

2016 International Conference on Emerging Trends in Communication Technologies (ETCT 2016)

**Dehradun, India
18-19 November 2016**



**IEEE Catalog Number: CFP16J05-POD
ISBN: 978-1-5090-4506-8**

**Copyright © 2016 by the Institute of Electrical and Electronics Engineers, Inc
All Rights Reserved**

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

****** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP16J05-POD
ISBN (Print-On-Demand):	978-1-5090-4506-8
ISBN (Online):	978-1-5090-4505-1

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

TABLE OF CONTENTS

DIGITAL CIRCUIT OPTIMIZATION USING PASS TRANSISTOR LOGIC ARCHITECTURES.....	1
<i>Mudit Mittal, Arun Pratap Singh Rathod</i>	
ANALYSIS OF DIGITAL PWM DESIGN FOR ZERO VOLTAGE TRANSITION PHASE SHIFTED FULL BRIDGE CONVERTERS FOR SPACE APPLICATIONS	6
<i>Peter K Joseph, N. V. Bijeev, Naveen B. Sharma, Vasantry H. Jani</i>	
A STUDY OF INPUT FILTER DESIGN FOR HIGH POWER HIGH FREQUENCY SPACE APPLICATIONS	11
<i>N. V. Bijeev, Vasantry H. Jani, Peter K. Joseph, Naveen B. Sharma</i>	
ROBUSTNESS ANALYSIS OF CONTROLLER DESIGNED FOR FIRST, SECOND AND THIRD ORDER DELAYED PROCESS MODEL	16
<i>Monalisa Joshi, Jagriti Uniyal, Pradeep K. Juneja</i>	
MODELING ERROR EFFECT ON PERFORMANCE OF A SECOND ORDER DELAYED PROCESS MODEL.....	21
<i>Jagriti Uniyal, Monalisa Joshi, Pradeep K. Juneja</i>	
A NEW WIDEBAND 3DB POWER DIVIDER FOR DUAL BAND APPLICATIONS.....	26
<i>Aijaz M. Zaidi, Syed A. Imam, Binod K. Kanaujia, Ved P. Dubey</i>	
WIDE BAND WAVEGUIDE FED LINEARLY POLARIZED MM WAVE OMNIDIRECTIONAL ANTENNA	29
<i>Pramendra Kumar Verma, Raj Kumar, Mahakar Singh</i>	
REVIEW ON ENERGY EFFICIENT PROTOCOL BASED ON LEACH, PEGASIS AND TEEN	32
<i>Tushar Chauhan, Meenakshi Nayyer</i>	
AN INTELLIGENT COLOR SENSING SYSTEM FOR BUILDING WALL	37
<i>Abhishek Singh, Nagesh B. Balam, Anuj Kumar, Ashok Kumar</i>	
WIDEBAND LOW PROFILE TIGHTLY COUPLED DIPOLE ANTENNA ARRAY WITH AN INTEGRATED BALUN	41
<i>Abhishek Kumar Awasthi, A. R. Harish</i>	
A NOVEL IMPLEMENTATION OF 32 BIT EXTENDED ALU ARCHITECTURE AT 28NM FPGA.....	44
<i>Nidhi Gaur, Anu Mehra, Deepika Kamboj, Devyani Tyagi</i>	
DETECTION OF RETINAL BLOOD VESSELS AND REDUCTION OF FALSE MICROANEURYSMS FOR DIAGNOSIS OF DIABETIC RETINOPATHY	48
<i>Rahul Chauhan, Anita Uniyal, V. P. Dubey</i>	
METAMATERIAL BASED K BAND SUBSTRATE INTEGRATED WAVEGUIDE FILTER FOR ADVANCED COMMUNICATION SYSTEMS	54
<i>M. Vishnu, B. Abinaya Lakshmi, Balamati Choudhury, R. U. Nair</i>	
LSB BASED IMAGE STEGANOGRAPHY USING DYNAMIC KEY CRYPTOGRAPHY	58
<i>Nikhil Patel, Shweta Meena</i>	
INVESTIGATION OF SOME FEATURES FOR PRELIMINARY DETECTION OF CORONARY ARTERY DISEASE USING ELECTRONIC STETHOSCOPE	63
<i>Sibghatullah I. Khan, Vasif Ahmed</i>	
LOWER BOUNDS OF CORRELATION MEASURE FOR TIME HOPPING CODES IN UWB COMMUNICATION SYSTEMS	67
<i>Rajendra Singh, B. S. Jassal</i>	
BRAIN CONNECTIVITY IN SPATIAL ORIENTATION TASK	72
<i>Greeshma Sharma, Ronnie V. Daniel, Sushil Chandra, Vijander Singh, Alok Prakash Mittal</i>	
SIMULATION ANALYSIS OF MP AND EIGENVALUE BASED METHOD FOR COGNITIVE RADIO.....	76
<i>Amit Khandelwal, Chhagan Charan</i>	
RECENT ADVANCEMENT IN ORGANIC SOLAR CELLS AND COMPARISON BETWEEN VARIOUS STRUCTURES	81
<i>Deepti Dhuriya, Brijesh Kumar, R. K. Chauhan</i>	
PERFORMANCE ANALYSIS OF DUAL GATE OTFT USING DIFFERENT GATE DIELECTRIC MATERIALS.....	86
<i>Anil Kumar Baliga, Brijesh Kumar, Yamini Pandey</i>	
PERFORMANCE ANALYSIS OF PMSM DRIVE USING ARTIFICIAL NEURAL NETWORK TECHNIQUE.....	90
<i>Deepti Yadav, Trapti Yadav, Arunima Verma</i>	

