



EEE SIMULATION B.Tech/B.E IEEE Projects List

S.No	PROJECT TITLE	IEEE
1	Power Quality Improvement in Micro Grid System using Fuzzy – UPQC Controller	2017
2	Application of Fact Devices for Voltage Stability in a Power System	2017
3	A New-Coupled-Inductor Circuit Breaker for DC Applications	2017
4	A Hybrid Boost Modular Multilevel Converter-Based Bipolar High Voltage Pulse Generator	2017
5	A Novel Single-Stage Single-Phase Reconfigurable Inverter Topology for a Solar Powered Hybrid AC/DC Home	2017
6	A Novel Step-Up Multi input DC–DC Converter for Hybrid Electric Vehicles Application	2017
7	Direct Torque Control With Feedback Linearization for Induction Motor Drives	2017
8	High-Efficiency Bridgeless Three-Level Power Factor Correction Rectifier	2017
9	Three-Level LC-Switching-Based Voltage Boost NPC Inverter	2017
10	Direct Torque Control With Feedback Linearization for Induction Motor Drives	2017
11	High-Efficiency Bridgeless Three-Level Power Factor Correction Rectifier	2017
12	Improved Grid-Photovoltaic System Based on Variable-Step MPPT, Predictive Control, and Active/Reactive Control	2017
13	single-Stage Three-Phase Grid-Tied PV System With Universal Filtering Capability Applied to DG Systems and AC Microgrids	2017

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14	Neutral Point Clamped MOSFET Inverter With Full-Bridge Configuration for Nonisolated Grid-Tied Photovoltaic System	2017
15	Modeling and Simulation of Incremental Conductance Maximum Power Point Tracking (MPPT) Algorithm for Solar PV Array Using Boost Converter	2016
16	Power Quality Improvement in Micro Grid System using Fuzzy - UPQC Controller	2016
17	Power Quality Improvement in Micro Grid System using Fuzzy - UPQC Controller	2016
18	Simulation Of Three Phase Multilevel Inverter With Reduced Number Of Switches	2016
19	A dual inverter for an open end winding induction motor drive without an isolation transformer	2016
20	A Systematic Approach to Hybrid Railway Power Conditioner Design With Harmonic Compensation for High-Speed Railway	2016
21	An Integrated Dynamic Voltage Restorer-Ultracapacitor Design for Improving Power Quality of the Distribution Grid	2016
22	Application of Fact Devices for Voltage Stability in a Power System	2016
23	Improved-Power-Quality Bridgeless-Converter-Based Multiple-Output SMPS	2016
24	Integration Of Grid Connected PMG Wind Energy And Solar Energy Systems Using Different Control Strategies	2016
25	Modelling. Simulation And Performance Evaluation Of Solar PVWIND Hybrid Energy System	2016

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26	Simulation and Implementation of Multilevel Inverter Based BLDC Motor Drive	2016
27	A Solar Power Generation System With a Seven-Level Inverter	2016
28	High Gain Step Up DC-DC Converter For DC Micro-Grid Application	2016
29	Power Quality Improvement in Distributed Generation Resources using UPQC	2016
30	Active and Reactive Power Controller for Single-Phase Grid- Connected Photovoltaic Systems	2016
31	Reactive Power and Harmonic Distortion Control in Electric Traction Systems	2016
32	Simulation of Four Quadrant Operation & Speed Control of BLDC Motor on MATLAB / SIMULINK	2016
33	A Novel MATLAB/Simulink Model of PMSM Drive using Direct Torque Control with SVM	2016
34	Efficient Transformerless MOSFET Inverter for a Grid-Tied Photovoltaic System	2016
35	Power Quality Improvement Using UPQC Integrated with Distributed Generation Network	2016
36	Microgrid With Unified Power Quality Conditioner (UPQC) to Improve the Power Quality Problems by Using P-Q Theory	2016
37	Synchronous Reference Frame Based Control of MLI-STATCOM in Power Distribution Network	2016
38	Two-Stage Solar Photovoltaic-Based Stand-Alone Scheme Having Battery as Energy Storage Element for Rural Deployment	2016

