



IEEE Latin America Transactions

SEPTEMBER 2018, Volume 16 Issue 9

IEEEXplore, DOI, ISI, ISSN 1548-0992

SPECIAL ISSUE : New Trends In Electronics

Table of Contents.....	2302
Editorial.....	2304
Recommendations of Experts to advise students on ubiquitous learning experiences: Method and Validation	2314
E. Durán y M. Alvarez.....	
Review of Architectural Patterns and Tactics for Microservices in Academic and Industrial Literature	2321
G. Márquez, F. Osses and H. Astudillo.....	
Compact Data Structures to Represent and Query Data Warehouses into Main Memory	2328
C. Vallejos, M. Caniupán and G. Gutiérrez.....	
Resilient Multiculture Network Design in the Presence of Exploit- Triggered Correlated Failures	2336
N. Boettcher, Y. Prieto, S. E. Restrepo, and J. E. Pezoa, <i>Member, IEEE</i>	
Methodologies of Energy Management and Control in Microgrid.	2345
S. Monesha, S. Ganesh Kumar and M. Rivera.....	
The Asymmetric Allternate Arm Converter: A compact Voltage Sourse Converter design for HVDC	2354
D. Soto Sánchez, <i>Member, IEEE</i> , M. Hernández, I. Andrade, <i>Member, IEEE</i> , R. Peña, <i>Member, IEEE</i>	
A probabilistic economic/CO2eq emissions dispatch model: Real applications, IEEE	2362
Eduardo Arriagada, Enrique López, Miguel López, Gastón Lefranc <i>IEEE Senior Member</i> , Rodrigo López <i>IEEE Member</i> and Michel Poloujadoff <i>IEEE Fellow Member, IEEE Lamme Medal, IEEE-PES Nikola Tesla Award</i>	
Predictive Control Strategies Operating at Fixed Switching Frequency for Input Filter Resonance Mitigation in an Indirect Matrix Converter	2370
M. Rivera, S. Toledo, L. Tarisciotti, P. Wheeler and H. Dan	
H2 and H ∞ state-feedback control through Multi-Hop Networks: Trade-Off Analysis Between the Network Load and Performance Degradation.	2377
J. M. Palma, L. de P. Carvalho, T. E. Rosa, C. F. Morais and R. C. L. F. Oliveira.....	
Secrecy Capacity Bounds Analysis for Physical Layer Security based on Game Theory	2385
N. M. Ortega and C. Valencia.....	
Vehicle Following problem: A Control Approach for Uncertain Systems with Lossy Networks	2392
L. de P. Carvalho, J. M. Palma, A. P. C. Gonçalves and C. Duran Faundez.....	
Q-Adaptive Control of the nonlinear dynamics if the cantilever-sample system of an Atomic Force Microscope	2400
C. Fuhrhop, <i>Member, IEEE</i> , P. Mercorelli, <i>Member, IEEE</i> , and D. E. Quevedo, <i>Senior Member, IEEE</i>	

Control of Total Radiation in an Industrial Furnace by Optical Sensing of Flame Emissions H. O. Garcés, A. J. Rojas, <i>Member, IEEE</i> , L. E. Arias.....	2409
Automatic Control on Batch and Continuous Distillation Columns S. Díaz, J.R. Pérez-Correa and M. Fernández-Fernández.....	2418
Fractional Order Controllers for Back-to-Back Converters T. Crespo, M. A. Duarte, <i>Life Senior Member, IEEE</i> , G. Ceballos, G. Lefranc, <i>Life Senior Member, IEEE</i>	2427
New hyperspectral index for determining the state of fermentation in the non-destructive analysis for organic cocoa violet J. Soto, J. Ruiz, W. Ipanaqué, C. Chinguel.....	2435
Physical, chemical and mechanical characterization of a prototype insulating material based on eucalyptus bark fiber C. Rojas, M. Cea, F. Rosas-Díaz and J. P. Cárdenas-R.....	2441
Towards 3D Pipe Reconstruction Employing Affine Transformations from Video Information.Sergio M. R. Reyes-Acosta, I. Lopez-Juarez, R. Osorio-Comparan, G. Lefranc <i>Life Senior Member, IEEE</i>	2447
Electrohydraulic Active Suspension Fuzzy-Neural Based Control System Sebastián Bongain and Marcela Jamett, <i>Member IEEE</i>	2454
Algorithm for processing Mammography: detection of microcalcifications. M. Bustamante, A. Rienzo, R. Osorio, E. Lefranc, M. Duarte, E. Herrera, G. Lefranc.....	2460
Carpal Tunnel Syndrome Rehabilitation Through Force Feedback V. H. Andaluz, C. Bustamante D., M. Silva S., M. Escudero V., P. J. Salazar.....	2467
Radar Systems for Ice and Snow Measurements Onboard Manned and Unmanned Aircraft F. Rodríguez-Morales, <i>Senior Member, IEEE</i> , D. Gómez-García, E. Arnold, <i>Member, IEEE</i> , R. Hale, S. Keshmiri, C. Leuschen, <i>Member, IEEE</i> , J. Li, <i>Senior Member, IEEE</i> , J. Paden, <i>Member, IEEE</i> , and C. Cárdenas, <i>Member, IEEE</i>	2473
Multi-temporal photogrammetric analysis to monitoring the river Las Minas, Punta Arenas, Chile R. Koschitzki a, E. Schwalbe a, M. Kröhnert a, C. Cárdenas b, H-G. Maas a.....	2481
Caw's Walking State Recognition Based on Accelerometers and Gyroscopes Installed on Ear-Tags and Collar-Tags. Carlos Muñoz Poblete, Nicolás Antonio Roa Muñoz y Juan Ignacio Huircán.....	2490
Results of the implementation of a sensor network based on Arduino devices and multiplatform applicationjs using the standard OPC UA Victor Vimos and Erwin J. Sacoto-Cabrera.....	2496