

Turkish Journal of Electrical Engineering and Computer Sciences

Volume 28 | Number 1

Article 43

1-1-2020

Cover and Contents

Follow this and additional works at: <https://journals.tubitak.gov.tr/elektrik>

Recommended Citation

(2020) "Cover and Contents," *Turkish Journal of Electrical Engineering and Computer Sciences*: Vol. 28: No. 1, Article 43. Available at: <https://journals.tubitak.gov.tr/elektrik/vol28/iss1/43>

This Cover and Contents is brought to you for free and open access by TÜBİTAK Academic Journals. It has been accepted for inclusion in Turkish Journal of Electrical Engineering and Computer Sciences by an authorized editor of TÜBİTAK Academic Journals. For more information, please contact academic.publications@tubitak.gov.tr.

VOLUME | ISSUE | YEAR
28 | 1 | 2020
ISSN 1300-0632 • E-ISSN 1303-6203

TURKISH JOURNAL OF
**ELECTRICAL
ENGINEERING
& COMPUTER
SCIENCES**

<http://journals.tubitak.gov.tr/elektrik/>



Published by the Scientific and
Technological Research Council of Turkey

TÜBİTAK

TURKISH JOURNAL OF ENGINEERING & COMPUTER SCIENCES

Editor-in-Chief

Muhammet Uzuntarla
Bülent Ecevit University, Turkey

VOLUME 28 • ISSUE 1 • 2020
ISSN 1300-0632 • E-ISSN 1303-6203

Assistant Editor in Chief

Fatih DİKMEN
Gebze Technical University, Turkey

Assistant Editor in Chief

Ahmet Mete VURAL
Gaziantep University, Turkey

SCOPE

- The Turkish Journal of Electrical Engineering & Computer Sciences is published electronically 6 times a year by the Scientific and Technological Research Council of Turkey (TÜBİTAK)
- Accepts English-language manuscripts in the areas of power and energy, environmental sustainability and energy efficiency, electronics, industry applications, control systems, information and systems, applied electromagnetics, communications, signal and image processing, tomographic image reconstruction, face recognition, biometrics, speech processing, video processing and analysis, object recognition, classification, feature extraction, parallel and distributed computing, cognitive systems, interaction, robotics, digital libraries and content, personalized healthcare, ICT for mobility, sensors, and artificial intelligence.
- Contribution is open to researchers of all nationalities.

ABSTRACTED

- Science Citation Index Expanded
 - Scopus
 - Academic Search Complete
 - Inspec
-

