

# Table of contents

Volume 2062

2021

◀ Previous issue    Next issue ▶

**2nd International Conference on Computational Intelligence and Energy Advancements (ICCIEA 2021) 11-12 September 2021, Vaagdevi College of Engineering, Warangal, India (Web format)**

Accepted papers received: 07 October 2021

Published online: 02 December 2021

Open all abstracts

## Preface

**OPEN ACCESS** 011001

2<sup>nd</sup> International Conference on Computational Intelligence and Energy Advancements (ICCIEA-2021), September 11-12, 2021 Virtual Format

Nishu Gupta, Parvesh Kumar and H. S. Pali

+ Open abstract     View article     PDF

**OPEN ACCESS** 011002

Peer Review Declaration Form Guidance

+ Open abstract     View article     PDF

## COMMUNICATION SYSTEMS AND NETWORKS

**OPEN ACCESS** 012001

Adversarial Modeling in WSN and its Application in Key Distribution

Rohit Bathla and Priyanka Ahlawat

+ Open abstract     View article     PDF

**OPEN ACCESS** 012002

Planar Inverted F Antenna, PIFA Array in 5G applications

Krishanu Kundu, Avneesh Dubey, Ankur Dhama and Narendra Nath Pathak

+ Open abstract     View article     PDF

**OPEN ACCESS** 012003

Design of Quad Feed microstrip patch antenna for Airborne Systems



V Gnanalakshmi, Rahul Raaj and V Suresh Kumar

[+ Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS**

012004

A Novel Metamaterial Inspired 2<sup>nd</sup> Iteration Koch Fractal Antenna for Wi-Fi, WLAN, C band and X band Wireless Communications

Gudla Ramalakshmi and P Mallikarjuna Rao

[+ Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS**

012005

Impact of Hello Intervals in AODV in FANET

Hemant Kumar Saini and Kusumlata Jain

[+ Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS**

012006

Performance Analysis of Linear Precoding in Downlink Based on Polynomial Expansion on Massive MIMO Systems

Sammaiah Thurpati, Mahesh Mudavath and P. Muthuchidambaranathan

[+ Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS**

012007

Application of Different Filtering Techniques in Digital Image Processing

Sumant Sekhar Mohanty and Sushreeta Tripathy

[+ Open abstract](#) [View article](#) [PDF](#)

---

## COMPUTATIONAL TECHNIQUES AND IoT APPLICATIONS

---

**OPEN ACCESS**

012008

Comparative evaluation of performance and scalability of convolutional neural network implementations on a multisystem HPC architecture

Sunil Pandey, Naresh Kumar Nagwani and Shrish Verma

[+ Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS**

012009

Detection of Cotton Leaf Disease Using Image Processing Techniques

Sushreeta Tripathy

[+ Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS**

012010

A smart Agriculture Irrigation System using sensor array based IOT

This site uses cookies. By continuing to use this site you agree to our use of cookies. To find out more, see our [Privacy and Cookies policy](#).



[+ Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS** 012011

Face Transferring on Webcam images using StyleGAN

J. Prasanthi and G. Anuradha

[+ Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS** 012012

Wi-Fi Based Fire Extinguisher Robot

Abul Hassan Laiq, Bheem Kant Kaushal, Mohan Kumar and Chandan Choubey

[+ Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS** 012013

Endpoint detection and response using machine learning

Harmionee Kaur and Richa Tiwari

[+ Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS** 012014

Development of Textual Analysis using Machine Learning to Improve the Sentiment Classification

Abha Kiran Rajpoot, Parma Nand and Ali Imam Abidi

[+ Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS** 012015

Design and Development of Pipe-inspection robot with vision 360°

CH Karthik and Pramod Sreedharan

[+ Open abstract](#) [View article](#) [PDF](#)

---

**OPEN ACCESS** 012016

Aspects of programming for implementation of convolutional neural networks on multisystem HPC architectures

Sunil Pandey, Naresh Kumar Nagwani and Shrish Verma

[+ Open abstract](#) [View article](#) [PDF](#)

---

## EMBEDDED SYSTEMS AND INDUSTRIAL AUTOMATION

---

**OPEN ACCESS** 012017

A Novel Light Weight Approach For Identification of Psoriasis Affected Skin Lesion Using Deep Learning.

T R Arunkumar and H S Jayanna

This site uses cookies. By continuing to use this site you agree to our use of cookies. To find out more, see our Privacy and Cookies policy.