A COMPARATIVE STUDY OF NDBI, NDISI AND NDII FOR EXTRACTION OF URBAN IMPERVIOUS SURFACE OF DEHRADUN [UTTARAKHAND, INDIA] USING LANDSAT 8 IMAGERY	94
<i>Abhisha Garg, Divyansu Pal, Hukum Singh, Deepak Chander Pandey</i>	
DEPLOYMENT EFFICIENCY VS ENERGY EFFICIENCY IN DENSE WIRELESS ENVIRONMENT USING MASSIVE MIMO.....	99
<i>N. Indira Devi, Rajarshi Mahapatra, Vinod Kumar Reddy, Aditi Kohli</i>	
RECONFIGURABLE BANDPASS FILTER FOR USE OF 2.7- 3.1 GHZ RADAR SPECTRUM.....	104
<i>Jai Utkarsh, Ramendra Kumar Raj, Aman Kumar Lall, D. K. Upadhyay, Gajendra Kant Mishra</i>	
DUAL-BAND MONOPOLE ANTENNA LOADED WITH DUAL-BAND AMC FOR WLAN/WIMAX APPLICATIONS.....	108
<i>Vivek Kumar Pandit, A. R. Harish</i>	
EXPLICATING MINISAR DATA TO UNDERLINE SIGNIFICANT PROPERTIES OF LUNAR SURFACE	111
<i>Nidhi Verma, Pooja Mishra, Neetesh Purohit, Dharmendra Singh</i>	
RESEARCH ISSUES IN RDF MANAGEMENT SYSTEMS.....	116
<i>Tanvi Chawla, Girdhari Singh, Emmanuel S. Pilli, M. C. Govil</i>	
SURVEY OF SCALING PLATFORMS FOR DEEP NEURAL NETWORKS.....	121
<i>Abhay A. Ratnaparkhi, Emmanuel Pilli, R. C. Joshi</i>	
A FRAMEWORK TO MANAGE TRUST IN INTERNET OF THINGS.....	127
<i>Avani Sharma, Emmanuel S. Pilli, Arka P. Mazumdar, M. C. Govil</i>	
A COMPARATIVE REVIEW OF IMPROVED ENERGY DETECTION AND STATISTICAL COVARIANCE FOR COGNITIVE RADIO	132
<i>Reena Yadav, N. P Singh</i>	
IMPROVEMENT IN DETECTION OF HUMAN LIFE SIGN SIGNAL HIDDEN BEHIND THE WALL USING CLUTTER REDUCTION TECHNIQUE	136
<i>Abhay N Gaikwad, K. S. Dongre</i>	
ENHANCING CONCEALED TARGET DETECTION THROUGH DUAL POLARIZED 94 GHZ RADIOMETRIC SENSOR.....	141
<i>Ashok Kumar, B. S. Jassal</i>	
CPW FED CIRCULARLY POLARIZED HEXAGONAL SLOT ANTENNA.....	145
<i>Kapil Saraswat, A. R. Harish</i>	
VARIATION IN EXTINCTION CROSS-SECTION OF RAIN DROPS WITH TEMPERATURE	149
<i>Ritujoy Biswas, Anurag Vidyarthi, B. S. Jassal, A. K. Shukla</i>	
FREQUENCY SCALING OF SLANT PATH RAIN ATTENUATION FOR FADE MITIGATION IN SATELLITE COMMUNICATION	153
<i>Anurag Vidyarthi, Ritujoy Biswas, B. S. Jassal, A. K. Shukla</i>	
CR NETWORK PERFORMANCE METRICS ANALYSIS UNDER CONVENTIONAL AND ADAPTIVE THEORY	157
<i>Vikas Kumar, Sandeep Santosh</i>	
NEW CONSTRUCTIONS OF BOOLEAN FUNCTIONS USING CYCLOTOMIC COSETS	161
<i>Kanchan Verma, Dheeraj Kumar Sharma</i>	
A BROKER BASED FRAMEWORK FOR FEDERATED CLOUD ENVIRONMENT	165
<i>Sameer Singh Chauhan, Emmanuel S. Pilli, R. C. Joshi</i>	
ANALYSIS OF FACTORS AFFECTING THE SOLAR RADIATION RECEIVED BY ANY REGION.....	170
<i>Arun Pratap Singh Rathod, Poornima Mittal, Brijesh Kumar</i>	
ORGANIC THIN FILM TRANSISTOR AND ORGANIC INVERTER BASED ON CYLINDRICAL GATE OTFT	174
<i>Anshu Singh, Poornima Mittal</i>	
MODELLING AND COMPARISON OF SINGLE GATE AND DUAL GATE ORGANIC THIN FILM TRANSISTOR.....	179
<i>Deepa Saini, Shilpa Saini, Shubham Negi</i>	
FINDING SAFE PATH AND LOCATIONS IN DISASTER AFFECTED AREA USING SWARM INTELLIGENCE	184
<i>Anshul Karasi, Arun Pratap Singh Rathod</i>	
PERFORMANCE ANALYSIS OF ACTIVE MATRIX ORGANIC DISPLAY USING VERTICAL CHANNEL ORGANIC THIN FILM TRANSISTOR	189
<i>Shubham Negi, Poornima Mittal, Surabhi Rawat</i>	
IMPACT OF VARIATION IN GATE LINE SPACING AND ACTIVE LAYER THICKNESS ON PERFORMANCE OF ORGANIC STATIC INDUCTION TRANSISTOR.....	194
<i>Anil Kumar Baliga, Brijesh Kumar, Srishti</i>	

