IEEE 2023 POWER ELECTRONICS, POWER SYSTEMS AND DRIVES TITLES.

POWER SYSTEM-BASED RENEWABLE AND ENERGY STORAGE SYSTEMS:

1. Optimization Control of Power Balance for Stability Improvement in Grid-Connected PV System
2. Shipboard DC Systems—A Critical Overview: Challenges in Primary Distribution, Power-Electronics-Based Protection, and Power Scalability
3. Modelling and Simulation of Hydrogen Energy Storage System for Power-to-gas and Gas-to-power Systems
4. Continuous Operation of Wind Power Plants Under Pole-to-Ground Fault in an HVDC System Consisting of Half-Bridge MMCs and Disconnecting Switches
5. Quality Analysis of Photovoltaic System Using Descriptive Statistics of Power Performance Index
6. Grid-Tied Solar PV System with Power Quality Enhancement Using Adaptive Generalized Maximum Versoria Criterion
7. Superconducting Magnetic Energy Storage Integrated Current-source DC/DC Converter for Voltage Stabilization and Power Regulation in DFIG-based DC Power Systems

8. Dynamic Frequency Support and DC Voltage Regulation Approach for VSC-MTDC Systems
9. Improvement of Frequency Regulation of a Wind-Integrated Power System Based on a PD-PIDA Controlled STATCOM Tuned by the Artificial Rabbits Optimizer
10. Unreliability Tracing of Power Systems with High Penetration of Wind Power Based on Temporal Decomposition Model
11. An Innovative Converter less Solar PV Control Strategy for a Grid Connected Hybrid PV/Wind/Fuel-Cell System Coupled With Battery Energy Storage
12. Control Method for Additional Damper in Hydro-turbine Speed Governor of Hydro-dominant Power Systems
13. Autonomous-synergic Voltage Security Regions in Bulk Power Systems
14. Enabling 100 % Renewable Power Systems Through Power Electronic Grid-Forming Converter and Control: System Integration for Security, Stability, and Application to Europe

15. Capacity Allocation of Hybrid Power System with Hot Dry Rock Geothermal Energy, Thermal Storage, and PV Based on Game Approaches
16. Hierarchical Frequency-dependent Chance Constrained Unit Commitment for Bulk AC/DC Hybrid Power Systems with Wind Power Generation
17. Effect of Various Incremental Conductance MPPT Methods on the Charging of Battery Load Feed by Solar Panel
18. An Improved Bipolar Voltage Boost AC Voltage Controller With Reduced Switching Transistors
19. A Comprehensive Review of Micro grid Control Mechanism and Impact Assessment for Hybrid Renewable Energy Integration
20. Exploiting the Inherent Flexibility in Transmission Network for Optimal Scheduling, Wind Power Utilization, and Network Congestion Management
21. Review of Methods to Accelerate Electromagnetic Transient Simulation of Power Systems
22. Simultaneous optimization of renewable energy and energy storage capacity with hierarchical control
23. Investigation on Sizing of Voltage Source for a Battery Energy Storage System in Micro grid With Renewable Energy Sources
24. Smart Meter Data Analytics for Occupancy Detection of Buildings with Renewable Energy Generation

25. Algorithm for Demand Response to Maximize the Penetration of Renewable Energy
26. Isolation and Protection of the Motor-Generator Pair System for Fault Ride-Through of Renewable Energy Generation Systems
27. A Home Energy Management System With Renewable Energy and Energy Storage Utilizing Main Grid and Electricity Selling
28. Overview of energy storage in renewable energy power fluctuation mitigation
29. Robust Operation of a Water-Energy Nexus: A Multi-Energy Perspective
30. Photovoltaic System MPPT using Fuzzy Logic Controller
31. Comparative Analysis of P&O and FLC based SEPIC Boost Converter for Solar PV Application
32. Model and Simulation of a Renewable Energy Market: Integration of Renewable Energy Sources with the Conventional Generation System
33. Algorithm for Demand Response to Maximize the Penetration of Renewable Energy
34. Overview of energy storage in renewable energy power fluctuation mitigation
35. Dynamic Economic Dispatch With Maximal Renewable Penetration Under Renewable Obligation
36. Dynamic Inertia Response Support by Energy Storage System with Renewable Energy Integration Substation

