



**KREST**  
**TECHNOLOGIES**

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# M.Tech Projects

## EEE (Simulation)

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S.No.	PROJECT TITLE	YEAR
1.	A novel DFACTS device for the improvement of power quality of the supply	2011
2.	A practical technique for power quality improvement for single phase induction machines	2011
3.	Active power filter based on cascaded transformer multilevel inverter (IJAEST)	2011
4.	A Comparison of Symmetrical and Asymmetrical Three-Phase H-Bridge Multilevel Inverter for DTC Induction Motor Drives	2011
5.	A Dynamic Voltage Restorer Equipped With a High-Frequency Isolated DC-DC Converter	2011
6.	A Hybrid AC/DC Micro grid and Its Coordination Control	2011
7.	A Minimum Power-Processing-Stage Fuel-Cell Energy System Based on a Boost-Inverter With a Bidirectional Backup Battery Storage	2011
8.	A Modified C-Dump Converter for BLDC Machine Used in a Flywheel Energy Storage System	2011
9.	A New Approach to Multifunctional Dynamic Voltage Restorer Implementation for Emergency Control in Distribution Systems	2011
10.	A New Method for Islanding Detection of Inverter-Based Distributed Generation Using DC-Link Voltage Control	2011
11.	A new method for power quality improvement in classical ac/ac voltage controllers using PWM technique	2011
12.	A new multilevel inverter topology using less number of switches(IJEST)	2011
13.	A novel approach in soft starting of large induction motors(AJBAS)	2011
14.	A Novel BVC-RBF Neural Network Based System Simulation Model for Switched Reluctance Motor	2011
15.	A Novel Duty Cycle Control Strategy to Reduce Both Torque and Flux Ripples for DTC of Permanent Magnet Synchronous Motor Drives With Switching Frequency Reduction	2011
16.	A novel induction motor speed estimation using neuro – fuzzy(ICCSS)	2011
17.	A Novel Power Quality Compensator for Negative sequence and Harmonic Currents in High-speed Electric Railway	2011
18.	A Seven-Level Inverter Topology for Induction Motor Drive Using Two-Level Inverters and Floating Capacitor Fed H-Bridges	2011
19.	A Shunt Active Power Filter With Enhanced Performance Using ANN-Based Predictive and Adaptive Controllers	2011

20.	A Simple Method to Reduce Torque Ripple in Direct Torque-Controlled Permanent-Magnet Synchronous Motor by Using Vectors With Variable Amplitude and Angle	2011
21.	A single phase five level inverter for grid connected photovoltaic system by employing PID controller(AJSR)	2011
22.	A Single-Stage Three-Phase Photovoltaic System With Enhanced Maximum Power Point Tracking Capability and Increased Power Rating	2011
23.	A Three-Phase Current-Fed Push–Pull DC–DC Converter With Active Clamp for Fuel Cell Applications	2011
24.	A Transformer less Medium-Voltage STATCOM Topology Based on Extended Modular Multilevel Converters	2011
25.	A Versatile Control Scheme for UPQC for Power Quality Improvement	2011
26.	An Adaptive-Filter-Based Torque-Ripple Minimization of a Fuzzy-Logic Controller for Speed Control of IPM Motor Drives	2011
27.	An Advanced Modulation Technique for the Cascaded Multilevel Inverter Used As A Shunt Active Power Filter	2011
28.	An hybrid multi level inverter based DSTATCOM control(MJEE)	2011
29.	An Improved Maximum Power Point Tracking for Photovoltaic Grid-Connected Inverter Based on Voltage-Oriented Control	2011
30.	An SVPWM-Based Switching Pattern for Stand-Alone and Grid-Connected Three-Phase Single-Stage Boost Inverters	2011
31.	Analysis and Simplification of Three-Dimensional Space Vector PWM for Three-Phase Four-Leg Inverters	2011
32.	Analysis of the variation effect of induction machine parameters for VECTORIAL controls(CJEEE)	2011
33.	Analysis, Design, Modeling, and Implementation of an Active Clamp HF Link Converter	2011
34.	Application of SMES Unit in Improving the Performance of an AC/DC Power System	2011
35.	Assessment of Power Quality in Wind Power Systems	2011
36.	Cascaded multilevel voltage source inverter based active power filter for harmonics and reactive power compensation(IJAER)	2011
37.	Case study on power quality improvement of thirty bus system with UPFC (IJCEE)	2011