[+ Open abstract](#) [View article](#) [PDF](#)



OPEN ACCESS

012018

Kathakali face expression detection using deep learning techniques

C Selvi, Y Anvitha, C H Asritha and P B Sayannah

[+ Open abstract](#)[View article](#)[PDF](#)

---

**SUSTAINABLE TECHNOLOGIES AND ENERGY ADVANCEMENTS**

---

OPEN ACCESS

012019

Impact of hot injected beam on whistler mode with alternating electric field (AC) in the magnetosphere of Saturn

Kumari Neeta Shukla, Devi Singh and R S Pandey

[+ Open abstract](#)[View article](#)[PDF](#)

OPEN ACCESS

012020

Employment of torque-hysteresis controller for DTC based induction motor drive

Payai S. Borse, Mohan P. Thakre and Rakesh Shriwastava

[+ Open abstract](#)[View article](#)[PDF](#)

OPEN ACCESS

012021

Prediction of EV arrivals at Battery Swapping Station using Hybrid Neural Network models

Manikanta Suri, Neha Raj and K Sireesha

[+ Open abstract](#)[View article](#)[PDF](#)

OPEN ACCESS

012022

Improved Hybrid Salp swarm and Sine-cosine Optimization based MPPT Control for PV Systems Under Partial Shading Conditions

Chandrakanta Mishra and Sheela Tiwari

[+ Open abstract](#)[View article](#)[PDF](#)

OPEN ACCESS

012023

Effect of di-methyl carbonate as additive and exhaust gas recirculation on the performance and emission parameters of diesel engine using diesel-biodiesel blends as fuel

A Chandravanshi, S Pandey, R K Malviya and A S Paikra

[+ Open abstract](#)[View article](#)[PDF](#)

OPEN ACCESS

012024

Comparative Evaluation of Control Techniques of PMSM Drive in Automotive Application

Rakesh Shriwastava, Satyajit Deshmukh, Ashwini Tidke and Mohan Thakre

[+ Open abstract](#)[View article](#)[PDF](#)

This site uses cookies. By continuing to use this site you agree to our use of cookies. To find out more, see our Privacy and Cookies policy.



**ADVANCES IN BIOENERGY AND ENVIRONMENTAL TECHNOLOGIES****OPEN ACCESS**

012025

Investigation of Efficient Hole Injection Layer for Enhancement of Opto-Electrical Properties of an Organic Light Emitting Diode

Neha Jain, Vikas Singh and Vivek Prajapati

[+ Open abstract](#) [View article](#) [PDF](#)

**OPEN ACCESS**

012026

Development a Solar Dryer for low income group Farmers for sub cooled region

Ashutosh Ameta, Mohammad Inayat Pinjara, Alok Kumar Dudhera and Harveer Singh Pali

[+ Open abstract](#) [View article](#) [PDF](#)

**OPEN ACCESS**

012027

Question Answering Systems for Covid-19

Poonam Gupta, Ruchi Garg and Amandeep Kaur

[+ Open abstract](#) [View article](#) [PDF](#)

**OPEN ACCESS**

012028

Investigation of 1-Hexanol Diesel Blends on Performance, Combustion and Emission Characteristics of a Diesel Engine

Ashish Kumar Singh, Mohd.Mohsin Khan and Harveer Singh Pali

[+ Open abstract](#) [View article](#) [PDF](#)

**OPEN ACCESS**

012029

Application of Pyrolysis and Hydrothermal Liquefaction Process to Convert Bio-Fuel from Biomass

Amit Kumar, Harveer Singh Pali and Manoj Kumar

[+ Open abstract](#) [View article](#) [PDF](#)

**OPEN ACCESS**

012030

Design and Simulation of Hybrid Solar PV-Fuel-Cell-Battery System to supply in the Nit Kurukshetra Campus and its effect on the Environment using Homer Software

Alok kumar and Shelly Vadhera

[+ Open abstract](#) [View article](#) [PDF](#)

**OPEN ACCESS**

012031

Synthesis and characterization of PEO and PVDF based polymer electrolytes with Mg(NO<sub>3</sub>)<sub>2</sub> ionic salt as ionic conductivity improver

Ponam and Parshuram Singh

[+ Open abstract](#) [View article](#) [PDF](#)

This site uses cookies. By continuing to use this site you agree to our use of cookies. To find out more, see our Privacy and Cookies policy.



