POWER ELECTRONICS Projects

I. POWER ELECTRONICS based MULTI-PORT SYSTEMS

1. An Interleaved Half-Bridge Three-Port Converter With Enhanced Power Transfer Capability Using Three-Leg Rectifier for Renewable Energy Applications. **(IEEE 2016)**
2. Secondary-Side-Regulated Soft-Switching Full Bridge Three-Port Converter Based on Bridgeless Boost Rectifier and Bidirectional Converter for Multiple Energy Interface. **(IEEE 2016)**
3. Analysis, Design, Modeling and Control of 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 ZVS . **(IEEE 2016)**

II. POWER ELECTRONICS based RENEWABLE ENERGY

1. High-Gain Single-Stage Boosting Inverter for Photovoltaic Applications. **(IEEE 2016)**
2. A Single-Phase PV Quasi-Z-Source Inverter With Reduced Capacitance Using Modified Modulation and Double-Frequency Ripple Suppression Control. **(IEEE 2016)**
3. A Medium Frequency Transformer-Based Wind Energy Conversion System Used for Current Source Converter Based Offshore Wind Farm. **(IEEE 2016)**
4. Ultra-capacitor-Battery Hybrid Energy Storage System Based on the Asymmetric Bidirectional Z Source Topology for EV. **(IEEE 2016)**

5. Efficient Single Phase Transformer less Inverter for Grid-Tied PVG System With Reactive Power Control. **(IEEE 2016)**
6. Highly Reliable Transformer less Photovoltaic Inverters with Leakage Current and Pulsating Power Elimination. **(IEEE 2016)**

III. POWER ELECTRONICS based CONVERTERS

1. High Gain DC–DC Converter Based on the Cockcroft–Walton Multiplier. **(IEEE 2016)**
2. A Three-State Switching Boost Converter Mixed With Magnetic Coupling and Voltage Multiplier Techniques for High Gain Conversion. **(IEEE 2016)**
3. High-Efficiency Coupled-Inductor-Based Step-Down Converter. **(IEEE 2016)**
4. A Family of Isolated Buck-Boost Converters Based on Semi active Rectifiers for High-Output Voltage Applications. **(IEEE 2016)**
5. High-Efficiency LLC Resonant Converter with High Voltage Gain Using an Auxiliary LC Resonant Circuit. **(IEEE 2016)**
6. Multi-input Step-Up Converters Based on the Switched-Diode-Capacitor Voltage Accumulator. **(IEEE 2016)**
7. Split-Phase Control: Achieving Complete Soft Charging Operation of a Dickson Switched-Capacitor Converter. **(IEEE 2016)**
8. High-Efficiency Coupled-Inductor-Based Step-Down Converter. **(IEEE 2016)**

IV. POWER ELECTRONICS based POWER FACTOR CORRECTION CONVERTER

1. LCL Filter Design for Three-phase Two-level Power Factor Correction using Line Impedance Stabilization Network. **(IEEE 2016)**
2. Control of a Single-Stage Three-Phase Boost Power Factor Correction Rectifier. (IEEE 2016)

3. A bidirectional single-stage three-phase Rectifier with high-frequency Isolation and power factor Correction. **(IEEE 2016)**
4. Bumpless Control for Reduced THD in Power Factor Correction Circuits. **(IEEE 2016)**

V. POWER ELECTRONICS based INVERTERS

1. Analysis and Design of Modified Half-Bridge Series Resonant Inverter with DC-Link Neutral-Point Clamped Cell. **(IEEE 2016)**
2. Hybrid Modulation Scheme for a High-Frequency AC-Link Inverter. **(IEEE 2016)**
3. A Coupled Inductor Based High Boost Inverter with Sub–Unity Turns–Ratio Range. **(IEEE 2016)**
4. Switched-Coupled-Inductor Quasi-Z-Source Inverter. **(IEEE 2016)**
5. Dual Buck Inverter with Series Connected Diodes and Single Inductor. **(IEEE 2016)**
6. Three-Phase Split-Source Inverter (SSI): Analysis and Modulation. **(IEEE 2016)**
7. A Pulse-width Modulation Technique for High Voltage Gain Operation of Three-Phase Z-Source Inverters. **(IEEE 2016)**

VI. VI. POWER ELECTRONICS based MULTILEVEL INVERTERS

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