EDITORIAL BOARD

- Abdulkadir BALIKÇI, Gebze Technical University, Turkey
- Ahmet Mete VURAL, Gaziantep University, Turkey
- Ahmet TEKE, Çukurova University, Turkey
- Ali BOZBEY, TOBB ETU, Turkey
- Ali KARA, Atilim University, Turkey
- Ali TOKER, İstanbul Technical University, Turkey
- Alptekin KÜPÇÜ, Koç University, Turkey
- Arzucan ÖZGÜR, Boğaziçi University, Turkey
- Ayşe TOSUN, İstanbul Technical University, Turkey
- Baha ŞEN, Yıldırım Beyazıt University, Turkey
- Behçet Uğur TÖREYİN, İstanbul Technical University, Turkey
- Berrin YANIKOĞLU, Sabancı University, Turkey
- Buğra KOKU, Middle East Technical University, Turkey
- Burcu CAN, Hacettepe University, Turkey
- Cemal YILMAZ, Sabancı University, Turkey
- Cihan KARAKUZU, Bilecik Şeyh Edibali University, Turkey
- Dinçer GÖKÇEN, Hacettepe University, Turkey
- Duygun Erol BARKANA, Yeditepe University, Turkey
- Emin ANARIM, Boğaziçi University, Turkey
- Enver EVER, Middle East Technical University, Turkey
- Erdoğan DOĞDU, Çankaya University, Turkey
- Ergin YILMAZ, Bülent Ecevit University, Turkey
- Ergun ERÇELEBİ, Gaziantep University, Turkey
- Fırat HARDALAÇ, Gazi University, Turkey
- Fikret ÇALIŞKAN, İstanbul Technical University, Turkey
- Fuat AKAL, Hacettepe University, Turkey
- Güneş Zeynep KARABULUT KURT, İstanbul Technical University, Turkey
- Günhan DÜNDAR, Boğaziçi University, Turkey
- İbrahim ALIŞKAN, Bülent Ecevit University, Turkey
- İbrahim Beklan KÜÇÜKDEMİRAL, Glasgow Caledonian University, United Kingdom
- İsa YILDIRIM, İstanbul Technical University, Turkey
- İstemihan GENÇ, İstanbul Technical University, Turkey
- Jafar A. ALZUBI, Al-Balqa Applied University, Jordan
- Kamil Çağatay BAYINDIR, Yıldırım Beyazıt University, Turkey
- Kemal OFLAZER, Carnegie Mellon University in Qatar, Qatar
- Kemal POLAT, Abant İzzet Baysal University, Turkey
- Klaus Werner SCHMIDT, Middle East Technical University, Turkey
- Matjaz PERC, University of Maribor, Slovenia
- Mehmet Alper ŞEN, Bogazici University, Turkey
- Mehmet Kemal LEBLEBİCİOĞLU, Middle East Technical University, Turkey
- Mehmet Timur AYDEMİR, Gazi University, Turkey
- Mehmet Turan SÖYLEMEZ, İstanbul Technical University, Turkey
- Mert ANKARALI, Middle East Technical University, Turkey
- Murat GÖL, Middle East Technical University, Turkey
- Mustafa Caner AKÜNER, Marmara Üniversitesi, Turkey
- Oğuzhan URHAN, Kocaeli University, Turkey
- Onur KAYA, Işık University, Turkey
- Osman PARLAKTUNA, Eskişehir Osmangazi University, Turkey
- Ömer DÖNMEZ, İstanbul University, Turkey
- Ömer Nezih GEREK, Anadolu University, Turkey
- Ömer USTA, İstanbul Technical University, Turkey
- Özgür ERTUĞ, Gazi Üniversitesi, Turkey
- Özgür ÜSTÜN, İstanbul Technical University, Turkey
- Özlem ÖZGÜN, Hacettepe University, Turkey
- Pelin ANGIN, Middle East Technical University, Turkey
- Ramazan BAYINDIR, Gazi University, Turkey
- Resul ÇÖTELİ, Fırat University, Turkey
- Resul DAŞ, Fırat University, Turkey
- Rıfat HACIOĞLU, Bülent Ecevit University, Turkey
- Rukiye UZUN, Bülent Ecevit University, Turkey
- Sedat AKLEYLEK, Ondokuz Mayıs University, Turkey
- Şenan Ece G. SCHMIDT, Middle East Technical University, Turkey
- Tamer ÖLMEZ, İstanbul Technical University, Turkey
- Temel KAYIKÇIOĞLU, Karadeniz Technical University, Turkey
- Tuğrul ÇAVDAR, Karadeniz Technical University, Turkey
- Tunga GÜNGÖR, Boğaziçi University, Turkey
- Ümit GÜZ, Işık University, Turkey
- Yalçın İŞLER, İzmir Katip Çelebi University, Turkey
- Yusuf ALTUN, Düzce University, Turkey
- Z. Hakan AKPOLAT, Fırat University, Turkey
- Zehra SARAÇ, Bülent Ecevit University, Turkey
- Zeydin PALA, Muş Alparslan University, Turkey
- Zeynep Yasemin KAHYA, Boğaziçi University, Turkey

CONTENTS

Energy efficiency in CMOS power amplifier designs for ultralow power mobile wireless communication systems	1
Selvakumar MARIAPPAN, Jagadheswaran RAJENDRAN, Norlaili Mohd NOH, Harikrishnan RAMIAH, Asrulnizam Abd MANAF	
A review on embedded field programmable gate array architectures and configuration tools	17
Khouloud BOUAZIZ, Abdulfattah M. OBEID, Sonda CHTOUROU, Mohamed ABID	
Simulation and analysis of wind turbine radar echo based on 3-D scattering point model	34
Jiangong ZHANG, Bin HAO, Bo ANG, Li HUANG, Jiawei YANG	
Design of a high performance narrowband low noise amplifier using an on-chip orthogonal series stacked differential fractal inductor for 5G applications	45
Sunilkumar TUMMA, Bheemaroo NISTALA	
A hybrid model based on the convolutional neural network model and artificial bee colony or particle swarm optimization-based iterative thresholding for the detection of bruised apples	61
Mahmut HEKIM, Onur COMERT, Kemal ADEM	
A novel semisupervised classification method via membership and polyhedral conic functions	80
Nur UYLAŞ SATI	
Retinal vessel segmentation using modified symmetrical local threshold	93
Umar ÖZGÜNALP	
Integrated topic modeling and sentiment analysis: a review rating prediction approach for recommender systems	107
Anbazhagan MAHADEVAN, Michael AROCK	
Detailed modeling of a thermoelectric generator for maximum power point trackingA no-reference framework for evaluating video quality streamed through wireless network	124
Hayati MAMUR, Yusuf ÇOBAN	
Fuzzy c-Means Directional Clustering (FCMDC) algorithm using trigonometric approximation	140
Orhan KESEMEN, Özge TEZEL, Eda ÖZKUL, Buğra Kaan TİRYAKİ	
Context-aware system for glycemic control in diabetic patients using neural networks	153
Owais BHAT, Dawood A KHAN	
Consumer loans' first payment default detection: a predictive model	167
Utku KOÇ, Türkan SEVGİLİ	
Fast texture classification of denoised SAR image patches using GLCM on Spark	182
Caner ÖZCAN, Okan ERSOY, İskender Ülgen OĞUL	
Applying deep learning models to structural MRI for stage prediction of Alzheimer's disease	196
Altuğ YİĞİT, Zerrin IŞIK	
Time series forecasting on multivariate solar radiation data using deep learning (LSTM)	211
Murat Cihan SORKUN, Özlem DURMAZ İNCEL, Christophe PAOLI	
An index-based joint multilingual/cross-lingual text categorization using topic expansion via Babel-Net	224
Eniafe Festus AYETIRAN	

