

# **2017 Electronics**

**Palanga, Lithuania  
19-21 June 2017**



**IEEE Catalog Number:** CFP17L62-POD  
**ISBN:** 978-1-5386-0395-6

**Copyright © 2017 by the Institute of Electrical and Electronics Engineers, Inc.  
All Rights Reserved**

*Copyright and Reprint Permissions:* Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

***\*\*\* This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP17L62-POD
ISBN (Print-On-Demand):	978-1-5386-0395-6
ISBN (Online):	978-1-5386-0394-9

**Additional Copies of This Publication Are Available From:**

Curran Associates, Inc  
57 Morehouse Lane  
Red Hook, NY 12571 USA  
Phone: (845) 758-0400  
Fax: (845) 758-2633  
E-mail: [curran@proceedings.com](mailto:curran@proceedings.com)  
Web: [www.proceedings.com](http://www.proceedings.com)

CURRAN ASSOCIATES INC.  
**proceedings**  
.com

## CONTENT

**Halit Senberber, Aytekin Bagis.**

Fractional PID Controller Design for Fractional Order Systems using ABC Algorithm ..... 1

**Janis Kluga, Ansis Kluga.**

Driver's Professional Skills Evaluation with Modified GPS Vehicle Tracking System..... 8

**Wang Yu, Wang Xin, Zhang Jiangjiang, Wang Dong, Wang Shumao.**

Wireless Feeding Rate Real-Time Monitoring System of Combine Harvester..... 12

**Eiko Priidel, Raul Land, Veljo Sinivee, Paul Annus, Mart Min.**

Comparative Measurement of Cardiac Cycle by Means of Different Sensors ..... 18

**Leszek Nowosielski, Marian Wnuk.**

Microstrip Antennas Diagnostics with Thermography..... 23

**Unal Yilmaz, Ali Kircay, Selim Borekci.**

PV System Flyback Converter Controlled PI Control to Charge Battery under Variable Temperature and Irradiance ..... 29

**Martynas Sapurov, Algirdas Baskys, Edvardas Bielskis, Vytautas Bleizgys, Raul Rabinovici.**

Single Phase Cascaded Inverter for Renewable Energy Supplies ..... 35

**Yi-ming Tan, Wei-qing Sun, Ping-liang Zeng, Heng Li.**

Research on an Optimized Load Model Based on Substitution Effect of Renewable Energy Generation..... 40

**Eligijus Sakalauskas, Jonas Muleravicius, Inga Timofejeva.**

Computational Resources for Mobile E-Wallet System with Observers..... 46

**Janeks Ahrems.**

Development of V2V and GPS Based Collision Warning Algorithm for Uncontrolled Intersections..... 51

**Saban Ozturk, Bayram Akdemir.**

Automatic Leaf Segmentation using Grey Wolf Optimizer Based Neural Network..... 55

**Alina Staſecka, Elmars Lipenbergs, Vjaceslavs Bobrovs, Tamara Sharashidze.**

Quality of Service Methodology for the Development of Internet Broadband Infrastructure of Mobile Access Networks ..... 61

**Julija Putrina, Sergejs Olonkins, Vjaceslavs Bobrovs.**

Investigation of EDFA Positioning Impact on the Quality of the Amplified Signal in DWDM Transmission Systems ..... 66

**Kadir Tohma, Yakup Kutlu, Ipek Abasikeles-Turgut.**

A New Cluster Head Based Dynamic Base Station Positioning for Wireless Sensor Networks ..... 71

**Pedro Juan Roig, Salvador Alcaraz, Katja Gilly.**

Algebraic Specification of ABP Protocol Using Different Time Constraints ..... 77