38.	Comparative study on carrier overlapping PWM strategies for five level diode clamped inverter(IJCEE)	2011
39.	Comparison of 3-level and 9-level inverter-fed induction motor drives	2011
40.	Comparison of SSSC and d-q control scheme based UPFC for power flow control(IJCA)	2011
41.	Comparison of z-source inverter fed induction motor with traditional source inverter systems(RJASET)	2011
42.	Comparison performance of induction motor using SVPWM and hysteresis current controller(JTAIT)	2011
43.	Composite Energy Storage System Involving Battery and Ultra capacitor With Dynamic Energy Management in Micro grid Applications	2011
44.	Constant Frequency-Unified Power Quality Conditioner	2011
45.	Constant Power Control of DFIG Wind Turbines With Super capacitor Energy Storage	2011
46.	Control and Analysis of the Modular Multilevel Cascade Converter Based on Double-Star Chopper-Cells (MMCC-DSCC)	2011
47.	Control of a Doubly Fed Induction Generator via an Indirect Matrix Converter With Changing DC Voltage	2011
48.	Control Strategy for Harmonic Elimination in Stand-Alone DFIG Applications With Nonlinear Loads	2011
49.	Coordinated Voltage Control Scheme for SEIG-Based Wind Park Utilizing Substation STATCOM and ULTC Transformer	2011
50.	Damping of Low Frequency Oscillations in Power Systems with Neuro-Fuzzy UPFC Controller	2011
51.	Damping Power System Oscillations Using a Hybrid Series Capacitive Compensation Scheme	2011
52.	DC/DC Boost Converter Functionality in a Three-Phase Indirect Matrix Converter	2011
53.	Design and effective operation of double winding synchronous reluctance motor(IJCEE)	2011
54.	Design and Implementation of Neuro-Fuzzy Vector Control for Wind-Driven Doubly-Fed Induction Generator	2011
55.	Design and simulation of UPQC to improve power quality and transfer power of photovoltaic array to grid(AJBAS)	2011

56.	Design Strategy for Optimum Rating Selection of Interline DVR	2011
57.	Design, implementation and construction of a multilevel inverter for robot arm drive, by means of a brushless motor(CJEEE)	2011
58.	Development of a Nonlinear Control Strategy for the DC Power Transferring System (ICMS)	2011
59.	Direct electromagnetic torque control of induction motors powered by high power PWM inverters for two levels or three levels(PIERS)	2011
60.	Direct electromagnetic torque control of induction motors powered by high power PWM inverters for two levels or three levels(PIERS)	2011
61.	Direct Torque and Indirect Flux Control of Brushless DC Motor	2011
62.	Direct Voltage Control for a Stand-Alone Wind-Driven Self-Excited Induction Generator With Improved Power Quality	2011
63.	Dynamic Modeling and Improved Control of DFIG Under Distorted Grid Voltage Conditions	2011
64.	Dynamic Modeling and Performance Analysis of a Grid-Connected Current-Source Inverter-Based Photovoltaic System	2011
65.	Dynamic Stability Improvement of an Integrated Grid-Connected Offshore Wind Farm and Marine-Current Farm Using a STATCOM	2011
66.	Energy Management and Power Control of a Hybrid Active Wind Generator for Distributed Power Generation and Grid Integration	2011
67.	Energy optimization of field oriented six-phase induction motor drive	2011
68.	Enhanced Power Quality Control Strategy for Single-Phase Inverters in Distributed Generation Systems	2011
69.	Fault Detection and Mitigation in Multilevel Converter STATCOMs	2011
70.	Fault Ride-Through of a DFIG Wind Turbine Using a Dynamic Voltage Restorer During Symmetrical and Asymmetrical Grid Faults	2011
71.	Feasibility Analysis of the Positioning of Superconducting Fault Current Limiters for the Smart Grid Application Using Simulink and SimPowerSystem	2011
72.	Flying Capacitor Multilevel Inverter Based Shunt Active Power Filter with Trifling Susceptibility to Divisional Voltages Deregulation	2011
73.	Grid Interconnection of Renewable Energy Sources at the Distribution Level With Power-Quality Improvement Features	2011

