

ISSN: 2153-1285 Volume 7, Number 13, November 2016



Circuits and Systems



ISSN: 2153-1285



www.scirp.org/journal/cs

Journal Editorial Board

ISSN Print: 2153-1285 ISSN Online: 2153-1293

<http://www.scirp.org/journal/cs>

Editors-in-Chief

Prof. Mehdi Anwar	University of Connecticut, USA
Prof. Gyungho Lee	Korea University, South Korea

Associate Editor-in-Chief

Prof. Jichai Jeong	Korea University, South Korea
---------------------------	-------------------------------

Editorial Board

Prof. Terry L. Alford	Arizona State University, USA
Prof. Dong-Ho Cho	Korea Advanced Institute of Science and Technology, South Korea
Dr. Wonzoo Chung	Korea University, South Korea
Prof. Nanditha Dissanayake	Brookhaven National Laboratory, USA
Prof. Syed Kamrul Islam	University of Tennessee, USA
Prof. Ju Wook Jang	Sogang University, South Korea
Prof. Yichuan Jiang	Southeast University, China
Prof. Chi Chung Ko	National University of Singapore, Singapore
Dr. Guowang Miao	Royal Institute of Technology, Sweden
Dr. Sudarshan R. Nelatury	Pennsylvania State University, USA
Dr. Shriram Raghunathan	Cyberonics, Inc., USA
Prof. Fathi M. Salem	Michigan State University, USA
Prof. Theodore B. Trafalis	The University of Oklahoma, USA
Prof. Fan-Gang Tseng	National Tsing Hua University, Chinese Taipei
Prof. Vincenzo Tucci	University of Salerno, Italy
Prof. Fei Zhang	Michigan State University, USA
Prof. Zuxing Zhang	Tohoku University, Japan

Table of Contents

Volume 7 Number 13

November 2016

Tire Pressure Monitoring System Using SoC and Low Power Design

A. Vasantharaj, K. Krishnamoorthy.....4085

Fuzzy Controlled Ultra-Capacitor Based DVR (UCAP-DVR) for Power Quality Enhancement

R. Bhavani, Dr. N. R. Prabha.....4098

Inverter Power Stage Connected with PV-Grid

K. Kirubasankar, Dr. A. S. Kumar.....4113

Dynamic Spectrum Access Protocol for the Digital Dividend

R. Zamblé, R. Gbégbé, J.-M. Kadjo, O. Asseu, P. Brou.....4124

New VD-DIBA-Based Single-Resistance-Controlled Sinusoidal Oscillator

K. L. Pushkar, R. K. Goel, K. Gupta, P. Vivek, J. Ashraf.....4145

Secure Multicast Tree Construction Using Bacterial Foraging Optimization (BFO) for MANET

A. Arumugam, C. Jayakumar.....4154

A Modified PFD Based PLL with Frequency Dividers in 0.18- μ m CMOS Technology

N. K. Anushkannan, H. Mangalam.....4169

Two-Dimensional Finite Element Method Analysis Effect of the Recombination Velocity at the Grain Boundaries on the Characteristics of a Polycrystalline Silicon Solar Cell

Nzonzolo, D. Lilonga-Boyenga, C. N. Mabika, G. Sissoko.....4186

Current-Controlled CFTA Based Fractional Order Quadrature Oscillators

T. Comedang, P. Intani.....4201

Centralized Solar PV Systems for Static Loads Using Constant Voltage Control Method

S. Alagammal, Dr. N. Rathina Prabha, I. Aarthy.....4213

Newly Constructed Real Time ECG Monitoring System Using LabView

Dr. V. Nandagopal, Dr. V. Maheswari, C. Kannan.....4227

Power Analysis of Sensor Node Using Simulation Tool

R. Sittalatchoumy, R. Kanthavel, R. Seetharaman.....4236

**Comparative Methodical Assessment of Established MOSFET Threshold Voltage
Extraction Methods at 10-nm Technology Node**

Y. Swami, S. Rai.....4248

Implementation of FPGA Based Hybrid Power Generator for PV and Wind Grid Applications

T. S. B. Damodhar, Dr. A. S. Kumar.....4280

Circuits and Systems (CS)

Journal Information

SUBSCRIPTIONS

The *Circuits and Systems* (Online at Scientific Research Publishing, www.SciRP.org) is published monthly by Scientific Research Publishing, Inc., USA.

