DC DC CONVERTER

➢ Multifunctional Isolated DC-DC Converter for Electric Vehicles

➢ Interlinking Unipolar and Bipolar DC Microgrids Using a Bidirectional DC-DC Converter With Voltage Balancer Support

➢ A Novel Non-Isolated DC-DC Converter for Marine Water Pumping Applications using Solar PV System

➢ On the Control of DC-DC Converters in the SS-Compensated Wireless Power Transfer System

➢ A Low-stress High-gain Interleaved DC-DC Converter with Self-balancing Capacitor Voltage

DC /AC CONVERTERS (INVERTER)

➢ A Supercapacitor Assisted Technique for Reducing Losses in the Input Loop of an Inverter System for Solar PV Applications

➢ Implementation of Seven-Level Asymmetrical Multilevel Inverter for Solar PV Application

- MPC-Based Harmonic Injection Techniques for Reconfigurable Single/Three-Phase Inverters with Grid Neutral Point Connection
- Deadbeat Control Method for T-type Three-Phase Four-leg Three-level Inverters
- A Full-ANN Control Scheme of Single-Phase Grid-Connected Inverter
- Switching Loss Reduction in Dual Inverter Topology Using Optimized Modulation Strategy

MULTIPORT CONVERTERS

- Three-phase Single-stage Multiport Bidirectional AC-DC Converter with Reduced Power Conversion Stages
- High Gain Multiport Boost Converter for Hybrid Renewable Energy Systems
- Research on the Switch Reuse Dual Buck/Boost-DAB Four-Port DC/DC Converter
- Multiport Current Fed Push/Pull Partial Power Converter for Battery Integration in DC Microgrid
- Dual Input Step-up Converter for Portable Devices

RENEWABLE ENERGY SOURCES

- Grid-Connected Hybrid Renewable Energy System Under Various Operating Conditions

- Variable Phase-Shift Switching Strategy For Multi-Input Interleaved Boost Converters in Solar Energy Systems
- Single Inductor-Multi Input Single Output Buck-Boost Converter for PV system
- Improving Solar Power Efficiency: A Comparison of MPPT Methods with a Focus on Hybrid ANNP&O Controller
- Single Switch Hybrid Network-Based Large Step-Up DC-DC Converter for Solar PV Applications
- Multiphase Unidirectional Active Bridge High- Step-Up DC-DC Converter with Multiphase Serial-Output

- DC-Link Voltage Control and Power Management of BESS Integrated Wind Power System Using MATLAB
- Hybrid Energy System Simulation and Modelling Incorporating Wind and Solar Power

ELECTRIC VEHICLE BASED PROJECTS

- IoT Incorporated Prepaid Charging System for Electric Vehicles: A Design with RESs
- Intelligent Charging system for Electric Vehicle Batteries
- Interleaved Boost PFC with Half Bridge LLC Resonant Converter based EV Battery Charger
- PV fed Off-board E-bike Battery Charger using LLC Resonant Converter
- Performance of Single-Stage and Dual-Stage EV Battery Chargers for G2V and V2G Operation

- A Single-Phase Integrated Onboard Charger with a Wide Voltage Range for Plug-In Electric Vehicles
- EV's Battery Charger Integrated with High Power Density and Efficiency
- A Proposed Cuk Converter based Dual Input Hybrid Converter Topology as EV Charging Station

MODERN POWER SYSTEMS

- A Fuzzy Control Strategy for Improve the Performance of CHB-STATCOM Under Grid Faults
- Development of Internal Inverter Controller System with PWM VSC based STATCOM
- Dynamic Improvement of a UPQC System Operating Under Grid Voltage Sag/Swell Disturbances
- The Harmonic Mitigation for Heavy Rail Systems Using Shunt Active Power Filter
- V2G Integration Based on a UPQC With SMES
- Dual Function Photovoltaic System for Power Quality Enhancement and Power Generation

- Power Quality Enhancement of Stand-Alone Hydro Power Generation System Using UPQC
- Harmonic Elimination of AC Electric Railway Systems Using Shunt Active Power Filters
- Harmonic Current Compensation for CL Filtered Shunt Active Power Filter