Record Nr. UNINA9910829048203321 **Titolo** Advancements in automation and control technologies: selected, peer reviewed papers from the 2014 International Conference on Advancements in Automation and Control (ICAAC 2014), April 11-12, 2014, Ramanathapuram, Tamilnadu, India / / edited by S. Selvaperumal, R. Nagarajan and P. Nedumal Pugazhenthi Zurich, Switzerland:,: TTP,, 2014 Pubbl/distr/stampa ©2014 **ISBN** 3-03826-507-1 Descrizione fisica 1 online resource (872 p.) Applied Mechanics and Materials, , 1662-7482; ; Volume 573 Collana Disciplina 629.8 Soggetti Digital control systems Automation - Data processing Automatic control Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references at the end of each chapters and indexes. Nota di contenuto Advancements in Automation and Control Technologies; Preface, Committees and Sponsors; Table of Contents; Chapter 1: Power Electronics and Integrated Control Circuits; Design and Implementation of GA Based Selective Harmonic Elimination in Modified Cascaded Multilevel Inverter; Comparative Analysis of Fixed Speed & Variable Speed Response of PFC Zeta Converter Fed PMSM Drive Using PI Controller; Predetermination of Higher Order Harmonics by Dual Phase Analysis; Performance Investigation of PI Controller Based Chopper Fed DC Drive Comparison of DC-DC Converter in PV System Using Soft Computing Technique Hardware Implementation of Single-Stage Solar Based DC-DC Converter for Inductive Load Application; Closed Loop Control of Positive Output Re-Lift Luo Converter with PSO and Cuckoo Techniques; Intelligent Controller for Shunt Active Power Filter to Improve Power Quality: High Efficient Induction Motor Drives Using Triple Lift Converter: Optimization of Subcell Interconnection for Multijunction Solar Cells Using DC-DC Converter; Comparison of

Current Control Strategies of Shunt Active Power Filter

Augmentation of Real Power from Renewable Energy Sources across the DC Link of the UPFC Using Fuzzy Logic Control Scheme Power Quality Improvement in Single Phase AC-DC Three Level Boost Converter Using PI and SMC; Exploration of EMI in Buck Boost Converter - A Real Time Approach; A ZVS DC-DC Converter with High Voltage Gain for Fuel Cell Systems: Performance Comparison of P&O and INC MPPT Techniques for a Boost Converter in Solar Photovoltaic System; New Cost Effective Inverter Fed BLDC Motor for Electric Vehicle Applications Development of Zeta Converter for Permanent Magnet Brushless Direct Current Motor Analysis and Design of Single Phase AC-DC Modified SEPIC Converter; Digital Control of Space Vector Pulse Width Modulation Based Shunt Active Filter; A Modified Current Controller for H-Bridge Active Filter to Reduce Harmonics in Single Phase System: Time Domain Based Digital Controller for Sepic Converter; Design and Evaluation of PI Controller for Four Switch BLDC Motor Drive; A Novel Soft Switching Based Fuzzy Logic Control for Single Phase Inverter 3-Level Inverter Fed Direct Torque Control of Induction Motor without Using Medium Vectors Hybrid Anti-Windup Fuzzy PI Controller Based Direct Torque Control of Three Phase Induction Motor: Modeling and PID Control of Single Switch Bridgeless SEPIC PFC Converter; Chapter 2: VLSI Design for Intelligent Control; Power Optimization in Domino Circuits Using Current Mirror Based Leakage Compensating Keeper; Performance Analysis of an Area Efficient and Low Power MOD-R2MDC FFT for MIMO OFDM; SRAM Based Random Number Generator for Non-Repeating Pattern Generation Area Efficient Carry Select Adder Using Negative Edge Triggered D-**Flipflop** 

## Sommario/riassunto

Collection of selected, peer reviewed papers from the 2014 International Conference on Advancements in Automation and Control (ICAAC 2014), April 11-12, 2014, Ramanathapuram, Tamilnadu, India. The 138 papers are grouped as folllows: Chapter 1: Power Electronics and Integrated Control Circuits, Chapter 2: VLSI Design for Intelligent Control, Chapter 3: Automation and Control, Chapter 4: Communication Engineering, Chapter 5: Image and Signal Processing, Chapter 6: Computer Engineering and Information Technologies, Chapter 7: Materials Processing in Mechanical Engineering, Chapter 8: Advanced Pow