74.	Harmonic orientation of pulse width modulation technique in multilevel inverters	2011
75.	Hexagram-Converter-Based STATCOM for Voltage Support in Fixed-Speed Wind Turbine Generation Systems	2011
76.	High-Efficiency Regulation Method for a Zero-Current and Zero-Voltage Current-Fed Push–Pull Converter	2011
77.	Hybrid Flying-Capacitor-Based Active-Neutral-Point-Clamped Five-Level Converter Operated With SHE-PWM	2011
78.	Hysteresis Modulation of Multilevel Inverters	2011
79.	Implementation of Neural-Network-Controlled Three-Leg VSC and a Transformer as Three-Phase Four-Wire DSTATCOM	2011
80.	Improvements in power quality and efficiency with a new ac/dc high current converter(WSEAS transactions on circuits and systems)	2011
81.	Improving grid power quality with facts device on integration of wind energy system (SPAJ)	2011
82.	Induction machine DTC optimization using artificial intelligence for EV's applications	2011
83.	Induction Motor Drive Using Seven Level Multilevel Inverter for Energy Saving in Variable Torque Load Application	2011
84.	Interconnection of Two Very Weak AC Systems by VSC-HVDC Links Using Power-Synchronization Control	2011
85.	Investigation of SSR characteristics of hybrid series compensated power system with SSSC(HINDAWI PUBLISHING)	2011
86.	Isolated Buck–Boost DC/DC Converters Suitable for Wide Input-Voltage Range	2011
87.	Load Compensation for Diesel Generator-Based Isolated Generation System Employing DSTATCOM	2011
88.	Load compensation for single phase system using series active filter(IJEST)	2011
89.	Loading Balance of Distribution Feeders With Loop Power Controllers Considering Photovoltaic Generation	2011
90.	Low Frequency Oscillations Damping by Static Synchronous Series Compensator Equipped with an Auxiliary Fuzzy Logic Controller	2011
91.	Matrix Converter-Based Unified Power-Flow Controllers: Advanced Direct Power Control Method	2011

92.	Modeling and analysis of cascaded h-bridge inverter for wind driven Isolated self – excited induction generators(IJEEF)	2011
93.	Modeling and Control of VSC-HVDC Links Connected to Island Systems	2011
94.	Modulation for Three-Phase Transformer less Z-Source Inverter to Reduce Leakage Currents in Photovoltaic Systems	2011
95.	Modulation index effect on the 5-level she-PWM voltage source inverter(SCIENTIFIC RESEARCH)	2011
96.	Monovariabe and Multivariable Voltage Regulator Design for a Synchronous Generator Modeled With Fixed and Variable Loads	2011
97.	Multidimensional Two-Level Multiphase Space Vector PWM Algorithm and Its Comparison With Multi frequency Space Vector PWM Method	2011
98.	Multilevel inverter to reduce common mode voltage in ac motor drives using SPWM technique(JPE)	2011
99.	Multilevel inverter, based on multi-stage connection of three-level converters, scaled in power of three.	2011
100.	Neural-Network-Based Integrated Electronic Load Controller for Isolated Asynchronous Generators in Small Hydro Generation	2011
101.	Neutral-Point Potential Balancing of Three-Level Inverters in Direct-Driven Wind Energy Conversion System	2011
102.	Nine-level inverter system for an open-end winding(IJEST)	2011
103.	On chip implementation if z-source inverter fed induction motor drive(IJAST)	2011
104.	Online Efficiency Optimization of a Fuzzy-Logic-Controller-Based IPMSM Drive	2011
105.	Online Optimal Reactive Power Control Strategy of PV Inverters	2011
106.	Parallel Operation of DFIGs in Three-Phase Four-Wire Autonomous Wind Energy Conversion System	2011
107.	Performance Comparison of VSC-Based Shunt and Series Compensators Used for Load Voltage Control in Distribution Systems	2011
108.	performance of voltage source multilevel inverter - fed induction motor drive using SIMULINK(ARPN JOURNAL)	2011
109.	Performance Investigation of Neural-Network-Based Unified Power-Quality Conditioner	2011
110.	Power Quality Conditioner with Series-Parallel Compensation Applied to Single-Phase Systems	2011