37. Machine Learning Based Energy Management Model for Smart Grid and Renewable Energy Districts
38. Single Pulse Common-Mode Voltage PWM Scheme to Achieve High Power-Density for Full Sic Three-level Uninterruptible Power Supply
39. A Multi-load Wireless Power Transfer System with Series-parallel-series (SPS) Compensation
40. Improved Pulse Density Modulation for Semi-bridgeless Active Rectifier in Inductive Power Transfer System
41. Solar Optiverter –A Novel Hybrid Approach to the Photovoltaic Module Level Power Electronics
42. A Power Electronic Traction Transformer Configuration with Low-Voltage IGBTs for Onboard Traction Application
43. Port Controlled Hamiltonian Modelling and IDA-PBC Control of Dual Active Bridge Converters for DC Microgrids
44. Carrier-Based Digital PWM and Multirate Technique of a Cascaded H-Bridge Converter for Power Electronic Traction Transformers
45. A Modified DC Power Electronic Transformer Based on Series Connection of Full-Bridge Converters.
46. A Unified Power Flow Controller Using a Power Electronics Integrated Transformer.
47. Evaluation of power processing in series-connected partial-power converters.

48. Centralized monitoring of the power electronics devices.
49. Functioning Algorithm of the Stand Alone Power Supply System with Renewable Energy Sources.
50. Design and Optimization of a Solar Power Conversion System for Space Applications.
51. Power Quality Analysis of Phase Controlled Bidirectional and Unidirectional AC Voltage Controllers and their impacts on input power system.

POWER SYSTEM:

1. An Improved Three-Stages Cascading PassivityBased Control of Grid-Connected LCL Converter in Unbalanced Weak Grid Condition
2. An Improved Bipolar Voltage Boost AC Voltage Controller With Reduced Switching Transistors
3. An Active Voltage Stabilizer for a DC Microgrid System
4. A Sub-Synchronous Oscillation Suppression Strategy for Doubly Fed Wind Power Generation System
5. Review of Methods to Accelerate Electromagnetic Transient Simulation of Power Systems

6. Switching Transition Control to Improve Efficiency of a DC/DC Power Electronic System
7. Analyze the Impact of Demand Side Management on Grid Power for an Isolate Zone in a Sustainable IEEE 14 Bus System
8. Exploiting the Operational Flexibility of Wind Integrated Hybrid AC/DC Power Systems
9. Power Compensation of Network Losses in a Microgrid With BESS by Distributed Consensus Algorithm
10. Control of UPQC based on steady state linear Kalman filter for compensation of power quality problems
11. Implementation of Hybrid STATCOM System for Power System Performance Enhancement
12. Investigation of Modular Multilevel Converters for E-STATCOM Applications
13. Voltage Flicker Compensation of STATCOM Through Novel Bee Colony Optimization
14. Analysis of Stability in IEEE 14 Bus System using ETAP Software
15. Improving the Reactive Current Compensation Capability of Cascaded H-Bridge Based STATCOM Under Unbalanced Grid Voltage
16. Network-Wide Influence of a STATCOM Configured for Voltage Unbalance Mitigation

17. GA Based Optimal STATCOM Placement for Improvement of Voltage Stability
18. Power Quality Assessment of A Wind Power-Integrated System into the Power Grid
19. Quasi-Two-Stage Multifunctional Photovoltaic Inverter With Power Quality Control and Enhanced Conversion Efficiency
20. A PV-Statcom for Enhancement of power quality in grid integrated system using Unit Vector Controller
21. Implementation of Switched Mode Power Supply with Power Quality Enhancement using Zeta Converter
22. A Proposal for Power Quality Management System
23. A Superconducting Magnetic Energy Storage Emulator/Battery Supported Dynamic Voltage Restorer
24. Single-Phase to Three-Phase Unified Power Quality Conditioner Applied in Single Wire Earth Return Electric Power Distribution Grids
25. Voltage Control with PV Inverters in Low Voltage Networks—In Depth Analysis of Different Concepts and Parameterization Criteria
26. Low-Capacitance Cascaded H-Bridge Multilevel STATCOM
27. Simultaneous Micro grid Voltage and Current Harmonics Compensation Using Coordinated Control of Dual Interfacing Converters
28. MPC-SVM Method for Vienna Rectifier with PMSG used in Wind Turbine Systems

29. An Isolated Topology for Reactive Power Compensation With a Modularized Dynamic-Current Building-Block
30. Shunt Active Power Filter Based on Cascaded Transformers Coupled with Three-Phase Bridge Converters
31. Full-Bridge Reactive Power Compensator With Minimized-Equipped Capacitor and Its Application to Static Var Compensator
32. Investigation Dynamic Voltage Restorers With Two DC Links and Series Converters for Three-Phase Four-Wire Systems
33. A Versatile Unified Power Quality Conditioner Applied to Three-Phase Four-Wire Distribution Systems Using a Dual Control Strategy
34. Connection of Converters to a Low and Medium Power DC Network Using an Inductor Circuit
35. High-Performance Constant Power Generation in Grid-Connected PV Systems
36. Control Strategy to Maximize the Power Capability of PV Three-Phase Inverters During Voltage Sags
37. Delay-Dependent Stability of Single-Loop Controlled Grid-Connected Inverters with LCL Filters
38. Grid-Current-Feedback Active Damping for LCL Resonance in Grid-Connected Voltage-Source Converters
39. A Hybrid-STATCOM With Wide Compensation Range and Low DC-Link Voltage

