



IEEE Latin America Transactions

JULY 2025, Volume 23 Issue 7 IEEEXplore, DOI, ISI, ISSN 1548-0992

REGULAR ISSUE: Electronics, Energy and Computing

Table of Contents	545
Enhanced YOLOv8 for Detecting Multiple Defects on Bridge Surfaces	
R. Li, L. Zhao, H. Wei, B. OuYang, B. Fang, Y. Xu, and G. Hu	546
PAPR Reduction Technique for Mobile Communication Systems Using Neural Networks	
B. S. de C. da Silva, P. H. C. de Souza, and L. L. Mendes	556
Design and Validation of an ABS and TCS Control Strategy Applied in an Automotive Simulator Using Model-Based Design Methodology	
I. Souza, L. A. Torres, A. Murilo, and R. R. Silva	565
Brazilian Stock Market Forecast with Heterogeneous Data Integration for a Set of Stocks	
M. J. A. Rosa, M. R. Souza, C. L. S. Machado, S. J. Rigo, and J. L. V. Barbosa	572
Toward a New Dataset: Mexican Traffic Signs "ReWaln-MTS" for Detection	
D. Bolaños-Flores, T. Ramirez-delreal, H. Gamboa-Rosales, and G. Gutierrez-Esparza	584
Multi-Objective Optimization for Safety in the Grounding of AC Substations	
D. Arias-Cazco, and L. Cruz-Panchi	592
Local Volt-Var Control Applied in an Islanded Microgrid Using Supervised Learning Techniques	
D. D. Domingues, S. J. M. Almeida, and E. A. C. Costa	600
Rapid Prototyping of FPGA Controlled Common Ground Single-Phase Transformerless Five-Level Inverter using Xilinx System Generator	
P. Ravali, and K. Annamalai	609
Dosimetry Strategies for Non-Autonomous UV-C Robots	
M. R. S. Gambetá-Leite, R. A. Real, C. d. D. d. Nascimento, and E. G. Souza	619
Compact 4-Port MIMO Antenna-Diplexer Utilizing Slotted-HMSIW Technology	
D. Chaturvedi, T. G. Lanka, and A. Kumar	628