111.	Power quality improvement for electrical system feeding metro subway in EGYPT(MEPCON)	2011
112.	Power quality improvement in dc drives using MATLAB/SIMULINK(IJWBC)	2011
113.	Power Quality Improvement of 1- $\Phi$ Grid-connected PWM Inverter using Fuzzy with Hysteresis Current Controller	2011
114.	Power quality improvement of wind turbines using doubly-fed induction machines	2011
115.	Power quality improvement using a fuzzy logic control of a series active filter(JTAIT)	2011
116.	Power Quality Improvement Using Interline Unified Power Quality Conditioner	2011
117.	Power System Voltage Regulation via STATCOM Internal Nonlinear Control	2011
118.	Predictive Current Control Implementation in the Sensor less Induction Motor Drive	2011
119.	Primary-Side-Converter-Assisted Soft-Switching Scheme for an AC/AC Converter in a Cyclo converter-Type High-Frequency-Link Inverter	2011
120.	Quasi-Z-Source-Based Isolated DC/DC Converters for Distributed Power Generation	2011
121.	Reliable, effective and efficient operation of dg source for power flow control in coordination with main utility network at common load bus using static device(WSEAS)	2011
122.	Real-Time Coordination of Plug-In Electric Vehicle Charging in Smart Grids to Minimize Power Losses and Improve Voltage Profile	2011
123.	Reducing THD in hybrid multilevel inverter with varying voltage steps under space vector modulation(EJSR)	2011
124.	Reversing the Power Flow in the Looped Electrical Distribution Network by Using a Cascaded H-bridge D-SSSC	2011
125.	Simple Low-Cost Hysteretic Controller for Multiphase Synchronous Buck Converters	2011
126.	Simplified fuzzy control for flux-weakening speed control of IPMSM drive(HINDAWI PUBLISHING CORPORATION)	2011
127.	Simulation and analysis of a multilevel converter topology for solar PV-based grid connected inverter(SCIENTIFIC RESEARCH)	2011
128.	Simulation Single Phase Shunt Active Filter Based on p-q technique using MATLAB/Simulink Development Tools Environment	2011
129.	Single-Phase Seven-Level Grid-Connected Inverter for Photovoltaic System	2011

130.	Smart Park as a Virtual STATCOM	2011
131.	Space vector PWM scheme for three level inverters based on two-level space vector PWM(IJPSOEM)	2011
132.	Speed control of switched reluctance motor using fuzzy sliding mode	2011
133.	Synchronous-Reference-Frame-Based Control Method for UPQC Under Unbalanced and Distorted Load Conditions	2011
134.	TCSC Damping controller design based on Self learning fuzzy controller Techniques	2011
135.	THD Reduction in Performance of Multi-Level Inverter fed Induction Motor Drive	2011
136.	Three-Arm AC Automatic Voltage Regulator	2011
137.	Transient Response of a Wind Energy Conversion System Used as Active Filter	2011
138.	Transient Stability Enhancement in Power System with Distributed Static Series Compensator (DSSC)	2011
139.	transmission line stability improvement using TCSC ( IJAEST)	2011
140.	Two-Stage MPPT Power Regulator for Satellite Electrical Propulsion System	2011
141.	Unified Power Quality Conditioner (UPQC) Control using Feed Forward (FF)/ Feed Back (FB) Controller	2011
142.	UPQC-S: A Novel Concept of Simultaneous Voltage Sag/Swell and Load Reactive Power Compensations Utilizing Series Inverter of UPQC	2011
143.	Using active power filters to improve power quality	2011
144.	Voltage stability improvement using series facts devices(AJBAS)	2011
145.	11-level inverter using less number of switches(IJEST)	2011
146.	A 28-pulse ac-dc converter based SMPS for telecom power supply (be press)	2010
147.	A fuzzy rule-based approach for islanding detection in distributed generation	2010
148.	A high performance induction motor drive system using fuzzy logic controller	2010
149.	A high-power-factor single-stage single-switch electronic ballast for compact fluorescent lamps	2010
150.	A hybrid system based approach to direct torque control (DTC) of induction motors	2010

