



11/6/24
SB

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

Electrical Engineering · Electronics and
Telecommunication Engineering · Computer Engineering

For Circulation in India only



The Institution of Engineers (India)

Springer

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

Volume 105 · Issue 2 · April 2024

ORIGINAL CONTRIBUTIONS

A Parallel DNA Crypto Algorithm for Medical Image
S. Biradar · P.T. Akkasaligar · S. Biradar **183**

Automatic Location Tracking and Health Monitoring by System Based on Mesh Network

R. Bansal · S. Mahajan · K. Aggarwal · D. Goyal · Y. Choudhary · K. Kaur · N. Jindal **191**

A Flow-Based Performance Evaluation on RYU SDN Controller

A. Ram · M.P. Dutta · S.K. Chakraborty **203**

Combined Wavelet and Ann-Based Open-Switch Fault Detection and Classification in PV-Fed Multilevel Inverter

V. Singh · A. Yadav · S. Gupta **217**

Design a High Frequency Power Inverter Using Ferrite-Core Transformer for Ohmic Heating of Liquid Conducting System

S. Mandal · M. Roy **229**

Design & Implementation of High Speed and Low Power PLL Using GPDK 45 nm Technology
N.A. Badiger · S. Iyer **239**

Early Malignant Mesothelioma Detection Using Ensemble of Naive Bayes Under Decorate Ensemble Framework

A. Moirangthem · O.S. Lepcha · R. Panigrahi · B. Brahma · A.K. Bhoi **251**

Feature Extraction of Partial Discharge Signal Based on Local Mean Decomposition and Multi-scale Singular Spectrum Entropy

X. Yang · W. Wang · M. Fang · L. Hu · L. Li **265**

Investigations into the Poor Energy use Practices of Irrigation Pumps by Indian Farmers: A Case Study

M.N. Shelar · V.K. Matsagar · V.S. Patil

S.D. Barahate **277**

KrishiQ-BERT: A Few-Shot Setting BERT Model to Answer Agricultural-Related Questions in the Kannada Language

P. Ajawan · V. Desai · S. Kale · S. Patil **285**

Microgrid Harmonic-Restrained Dual Slope Differential Protection

J.P. Desai **297**

PV-Based Grid Integrated EV with GWO Optimized PI Controller for Boost Integrated Luo Converter
A.B. Kancharla · N.B. Prasad · D.R. Kishore **309**

Power Efficient CNTFET-Based Ternary Comparators
K. Chauhan · D. Bansal **323**

PV-Fed Single-Phase Induction Motor for Irrigation Application
D. Bojang · E. Nhantumbo · M. Verma · A. Kulkarni **335**

Seismic Vibration Analysis Using Toeplitz-Matrix-Based Cloud Computing
A. Das · S. Chattopadhyay · J.H.C. Pretorius **343**

S⁴BL Power-Factor-Corrected Converter Powered Sensorless BLDC Motor Ceiling-Fan
A. Kumar · B. Singh **351**

Underwater Fleck Detection Using Convolutional Neural Network
S. Pushpa Mala · P. Prajwal Raju · B. Poojashree · R. Hebbar · V. Bedre · K.R. Manasa **365**

Wireless Geofenced Inventory Management for Agricultural Warehouse
P. Arishenbagam · S. Tamil Selvi · B. Ganapathy Ram **375**

REVIEW PAPERS

Architectures for Efficiency Enhancement in Power Amplifiers
K. Saurabh · S. Singh **385**

Multi-input Converters for Electric Vehicles: A Comprehensive Review of Topologies, Control Strategies, and Future Research Trends
A.S.L.V. Tummala · G.I. Kishore · V. Tarun · K. Vinay · S. Sriharsha **397**

CASE STUDY

Knowledge Extraction on Energy Consumption in an Educational Institution Using Smart Energy Meter Data Analytics

A.C. Vishnu Dharssini · S. Charles Raja · D. Nelson Jayakumar **417**

BRIEF COMMUNICATIONS

Investigation of NOMA 5G Systems Under Non-Gaussian Channels

H.A. Hilal 433

Using Computer Vision for Mango Price Estimation Based on Breed Classification and Quality Grading

C. Yosbuth · K. Pattrajariya · P. Sitthikarn · S. Ditjarern · T. Siriborvornratanakul 443

CORRECTION

Correction: Characterization of Tin Disulfide Thin Films Prepared by Spin Coating Technique: Effect of Spin Speed and Deposition Time on Film Properties

K.H. Maria · R.Md. Kabir · I.N. Esha · F.T.Z. Toma · M.S. Bashar · K.Md.A. Hussain 455

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>