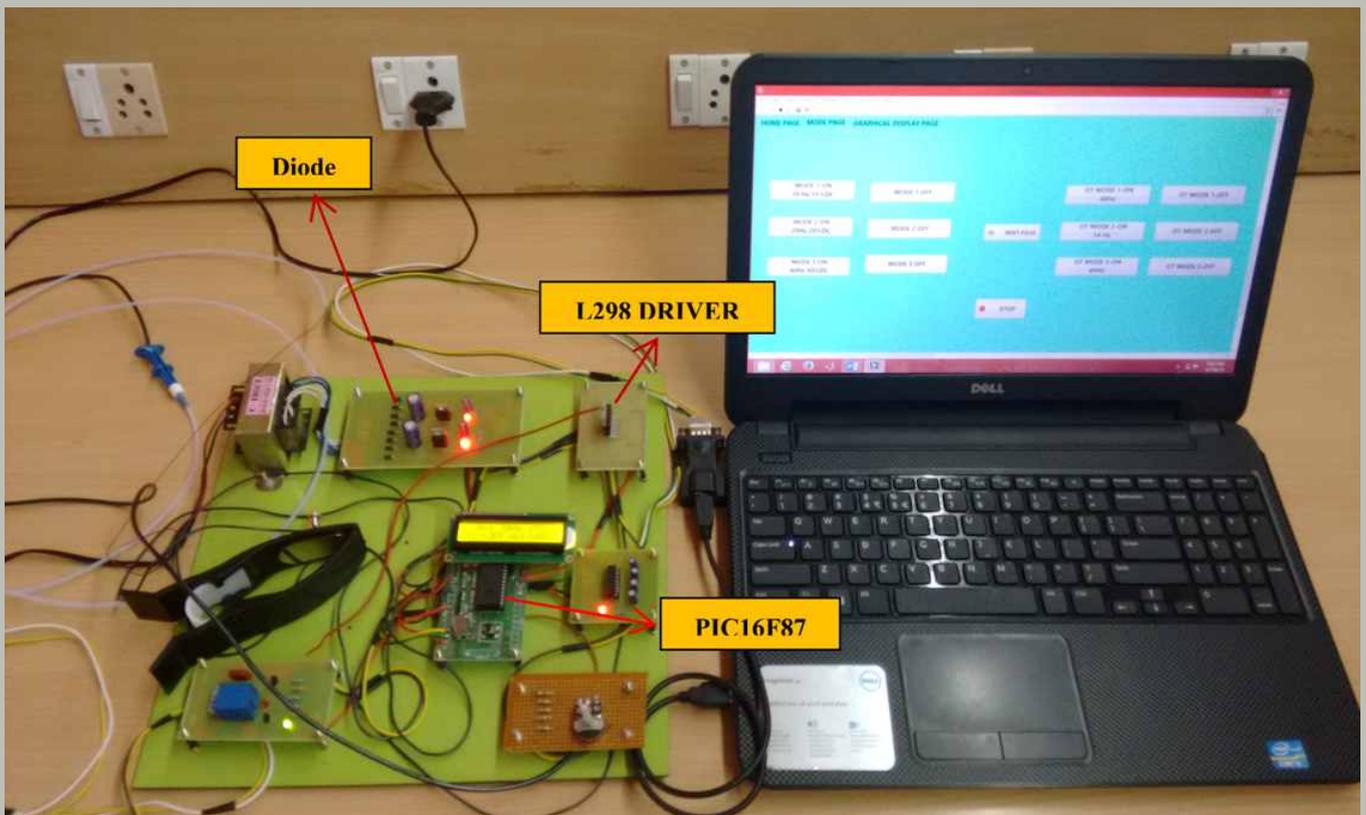


Circuits and Systems



ISSN: 2153-1285



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 4

April 2016

Harmonic Reduction in Wind Power Generating System Using Shunt Active Filter with SPWM Technique	
R. Zahira, A. P. Fathima, R. Muthu.....	157
A Novel Flower Pollination Algorithm to Solve Load Frequency Control for a Hydro-Thermal Deregulated Power System	
D. Lakshmi, A. P. Fathima, R. Muthu.....	166
Electrogastrogram Recovery for Correction of Gastric Disorders Using Gastric Stimulator	
G. Gopu, M. S. GeethaDevasena.....	179
A State Space Modeling of Non-Isolated Bidirectional DC-DC Converter with Active Switch	
J. B. Banu, M. B. Moses.....	187
A Bi-Polar Triple-Output Converter with Duty Cycle Estimation	
K. Sundararaman, M. Gopalakrishnan.....	198
Analysis and Design of Single Switch Hybrid Step-Up Converter	
R. Shanmugasundaram, J. Rajaiah, V. Parasunath.....	211
KAMAR: A Lightweight Feistel Block Cipher Using Cellular Automata	
J. K. K. Jeyaprakash, J. G. Sekar, K. Villayutham.....	222
New Single Input Multiple Output Type Current Mode Biquad Filter Using OTAs	
M. Gupta.....	231
Secured Efficient Fast Handover Multihoming Based NEMO+ (SEFMNEMO+) for Vanets	
M. S. Sangari, K. Baskaran.....	239
An Efficient Approach for Segmentation, Feature Extraction and Classification of Audio Signals	
M. Arumugam, M. Kaliappan.....	255
Evaluation of the Capacitance and Charge Distribution for Conducting Bodies by Circuit Modelling	
D. Muneeswaran, D. Raghavan.....	280
Hybrid Neuro Fuzzy Controller for Automatic Generation Control of Multi Area Deregulated Power System	
B. S. Solaiappan, N. Kamaraj.....	292
Investigation of Current Control Techniques of AC-DC Interleaved Boost PFC Converter	
A. I. Raxy, R. Seyezhai.....	307

Feature Selection Based on Enhanced Cuckoo Search for Breast Cancer Classification in Mammogram Image	
M. N. Sudha, S. Selvarajan.....	327
Design of Efficient Router with Low Power and Low Latency for Network on Chip	
M. Deivakani, D. Shanthi.....	339
Dual Authentication Hashing for Security Enhancement in MANET	
L. Raja, Dr. P. S. Periasamy.....	350