**OPEN ACCESS**

012032

## A simplified SVPWM method for cascaded multilevel inverters

Nishant Matale, Mohan Thakre and Rakesh Shrivastava

[+ Open abstract](#)

[View article](#)

[PDF](#)

### JOURNAL LINKS

[Journal home](#)

[Journal Scope](#)

[Information for organizers](#)

[Information for authors](#)

[Contact us](#)

[Reprint services from Curran Associates](#)



The Electrochemical Society  
Advancing solid state & electrochemical science & technology

243rd ECS Meeting with  
SOFC-XVIII

[Learn more](#)

Abstract Submission Extended  
Deadline: Dec 16

This site uses cookies. By continuing to use this site you agree to our use of cookies. To find out more, see our Privacy and Cookies policy.



PAPER • OPEN ACCESS

# Planar Inverted F Antenna, PIFA Array in 5G applications

Krishanu Kundu<sup>1</sup>, Avneesh Dubey<sup>1</sup>, Ankur Dhama<sup>1</sup> and Narendra Nath Pathak<sup>1</sup>


Published under licence by IOP Publishing Ltd

Journal of Physics: Conference Series, Volume 2062, 2nd International Conference on Computational Intelligence and Energy Advancements (ICCIEA 2021) 11-12 September 2021, Vaagdevi College of Engineering, Warangal, India (Web format)

**Citation** Krishanu Kundu *et al* 2021 *J. Phys.: Conf. Ser.* **2062** 012002**DOI** 10.1088/1742-6596/2062/1/012002[krishanukundu08@gmail.com](mailto:krishanukundu08@gmail.com)

<sup>1</sup> Department of Electronics & Communication Engineering, G.L. Bajaj Institute of Technology & Management, Greater Noida, India

Buy this article in print

 Journal RSS

Sign up for new issue notifications

Create citation alert

## Abstract

Planar inverted F antenna (PIFA) is mainly fit for mobile devices. PIFA is mostly designed for dual band frequencies as it is capable of covering wide range of wireless services. This in turn helps in making it acceptable for designing mobile devices. Sizes of ground plane as well as PIFA's position with respect to ground plane actually effect the performance of PIFA. For example, placement of PIFA at corner of ground plane shows good radiation pattern. Major prerequisite of 5G is nothing but the capability to enhance data volume to every single user, while supporting majority of mobile users as well as new maneuvers. The best part is advanced antenna array technologies are able to meet such requirements. Although PIFA antenna has gained popularity in designing mobile handsets, because of light weight, lower cost as well as higher directivity, PIFA antenna Arrays have been proved to be the best byng foundation for future 5G Mobile Communication Systems and PIFA Arrays see our Privacy and Cookies policy.

PDF

[Help](#)

provide better gain than single PIFA antenna in same frequency band. Current work presents a comprehensive study on so far impact of PIFA as well as PIFA Array in providing infrastructure for future mobile innovations suitable for 5G communication.

Export citation and abstract

[BibTeX](#)

[RIS](#)

◀ **Previous** article in issue

**Next** article in issue ▶



Content from this work may be used under the terms of the Creative Commons Attribution 3.0 licence. Any further distribution of this work must maintain attribution to the author(s) and the title of the work, journal citation and DOI.



## You may also like

### JOURNAL ARTICLES

Noninvasive quantification of nonhuman primate dynamic  $^{18}\text{F}$ -FDG PET imaging

Design and on-body evaluations of a low-cost wearable PIFA for on-body applications

[PDF](#)

A method of estimating inspiratory flow rate and volume from an inhaler using acoustic measurements

[Help](#)

Dust particle coagulation mechanism in low-pressure plasma: rapid growth and saturation stage modeling

Detection of skin Cancer using PIFA antenna

Evaluation of implementation practices of industrial field on revitalization of the vocational educational institution in the industrial revolution 4.0

This site uses cookies. By continuing to use this site you agree to our use of cookies. To find out more, see our [Privacy and Cookies policy](#).







The Electrochemical Society  
Advancing solid state & electrochemical energy & technology

243rd ECS Meeting with  
SOFC-XVIII

[Learn more](#)

Boston, MA • May 28 – June 2, 2023

PDF

Help

This site uses cookies. By continuing to use this site you agree to our use of cookies. To find out more, see our [Privacy and Cookies policy](#).

