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**TÜBİTAK**

## 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
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## Preface

In this issue of the Turkish Journal of Electrical Engineering & Computer Sciences, we have a total of 39 papers. Two of these are related to the hot topic of machine learning. In their interesting paper (pages 1685-1697), Shehab and Kahraman present several approaches for improving the extreme learning machine. They particularly present a fast and reliable statistical approach to determine the minimum hidden layer size that yields an optimum performance. In the following paper by Jawed et al. (pages 1698-1709), the authors present a direct usage of machine learning in security applications. As another attractive topic, the Internet of Things is considered in the paper by Najjar-Ghabel et al. (pages 1710-1723), where the authors target reliable data gathering via a heuristic approach.

Recently, graphene has attracted the interest of many researchers in our area. Kaliberda et al. in their paper (pages 1724-1735) present simulations of such planar structures in the THz range. They provide reflection, transmission, and absorption characteristics for given graphene and grating parameters. A completely different topic at GHz frequencies is presented by Pirasteh et al. (pages 1736-1746), where the authors consider the design of a compact microstrip filter.

This issue is particularly remarkable with a series of papers on network and power systems. In their paper (pages 1759-1770), Behal et al. consider network security and a generalized detection system for attacks. In another valuable contribution by Mayilswamy and Avinashiappan (pages 2029-2042), the authors present performance estimation and analysis of power line communication and they discuss two-step hybrid single-ended loop testing.

While it is difficult to achieve, our journal successfully combines a wide variety of topics even in a single issue. It also promotes the dissemination of research in electrical engineering and computer sciences by being free of charge for both authors and readers. With our recent actions, our aim is to improve the quality of the journal, while we already see improvements in each and every new issue.

Salih Özgür Ergül  
Editor in Chief

# CONTENTS

Optimum, projected, and regularized extreme learning machine methods with singular value decomposition and $L_2$ -Tikhonov regularization .....	1685
<b>Mohanad Abd SHEHAB, Nihan KAHRAMAN</b>	
Anomaly detection through keystroke and tap dynamics implemented via machine learning algorithms .....	1698
<b>Hani JAWED, Zara ZIAD, Muhammad Mubashir KHAN, Maheen ASRAR</b>	
Reliable data gathering in the Internet of Things using artificial bee colony .....	1710
<b>Samad NAJJAR-GHABEL, Shamim YOUSEFI, Leili FARZINVASH</b>	
Simulation of infinite periodic graphene planar grating in the THz range by the method of singular integral equations .....	1724
<b>Mstislav KALIBERDA, Leonid LYTVYENENKO, Sergey POGARSKY</b>	
Compact microstrip lowpass filter with ultrasharp response using a square-loaded modified T-shaped resonator .....	1736
<b>Ali PIRASTEh, Saeed ROSHANI, Sobhan ROSHANI</b>	
Solving a combined economic emission dispatch problem using adaptive wind driven optimization .....	1747
<b>Milena JEVTIĆ, Nenad JOVANOVIĆ, Jordan RADOSAVLJEVIĆ</b>	
A generalized detection system to detect distributed denial of service attacks and flash events for information theory metrics .....	1759
<b>Sunny BEHAL, Krishan KUMAR, Monika SACHDEVA</b>	
A novel model for minimizing unnecessary handover in heterogeneous networks .....	1771
<b>Babatunji OMONIWA, Riaz HUSSAIN, Junaid AHMED, Adeel IQBAL Ahmed MURKAZ, Qadeer UL-HASAN, Shahzad Ali MALIK</b>	
A model of QoS differentiation burst assembly with padding for improving the performance of OBS networks .....	1783
<b>Viet Minh Nhat VO, Van Hoa LE, Hoang Son NGUYEN, Manh Thanh LE</b>	
Threshold-based distributed DDoS attack detection in ISP networks .....	1796
<b>Karanbir SINGH, Kanwalvir Singh DHINDSA, Bharat BHUSHAN</b>	
Lorenz-like system design using cellular neural networks .....	1812
<b>Enis GÜNAY, Kenan ALTUN</b>	
Hardware implementation and comparison of displacement retrieval algorithms for a laser diode-based optical feedback interferometric sensor .....	1820
<b>Ghazi REHMAN, Usman ZABIT, Muhammad Obaid ULLAH</b>	
Reduction of PMUs via hybrid PMU-RTU communication changeover in the case of cyberattack on vulnerable power transmission lines .....	1833
<b>Noorollah FARDAD, Soodabeh SOLEYMANI, Faramarz FAGHIHI</b>	
Grid-connected quasi-z-source inverter with battery .....	1847
<b>Umesh SHINDE, Sagar KOTTAGATTU, Sumant KADWANE, Snehal GAWANDE</b>	
SAR image denoising based on patch ordering in nonsubsample shearlet domain .....	1860
<b>Shuaiqi LIU, Qi HU, Pengfei LI, Jie ZHAO, Zhihui ZHU</b>	

