1. Record Nr. UNINA9910743245603321

Titolo	Innovation in electrical power engineering, communication, and computing technology : proceedings of Second IEPCCT 2021 / / Manohar Mishra [and four others]
Pubbl/distr/stampa	Singapore : , : Springer, , [2022] ©2022
ISBN	981-16-7075-7 981-16-7076-5
Descrizione fisica	1 online resource (573 pages)
Collana	Lecture Notes in Electrical Engineering
Disciplina	004
Soggetti	Computer science Electric power systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Intro -- IEPCCT Committee -- Preface -- Acknowledgements -- About the Conference -- Contents -- About the Editors -- Congestion Management in the Deregulated Market: A Brief Survey -- 1 Introduction -- 2 Congestion Management Major Issues -- 3 In a Congested Power System, a Real-Time Scenario -- 4 Congestion Management Methodologies -- 4.1 Congestion Management by Generation Rescheduling (GR) -- 4.2 Congestion Management by Optimal Power Flow (OPF) -- 4.3 Congestion Management by Available Transfer Capability (ATC) -- 4.4 Congestion Management by Flexible AC Transmission Systems (FACTS) Devices -- 4.5 Congestion Management by Price Control -- 4.6 Congestion Management by Load Curtailment -- 5 Congestion Management Case Studies -- 6 Congestion Management Issues and Challenges -- 7 Critical Discussion on Research Gaps -- 8 Conclusion -- References -- Design and Analysis of RF Optimization in 2G GSM and 4G LTE Network -- 1 Introduction -- 2 Measurement of Radio Resources -- 2.1 Measurement of Radio Parameters Using TEMS -- 2.2 Received Signal Power -- 2.3 Interference -- 2.4 Speech Quality -- 3 Analysis of Measurements -- 3.1 Measurement of Radio Parameters -- 3.2 Handover -- 3.3 Other Observations During Drive Test -- 4 Conclusion

-- References -- Artificial Pancreas (AP) Based on the Fractional-Order PID Controller (FOPIDC) with JAYA Optimization Technique -- 1 Introduction -- 2 Problem Formulations -- 2.1 Clinical Support -- 2.2 Simulation Structure of Patient -- 2.3 MID -- 2.4 Investigation of Patient Activities -- 3 Control Algorithms -- 3.1 Development of JAYA-FOPIDC -- 4 Results -- 4.1 Patient Activities with JAYA-FOPID Control -- 4.2 Comparative Investigation -- 5 Conclusions -- References -- Efficiency Enhancement of Solar Photovoltaic Module Based on Different Cooling Arrangement -- 1 Introduction -- 2 Methods Implemented.
3 Results and Discussion -- 3.1 Fixing the Tilt Angle of Solar Modules Used Understudy from January to April -- 3.2 Measurement of Electrical Parameters of Solar Module Used for the Study -- 4 Conclusion -- References -- Optimal Compensation of Hydro Governor for Power Oscillation Damping -- 1 Introduction -- 2 Hydro-Turbine Modelling -- 3 Governor Modelling -- 4 Generator Model -- 5 Phase Compensation -- 6 Objective Function -- 7 SSA Algorithm -- 8 Result and Discussion -- 9 Conclusion -- References -- Optimal LFC of Multi-area Interconnected System Applying PI-PID Cascaded Controller -- 1 Introduction -- 2 System Investigated -- 3 Controller Structure (PI-PID Cascaded Controller) -- 4 Result and Discussion -- 4.1 Multi-area Without HVDC Link -- 4.2 Multi-area with HVDC Link -- 5 Conclusion -- Appendix -- References -- A Novel Fuzzy-Based Model Predictive Adaptive Controller for a PMSG Wind Turbine -- 1 Introduction -- 2 System Investigated -- 3 Controller Structures and Their Optimal Design -- 4 Fuzzy Logic Controller -- 5 Result and Discussion -- 6 Conclusion -- Appendix -- References -- Feasibility Study of a Floating Solar Photovoltaic System in Odisha, India -- 1 Introduction -- 1.1 Present Status of Floating Solar Panel in India -- 1.2 Major Components of Floating Solar Photovoltaics -- 2 Proposed Design of a 12 kW Floating Solar Power Plant -- 2.1 Study Area-Jhumka Dam and Reservoir -- 2.2 Solar Energy Resources in Jhumka Reservoir -- 3 Simulation Results and Analysis of FSPV -- 4 Conclusion -- References -- ASOS-Based Load Frequency Control of Multi-Area Power System Using Degrees of Freedom PID Controller -- 1 Introduction -- 2 Proposed Model -- 2.1 Three-Area System -- 2.2 Controller Design -- 2.3 Adaptive Symbiotic Organism Search -- 3 Simulation Results Analysis -- 4 Conclusion -- References.
Design of Aperture Coupled Microstrip Phased Array Antenna -- 1 Introduction -- 2 Antenna Design -- 3 Design Optimization -- 3.1 Length and Width of the Patch Array Antenna -- 3.2 Length and Width of the Slots Present in the Ground -- 3.3 Optimum Interelement Spacing of the Array Antenna Elements -- 3.4 Width of the Transmission Line -- 4 Final Simulation Results -- 5 Simulation Studies of 2×2 Phased Array Antenna -- 6 Conclusion -- References -- Stability Improvement of Fractional-Order Filters Using Gain Bandwidth and Step Response Approach -- 1 Introduction -- 2 Fractional Calculus -- 3 Fractional-Order Systems -- 3.1 Mathematical Background -- 3.2 Realization of Fractional Capacitor Using Passive Elements -- 3.3 Gain-Bandwidth Stability Range of Fractional-Order Filter -- 3.4 Stability Analysis of Fractional-Order Filter Using Step Response -- 4 Results and Discussion -- 5 Conclusions -- References -- Tidal Energy Connected with Grid for Coastal Area -- 1 Introduction -- 2 Modeling of Marine Energy -- 2.1 Tidal Analysis Method -- 2.2 Tidal Current and Turbine Profile -- 3 Inverter Control -- 3.1 Phase Locked Loop (PLL) -- 3.2 Clarke and Park (CP) Transformation -- 4 Simulation Results -- 5 Conclusion -- References -- Design of Switched Capacitor-Based Charge Amplifier in 180nm Technology -- 1