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39	DC Microgrid for Wind and Solar Power Integration	2016
40	Distributed Voltage Control with Electric Springs: Comparison with STATCOM	2016
41	Doubly Fed Induction Generator for Wind Energy Conversion Systems With Integrated Active Filter Capabilities	2016
42	Flicker Mitigation by Individual Pitch Control of Variable Speed Wind Turbines With DFIG	2016
43	High-Frequency Operation of a DC/AC/DC System for HVDC Applications	2016
44	Simulation Comparisons and Implementation of Induction Generator Wind Power Systems	2016
45	A DC Current Flow Controller for Meshed Modular Multilevel Converter Multiterminal HVDC Grids	2016
46	A New General Topology for Cascaded Multilevel Inverters With Reduced Number of Components Based on Developed H-Bridge	2016
47	A Novel control scheme for a Grid Connected Wind-Farm and Marine-Current Farm Using a STATCOM	2016
48	An Improved iUPQC Controller to Provide Additional Grid Voltage Regulation as a STATCOM	2016
49	Intelligent Energy Control Center for Distributed Generators Using Multi-Agent System	2016
50	Design and Application for PV Generation System Using a Soft-Switching Boost Converter With SARC	2016
51	Research on Low Voltage Ride through Technology of Grid-Connected Photovoltaic System	2016

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52	Hybrid Power Electronic Controller For Combined Operation Of Constant Power And Maximum Power Point tracking For Single-Phase Grid-Tied Photovoltaic Systems	2016
53	Development and Comparison of an Improved Incremental Conductance Algorithm for Tracking the MPPT of a Solar PV Panel	2016
54	Diagnosis of single-phase open-line fault in three-phase PWM rectifier with LCL filter	2016
55	Discrete-Time Repetitive Control of Flyback CCM Inverter for PV Power Applications	2016
56	DSTATCOM supported induction generator for improving power quality	2016
57	Dynamic voltage restorer employing multilevel cascaded H-bridge inverter	2016
58	Effect of circulating current on input line current of 12-pulse rectifier with active inter-phase reactor	2016
59	Enhancement of Performance, Availability, and Flexibility of a Battery Energy Storage System Based on a Modular Multilevel Cascaded Converter	2016
60	Enhancing DFIG wind turbine during three phase fault using parallel interleaved converters and dynamic resistor	2016
61	Generalized Structure for a Single Phase Switched Capacitor Multilevel Inverter Using a New Multiple Dc Link Producer with Reduced Number of Switches	2016
62	Generation of Higher Number of Voltage Levels by Stacking Inverters of Lower Multilevel Structures with Low Voltage Devices for Drives	2016
63	Grid connected three-phase multiple-pole multilevel unity power factor rectifier with reduce components count	2016

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64	High frequency inverter topologies integrated with the coupled inductor bridge arm	2016
65	High-Performance Constant Power Generation in Grid-Connected PV Systems	2016
66	High-performance unified power quality conditioner using command generator tracker-based direct adaptive control strategy	2016
67	Impact of SFCL on the Four Types of HVDC Circuit Breakers by Simulation	2016
68	Impact of Switching Harmonics on Capacitor Cells Balancing in Phase-Shifted PWM Based Cascaded H-Bridge STATCOM	2016
69	Improved equal current approach for reference current generation in shunt applications under unbalanced and distorted source and load conditions	2016
70	Improved performance low-cost incremental conductance PV MPPT technique	2016
71	Integration of an Active-Filter and a Single-Phase ACDC Converter with Reduced Capacitance Requirement and Component Count	2016
72	Investigation on Dynamic Voltage Restorers With Two DC Links and Series Converters for Three-Phase Four-Wire Systems	2016
73	Load Model for Medium Voltage Cascaded H-Bridge Multi-Level Inverter Drive Systems	2016
74	Loss-of-excitation analysis and protection for pumped-storage machines during starting	2016
75	Model Predictive Control of Quasi-Z-Source Four-Leg Inverter	2016
76	Modelling, simulation, and verification for detailed short-circuit analysis of a 1×25 kV railway traction system	2016