A new biometric identity recognition system based on a combination of superior features in finger knuckle print images	238
Hadis HEIDARI, Abdolah CHALECHALE	
Automatic characterization of copy number polymorphism using high throughput sequencing	253
Can ALKAN	
Lung cancer subtype differentiation from positron emission tomography images	262
Oğuzhan AYYILDIZ, Zafer AYDIN, Bülent YILMAZ, Seyhan KARAÇAVUŞ, Kübra ŞENKAYA, Semra İÇER, Arzu TAŞDEMİR, Eser KAYA	
On the automorphisms and isomorphisms of MDS matrices and their efficient implementations	275
Muharrem Tolga SAKALLI, Sedat AKLEYLEK, Kemal AKKANAT, Vincent RIJMEN	
A novel S-box-based postprocessing method for true random number generation	288
Erdinç AVAROĞLU, Taner TUNCER	
Filter design for small target detection on infrared imagery using normalized-cross-correlation layer	302
H. Seçkin DEMİR, Erdem AKAGÜNDÜZ	
Nonlocal means estimation of intrinsic mode functions for speech enhancement	318
Sagar Reddy VUMANTHALA, Bikshalu KALAGADDA	
Sensor anomaly detection in the industrial internet of things based on edge computing	331
Dequan KONG, Desheng LIU, Lei ZHANG, Lili HE, Qingwu SHI, Xiaojun MA	
A symmetric-based framework for securing cloud data at rest	347
Mohammed Anwar MOHAMMED, Fadhil Salman ABED	
On the asymptotic analysis of the high-order statistics of the channel capacity over generalized fading channels	362
Ferkan YILMAZ	
Reliability comparisons of mobile network operators: an experimental case study from a crowd-sourced dataset	380
Engin ZEYDAN, Ahmet YILDIRIM	
A compact wideband series linear dielectric resonator array antenna	394
Yazeed M QASAYMEH, Abdullah AIMUHASIEN, Talha KAMRAN	
Design and fabrication of an eight-port binary Wilkinson power splitter	404
Mohammad Amir GHASEMI SHABANKAREH	
Design and implementation of a bandpass Wilkinson power divider with wide bandwidth and harmonic suppression	414
Hojatollah SOLEYMANI, Sobhan ROSHANI	
A wide angle multiple beam lens for convex conformal arrays	423
Rasime UYGUROĞLU, Abdullah Y. ÖZTOPRAK	
RMS frequency error performance and spurious signals in two-point modulators due to path imbalances	432
Gökhun SELÇUK, Kaan ÜÇEL	

A power and area efficient approximate carry skip adder for error resilient applications	443
Sujit Kumar PATEL, Bharat GARG, Shireesh Kumar RAI	
Controlling waveguide modes using PT transformation media	458
Hayrettin ODABAŞI	
Operation scheme for MMC-based STATCOM using modified instantaneous symmetrical components	468
Qing DUAN, Wanxing SHENG, Guanglin SHA, Zhen LI, Caihong ZHAO, Penghua LI, Chunyan MA	
Optimal fractional-order PID controller of inverter-based power plants for power systems LFO damping	485
Mahdi SAADATMAND, Babak MOZAFARI, Gevork B. GHAREHPETIAN, Soodabeh SOLEYMANI	
A low dropout voltage regulator with a transient voltage spikes reducer and improved figure of merit	500
Guru PRASAD, Kumara SHAMA	
Pulse width modulation control of fifteen-switch inverter for four AC loads	509
Gaurav GOYAL, Mohan AWARE	
Performance improvement of induction motor drives with model-based predictive torque control ..	525
Fatih KORKMAZ	
Estimation of distribution-based multiobjective design space exploration for energy and throughput-optimized MPSoCs	540
Maryam MURAD, Ishfaq HUSSAIN, Ayaz AHMAD, Muhammad Yasir QADRI, Nadia N. QADRI	
Dynamically updated diversified ensemble-based approach for handling concept drift	556
Kanu GOEL, Shalini BATRA	
A preliminary survey on software testing practices in Khyber PakhtunKhwa region of Pakistan	575
Bushra LATIF, Tauseef RANA	