

POWER ELECTRONICS Projects

I. POWER ELECTRONICS based DC TO DC CONVERTER

1. Optimized Magnetics and Improved Power Devices Utilization for Photovoltaic Module Applications with DC-DC Converter. **[IEEE 2015]**.
2. Soft-Switching DC–DC Converters Based on a Phase-Shift-Controlled Active Boost Rectifier **[IEEE 2015]**.
3. An Ameliorate Single-Phase Active-Front-End Rectifier System for Use with Three-Phase Variable-Frequency Drives **[IEEE 2015]**.
4. Interleaved high step-up DC–DC converter based on three-winding high-frequency coupled inductor and voltage multiplier Cell **[IEEE 2015]**.
5. A Family of Two-Switch Boosting Switched-Capacitor AC-DC **[IEEE 2015]**.
6. Naturally Clamped Push–Pull DC/DC Converter: Analysis, Design, and Experimental Results **[IEEE 2015]**.
7. Robust ZVS Full-Bridge DC–DC Converter with Reduced Conduction Losses and Frequency Variation Range **[IEEE 2015]**.

II. POWER ELECTRONICS based RESONANT CONVERTER / INVERTER

1. Resonant Converter with Significantly Reduced High Current Side Output Filter for EV and HEV Applications **[IEEE 2015]**.
2. Transformer less Inverter for Non- isolated Micro inverter Applications **[IEEE 2015]**.



IEEE 2015

3. Resonance Analysis of Isolated Boost Converter with Coupled Inductors for Vehicle Inverter Application [**IEEE 2015**].
4. Discontinuous Modulation Scheme for a Differential-Mode Cuk DC-AC System [**IEEE 2015**].
5. Four-Switch Three-Phase SEPIC Based Inverter [**IEEE 2015**].
6. *LLC* Resonant Converter in Battery Charging Applications Based on Time-Weighted Average Efficiency [**IEEE 2015**].
7. A Phase Shift Controlled LLC Resonant Converter with Diminished Conduction Loss at Normal Operation for Hold-up Time Compensation Application [**IEEE 2015**].
8. A Multilevel Vitality Buffer and Voltage Modulator for Grid-Interfaced Micro Inverters [**IEEE 2015**].
9. Analysis and Design of *LLC* Vibrant Converters with Capacitor–Diode Clamp Current Limiting [**IEEE 2015**].
10. Systematic Model of the Half-Bridge Series Resonant Inverter for Improved Power Conversion Efficiency and Performance [**IEEE 2015**].
11. A Bidirectional LLC Resonant Converter with Automatic Forward and Backward Mode Transition [**IEEE 2015**].

III. POWER ELECTRONICS based POWER FACTOR CORRECTION (PFC) CONVERTER

1. Bridgeless PFC-Modified SEPIC Rectifier with Expanded Gain for Universal Input Voltage Applications [**IEEE 2015**].



IEEE 2015

2. A Three-Level Quasi-Two-Stage Single-Phase PFC Converter with Pliable Output Voltage and Improved Conversion Efficiency [IEEE 2015].
3. Large-Signal Sustained of AC Grid Supplying Voltage-Source Converters with LCL-Filters [IEEE 2015].
4. Transformer less Hybrid Power Filter Based on a Six-Switch Two-Leg Inverter for Harmonic Compensation Performance [IEEE 2015].

IV. POWER ELECTRONICS based RENEWABLE ENERGY

1. A Three Winding Coupled Inductor for a Fuel Energy Source Application [IEEE 2015].
2. An Interleaved Flyback Inverter for Photovoltaic Application [IEEE 2015].
3. A Quasi-Unipolar SPWM Full Bridge Transformer less PV Grid-Connected Inverter with Static Common Voltage [IEEE 2015].
4. A Novel High Step-up DC/DC Converter Established on Integrating Coupled Inductor and Switched-Capacitor Techniques for Renewable Energy Applications [IEEE 2015].
5. Study of Single-Phase Transformer less Photovoltaic Inverters for Leakage Current Suppression [IEEE 2015].

V. POWER ELECTRONICS based MULTIPLE OUTPUT CONVERTERS

1. Three-Port DC–DC Converter for Photovoltaic System [IEEE 2015].
2. Multiport Buck–Boost Converters Based on DC-Link-Inductors (DLIs) [IEEE 2015].
3. Hybrid Phase-Shift-Controlled DC–DC Converter with Active Connection at Secondary Side [IEEE 2015].