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77	Modular Multilevel Converter-Based Bipolar High-Voltage Pulse Generator With Sensorless Capacitor Voltage Balancing Technique	2016
78	Modular Multilevel Converter Circulating Current Reduction Using Model Predictive Control	2016
79	Modular symmetric and asymmetric reduced count switch multilevel current source inverter	2016
80	Modulation and Control of Transformerless UPFC	2016
81	Multilevel Cascaded-Type Dynamic Voltage Restorer with Fault Current Limiting Function	2016
82	Multilevel Inverter Topologies with Reduced Device Count: A Review	2016
83	Nonlinear Control of Single-Phase PWM Rectifiers With Inherent Current-Limiting Capability	2016
84	Novel Family of Single-Phase Modified Impedance Source Buck-Boost Multilevel Inverters with Reduced Switch Count	2016
85	Novel Isolated Multi-level DC-DC Power Converter	2016
86	Open-Circuit Fault-Tolerant Control for Outer Switches of Three-Level Rectifiers in Wind Turbine Systems	2016
87	Optimal Pulse width Modulation of Medium-Voltage Modular Multilevel Converter	2016
88	Parallel inductor multilevel current source inverter with energy-recovery scheme for inductor currents balancing	2016
89	Partial Shading Detection and Smooth Maximum Power Point Tracking of PV Arrays under PSC	2016

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90	Phase angle calculation dynamics of type-4 wind turbines in rms simulations during severe voltage dips	2016
91	Power and Voltage Balance Control of a Novel Three-phase Solid State Transformer Using Multilevel Cascaded H-Bridge Inverters for Microgrid Applications	2016
92	Power Factor Corrected Welding Power Supply Using Modified Zeta Converter	2016
93	Power Quality Improvement of PMSG Based DG Set Feeding Three-Phase Loads	2016
94	Power-Electronics-Based Energy Management System With Storage	2016
95	Quasi-Z-Source Inverter With a T-Type Converter in Normal and Failure Mode	2016
96	Real-Time Implementation of a Packed U-Cell Seven-Level Inverter with Low Switching Frequency Voltage Regulator	2016
97	Real-Time Implementation of Model Predictive Control on 7-Level Packed U-Cell Inverter	2016
98	Sensorless control scheme for synchronous buck converter	2016
99	Sensor-Less Five-Level Packed U-Cell (PUC5) Inverter Operating in Stand-Alone and Grid-Connected Modes	2016
100	Simple Time Averaging Current Quality Evaluation of a Single-Phase Multilevel PWM Inverter	2016
101	Simplified model and sub module capacitor voltage balancing of single-phase AC/AC modular multilevel converter for railway traction purpose	2016

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102	Simulation Framework for DC Grid Control and ACDC Interaction Studies Based on Modular Multilevel Converters	2016
103	Single-Phase to Three-Phase Converters With Two Parallel Single-Phase Rectifiers and Reduced Switch Count	2016
104	Sliding Mode Control (SMC) of PWM Dual Inverter Based Grid Connected PV System: Modelling and Performance analysis	2016
105	Switching Control of Buck Converter Based on Energy Conservation Principle	2016
106	T-type direct AC/AC converter structure	2016
107	Theory and Experiment on an Optimal Carrier Frequency of a Modular Multilevel Cascade Converter With Phase-Shifted PWM	2016
108	Topology for cascaded multilevel inverter	2016
109	Transformer-less Single-Phase Universal Active Filter with UPS Features and Reduced Number of Electronic Power Switches	2016
110	Transformer-less Unified Power Flow Controller Using the Cascade Multilevel Inverter	2016
111	Using Multiple Reference Frame Theory for Considering Harmonics in Average-Value Modeling of Diode Rectifiers	2016
112	Versatile Unified Power Quality Conditioner Applied to Three-Phase Four-Wire Distribution Systems Using a Dual Control Strategy	2016
113	Voltage Balancing Control of a Four-Level Hybrid Clamped Converter Based on Zero-Sequence Voltage Injection Using Phase-Shifted PWM	2016
114	Zero voltage transition–zero current transition pulse-width modulated	2016

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	multiphase synchronous buck converter with an active auxiliary circuit for portable applications	
115	A Hybrid Filter for the Suppression of Common-Mode Voltage and Differential-Mode Harmonics in Three-Phase Inverters With CPPM	2015
116	A Modular Multilevel DC/DC Converter With Fault Blocking Capability for HVDC Interconnects	2015
117	A New Hybrid Active Neutral Point Clamped Flying Capacitor Multilevel Inverter	2015
118	A New Railway Power Flow Control System Coupled With Asymmetric Double LC Branches	2015
119	A Novel and Simple Single-Phase Modulator for the Nested Neutral-Point Clamped (NNPC) Converter	2015
120	A Novel Control Method for Transformer-less H-Bridge Cascaded STATCOM With Star Configuration	2015
121	A Quad Two-Level Inverter Configuration for Four-Pole Induction-Motor Drive with Single DC Link	2015
122	A Robust DC-Link Voltage Control Strategy to Enhance the Performance of Shunt Active Power Filters Without Harmonic Detection Schemes	2015
123	A Single-Phase Active Device for Power Quality Improvement of Electrified Transportation	2015
124	A Single-Phase Cascaded Multilevel Inverter Based on a New Basic Unit With Reduced Number of Power Switches	2015
125	An Adaptive Power Oscillation Damping Controller by STATCOM With Energy Storage	2015
126	An Enhanced Voltage Sag Compensation Scheme for Dynamic Voltage	2015