40. Hybrid Energy Storage System Micro Grids Integration For Power Quality Improvement Using Four Leg Three Level NPC Inverter and Second Order Sliding Mode Control

CONVERTERS LOGIC:

1. Increasing Light Load Efficiency in Phase-Shifted, Variable Frequency Multiport Series Resonant Converters
2. Common DC-Link Multilevel Converters: Topologies, Control and Industrial Applications
3. High Efficiency LLC Resonant Converter With Wide Output Range of 200–1000 V for DC-Connected EVs Ultra-Fast Charging Stations
4. Adaptive Bus-Impedance-Damping Control of Multi-Converter System Applying Bidirectional Converters
5. Direct Arm Energy Control of the Modular Multilevel Matrix Converter
6. Design Considerations and Performance Investigation of a Five-Level Cascaded Multilevel LLC Boost DC–DC Converter
7. A Modified PI-Controller Based High Current Density DC–DC Converter for EV Charging Applications
8. Single-Phase Mains Fed Three-Phase Induction Motor Drive Using Improved Power Quality Direct AC–AC Converter

9. Decentralized Control Strategy for Switching Harmonic Elimination of Modularized Input Parallel Output Series Dual Active Bridge Converter
10. Resonant Frequency Tracking Scheme for LLC Converter Based on Large and Small Signal Combined Model
11. Failure Prevention in DC–DC Converters: Theoretical Approach and Experimental Application on a Zeta Converter
12. Coupled Inductor Based Soft Switched High Gain Bidirectional DC-DC Converter With Reduced Input Current Ripple
13. Minimum Backflow Power and ZVS Design for Dual-Active-Bridge DC–DC Converters
14. A Single-Stage Semi Dual-Active-Bridge AC–DC Converter With Seamless Mode Transition and Wide Soft-Switching Range
15. Coupled Inductor Based Soft Switched High Gain Bidirectional DC-DC Converter With Reduced Input Current Ripple
16. New Four-Channel Resonant Boost DC/DC Converter.
17. Flexible Interlinking Converter With Enhanced FRT Capability for On-Board DC Microgrids
18. Large-Signal Stability Guarantees for Cycle-by-Cycle Controlled DC–DC Converters
19. Reliability of Silicon Battery Technology and Power Electronics Based Energy Conversion

20. A High Efficiency and Wide Voltage Gain s*LC_LCC* DC–DC Converter With SiC Devices
21. Unidirectional Step-Up DC–DC Converter Based on Interleaved Phases, Coupled Inductors, Built-In Transformer, and Voltage Multiplier Cells
22. A Comprehensive Review of Microgrid Control Mechanism and Impact Assessment for Hybrid Renewable Energy Integration
23. Transformer-Less Voltage Equalizer for Energy Storage Cells Based on Double-Tiered MultiStacked Converters
24. Modified Phase-Shift Scheme for Optimal Transient Response of Dual-Active-Bridge DC/DC Converters Considering the Resistive Impact
25. WBG-Based PEBB Module for High Reliability Power Converters
26. Voltage Lift Switched Inductor Double Leg Converter With Extended Duty Ratio for DC Microgrid Application
27. An Overview on Single/Multi Output Isolated Resonant Converter Topologies for Vehicular applications
28. Developing a super-lift luo-converter with integration of buck converters for electric vehicle applications
29. A Modular Two-Stage High Step-Down DC-DC Converter Using Frequency Multiplier Circuit for Datacenter Applications
30. Three-port Pulse Width Modulated DC-DC Converter for Vehicular Applications

31. Performance of P/PI/PID Based controller in DC-DC Converter for PV applications and Smart Grid Technology
32. Fault Tolerant Series LC Resonant Converter Topology for Constant Power Applications
33. Nonlinear Implementable Control of a Dual Active Bridge Series Resonant Converter
34. Design of a Multiport Bidirectional DC-DC Converter for Low Power PV Applications
35. Predictive Current Control Strategy for a Multi-Modular Matrix Converter
36. Buck-Boost DC-DC Converter Designed for PCB Applications
37. Reduced Switch Voltage Stress Ultra-gain DC-DC Converter for High Voltage Low Power Applications
38. A Novel Topology of Multilevel Bidirectional and Symmetrical Split-Pi Converter
39. A Lossless Passive Snubber Circuit for Three-Port DC-DC Converter
40. An Experimental Estimation of Hybrid ANFIS–PSO-Based MPPT for PV Grid Integration Under Fluctuating Sun Irradiance
41. Two Switch Non-Isolated Quadratic Gain DC-DC Converters
42. A Single-Inductor Dual-Output DC-DC Converter with Dual-Mode Control
43. A new Approach of Resonant Converter using Large Air Gap Transformer

