# 2015 IEEE EEE PROJECT TITLES - R

## POWER ELECTRONICS

| S.No | |
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| 1 | A Bidirectional LLC Resonant Converter With Automatic Forward and Backward Mode Transition |
| 2 | A BL-CSC Converter-Fed BLDC Motor Drive With Power Factor Correction |
| 3 | A Fast DC-Bus Voltage Controller for Bidirectional Single-Phase AC/DC Converters |
| 4 | A High Gain Input-Parallel Output-Series DC/DC Converter With Dual Coupled Inductors |
| 5 | A High Step-Up Converter with Voltage-Multiplier Modules for Sustainable Energy Applications |
| 6 | A High Step-Up DC to DC Converter Under Alternating Phase Shift Control for Fuel Cell Power System |
| 7 | A High-Efficiency MOSFET Transformer less Inverter for Non isolated Micro inverter Applications |
| 8 | A Multi-Input Bridgeless Resonant AC-DC Converter for Electromagnetic Energy Harvesting |
| 9 | A Novel Drive Method for High-Speed Brushless DC Motor Operating in a Wide Range |
| 10 | A Novel High Step-up DC/DC Converter Based on Integrating Coupled Inductor and Switched-Capacitor Techniques for Renewable Energy Applications |
| 11 | A Quasi-Z-Source Direct Matrix Converter Feeding a Vector Controlled Induction Motor Drive |
| 12 | Analysis of Dual-Carrier Modulator for Bidirectional Non inverting Buck–Boost Converter |
| 12 | Bidirectional PWM Converter Integrating Cell Voltage Equalizer Using Series-Resonant Voltage Multiplier for Series-Connected Energy Storage Cells |
| 14 | Bridgeless PFC-Modified SEPIC Rectifier With Extended Gain for Universal Input Voltage Applications |
| 15 | Derivation, Analysis, and Comparison of No isolated Single-Switch High Step-up Converters with Low Voltage Stress |
| 16 | Double-Switch Equalizer Using Parallel- or Series-Parallel-Resonant Inverter and Voltage Multiplier for Series-Connected Super capacitors |
| 17 | Input-Series–Output-Parallel-Connected Buck Rectifiers for High-Voltage Applications |
| 18 | Large-Signal Characterization of Power Inductors in EV Bidirectional DC–DC Converters Focused on Core Size Optimization |
| 19 | Naturally Clamped Soft-Switching Current-Fed Three-Phase Bidirectional DC/DC Converter |
| 20 | Novel Modular Multiple-Input Bidirectional DC–DC Power Converter (MIPC) for HEV/FCV Application |
| 21 | PFC Cuk Converter-Fed BLDC Motor Drive |
| 22 | Predictive Voltage Control of Transformer less Dynamic Voltage Restorer |
| 23 | Soft-Switching AC-Link Three-Phase AC–AC Buck–Boost Converter |
| 24 | The Delta Configured Modular Multilevel Converter |
| 25 | Transformer less Hybrid Power Filter Based on a Six-Switch Two-Leg Inverter for Improved Harmonic Compensation Performance |
| 26 | Two-Switch Voltage Equalizer Using an LLC Resonant Inverter and Voltage Multiplier for Partially Shaded Series-Connected Photovoltaic Modules |
| 27 | Wide Damping Region for *LCL*-Type Grid-Connected Inverter with an Improved Capacitor-Current-Feedback Method |

## POWER SYSTEMS

| S.No | |
|------|---|
| 28 | A Novel Control Method for Transformer less H-Bridge Cascaded STATCOM With Star Configuration |
| 29 | A Phase-Shifted-PWM D-STATCOM Using a Modular Multilevel Cascade Converter (SSBC)—Part I: Modeling, Analysis, and Design of Current Control |
| 30 | A Zero-Sequence Voltage Injection-Based Control Strategy for a Parallel Hybrid Modular Multilevel HVDC Converter System |

| 31 | An Adaptive Power Oscillation Damping Controller by STATCOM With Energy Storage |
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| 32 | Analysis and Impacts of Implementing Droop Control in DFIG-Based Wind Turbines on Micro grid/ Weak-Grid Stability |
| 33 | Full-bridge Reactive Power Compensator with Minimized Equipped Capacitor and its Application to Static Var Compensator |
| 34 | Minimization of the DC Component in Transformer less Three-Phase Grid- Connected Photovoltaic Inverters |
| 35 | Modular Cascaded H-Bridge Multilevel PV Inverter with Distributed MPPT for Grid-Connected Applications |
| 36 | Reactive Power Management in Islanded Micro grid—Proportional Power Sharing in Hierarchical Droop Control |

## PROJECT SUPPORT TO REGISTERED STUDENTS:

1) IEEE Base paper.
2) Abstract Document.
3) Future Enhancement (based on Requirement).
4) Modified Title / Modified Abstract (based on Requirement).
5) Complete Source Code.
6) Final Report / Document