# Power Electronics Projects

## *I. POWER ELECTRONICS based MULTI-PORT SYSTEMS*

1. Three-Port Converter with Power Transfer Capability Using Three-Leg Rectifier for Renewable Energy Applications**. (IEEE 2016)**
2. Full Bridge Three-Port Converter Based on Bridgeless Boost Rectifier and Bidirectional Converter for Multiple Energy Interface**. (IEEE 2016)**
3. An Interleaved-Boost Full-Bridge Three Port Converter for Hybrid Renewable Energy Systems.**(IEEE 2016)**
4. A Triple Active Bridge DC-DC Converter Capable of Achieving Full-Range Zero Voltage Switching.**(IEEE 2016)**

## *II. POWER ELECTRONICS based RENEWABLE ENERGY*

1. High-Gain Single-Stage Boosting AC to DC Conversion for Photovoltaic Applications**. (IEEE 2016)**
2. A Single-Phase PV Quasi-Z-Source Inverter with Reduced Capacitance Using Modified Modulation and DFRSC. **(IEEE 2016)**
3. A Medium Frequency Transformer-Based Wind Energy Conversion System Used for CSC Based Offshore Wind Farm. **(IEEE 2016)**
4. Ultra-capacitor-Battery Hybrid Energy Storage System Based on the Asymmetric Bidirectional Z Source Topology for Electric Vehicle**. (IEEE 2016)**
5. Analysis the Efficient Single Phase Transformerless Inverter for Grid-Tied PVG System With Reactive Power Control**. (IEEE 2016)**
6. Highly Reliable Transformerless PV Inverters with Leakage Current and Pulsating Power Elimination**. (IEEE 2016)**

## *III. POWER ELECTRONICS based CONVERTERS*

1. Obtaining High Gain DC–DC Converter Based on the Cockcroft–Walton Multiplier**. (IEEE 2016)**
2. A Three-State Switching Mixed With Magnetic Coupling and Voltage Multiplier Techniques for High Gain Conversion. **(IEEE 2016)**
3. Efficiency utilization of Coupled-Inductor-Based Step-Down Converter**. (IEEE 2016)**
4. Buck-Boost Converters Based on Semi active Rectifiers for High-Output Voltage Applications**. (IEEE 2016)**
5. A Sensitivity-Improved PFM LLC Resonant Full Bridge Boost Converter with LC opposed Resonant Circuitry. **(IEEE 2016)**
6. High-Efficiency LLC Resonant Converter with improved Gain Using an Auxiliary LC Resonant Circuit. **(IEEE 2016)**
7. Multi-input boost Converters Based on the Switched-Diode-Capacitor Voltage Accumulator. **(IEEE 2016)**
8. Achieving Charging Operation of a Dickson Switched-Capacitor Converter. **(IEEE 2016)**
9. A PWM Plus Phase-Shift Controlled Boost Converter Based on Semi-active Quadrupler Rectifier for High Step-Up Applications. **(IEEE 2016)**
10. Estimate High Efficiency Coupled-Inductor Based Step-Down Converter**. (IEEE 2016)**

## *IV. POWER ELECTRONICS based POWER FACTOR CORRECTION CONVERTER*

1. LCL Filter Design for Power Factor Correction using Line Impedance Stabilization Network**. (IEEE 2016)**
2. Control of a Three-Phase Boost Power Factor Correction Rectifier**. (IEEE 2016)**
3. A bidirectional single-stage Rectifier with high-frequency Isolation and power factor Correction**. (IEEE 2016)**
4. Bumpless Control for Reduced harmonic Distortion in Power Factor Correction Circuits**. (IEEE 2016)**

## *V. POWER ELECTRONICS based INVERTERS*

1. Analysis and Design of Modified Half-Bridge Series Resonant Inverter with Diode Clamp-Link Neutral-Point Clamped Cell**. (IEEE 2016)**
2. Simulate Hybrid Modulation Scheme for a High-Frequency AC-Link Inverter. **(IEEE 2016)**
3. A Coupled Inductor Based Inverter with Sub–Unity Turns–Ratio Range**. (IEEE 2016)**
4. Switched-Coupled-Inductor Quasi-Z-Source DC conversion. **(IEEE 2016)**
5. A Zero Voltage Source Grid-Connected Full-Bridge Inverter with a Novel ZVS SPWM Scheme**. (IEEE 2016)**
6. Dual Step Down Inverter with Series Connected Diodes and Single Inductor**. (IEEE 2016)**
7. Analysis of Three-Phase Split-Source Inverter (SSI). **(IEEE 2016)**
8. PWM Technique for High Voltage Gain Operation of Three-Phase Z-Source Inverters**. (IEEE 2016)**
9. Bidirectional DC-AC Converter with Non-Complementary Active-Clamp Circuits. **(IEEE 2016)**
10. High-Efficiency Bidirectional Dual Active Bridge Inverter Using a Novel Hybrid Modulation for Stand-Alone Power Generating System with Low Input Voltage**. (IEEE 2016)**

## *VI. POWER ELECTRONICS based MULTILEVEL INVERTERS*

1. A Family of multilevel Dual-Buck Full-Bridge Inverters for Grid-Tied Applications**. (IEEE 2016)**
2. A Single DC Source Cascaded Inverter Integrating Switched Capacitor Techniques**. (IEEE 2016)**
3. An Enhanced Single Phase Boost Five-Level Inverter**. (IEEE 2016)**
4. A New Cascaded Inverter Based on Improved Series– Parallel Conversion with Less Number of Components. **(IEEE 2016)**
5. Design a Novel Multilevel DC–AC Inverter. (IEEE 2016)