44. A Novel Boost Converter Topology with Non-Pulsating Input and Output Current
45. Modelling and Optimization of DC/DC Converter for Supplying of LED Lighting
46. Zero Voltage Transition Non-Isolated Bidirectional Buck-Boost DC-DC Converter with Coupled Inductors
47. Nonisolated Multiport Converters Based on Integration of PWM Converter and Phase-Shift-Switched Capacitor Converter
48. Developing a super-lift luo-converter with integration of buck converters for electric vehicle applications
49. Capacitor Size Comparison on High-Power DC-DC Converters with Different Transformer Winding Configurations on the AC-link
50. Bidirectional Isolated Ripple Cancel Triple Active Bridge DC-DC Converter
51. Configurations of DC–DC converters of one input and multiple outputs without transformer
52. A New DC-DC Double Zeta Quadratic Converter
53. A Study Of Landsman, Sepic And Zeta Converter By Particle Swarm Optimization Technique
54. Speed Control of Brushless DC Motor using Zeta Converter
55. Implementation of Switched Mode Power Supply with Power Quality Enhancement using Zeta Converter

56. Bridgeless Isolated Zeta-Luo Converter Based EV Charger with PF Pre-regulation
57. Novel Modulation of Isolated Bidirectional DC-DC Converter for Energy Storage Systems
58. A High Performance Shade-Tolerant MPPT Based on Current-Mode Control.
59. High-Efficiency Bidirectional Buck-Boost Converter for Photovoltaic and Energy Storage Systems in a Smart Grid.
60. High Frequency PCB Winding Transformer with Integrated Inductors for a Bi-directional Resonant Converter.
61. A Highly Reliable and Efficient Class of Single Stage High-Frequency AC-Link Converters
62. Modulated Model Predictive Control for Modular Multilevel ACAC Converter
63. Optimal Phase Shift Control to Minimize Reactive Power for a Dual Active Bridge DC-DC Converter.
64. Analysis of the Impact of Electric Vehicle Charging Station on Power Quality Issues.
65. A Bidirectional Interactive Electric Vehicles Operation Modes: Vehicle-to-Grid (V2G) and Grid-to-Vehicle (G2V) Variations Within Smart Grid
66. Optimal Charging and Discharging Planning for Electric vehicles in Energy saving system.

67. Hybrid Modulation of Parallel-Series LLC Resonant Converter and Phase Shift Full-Bridge Converter for a Dual-Output DC–DC Converter.
68. Switched Capacitor Converter Based Multiport Converter Integrating Bidirectional PWM and Series-Resonant Converters for Standalone Photovoltaic Systems.
69. Performance Analysis of Fuzzy Logic Controlled DC-DC Converters.
70. A Single-Stage Three-Level AC/DC Converter for Wireless Power Transfer
71. A Novel High Voltage Gain Noncoupled Inductor SEPIC Converter
72. A New Non-Isolated Buck-Boost Converter with High Voltage Gain and Positive Output Voltage for Renewable Energy Applications
73. A Family of Coupled-Inductor-Based Soft-Switching DC–DC Converter With Double Synchronous Rectification.
74. Experimental Evaluation of Capacitors for Power Buffering in Single-Phase Power Converters.
75. Three Phase Single Stage Isolated Cuk based PFC Converter.

STAND-ALONE INVERTER AND MULTILEVEL INVERTER:

1. Medium-Voltage Seven-Level Multiplexed Converter for AC Applications
2. A 5-Level HERIC Active-Clamped Inverter With Full Reactive Power Capability for Grid-Connected Applications
3. Reduced Voltage Stress and Spikes in Source Current of 7-Level Switched-Capacitor Based Multilevel Inverter
4. Coupled Inductor Assisted High-Voltage Gain Half-Bridge Z-Source Inverter
5. A Family of Single-Phase Single-Stage Boost Inverters
6. PSO Tuning of a Second-Order Sliding Mode Controller for Adjusting Active Standard Power Levels for Smart Inverter Applications
7. Stabilized Control for Power Electronics Transformer-Based Grid-Tied Inverter System
8. Design Considerations and Performance Investigation of a Five-Level Cascaded Multilevel LLC Boost DC–DC Converter
9. Implementation of New Optimal Control Methodology of Quazi Z-Source Inverter Based on MPC
10. Power Sharing in Three-Level NPC Inverter Based Three-Phase Four-Wire Islanding Microgrids With Unbalanced Loads
11. A Hybrid PWM Technique to Improve the Performance of Voltage Source Inverters

