

Circuits and Systems





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

Korea University, South Korea

Editorial Board

Prof. Jichai Jeong

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
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. Shriram Raghunathan	Cyberonics, Inc., USA
·	
Dr. Shriram Raghunathan	Cyberonics, Inc., USA
Dr. Shriram Raghunathan Prof. Fathi M. Salem	Cyberonics, Inc., USA Michigan State University, USA
Dr. Shriram Raghunathan Prof. Fathi M. Salem Prof. Sarawut Sujitjorn	Cyberonics, Inc., USA Michigan State University, USA Suranaree University of Technology, Thailand
Dr. Shriram Raghunathan Prof. Fathi M. Salem Prof. Sarawut Sujitjorn Prof. Theodore B. Trafalis	Cyberonics, Inc., USA Michigan State University, USA Suranaree University of Technology, Thailand The University of Oklahoma, USA
Dr. Shriram Raghunathan Prof. Fathi M. Salem Prof. Sarawut Sujitjorn Prof. Theodore B. Trafalis Prof. Fan-Gang Tseng	Cyberonics, Inc., USA Michigan State University, USA Suranaree University of Technology, Thailand The University of Oklahoma, USA National Tsing Hua University, Chinese Taipei
Dr. Shriram Raghunathan Prof. Fathi M. Salem Prof. Sarawut Sujitjorn Prof. Theodore B. Trafalis Prof. Fan-Gang Tseng Prof. Vincenzo Tucci	Cyberonics, Inc., USA Michigan State University, USA Suranaree University of Technology, Thailand The University of Oklahoma, USA National Tsing Hua University, Chinese Taipei University of Salerno, Italy



Table of Contents

Volume 12 Number 1

January 2021

Ultrasound Needle Guidance System for Precision Vaccinations and Drug Deliver

S. Aslan, M. Rahman, S. Das, B. Schnitta.....1

Circuits and Systems (CS) Journal Information

SUBSCRIPTIONS

The *Circuits and Systems* (Online at Scientific Research Publishing, <u>https://www.scirp.org/</u>) is published monthly by Scientific Research Publishing, Inc., USA.

Subscription rates: Print: \$69 per copy. To subscribe, please contact Journals Subscriptions Department, E-mail: <u>sub@scirp.org</u>

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:<u>sub@scirp.org</u>

COPYRIGHT

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

Copyright © 2021 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 © 2021 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.

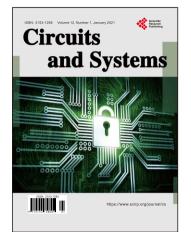
Disclaimer of liability

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

Call for Papers



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
 Embadded System and Software
- 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

What is SCIRP?

Scientific Research Publishing (SCIRP) is one of the largest Open Access journal publishers. It is currently publishing more than 200 open access, online, peer-reviewed journals covering a wide range of academic disciplines. SCIRP serves the worldwide academic communities and contributes to the progress and application of science with its publication.

What is Open Access?

Art and Design Review

Advances in

dvances in Biological bemistry Entomolog

Applied Mathematics

Engineering

nii ili a

All original research papers published by SCIRP are made freely and permanently accessible online immediately upon publication. To be able to provide open access journals, SCIRP defrays operation costs from authors and subscription charges only for its printed version. Open access publishing allows an immediate, worldwide, barrier-free, open access to the full text of research papers, which is in the best interests of the scientific community.

• High visibility for maximum global exposure with open access publishing model

Soft

- Rigorous peer review of research papers
- Prompt faster publication with less cost
- Guaranteed targeted, multidisciplinary audience



Website: https://www.scirp.org Subscription: sub@scirp.org Advertisement: service@scirp.org