151.	A new 84-pulse VSC configuration using multi-level dc voltage reinjection for especial applications	2010
152.	A new adaptive fuzzy vector control for permanent magnet synchronous motor drive	2010
153.	A novel three-phase to five-phase transformation using a special transformer connection	2010
154.	A real time power system harmonic estimator considering fundamental frequency variations (BEPRESS)	2010
155.	A three-phase interleaved dc–dc converter with active clamp for fuel cells	2010
156.	A voltage controlled adjustable speed PMBLDCM drive using a single-stage PFC half-bridge converter	2010
157.	An efficient ac–dc step-up converter for low-voltage energy harvesting	2010
158.	An inrush mitigation technique of load transformers for the series voltage sag compensator	2010
159.	An online simplified rotor resistance estimator for induction motors	2010
160.	Ann-based svc switching at distribution level for minimal-injected harmonics	2010
161.	APF for harmonic voltage resonance suppression in distribution system	2010
162.	Comparison of modulation techniques for matrix converter (IACSIT)	2010
163.	Control circuit for active power filter with an instantaneous reactive power control algorithm modification	2010
164.	Control of active filter in 25kv ac traction systems	2010
165.	Control scheme of cascaded h-bridge STATCOM using zero-sequence voltage and negative-sequence current	2010
166.	Design and implementation of a current-source converter for use in industry applications of D-STATCOM	2010
167.	Design of a 28 v-to-300 v/12 kw multi cell interleaved fly back converter using inter cell transformers	2010
168.	Design of a hybrid PID plus fuzzy controller for speed control of induction motors	2010
169.	Design of a mode decoupling STATCOM for voltage control of wind-driven induction generator systems	2010
170.	Design of controller for PMSM	2010

171.	Design on vector control system of ac motor for hybrid electric vehicles	2010
172.	Dynamic dc-bus voltage control strategies for a three-phase high power shunt active power filter	2010
173.	Dynamic hysteresis current control to minimize switching for three-phase four-leg VSI topology to compensate nonlinear load	2010
174.	Effects of switching asymmetry on an isolated full-bridge boost converter	2010
175.	Enhancement of power quality in distribution system using D-STATCOM	2010
176.	Estimation and mitigation of voltage and current harmonics in distribution systems	2010
177.	Facts device: distributed power-flow controller (DPFC)	2010
178.	Fault-location system for multi terminal transmission lines	2010
179.	Feasibility study on application of voltage source inductive filtering converter in HVDC-light systems	2010
180.	Flexible power electronic transformer	2010
181.	Harmonic elimination in single phase systems by means of a hybrid series active filter (HSAF)	2010
182.	High-efficiency voltage regulator for rural networks	2010
183.	Implementation and control of an hybrid multilevel converter with floating dc-links for current waveform improvement	2010
184.	Implementation and performance evaluation of a fast dynamic control scheme for capacitor-supported interline DVR	2010
185.	Input-output linearization and robust sliding-mode controller for the VSC-HVDC transmission link	2010
186.	Instantaneous power control of D-STATCOM with consideration of power factor correction	2010
187.	Modeling and simulation of an asynchronous generator with ac/dc/ac converter fed RLC series	2010
188.	Multiband hysteresis modulation and switching characterization for sliding-mode-controlled cascaded multilevel inverter(IEEE)	2010
189.	Non linear control of STATCOM	2010
190.	Novel direct torque control based on space vector modulation with adaptive stator flux observer for induction motors	2010

191.	Optimized modulation for ac–dc harmonic immunity in VSC HVDC transmission	2010
192.	Performance investigation of neural-network-based unified power-quality conditioner	2010
193.	Power-management strategies for a grid-connected PV-FC hybrid system	2010
194.	Reference current computation for active power filters by running DFT techniques	2010
195.	Research on three-level static synchronous compensator	2010
196.	Ripple current reduction of a fuel cell for a single-phase isolated converter using a dc active filter with a center tap	2010
197.	Simulation of four quadrant operation & speed control of BLDC motor on MATLAB / Simulink	2010
198.	Single-phase ac–ac converter based on quasi-z-source topology(PEDS)	2010
199.	Single-phase hybrid active power filter using single switch parallel active filter and simple passive filter	2010
200.	Single-phase to three-phase drive system using two parallel single-phase rectifiers	2010
201.	Super capacitors and battery power management for hybrid vehicle Applications using multi boost and full bridge converters(CREEBEL)	2010
202.	Torque ripple reduction in direct torque control of induction machines by use of all voltage vectors of matrix converters	2010
203.	Vector controlled PMSM drive based on fuzzy speed controller	2010
204.	Voltage security analysis of power systems under deregulation	2010
205.	Wind farm to weak-grid connection using UPQC custom power device	2010

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