12. Pareto Front Analysis Method for Optimization of PV Inverter Based Volt/Var Control Considering Inverter Lifetime
13. An Adaptive Hybrid Control of Reduced Switch Multilevel Grid Connected Inverter for Weak Grid Applications
14. Hardware Evaluation for GaN-Based Single-Phase Five-Level Inverter
15. A New Topology of Single-Phase Common Ground Buck-Boost Inverter With Component Voltage Rating Reduction
16. Single-stage Five-level Common Ground Transformerless Inverter with Extendable Structure for Centralized Photovoltaics
17. Multiple Open Switch Fault Diagnosis of Three Phase Voltage Source Inverter Using Ensemble Bagged Tree Machine Learning Technique
18. Space Vector Pulsewidth Modulation Strategy for Multilevel Cascaded H-Bridge Inverter With DC-Link Voltage Balancing Ability
19. A 5-Level HERIC Active-Clamped Inverter With Full Reactive Power Capability for Grid-Connected Applications
20. Three-Phase Four-Wire Inverter for Grid Emulator Under Wide Inductance Variation to Evaluate the Performance of Distributed Generator
21. A New Non-Isolated Active Quasi Z-Source Multilevel Inverter With High Gain Boost

22. Feasibility Study of a Fully Decentralized Control Scheme for PV Cell-Level Cascaded H-Bridge Inverters
23. A Family of Single-Phase Single-Stage Boost Inverters
24. Fault Diagnosis of Cascaded Multilevel Inverter Using Multiscale Kernel Convolutional Neural Network
25. Coupled Inductor Assisted High-Voltage Gain Half-Bridge Z-Source Inverter
26. A New Single DC Source Five-Level Boost Inverter Applicable to Grid-Tied Systems
27. Quadruple Boost Switched Capacitor-Based Inverter for Standalone Applications
28. Active Impedance Network Buck-Boost Three-Level T-Type Inverter With Enhanced Voltage Gain
29. A Low Switch Count 13-Level Switched-Capacitor Inverter With Hexad Voltage-Boosting for Renewable Energy Integration
30. Smart PV Inverter Cyberattack Detection Using Hardware-in-the-Loop Test Facility
31. Novel Integrated NLC-SHE Control Applied in Cascaded Nine-Level H-Bridge Multilevel Inverter and Its Experimental Validation
32. A Novel Three-Level Quasi-Switched Boost F-Type Inverter With High Voltage Gain and Self-Balanced Neutral-Point Voltage

33. A Novel SEPIC-Ćuk Based High Gain Solar PV Micro-Inverter for Grid Integration
34. Multidimensional Pulsewidth Modulation for Cascaded Split-Source Inverter
35. A Single-Phase Common-Ground Five-Level Transformerless Inverter With Low Component Count for PV Applications
36. Cybersecurity of Smart Inverters in the Smart Grid: A Survey
37. A Current Controller Gain Characterization of Weak Grid Coupled Solar Inverter Through Impedance Interaction Modeling
38. Two Compact Three-Phase Multilevel Inverters for Low-Voltage Applications
39. A Novel Direct Torque Control Strategy of Two-Level Voltage Source Inverters for Eliminating Common-Mode Voltage Spikes Caused by Dead-Time Effect.
40. Modeling and Suppressing Conducted Electromagnetic Interference Noise for LCL/LLCL-Filtered Single-Phase Transformerless Grid-Connected Inverter
41. Novel Soft-Switched Three-Phase Inverter With Output Current Ripple Cancellation
42. Three-Phase Inverter Fed Adjustable Field IPMSM Drive Utilizing Zero-Sequence Current

43. Fuzzy Logic Control for Solar PV Fed Modular Multilevel Inverter Towards Marine Water Pumping Applications
44. Comparative Analysis of Hybrid NPP and NPC Seven-Level Inverter With Switched-Capacitor
45. Fuzzy Logic Control for Solar PV Fed Modular Multilevel Inverter Towards Marine Water Pumping Applications
46. Comparison of Fuzzy and ANFIS Controllers for Asymmetrical 31-Level Cascaded Inverter With Super Imposed Carrier PWM Technique
47. Realization of Cascaded H-bridge Multilevel Inverter based Grid Integrated Solar Energy System with Band Stop Generalized Integral Control
48. A New Switching Angle Calculation Method for a Symmetrical Multilevel Inverter
49. Hybrid Multi-Cell Single-Stage Reduced Switch Multilevel Inverter
50. Modified PWM Technique for a Multi-Pulse Converter fed Multilevel Inverter Based IM Drive
51. Ladder-Switch Based Multilevel Inverter with Reduced Devices Count
52. An Asymmetrical Cascaded Single-phase quasi Z-Source Multilevel Inverter with Reduced Number of Switches and Lower THD
53. Comprehensive Study Of Cascade Multilevel Inverters With Three Level Cells