PERFORMANCE ANALYSIS OF SILICON-ON-NOTHING MOSFET UNDER 100NM TECHNOLOGY NODES.....	199
<i>Praveen Lakhera, Shashank Sundriyal, Brijesh Kumar</i>	
AUTOMATED DETECTION OF HUMAN GAIT EVENTS FROM CONVENTIONAL VIDEOGRAPHY	204
<i>Chandra Prakash, Rajesh Kumar, Namita Mittal</i>	
PHYSICAL LAYER SECURITY IN HALF-DUPLEX MULTI-HOP RELAYING SYSTEM.....	208
<i>Rupali Nirala, Sudakar Singh Chauhan</i>	
COMPARISON OF VF CONTROLLED WIND ENERGY SYSTEM BASED ON DIFFERENT SENSING METHODS	214
<i>Varsha Yadav, Arunima Verma</i>	
ANALYTICAL MODELLING OF SURFACE POTENTIAL OF MODIFIED SOURCE FD-SOI MOSFET	217
<i>Nilesh Anand Srivastava, Vimal Kumar Mishra, R. K. Chauhan</i>	
BANDWIDTH RECONFIGURABLE PATCH ANTENNA FOR NEXT GENERATION WIRELESS COMMUNICATION SYSTEM APPLICATIONS	221
<i>Sushant Anand, Ramendra Kumar Raj, Surbhi Sinha, D. K. Upadhyay, Gajendra Kant Mishra</i>	
SWITCHING-ALGEBRAIC ALGORITHMIC DERIVATION OF CANDIDATE KEYS IN RELATIONAL DATABASES.....	226
<i>Ali Muhammad Rushdi, Ali Rushdi</i>	
OPTIMIZATION OF CALL DROP SYSTEM (CDS) THROUGH RELIABILITY APPROACH.....	231
<i>Puru Gaur, Prince Saini, Amit Kumar, Mangey Ram</i>	
THREE MACHINES FLOWSHOP SCHEDULING MODEL WITH SEPARATE SETUP TIMES	236
<i>Neelam Tyagi, R. P. Tripathi, A. B. Chandramouli</i>	
SWITCHABLE FILTER BETWEEN HIGH PASS AND LOW PASS RESPONSES	241
<i>Shivi Batham, Arvind Kumar Pandey, R. K. Chauhan</i>	
EFFECTS OF RARE EARTH MATERIALS ON THIN FILM DEVICES.....	244
<i>Sandeep Tripathi, Vimal Kumar Mishra, R. K. Chauhan</i>	
INTERVAL-VALUED RELIABILITY ASSESSMENT OF 2-OUT-OF-4 SYSTEM.....	248
<i>Akshay Kumar, S. B. Singh, Mangey Ram</i>	
A COMPACT DUALBAND BANDPASS-TO-BANDSTOP TUNABLE FILTER FOR WIRELESS APPLICATIONS	252
<i>Tulika Sinha, Arvind Kumar Pandey, R. K. Chauhan</i>	
DESIGN OF ULTRA-WIDEBAND FILTER WITH RECONFIGURABLE NOTCHES	256
<i>Rupam Srivastava, Arvind Kumar Pandey, R. K. Chauhan</i>	
PERFORMANCE COMPARISON OF SINGLE AND DUAL GATES ORGANIC THIN FILM TRANSISTORS	259
<i>Astha Singh, Brijesh Kumar, G. S. Tripathi</i>	
SINGLE GATE BASED DIFFERENT STRUCTURES OF OTFTS: PROSPECTIVE AND CHALLENGES	264
<i>Ashish Pal, Brijesh Kumar, G. S. Tripathi</i>	
EFFECT OF ELECTRODE-THICKNESS ON ELECTRICAL PROPERTIES OF ORGANIC-THIN-FILM-TRANSISTORS	268
<i>Ashish Pal, Brijesh Kumar, G. S. Tripathi</i>	
Author Index	