Subscription rates:

Print: \$69 per copy.

To subscribe, please contact Journals Subscriptions Department, E-mail: sub@scirp.org

SERVICES

Advertisements

Advertisement Sales Department, E-mail: service@scirp.org

Reprints (minimum quantity 100 copies)

Reprints Co-ordinator, Scientific Research Publishing, Inc., USA.

E-mail: sub@scirp.org

COPYRIGHT

Copyright and reuse rights for the front matter of the journal:

Copyright © 2016 by Scientific Research Publishing Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY).

<http://creativecommons.org/licenses/by/4.0/>

Copyright for individual papers of the journal:

Copyright © 2016 by author(s) and Scientific Research Publishing Inc.

Reuse rights for individual papers:

Note: At SCIRP authors can choose between CC BY and CC BY-NC. Please consult each paper for its reuse rights.

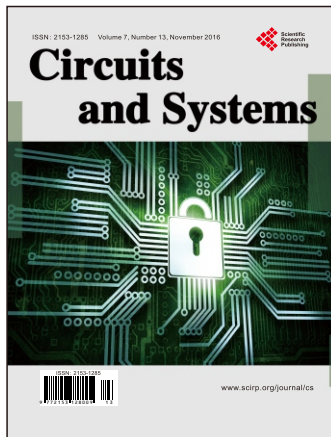
Disclaimer of liability

Statements and opinions expressed in the articles and communications are those of the individual contributors and not the statements and opinion of Scientific Research Publishing, Inc. We assume no responsibility or liability for any damage or injury to persons or property arising out of the use of any materials, instructions, methods or ideas contained herein. We expressly disclaim any implied warranties of merchantability or fitness for a particular purpose. If expert assistance is required, the services of a competent professional person should be sought.

PRODUCTION INFORMATION

For manuscripts that have been accepted for publication, please contact:

E-mail: cs@scirp.org



Circuits and Systems

ISSN Print: 2153-1285 ISSN Online: 2153-1293

<http://www.scirp.org/journal/cs>

Circuits and Systems is an international journal dedicated to the latest advancement of theories, methods and applications in electronics, circuits and systems. The goal of this journal is to provide a platform for scientists and academicians all over the world to promote, share, and discuss various new issues and developments in different areas of electronics, circuits and systems.

Subject Coverage

All manuscripts must be prepared in English, and are subject to a rigorous and fair peer-review process. Accepted papers will immediately appear online followed by printed hard copy. The journal publishes original papers including but not limited to the following fields:

- Analog Integrated Circuits
- Analog Signal Processing
- Blind Signal Processing
- Circuits and Systems for Communication and Information Technologies
- Circuits and Systems for Trusted Communications and Computing
- Computer and Processor Architecture
- Computer-Aided Network Design
- Digital Integrated Circuits
- Digital Signal Processing
- Digital System Design
- Distributed Sensor Networks and Systems
- Electronic Design Automation
- Embedded System and Software
- Graph Theory and Computing
- Low-Voltage Low-Power Circuits
- Memristors
- Multimedia Systems and Applications
- Nanoelectronics and Gigascale Systems
- Neural Systems and Applications
- Nonlinear Circuits and Systems
- Optoelectronics and Laser Technology
- Power Systems and Power Electronic Circuits
- Reconfigurable Architectures
- System-Level Synthesis
- Telemedicine
- Visual Signal Processing and Communications
- VLSI Systems and Applications

We are also interested in: 1) Short Reports—2-5 page papers where an author can either present an idea with theoretical background but has not yet completed the research needed for a complete paper or preliminary data; 2) Book Reviews—Comments and critiques.

Notes for Intending Authors

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. Paper submission will be handled electronically through the website. All papers are refereed through a peer review process. For more details about the submissions, please access the website.

Website and E-Mail

<http://www.scirp.org/journal/cs> E-mail: cs@scirp.org