54. Modulation and Voltage Balancing of a Five-Level Series-Connected Multilevel Inverter With Reduced Isolated Direct Current Sources
55. Cascadable Dual-Buck Multilevel Inverter Modules with Autonomous DC Capacitor Voltage Balance
56. Simulation for Fault Forbearance Operation for Three-Phase Three-level H-Bridge Multilevel Inverter by Space Vector Modulation technique
57. Modular Parallel Multi-Inverter System for HighPower Inductive Power Transfer
58. A Fuzzy Logic Based Switching Methodology for a Cascaded H-Bridge Multilevel Inverter
59. Fuzzy Control Design for Quasi-Z-Source Three Phase Inverter.
60. A Novel Single Phase Multilevel Inverter Topology with Reduced Number of Switching Elements and Optimum THD Performance
61. A New Nine Level Inverter with Low TSV and Fewer Numbers of Components for Renewable Energy Systems
62. Design and Implementation of a Three-Phase Inverter Operated with Different Conduction Modes
63. Model Predictive Controller With Reduced Complexity for Grid-Tied Multilevel Inverters
64. A Very High Frequency Self-Oscillating Inverter Based on a Novel Free-Running Oscillator

65. A Three-Phase Asymmetric Multilevel Inverter for Standalone PV Systems.
66. PV-Battery Series Inverter Architecture: A Solar Inverter for Seamless Battery Integration With Partial-Power DC–DC Optimizer.
67. Optimal Switching Algorithm for Different Topologies of 15-Level Inverter Using Genetic Algorithm.
68. Performance Analysis for Single-Stage Buck-Boost Inverter.
69. Vector Current Control Derived from Direct Power Control for Grid-Connected Inverters.
70. Single-Stage Variable Turns Ratio High-Frequency Link Grid-Connected Inverter.
71. Design of Power Decoupling Strategy for Single Phase Grid-Connected Inverter Under Non-Ideal Power Grid.

AC AND DC MICRO GRID.

1. Hierarchical Model-Predictive Droop Control for Voltage and Frequency Restoration in AC Microgrids
2. Resilient AC Microgrids Against Correlated Attacks
3. A Control Stage for Parallel-Connected Interlinking Converters in Hybrid AC–DC Microgrids
4. Protection of the Future Harbor Area AC Microgrids Containing Renewable Energy Sources and Batteries
5. Distributed Detection Mechanism and Resilient Consensus Strategy for Secure Voltage Control of AC Microgrids
6. A Seamless Switching Strategy for Hybrid AC/DC Microgrids under Varied Control Complexities
7. Enhancing Dynamic Voltage Stability in Resilient Microgrids Using FACTS Devices
8. Optimization, Design, and Feasibility Analysis of a Grid-Integrated Hybrid AC/DC Microgrid System for Rural Electrification
9. An Integrated Human–Cyber–Physical Framework for Control of Microgrids
10. A Novel Cooperative Control Technique for Hybrid AC/DC Smart Microgrid Converters
11. Analysis and optimization of boost converter parameters in internal model-based control of voltage source converter-based AC microgrids

12. T-S Fuzzy Model Based Large-Signal Stability Analysis of DC Microgrid With Various Loads
13. A Review on Challenges in DC Microgrid Planning and Implementation
14. Dynamic Analysis, Stability and Design of Grid Forming Converters With PI-Based Voltage Control in DC and 3-Phase AC Microgrids
15. Data-Driven Cyberphysical Anomaly Detection for Microgrids With GFM Inverters
16. A Novel Low Device Count Four-Port Converter Based Solar-Fed Off-Grid System for Catering Household Hybrid AC/DC Loads
17. Power Management System (PMS) in Smart Hybrid AC/DC Microgrids.
18. Unbalanced Voltage Compensation in Smart Hybrid Microgrids
19. Harmonic Compensation Control in Smart Hybrid Microgrids
20. Overview of Power Quality in Microgrids
21. Energy Management System (EMS) in Smart Hybrid Microgrids
22. DC–DC Converter and On-board DC Microgrid Stability
23. Control of ILC in an Autonomous AC–DC Hybrid Microgrid With Unbalanced Nonlinear AC Loads
24. Multicharacteristics Arc Model and Autocorrelation-Algorithm Based Arc Fault Detector for DC Microgrid
25. Smart Microgrid Control During Grid Disturbances
26. Multilevel Switching Mode Operation of Finite Set Model Predictive Control for Grid-Connected Packed E-Cell (PEC) Inverter

