

ISSN: 2153-1285 Volume 15, Number 4, April 2024



Circuits and Systems



ISSN: 2153-1285



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

Journal Editorial Board

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

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

Editor-in-Chief

Prof. Mehdi Anwar

University of Connecticut, USA

Associate Editor-in-Chief

Prof. Jichai Jeong

Korea University, South Korea

Editorial Board

Prof. Terry L. Alford

Arizona State University, USA

Dr. Ankan Bhattacharya

Mallabhum Institute of Technology, India

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

Dr. Mohammad Naser Hashemnia

Islamic Azad University, Iran

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

Prof. Sathiyasekar Kumarasamy

Anna University, India

Dr. Guowang Miao

Royal Institute of Technology, Sweden

Dr. Sudarshan R. Nelatury

Pennsylvania State University, USA

Dr. Wen Qi

Respiratory Analysis Laboratory of Polytechnic Milano, Italy

Dr. Shriram Raghunathan

Cyberonics, Inc., USA

Prof. Fathi M. Salem

Michigan State University, USA

Prof. Sarawut Sujitjorn

Suranaree University of Technology, Thailand

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 15 Number 4

April 2024

**Study and Production of a Two-Stage DC/DC DC/AC Converter for Generating an
Alternating Voltage from a Direct Voltage Supplied by a Photovoltaic Array**

M. Badiane, W. Fall, M. Kouyate, F. I. Barro.....45

Circuits and Systems (CS)

Journal Information

SUBSCRIPTIONS

The *Circuits and Systems* (Online at Scientific Research Publishing, <https://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 © 2024 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 © 2024 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.

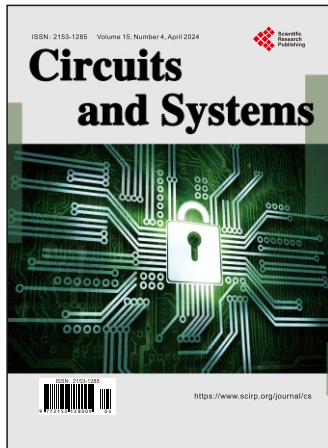
Disclaimer of liability

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

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

Circuits and Systems is an international journal dedicated to the latest advancement of theories, methods and applications in 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 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

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

E-mail: cs@scirp.org