IEEE R9 REGION

IEEE Advancing Technology for Humanity

IEEE Latin America Transactions

DECEMBER 2026, Volume 24 Issue 12 IEEEXplore, DOI, ISI, ISSN 1548-0992

REGULAR ISSUE: Electronics, Energy and Computing

Table of Contents 1426

Fragmentation-Conditioned WiFi Threat Detection under Crowdsensing
J. A. Macía-Montoya, H. I. Solís-Cisneros, and J. R. Velázquez-González 1427

Low-Cost Cyber-Physical Architecture for Monitoring Industrial DC Electrical Signals
M. A. Pérez-Romero, J. Sandoval-Gutiérrez, and M. Hernández-Bolaños 1437

A Variable-Bandwidth Low-Pass Filter Approach-based Power Sharing and Voltage Regulation in Hybrid Energy Storage Systems for DC Microgrid Applications
S. Bomma, and U. B. Manthati 1445

A Comparative Study of Harmonic and Inter-Harmonic Detection Using Parallel- and Cascade-Connected Nonlinear Limit Cycle Oscillators
E. Vazquez, and C. F. Méndez-Barrios 1458

Online Strategy for Contact Fault Diagnosis in Power Transformers
L. Puntano, G. G. Leal H., M. Meira, C. Ruschetti, and C. Verucchi 1470

Investigation on Suitability of Ripple Correlation Control Based MPPT for One Cycle Controlled Single Phase Two Stage Grid Connected PV Systems
R. Bandaru, Sreeraj E. S., and P. K. Goel 1477

VHDL Implementation of a Causal QRS Detector and Heart-Rate Classifier on a Cyclone V FPGA: Inter-Patient Validation on MIT-BIH
P. M. Q. Tapia, M. P. C. Meza, and J. A. C. Sinti 1493

A Low-Cost IoT System Development for Real-Time Residential Water Monitoring
A. M. Fernández-Saldaña, A. Monroy-Avelino, P. Miranda-Romagnoli, and R. Noriega-Papaqui 1506

Design of a Broadband Monopole Whip Antenna Based on Trap Circuit Configuration with BWR 1:17.3 for Long Distance Radio Applications
M. Raveendra, C. W. Chiu, C. Kohila, and U. Saravanakumar 1518

System Identification and Control Methods for Weighing Instruments Based on Electromagnetic Force Compensation
M. S. Gómez, J. A. P. Acosta, and H. P. Penagos 1530