27. A Consensus-Based Algorithm for Power Sharing and Voltage Regulation in DC Microgrids
28. Design of A Model Reference Adaptive Controller (MRAC) for DC-DC Boost Converter for Variations in Solar Outputs using modified MIT Rule in an Islanded Microgrid
29. Modeling and Control of Current-Source Converter-Based AC Microgrids
30. Overview and Implementation of Power Management in PV-Battery-Hydro Based Standalone Microgrid
31. Modeling Power Flow within a Microgrid for Energy Storage Sizing
32. Microgrid System with Emulated PV Sources for Parallel and Intentional Islanding Operations
33. Review of Switching and Control Techniques of Solar Microgrids
34. A Consensus-Based Secondary Control Strategy for Hybrid ac/dc Microgrids with Experimental Validation
35. Location of Fault in a DC Microgrid using State Space Model Based Approach
36. MESO-based robustness voltage sliding mode control for AC islanded microgrid
37. A Broad Frequency Range Harmonic Reduction for Cascaded-Power-Cell-Based Islanded Microgrid With Lumped PCC Filter
38. Solid-State Circuit Breakers for D.C. Microgrid Applications

39. Lifetime Estimation of DC-link Capacitors in Adjustable Speed Drives Under Grid Voltage Unbalances.
40. Hybrid Electric Springs for Grid-tied Power Control and Storage Reduction in AC Microgrids.
41. A Model Predictive Current Controlled Bidirectional Three-level DCDC Converter for Hybrid Energy Storage System in DC Microgrids.
42. A Novel Forbidden-Region-Based Stability Criterion in Modified Sequence-Domain for AC GridConverter System
43. A Three-port Converter Based Distributed DC Gridconnected PV System with Autonomous Output Voltage-Sharing Control
44. Resonant Point Analysis of Generalized CLLC-Type DC Transformer in the Hybrid AC/DC Microgrid
45. Loadability Improvement of Unbalanced Hybrid AC-DC Microgrids Using a Supervisory Control Scheme for Interlinking Converters
46. Arc analysis for the interlinking AC/DC buses in hybrid AC/DC building microgrids
47. Power Converters for DC Microgrids – Modelling and Simulation
48. Energy Management of Multiple Microgrids Based on a System of Systems Architecture
49. Microgrid Energy Management System for Reducing Required Power Reserves.

50. Compromised Controller Design for Current Sharing and Voltage Regulation in DC Microgrid
51. Capacity optimization of Distributed Generation for Stand-alone Microgrid Considering Hybrid Energy Storage Systems
52. Design and Optimization of a Solar Power Conversion System for Space Applications
53. Fractional Order PI Control for a Three-Phase Microgrid Application
54. An Efficient Fuzzy Logic Controlled-SMES for Isolated-Microgrid System Considering High Wind Power Penetration.
55. A Novel Control Scheme for Enhancing the Transient Performance of an Islanded Hybrid ACDC Microgrid

ELECTRICAL VEHICLES AND MOTOR DRIVES:

1. Research on Electric Vehicle Charging Safety Warning Based on A-LSTM Algorithm
2. Battery Degradation in Electric and Hybrid Electric Vehicles: A Survey Study
3. Energy Recovery and Energy Harvesting in Electric and Fuel Cell Vehicles, a Review of Recent Advances
4. Energy Demand Load Forecasting for Electric Vehicle Charging Stations Network Based on ConvLSTM and BiConvLSTM Architectures
5. A Comprehensive Data Analysis of Electric Vehicle User Behaviors Toward Unlocking Vehicle-to-Grid Potential
6. VCG-Based Auction for Incentivized Energy Trading in Electric Vehicle Enabled Microgrids
7. Neuro-Fuzzy and Networks-Based Data Driven Model for Multi-Charging Scenarios of Plug-in-Electric Vehicles
8. A Dynamic Optimal Scheduling Strategy for Multi-Charging Scenarios of Plug-in-Electric Vehicles Over a Smart Grid
9. Energy Management System for Hybrid Renewable Energy-Based Electric Vehicle Charging Station
10. Grid Impact of Frequency Regulation Provided by V2Gs Aggregated at HV, MV, and LV Level

