

Contents

Multi-Objective Optimization of Stand-alone Renewable Energy Hybrid System	1
Rajendran Joseph Rathish and Krishnan Mahadevan	
Wind Farm Power Prediction Based on Wind Speed and Power Curve Models	15
M. Lydia, S. Suresh Kumar, A. Immanuel Selvakumar and G. Edwin Prem Kumar	
Integration of Wind Power Generators for the Enhancement of Profit by Optimal Allocation of SVC	25
S. Nagalakshmi, R.C. Rohini and S. Balakiruthiha	
Block-Random Access Memory-Based Digital Pulse Modulator Architecture for DC–DC Converters	35
V. Radhika and K. Baskaran	
Fractional-Order Controller Design and Analysis of SEPIC Converter	47
S. Jeyasudha and B. Geethalakshmi	
Advanced Energy Management of a Micro-grid Using Arduino and Multi-agent System	65
Leo Raju, Antony Amalraj Morais and R.S. Milton	
Sustain the Critical Load in Blackout Using Virtual Instrumentation	77
R. Hariharan, P. Usha Rani and P. Muthu Kannan	
Optimal Single and Multiple DG Installations in Radial Distribution Network Using SLPSO Algorithm	89
R. Arulraj and N. Kumarappan	

Dynamic Modeling and Control of Utility-Interactive Microgrid Using Fuzzy Logic Controller	97
T. Vigneysh and N. Kumarappan	
A Novel Method of Power Quality Improvement in BLDC Motor Using Cascaded H-Bridge MLI Topology	107
S. Arunkumar and J. Pearly Catherine	
Tuning of Fractional Order Proportional Integral Derivative Controller for Speed Control of Sensorless BLDC Motor using Artificial Bee Colony Optimization Technique	117
K. Vanchinathan and K.R. Valluvan	
Torque Ripple Minimization of a FOC-Fed PMSM with MRAS Using Popov's Hyper-Stability Criterion	129
N. Krishna Kumari and D. Ravi Kumar	
Effectual Particle Swarm Optimization Algorithm for the Solution of Non-convex Economic Load Dispatch Problem	143
M. Vanitha and Smrithi Radhakrishnan	
Differential Evolution with Parameter Adaptation Strategy to Economic Dispatch Incorporating Wind	153
G.R. Venkatakrishnan, J. Mahadevan and R. Rengaraj	
Application of Cuckoo Search Algorithm in Deregulated Economic Load Dispatch	167
John Valder and A.J. Pinto Pius	
An Investigation of Small-Signal Stability of IEEE 14 Bus System with AVR, PSS and Performance Comparison with FACTS Devices	175
N. Mohana Sundaram, C. Udhayashankar and Rani Thottungal	
Investigation on the Properties of Natural Esters Blended with Mineral Oil and Pyrolysis Oil as Liquid Insulation for High Voltage Transformers	187
M. Bakrutheen, M. Willjuice Iruthayarajan and S. Senthil Kumar	
A Novel Approach to Using Energy-Efficient LED-Based Visible Light Communication in Hospitals	197
B. Anitha Vijayalakshmi and M. Nesa Sudha	
Implementation of Mesh Network Using Bluetooth Low Energy Devices	205
P. Gomathinayagam and S. Jayanthi	
Online Static Security Assessment Module Using Radial Basis Neural Network Trained with Particle Swarm Optimization	215
M. Lekshmi and M.S. Nagaraj	

Ocular Artifact Suppression in Single Trial EEG Using DWT-Combined ANC	225
P. Prema, T. Kesavamurthy and K. Ramadoss	
Egomotion Estimation Using Background Feature Point Matching in OpenCV Environment	231
Sharmila Bakthavachalam and Nedumaran Damodaran	
Performance Analysis of Wavelet Function Using Denoising for Clinical Database	241
Karthick Ganesan and Harikumar Rajaguru	
Influence of PWM Waveform on Breakdown in Twisted Pairs	251
S. Narasimha Rao and K. Elanseralathan	
Diagnosis of Cardiovascular Diseases (CVD) Using Medical Images	257
R. Indumathi and M. Maheswari	

Intelligent and Efficient Electrical Systems

Selected Proceedings of ICIEES'17

Bhuvaneswari, M.C.; Saxena, J. (Eds.)

2018, XVIII, 268 p. 156 illus., 122 illus. in color.,

Hardcover

ISBN: 978-981-10-4851-7