Novel low-loss microstrip triplexer using coupled lines and step impedance cells for 4G and WiMAX applications .....	1871
<b>Abbas REZAEI, Leila NOORI</b>	
Novel modified impedance-based methods for fault location in the presence of a fault current limiter .....	1881
<b>Javad BARATI, Aref DOROUDI</b>	
Study on variability smoothing benefits of wind farm cluster .....	1894
<b>Xuemei DAI, Kaifeng ZHANG, Jian GENG, Qianqian LIU, Ying WANG</b>	
A novel efficient TSV built-in test for stacked 3D ICs .....	1909
<b>Badi GUIBANE, Belgacem HAMDI, Brahim BENSALAM, Abdellatif MTIBAA</b>	
Automated citation sentiment analysis using high order n-grams: a preliminary investigation .....	1922
<b>Muhammad Touseef IKRAM, Muhammad Tanvir AFZAL, Naveed Anwer BUTT</b>	
IONOLAB-MAP: An automatic spatial interpolation algorithm for total electron content .....	1933
<b>Muhammet Necat DEVİREN, Feza ARIKAN</b>	
Performance analysis of distributed fiber Raman amplifiers employing higher order pumping schemes in optical transmission systems .....	1946
<b>Kulwinder Singh MALHI, Manjeet Singh PATTERRH, Manjit Singh BHAMRAH</b>	
Cache-timing attacks without a profiling phase .....	1953
<b>Ali Can ATICI, Cemal YILMAZ, Erkay SAVAS</b>	
User interaction in hands-free gaming: a comparative study of gaze-voice and touchscreen interface control .....	1967
<b>Muhtar Çağkan ULUDAĞLI, Cengiz ACARTÜRK</b>	
Presenting a method to perform cyber maneuvers .....	1977
<b>Mohammad SHAKIBAZAD, AliJabar RASHIDI</b>	
Minimizing path loss prediction error using k-means clustering and fuzzy logic .....	1989
<b>Wiyada BHUPUAK, Siraphop TOOPRAKAI</b>	
An efficient recurrent fuzzy CMAC model based on a dynamic-group-based hybrid evolutionary algorithm for identification and prediction applications .....	2003
<b>Chin-Ling LEE, Cheng-Jian LIN</b>	
Reducing power system model dimensions based on linearization for static analysis .....	2016
<b>Farid KARBALAEI, Maryam JEBREILZADEH, Hamidreza SHAHBAZI</b>	
Performance estimation and analysis of power line communication using single-ended loop testing .....	2029
<b>Bharathi MAYILSWAMY, Amsaveni AVINASHIAPPAN</b>	
An automatic extraction algorithm of high voltage transmission lines from airborne LIDAR point cloud data .....	2043
<b>Xiaojun SHEN Chuan QIN, Yong DU, Xinle YU, Rui ZHANG</b>	
Optimal coordination of overcurrent protection in the presence of SFCL and distributed generation .....	2056
<b>Saeed ASGHARIGOVAR, Heresh SEYEDI, Shahram PARCHEHBAF DIBAZARI</b>	
Application of domination integrity of graphs in PMU placement in electric power networks .....	2066
<b>Mariappan SARAVANAN, Ramalingam SUJATHA, Raman SUNDARESWARAN, Muthuselvan BALASUBRAMANIAN</b>	

Research on power-frequency electromagnetic interference model of multicore twisted signal cable of high-speed railway .....	2077
<b>Bowen ZHANG, Jiangjian XIE, Zhixin WANG, Jin YANG, Hao YAN</b>	
Real-time implementation of three-level inverter-based D-STATCOM using neuro-fuzzy controller .....	2088
<b>Resul ÇÖTELİ, Hakan AÇIKGÖZ, Beşir DANDIL, Servet TUNCER</b>	
Real-time power system dynamic security assessment based on advanced feature selection for decision tree classifiers .....	2104
<b>Qusay AL-GUBRI, Mohd Aifaa MOHD ARIFF</b>	
On the power handling of a high power combiner for industrial, scientific, and medical applications .....	2117
<b>Arash AHMADI</b>	
A novel single-inductor eight-channel light-emitting diode driver for low power display backlight applications .....	2130
<b>Magesh Kannan PARTHASARATHY, Nagarajan GANESAN</b>	
SF6 gas-insulated 50-kVA distribution transformer design .....	2140
<b>Okan ÖZGÖNENEL, David THOMAS, Ünal KURT</b>	
Modified acceleration feedback for practical disturbance rejection in motor drives .....	2151
<b>Ahmet GÜRHANLI</b>	