11. Optimal Speed Controller Design of Commercial BLDC Motor by Adaptive Tabu Search Algorithm
12. Pulse Width Modulation Methods for Minimizing Commutation Torque Ripples in Low Inductance Brushless DC Motor Drives
13. Investigation of Electric Vehicles Contributions in an Optimized Peer-to-Peer Energy Trading System
14. An Improvement in Dynamic Behavior of Single Phase PM Brushless DC Motor Using Deep Neural Network and Mixture of Experts
15. Designing an On-board Charger to Efficiently Charge Multiple Electric Vehicles
16. Frequency Folding for LLC Resonant Converters in EV Charging Applications.
17. Grid Impact Analysis and Mitigation of En-Route Charging Stations for Heavy-Duty Electric Vehicles
18. Analysis and Design of Adaptive Cruise Control for Smart Electric Vehicle with Domain-Based Poly-Service Loop Delay.
19. Dynamic Optical Wireless Power Transfer for Electric Vehicles.
20. An Economical Solar Water Pump with Grid and Battery Backup for Continuous Operation.
21. Frequency-Modulation-Based IPT With Magnetic Communication for EV Wireless Charging.

22. Compact Integrated Transformer – Grid Inductor Structure for E-Capless Single-Stage EV Charger.
23. Rotating Phase Shedding for Interleaved DC–DC Converter-Based EVs Fast DC Chargers
24. A Practical Data-Driven Battery State-of-Health Estimation for Electric Vehicles.
25. Deadline Differentiated Dynamic EV Charging Price Menu Design
26. Soft-Switching Operation With a Variable Switching Frequency Control for Switched-Quasi-Z-Source Bidirectional DC–DC Converter in EVs
27. Distributed Coordination of Charging Stations Considering Aggregate EV Power Flexibility.
28. Mobility in the Smart Grid: Roaming Protocols for EV Charging.
29. Photovoltaic based Brushless DC Motor Using Cuckoo Algorithm as a Maximum Power Point Tracking
30. Common Grounded Wide Voltage-Gain Range DC–DC Converter With Zero Input Current Ripple and Reduced Voltage Stresses for Fuel Cell Vehicles
31. Performance Analysis of Brushless Direct Current Motor Drive for Different types of DC-DC Converter Using MPPT
32. Modified PWM Technique for a Multi-Pulse Converter fed Multilevel Inverter Based IM Drive

33. Model Predictive Speed Control of DC-DC Buck Converter Driven DC-motor with Various Load Torque Values
34. A bidirectional DC-DC converter fed separately excited DC motor electric vehicle application
35. Elimination of Commutation Current Ripple in the BLDC Motor Based on DC-DC Converter using PR-Compensator
36. Development and Comparison of Controllers Based On ANFIS for Speed Control of a DC Motor
37. Hybrid back-to-back MMC system for variable speed AC machine drives
38. Independent Drive of Multiple AC Motors Using Amplitude Modulation
39. A Quasi-Three-Level PWM Scheme to Combat Motor Overvoltage in SiC-Based Single-Phase Drives
40. A Novel AC/AC Modular Multilevel Converter for Medium Voltage Variable Frequency Vector Controlled Induction Motor Drives
41. A 6-Wire 3-Phase Inverter Topology for Improved BLDC Performance and Harmonics
42. Performance Improvement in BLDC Motor Drive Using Self-Tuning PID Controller
43. Design and Simulation Analysis of Various Luo Converter Topologies fed BLDC Drive for Solar PV Applications
44. Design and Control of a BLDC Motor drive using Hybrid Modeling Technique and FPGA based Hysteresis Current Controller

45. On the Influence of the Load Parasitics on the CM Conducted EMI of BLDC Motor Drives
46. Fast Fault Diagnosis Method for Hall Sensors in Brushless DC Motor Drives
47. Low Switching Frequency Model Predictive Control of Three-Level Inverter-Fed IM Drives with Speed Sensorless and Field-Weakening Operation
48. Instantaneous Balancing of Neutral-Point Voltages for Stacked DC-Link Capacitors of a Multilevel Inverter for Dual-Inverter-Fed Induction Motor Drives
49. Load Cycle-Based Design Optimization of Induction Motor Drives for Highly Dynamic Applications
50. Performance Comparison of Fault-Tolerant Three-Phase Induction Motor Drives Considering Current and Voltage Limits
51. Speed Sensor less Model Predictive Control Based on Disturbance Observer for Induction Motor Drives
52. Positive Current Reference Generation based Current Control Technique for BLDC Motor Drives Applications
53. Solar Powered BLDC Motor Drive using CUK Converters for Water pumping
54. Web Monitoring And Speed Control Of Solar Based Bldc Motor With Iot

55. DTC based BLDC Motor Controlled Centrifugal Pump Fed by PI-BFO Tuning Strategy for Buck-Boost Converter in Solar PV Array Water Pumping System
56. Design, Improvement & Analysis of Solar Based Three-Stage Interleaved Boost Converter for BLDC Motor