Introduction -- 2 Charge Amplifier (CA) -- 3 Operating Principle -- 3.1 Switched Capacitor Technique -- 4 CMOS Operational Amplifier -- 4.1 Two-Stage CMOS Operational Configuration -- 4.2 CMOS Based Charge Amplifier -- 5 Results and Discussion -- 6 Conclusion -- References -- Optimal Power Trading for a Micro-grid with Demand Response in Competitive Electric Market -- 1 Introduction -- 2 Uncertainty Modeling of Load, MCP and Renewable Sources -- 3 Mathematical Formulation of MG for Optimal Power Trading -- 4 WOA Technique -- 4.1 IWOA Technique.
4.2 Performance Evaluation of IWOA -- 5 Implementation of IWOA for Optimal Power Trading of MG -- 6 CASE Studies -- 7 Conclusion -- References -- A Comparative Study of Deep Learning Algorithms for Identification of COVID-19 Disease Using Chest X-Ray Images -- 1 Introduction -- 2 Materials and Method -- 2.1 Dataset Used -- 2.2 Feature Extraction and Classification -- 3 Experimental Results -- 3.1 Performance Evaluation -- 4 Conclusion -- References -- Electrical and Dielectric Characteristics of Ethylene Vinyl Acetate/Aluminum Nitride Polymer Composite for Usage in Flexible Electronics -- 1 Introduction -- 2 Literature Review -- 3 Experimental Section -- 4 Result and Finding -- 4.1 XRD Study of EVA/AlN Composite -- 4.2 Electrical and Dielectric Study of EVA/AlN Composite at Room Temperature -- 4.3 Electrical and Dielectric Study of EVA/AlN Composite at Higher Temperature -- 5 Conclusion -- References -- Advanced Adaptive Filter-Based Control Strategy for Active Switch Inverter Operation -- 1 Introduction -- 2 System Under Study and Five-Level Active Switch Inverter -- 2.1 5LASI Working Model -- 3 Adaptive Filter-Based Control Design -- 4 Result Analysis -- 5 Conclusion -- Appendix -- References -- Bypass Diodes Configurations for Mismatch Losses Mitigation in Solar PV Modules -- 1 Introduction -- 2 System Configuration and Test Benches -- 2.1 Mathematical Modeling of Cells and Module -- 2.2 Formulations -- 3 Bypass Diode Configurations -- 4 Results and Discussions -- 5 Conclusion -- References -- Sentiment Analysis of Bengali Facebook Data Using Classical and Deep Learning Approaches -- 1 Introduction -- 2 Related Work -- 3 System Architecture -- 4 Methodology -- 4.1 Data Collection -- 4.2 Data Preprocessing -- 4.3 Feature Extraction -- 4.4 Classical Approaches -- 4.5 Deep Learning Approaches -- 5 Result Analysis and Comparison -- 6 Conclusion.
References -- Analysis and Recognition of Emotions from Voice Samples Using Ant Colony Optimization Algorithm -- 1 Introduction -- 2 Background -- 2.1 Spectral Flux (SF) -- 2.2 Spectral Centroid (SC) -- 2.3 Spectral Roll-Off (SR) -- 2.4 Formants -- 2.5 Log Energy -- 3 Problem Definition -- 4 The Proposed Methodology -- 5 Simulation Results and Discussion -- 6 Conclusions -- References -- Moth Flame Optimized Automatic Generation Control with PIDF Controller for the Integration of Plug-In Electrical Vehicles with Interconnected Power System -- 1 Introduction -- 2 System Modeling -- 3 Moth-Flame Optimization (MFO) -- 4 Modeling of PEV -- 5 Result and Discussions -- 6 Conclusion -- References -- Cost and Feasibility Analysis for Designing a PV-Wind Hybrid Renewable Energy System (A Case Study for Campus-3, KIIT University, Bhubaneswar) -- 1 Introduction -- 2 System Description -- 2.1 Energy Resources of the Location -- 2.2 Load Profile -- 2.3 Components of Hybrid Renewable Energy System -- 3 Homer Pro Software -- 4 Results and Discussion -- 5 Conclusion -- References -- Design of Optimal Multi-band PSS for Variable Solar-Penetrated Power System -- 1 Introduction -- 2 Generator Modelling -- 3 Multi-machine System Modelling -- 4 Multi-band PSS -- 5 Objective Function -- 6 SPV (Solar Photovolatic) System -- 7 Modified DE -- 8

Result Analysis -- 9 Conclusion -- References -- TLBO Designed 2-DOFPIDF Controller for LFC of Multi-area Multi-source Power System -- 1 Introduction -- 2 System Modelling -- 3 Proposed Control Approach -- 3.1 PID Controller -- 3.2 2-DOFPIDF Controller -- 3.3 Optimal Design of Controllers -- 4 Result Analysis -- 4.1 Transient Performance Analysis -- 4.2 Robustness Analysis -- 5 Conclusion and Future Scope -- Appendix 1 -- References.

Automatic Generation Control of an Interconnected Power System Using 2-degree of Freedom Fractional Order PID Controller.