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	Restorer	
127	An Improved Control System for Modular Multilevel Converters with New Modulation Strategy and Voltage Balancing Control	2015
128	An Improved iUPQC Controller to Provide Additional Grid-Voltage Regulation as a STATCOM	2015
129	An Integrated Dynamic Voltage Restorer-Ultra capacitor Design for Improving Power Quality of the Distribution Grid	2015
130	An Isolated Three-Port Bidirectional DC-DC Converter for Photovoltaic Systems With Energy Storage	2015
131	An Observer-Based Optimal Voltage Control Scheme for Three-Phase UPS Systems	2015
132	Analysis and Mitigation of Resonance Propagation in Grid-Connected and Islanding Micro-grids	2015
133	Analysis of the Phase-Shifted Carrier Modulation for Modular Multilevel Converters	2015
134	Comparison of Detailed Modeling Techniques for MMC Employed on VSC-HVDC Schemes	2015
135	Constrained State Feedback Speed Control of PMSM Based on Model Predictive Approach	2015
136	Control of PMSG-Based Wind Turbines for System Inertial Response and Power Oscillation Damping	2015
137	Control Strategy for Improved Dynamic Performance of Variable-Speed Drives With Modular Multilevel Converter	2015
138	DC/DC Buck Power Converter as a Smooth Starter for a DC Motor Based on a Hierarchical Control	2015

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139	Decoupling of Fluctuating Power in Single-Phase Systems Through a Symmetrical Half-Bridge Circuit	2015
140	Distributed Voltage Control with Electric Springs: Comparison with STATCOM	2015
141	Doubly Fed Induction Generator for Wind Energy Conversion Systems With Integrated Active Filter Capabilities	2015
142	DVR with Auxiliary DC Voltage Source Provided by A High Power Diode Based Rectifier Used in MV Connection Substations	2015
143	Enhanced Phase-Shifted PWM Carrier Disposition for Interleaved Voltage-Source Inverters	2015
144	Five-Level Inverter Using POD PWM Technique	2015
145	Functional Modeling of Symmetrical Multi-pulse Autotransformer Rectifier Units for Aerospace Applications	2015
146	High Accuracy and Fast Speed MPPT Methods for PV String Under Partially Shaded Conditions	2015
147	High Step-Up Converter With Three-Winding Coupled Inductor for Fuel Cell Energy Source Applications	2015
148	Hybrid Active Filter With Variable Conductance for Harmonic Resonance Suppression in Industrial Power Systems	2015
149	Implementation of a New MRAS Speed Sensor less Vector Control of Induction Machine	2015
150	Improving the Performance of Cascaded H-bridge based Interline Dynamic Voltage Restorer	2015
151	Induction Motor Control With a Small DC-Link Capacitor Inverter Fed by	2015

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	Three-Phase Diode Front-end Rectifiers	
152	Intelligent Control System for Micro grids Using Multi agent System	2015
153	Intelligent Islanding and Seamless Reconnection Technique for Micro-grid With UPQC	2015
154	Low-Volume PFC Rectifier Based on Non-symmetric Multilevel Boost Converter	2015
155	Modular Cascaded H-Bridge Multilevel PV Inverter With Distributed MPPT for Grid-Connected Applications	2015
156	New Control of PV Solar Farm as STATCOM (PV-STATCOM) for Increasing Grid Power Transmission Limits During Night and Day	2015
157	Optimal Control of Shunt Active Power Filter to Meet IEEE Std. 519 Current Harmonic Constraints Under Non-ideal Supply Condition	2015
158	Performance of Three Phase II-level Inverter with reduced number of switches using different PWM Techniques	2015
159	Power Controllability of a Three-Phase Converter With an Unbalanced AC Source	2015
160	Predictive Torque Control Scheme for Three-Phase Four-Switch Inverter-Fed Induction Motor Drives With DC-Link Voltages Offset Suppression	2015

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