POWER ELECTRONICS

* Voltage-Based Control of a Smart Transformer in a Micro grid
* Novel High Step-Up DC–DC Converter for Distributed Generation System
* Maximum Power Point Tracking Technique for Partially Shaded Photovoltaic Systems in Micro grids
* Digital Control for an ArcWelding Machine Based on Resonant Converters and Synchronous Rectification
* An Energy-Stored Quasi-Z-Source Inverter for Application to Photovoltaic Power System
* Battery Charger for Electric Vehicle Traction Battery Switch Station
* Bifurcation Analysis of Standalone Photovoltaic- Battery Hybrid Power System
* Boost rectifier using single phase matrix converter with reduced switch counts
* New Extendable Single-Stage Multi-Input DC-DC/AC Boost Converter
* A Modified Single-Phase Quasi-Z-Source AC–AC Converter
* Highly Efficient Analog Maximum Power Point Tracking (AMPPT) in a Photovoltaic System
* A New Cascaded Multilevel Inverter with reduced Number of Switches
* Boost-Derived Hybrid Converter with simultaneous DC and AC outputs
* Flexible Multilevel Boost DC-AC Converter
* Improved ZVS DC-DC Converter With a High Voltage Gain and a Ripple-Free Input Current
* A Soft Switching Three-phase Current-fed Bidirectional DC-DC Converter With High Efficiency Over a Wide Input Voltage Range
* Cascade Three-Level AC/AC Direct Converter
* Grid-Connected Boost-Half-Bridge Photovoltaic Microinverter System Using Repetitive Current Control and Maximum Power Point Tracking
* Novel Zeta-Mode Three-Level AC Direct Converter
* Step-Up DC/DC Converters With Cascaded Quasi-Z-Source Network

POWER SYSTEM

* Improvement of power quality by using hybrid fuzzy controlled based IPQC at various load conditions
* A Method for Evaluating Energy Efficiency to Justify Power Factor Correction in Ship Power Systems
* Reactive Power Compensation in Single-Phase Operation of Microgrid
* Technique to Develop Auto Load Shedding & Islanding Scheme to Prevent Power System Blackout
* Stabilty Of Power Transmission Capability Of Hvdc System Using Facts Controllers
* Multi objective Optimal Location of FACTS Shunt-Series Controllers for Power System Operation Planning
* Investigation of Domestic Load Control to Provide Primary Frequency Response Using Smart Meters

EMBEDDED

* A System for Mobile Assisted Living
* Wireless remote monitor and control system based on Zigbee and web
* A low cost web based remote monitoring system with built-in security feature for vulnerable environments
* Automatic Control for Laboratory Sterilization Process based on Arduino Hardware
* Online Control of Fuzzy Based Mine Detecting Robot Using Virtual Instrumentation
* Design and development of digital PID controller for dc motor drive system using embedded platform for mobile robot
* Design and Conceptual Development of a Sunbathe Laundry Robot
* Design and Implementation of Industrial Network Monitoring Protocol for Networked Industrial Sensors
* Automatic Measurement and Reporting System of Water Quality Based on GSM
* Online control of remote operated agricultural Robot using Fuzzy Controller and Virtual Instrumentation
* Low cost smart power metering
* Remote-Control System of High Efficiency and Intelligent Street Lighting Using a ZigBee Network of Devices and Sensors
* Automatic speed and torque monitoring in induction motors using
* A RISC Microcontroller Based Voltage Regulator Module with Fuzzy Logic Controller for Processor Core in Mobile Systems

LABVIEW

* Online control of remote operated agricultural Robot using Fuzzy Controller and Virtual Instrumentation
* Virtual Lab: Remote Access and Speed Control of DC Motor using Ward-Leonard System
* The Design of ZigBee Protocol Based Mobile Node in Wireless Sensor Network
* Remote Monitoring and Controlling of Gas Sensors Using VPN Connection
* Oxygen Level Monitoring in an Oxygen Cylinder
* Experiential Learning of Digital Communication Using LabVIEW
* Data Acquisition and Realization of Communication Transmission Based on Labview
* Novel Design Solutions for Remote Access, Acquire and Control of Laboratory Experiments on DC Machines
* LabVIEW Based Automatic Paralleling of Synchronous Generator System
* Online Control of Fuzzy Based Mine Detecting Robot Using Virtual Instrumentation

IMAGE PROCESSING

* Optical flow estimation for flame detection in videos
* Image sharpness assessment based on local phase coherence
* Structural texture similarity metrics for image analysis and retrieval
* Dimensionality reduction for registration of high-dimensional data sets
* Exploring visual and motion saliency for automatic video object extraction
* Efficient minimum error bounded particle re-sampling l1 tracker with occlusion detection
* Recursive histogram modification: establishing equivalency between reversible data hiding and lossless data compression
* Eye ball tracked wheelchair for the paralysed
* Supervisory control and traffic avoiding system using image Processing
* Vehicle Detection in Aerial Surveillance Using Dynamic Bayesian Networks
* MATLAB based defect detection and classification of printed circuit board
* A method for detecting pedestrians in video surveillance scenes
* Face detection system using digital image processing

VLSI

* IsoNet: Hardware-Based Job Queue Management for Many-Core Architectures
* MDC FFT/IFFT Processor With Variable Length for MIMO-OFDM Systems
* Self-Repairing Digital System With Uniﬁed Recovery Process Inspired by Endocrine Cellular Communication