Journal of The Institution of Engineers (India): Series B

Volume 102 · Issue 3 · June 2021

ORIGINAL CONTRIBUTIONS

A Differential Signal-Based Fault Classification Scheme Using PCA for Long Transmission Lines A. Mukherjee · P.K. Kundu · A. Das 403

A New Two-Leg Converter-Based Multifunctional TPFW Grid-Tied Single-Stage Solar PV System V. Narayanan · S. Kewat · B. Singh · P. Jayaprakash 415

Proposing Intelligent Energy Management Model for Implementing Price Rate in Microgrids Using Demand Response Program M. De · G. Das · K.K. Mandal 427

Assessment and Impact of Var Injection Devices on System Parameters B. Vyas · M. Kumar Gupta · M.P. Sharma 437

Case-Based Classifier for Air Pollution Monitoring and Forecasting G.M. Siddesh · S. Hiriyanniah · K.G. Srinivasa 447

SEPIC Converter for Solar PV Array Fed Battery Charging in DC Homes
K. Singh · A. Anand · A.K. Mishra · B. Singh ·
K. Sahay 455

Computing Cumulative Number of Failures Using the Fast Fourier Transform D. Ramasamy 465

Control of Electric Spring: A Lead–Lag Compensated Approach M.D. Solanki · S.K. Joshi 469

Design of Solar Smart Street Light Powered Plug-in Electric Vehicle Charging Station by Using Internet of Things S. Divyapriya · A. Amudha · R. Vijayakumar 477

Discrete-Time System Approximation Using Hybrid Method Based on Fuzzy C-Means Clustering A. Sikander · R. Goyal · M. Mehrotra · G. Parmar 487

GA-Optimized Fuzzy-Based MPPT Technique for Abruptly Varying Environmental Conditions S.S. Mohammed · D. Devaraj · T.P.I. Ahamed 497

Investigation of Partial Discharge Due to Particle Movement in Power Transformer Using Computational Fluid Dynamics and Monte Carlo Technique N. Vasantha Gowri · M. Ramalinga Raju ·

B.P. Singh **509**

Modeling of Gapless MOSA at Low Current Region Considering Harmonic Content of Operating Voltage

M. Khodsuz · S. Seyyedbarzegar 521

System Stability Improvement and Cost-Effective Solution by Accelerated Distance Protection Using Direct Fiber Optic Signal M. Venkatachalam · P. Loganathan 531

Multivariate Analysis of Water Quality of Ganga River P. Bagla · K. Kumar · N. Sharma · R. Sharma 539

Performance Analysis and Comparison of Optimally Tuned Hybrid Filter Controller for Arc Furnace Load R. Jhapte · A.P. Vishwakarma · R.N. Patel · D.D. Neema 551

Prediction of Unknown Fault of Induction Motor using SVM following Decision-Directed Acyclic Graph A.K. Thakur · P.K. Kundu · A. Das 573

PV-BES Microgrid System with LQR-Tuned CC-CVF-Based Control Algorithm S.K. Pandey · B. Singh 585

CASE STUDY

Operations of Distance Relay Third Zone Protection During Power System Critical Conditions: A Case Study on Indian Eastern Regional Grid K. Venkatanagaraju · M. Biswal · K.K. Murty 595

REVIEW PAPER

Evaluation of Machine Learning Algorithms Used on Attacks Detection in Industrial Control Systems P. Arora · B. Kaur · M.A. Teixeira 605

Further articles can be found at link.springer.com

Indexed/abstracted in Scopus, Google Scholar, EBSCO, OCLC, Summon by ProQuest

Instructions for Authors for J. Inst. Eng. India Ser. B are available at http://www.springer.com/40031