An Improved Fuzzy Based Algorithm for Detecting Text from Images Using Stroke Width Transform	
A. Thilagavathy, A. Chilambuchelvan.....	360
Efficient FPGA Implementation of AES 128 Bit for IEEE 802.16e Mobile WiMax Standards	
P. Rajasekar, Dr. H. Mangalam.....	371
The Effective Enhancement of Power System Security by Flexible Transmission Line Impedance with Minimal Rescheduling of Generators	
K. Muthulakshmi, R. M. Sasiraja, S. M. Muthu.....	381
Small Signal Stability Analysis of DFIG Fed Wind Power System Using a Robust Fuzzy Logic Controller	
M. Panneer Selvam, P. Prakasam.....	390
Steadfast Energy Proficient Sensor Node Activation System in Wireless Networks Lifetime Enhancement	
R. Saravanakumar, Dr. N. Mohankumar.....	402
Multiplier Design Utilizing Tri Valued Logic for RLNS Based DSP Applications	
S. R. Valliammal, S. Palaniswami.....	417
FPGA Implementation of Approximate 2D Discrete Cosine Transforms	
M. T. Raguraman, D. S. Saravanan.....	434
State Space Modeling and Implementation of a New Transformer Based Multilevel Inverter Topology with Reduced Switch Count	
R. G. Raj, S. Palani, H. H. Sait.....	446
FPGA-Based High-Frequency Digital Pulse Width Modulator Architecture for DC-DC Converters	
V. Radhika, K. Baskaran.....	464
A New Topology for a Single Phase Multilevel Voltage Source Inverter with Reduced Number of Components	
Lijo Jacob Varghese, C. Kezi Selva Vijila, I. Jacob Ragland.....	475
Proposal of High Gain, Reduced Stress with Low-Duty-Cycle Two-Input Boost Converter for Renewable Energy Systems	
L. Chitra, M. Karpagam, K. Saranyadevi.....	489

Universal Band Pass Sampling Algorithm for Integration of Multiple Wireless Technologies Using Software Defined Radio Platform

S. M. Budaraju, B. M. Anjaneyulu.....497

Asymmetric Three-Phase Cascading Trinary-DC Source Multilevel Inverter Topologies for Variable Frequency PWM

G. Irusapparajan, D. Periyazhagar.....506

Trust Based Meta-Heuristics Workflow Scheduling in Cloud Service Environment

G. Jeeva Rathanam, A. Rajaram.....520

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.

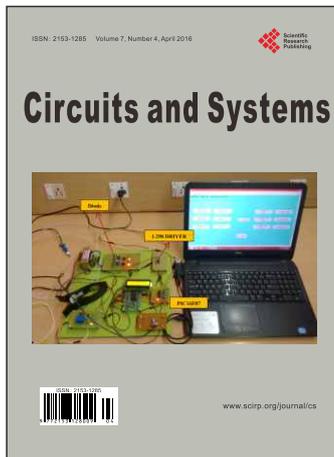
DISCLAIMER OF LIABILITY

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