
3.	194	Coordinating Bidding Strategy of Profit Maximization for Competitive Power Suppliers in Energy and Reserve Markets
4.	215	Application of Intelligent Grey Wolf Optimizer for Transient Stability Constraints Optimal Power Flow
5.	297	Design and Analysis of Multiple bands Spider Web shaped Circular Patch Antenna for IoT Application
6.	340	Fractional Calculus Based PID controller tuned by SMO for LFC Application
7.	348	Dynamic Retail Pricing for Load Serving Entity Under Significant Renewable Energy Penetration
8.	358	Application of FGMOS Based Wilson Current Mirror in Transimpedance Amplifier
9.	437	Harmonic mitigation in multi feeder using multi converter-unified power quality conditioning system

Track: ESBM

Venue: Room 2

	Paper ID	Paper Name
1.	51	Current Mirror Curcuit Based Low Cost Lead Acid Battery Charger for Solar PV
2.	190	Assessment of Energy Storage Potential for Primary Frequency Response Adequacy in Future Grids
3.	227	Operational Strategy of Energy Storage to Address Day-Ahead Scheduling Errors in High RE Scenario
4.	339	Cloud Energy Storage Management System with Price Fluctuations and Distributed Generation Intermittency
5.	356	Stacked Benefits of Energy Storage in Microgrid Scheduling

Track: PE IV

Venue: Room 3

	Paper ID	Paper Name
1.	400	Device Loss and Thermal Characteristics of High Power PWM Converters
2.	405	An Electrically Isolated Low Power LED Driver Offering Power Factor Correction with Ameliorated Mains Current THD
3.	419	Average Model of Isolated Bidirectional DC-DC Converter with Auxiliary Isolated Clamp
4.	445	Modeling and Investigation of Insulation Defects by Partial Discharge in HV XLPE Cable
5.	447	A Single Phase Quasi-Z Source based Seven-Level Inverter with Capacitor Voltage Balancing
6.	450	Performance Comparison of Non-ideal and Ideal Models of DC-DC Buck Converter
7.	464	Improved Dual Battery Charging System for Grid Connected Bi-directional EV Charger
8.	466	A Non-isolated Doubly Boost DC-DC Converter for Grid Connected Solar Photovoltaic Systems
9.	481	A Power Factor Corrected EV Battery Charger Using Boost Converter

Track: RE IV

Venue: Room 4

	Paper ID	Paper Name
1.	7	Multi-functional Bi-directional DC-DC/AC Converter Topology for Single Phase Microgrid Applications
2.	438	Maximum Power Point Tracking Using a Novel Current Control Strategy in an SRG Based Variable Speed Wind Energy Conversion System
3.	451	Distributed Control Strategy for the Coordinated Control Operation of the Distributed Generators
4.	462	Real-time Fuzzy Logic Based Power Quality Analysis of Hybrid microgrid System
5.	465	An Approach to Reduce the Number of Sensors for MPPT of Series Connected Solar PV Panels Facing Mismatched Operating Conditions
6.	152	A New Islanding Detection Method Using Transfer Learning Technique

Day 3: 15th December, 2018

Oral Session 5

Time: 4:00pm – 6:00pm

Track: EMD II

Venue: Room 1

	Paper ID	Paper Name
1.	267	18-Sector Direct Torque Controlled Strategy with Improved Stator Flux Estimator for Induction Motor Drive
2.	308	Nonlinear Control Modeling with State Observer-Based Parameter Estimation for PMSM Drive
3.	378	Experimental Investigations on a High-Speed Rotor for a Switched Reluctance Machine
4.	382	A Carrier based PWM Scheme for Dual Inverter-fed Open-end Winding Induction Motor with Single DC Source
5.	413	Induction Motor Control using Modified Indirect Field Oriented Control
6.	440	Reduced Flux based Direct Torque Control of Synchronous Reluctance Machine for Electric Vehicle applications
7.	449	A SyRM Drive Based Solar PV Array Fed Water Pumping System
8.	456	Virtual Space Vector Based Direct Torque Control Schemes for Induction Motor Drives

Track: TEV II

Venue: Room 2

	Paper ID	Paper Name
1.	192	Solar Energy Integration with New Boost Converter for Electric Vehicle Application
2.	196	Customer oriented electric vehicle charging scheduling in day-ahead market via aggregative game model
3.	370	An Empirical Capacity Degradation Modeling and Prognostics of Remaining Useful Life of Li-ion Battery using Unscented Kalman Filter
4.	384	Constrained unit commitment based power generation dispatching with integration of PHEVs
5.	411	Unit commitment in thermal power generation dispatching with integration of PHEVs
6.	472	Backward/Forward Method for 3 Phase power flow calculation in low voltage distribution networks with EV Charging Points
7.	475	Improved Sliding Mode Observer.....for Electric Vehicle
8.	477	An Efficient Wireless Topology for EV Battery Charging

Track: Skype Session

Venue: NKN Room

	Paper ID	Paper Name
1.	473	Cooperative Energy Scheduling of Micrprgrids with Renewable Energy Integration
2.	474	Risk-constrained Energy Management of Cooperative Microgrids
3.	91	Carrier Based Modulation of Multimodular Matrix Converter with Indirect Structure
4.	92	Modified Space Vector Modulated three phase to three phase Matrix Converter Under Unbalanced Supply Conditions
5.	171	Optimal Air-gap of a Magnetic Resonant Inductive Link for Maximum Wireless Power Transfer
6.	65	A Comparitive study of a T-type Asymmetrical Multilevel Inverter with Two Different Sources with Conventional H-bridge Converter
7.	123	Solar Power Based Single-Phase Transformerless Hybrid Series Active Filter based on Sliding Mode Controller for voltage and frequency deviations
8.	279	Transfer Function Approach of Designing Type-II Compensator and Performance Analysis of Boost Converter
9.	294	Design of Modular Multilevel Converter for micro grid inked photovoltaic system
10.	469	DFIG Based Wind Turbine Protection Using Active CROWBAR and SVC During Grid Faults
11.	443	Microcontroller-Based Current Sensorless Photovoltaic MPP Tracker
12.	444	Development of Observer-Based Photovoltaic MPP Tracker under Partial Shading Conditions
13.	397	Nash Differential Evolution (NashDE) Algorithm for WAMS Planning
14.	268	A novel Single Switch High Gain dc-dc Converter