Black Sea Journal of Engineering and Science

Volume 7 | Issue 3

ISSN: 2619 - 8991

BS Journals

BLACK SEA JOURNAL OF ENGINEERING AND SCIENCE

(BSJ ENGIN SCI)

Black Sea Journal of Engineering and Science (BSJ Eng Sci) is a double-blind peer-reviewed, open-access international journal published electronically 6 times (January, March, May, July, September, and November) in a year by since January 2018. It publishes, in English and Turkish, full-length original research articles, innovative papers, conference papers, reviews, mini-reviews, rapid communications or technical note on advances in a wide range of scientific disciplines from all fields of engineering and science and from any source.

ISSN 2619 - 8991

Phone: +90 362 408 25 15

Fax: +90 362 408 25 15

Email: bsjsci@blackseapublishers.com

Web site: http://dergipark.gov.tr/bsengineering

Sort of publication: Periodically 6 times (January, March, May, July, September, and November) in a year

Publication date and place: May 15, 2024 - Samsun, TÜRKİYE

Publishing kind: Electronically

OWNER

Assoc. Prof. Dr. Uğur ŞEN

DIRECTOR IN CHARGE

Prof. Dr. Hasan ÖNDER

EDITOR BOARDS

EDITOR IN CHIEF

Prof. Dr. Hasan ÖNDER, Ondokuz Mayis University, TÜRKİYE

Assoc. Prof. Dr. Uğur ŞEN, Ondokuz, Mayis University, TÜRKİYE

SECTION EDITORS*

Prof. Dr. Ahmet UYANIK, Section Editor of Chemistry, Ondokuz Mayis University, TÜRKİYE

Prof. Dr. Amila Sandaruwan RATNAYAKE, Section Editor of Geological Engineering, Uva Wellassa University, SRI LANKA

Prof. Dr. Berna KILIÇ, Section Editor of Fisheries Engineering, Ege University, TÜRKİYE

Prof. Dr. Çiğdem TAKMA, Section Editor of Statistics, Ege University, TÜRKİYE

Prof. Dr. Ertan BUYRUK, Section Editor of Mechanical Engineering, Sivas Cumhuriyet University, TÜRKİYE

Prof. Dr. Fahrul Zaman HUYOP, Section Editor of Biology, Universiti Teknologi Malaysia, MALAYSIA

Prof. Dr. Fauziatul FAJAROH, Section Editor of Chemical Engineering, Universitas Negeri Malang, INDONESIA

Prof. Dr. Fuad ALHAJOMAR, Section Editor of Electrical and Electronics Engineering, University of South Wales, UNITED KINGDOM

Prof. Dr. Gökhan CİVELEKOĞLU, Section Editor of Environmental Engineering, Akdeniz University, TÜRKİYE

Prof. Dr. Hasan TANAK, Section Editor of Physics, Amasya University, TÜRKİYE

Prof. Dr. Hasan TEMİZ, Section Editor of Food Engineering, Ondokuz Mayis University, TÜRKİYE

Prof. Dr. Hojjat SADEGHİ-ALİABADİ, Section Editor of Chemistry, Isfahan University, IRAN

Prof. Dr. İbrahim Özgür DENEME, Section Editor of Civil Engineering, Aksaray University, TÜRKİYE

Prof. Dr. İbrahim UĞUR, Section Editor of Mining Engineering, Süleyman Demirel University, TÜRKİYE

Prof. Dr. Jamrun EBBAH, Section Editor of Fisheries Engineering, Mindanao State University, PHILIPPINES

Prof. Dr. Messaoud SAIDANI, Section Editor of Civil Engineering, Coventry University, UNITED KINGDOM

Prof. Dr. Perarasu THANGAVELU, Section Editor of Aerospace Engineering, Anna University, INDIA

Prof. Dr. Sema PALAMUTCU, Section Editor of Textile Engineering, Pamukkale University, TÜRKİYE

Prof. Dr. Ümit Cafer YILDIZ, Section Editor of Forest Engineering, Karadeniz Technical University, TÜRKİYE

Assoc. Prof. Dr. Belgin KARABACAKOĞLU, Section Editor of Chemical Engineering, Eskişehir Osmangazi University, TÜRKİYE

Assoc. Prof. Dr. Bülent BOSTANCI, Section Editor of Geomatics Engineering, Erciyes University, TÜRKİYE

Assoc. Prof. Dr. Edit MİKÓ, Section Editor of Agricultural Engineering, University of Szeged, HUNGARY

Assoc. Prof. Dr. Ergün EKİCİ, Section Editor of Industrial Engineering, Çanakkale Onsekiz Mart University, TÜRKİYE
Assoc. Prof. Dr. Helal Uddin MOLLA, Section Editor of Physics, Rajshahi University of Engineering and Technology, BANGLADESH
Assoc. Prof. Dr. Kadyrbay CHEKİROV, Section Editor of Biology, Kyrgyz Turkish Manas University, KYRGYZSTAN
Assoc. Prof. Dr. Mehmet EBEOĞLUGİL, Section Editor of Metallurgical and Materials Engineering, Dokuz Eylül University, TÜRKİYE
Assoc. Prof. Dr. Nilüfer YURTAY, Section Editor of Computer Engineering, Sakarya University, TÜRKİYE
Assoc. Prof. Dr. Özgür Hakan AYDOĞMUŞ, Section Editor of Mathematics, Social Sciences University of Ankara, TÜRKİYE
Assoc. Prof. Dr. Rita ISMAİLOVA, Section Editor of Computer Engineering, Kyrgyz - Turkish Manas University, KYRGYZSTAN
Assoc. Prof. Dr. Samia Chehbi GAMOURA, Section Editor of Statistics, Strasbourg University, FRANCE
Assoc. Prof. Dr. Silvio DE OLİVEİRA JUNIOR, Section Editor of Mechanical Engineering, University of São Paulo, BRAZIL
Assoc. Prof. Dr. Sinan AKISKA, Section Editor of Geological Engineering, Ankara University, TÜRKİYE
Asst. Prof. Dr. Abdul JABBAR, Section Editor of Textile Engineering, National Textile University, PAKISTAN
Asst. Prof. Dr. Arsheed Ahmad RATHER, Section Editor of Forest Engineering, Annamalai University, INDIA
Asst. Prof. Dr. Ezenwanyi OCHULOR, Section Editor of Metallurgical and Materials Engineering, University Of Lagos, NİGERİA
Asst. Prof. Dr. Francis INEGBEDİON, Section Editor of Industrial Engineering, University of Benin, NIGERIA
Asst. Prof. Dr. Haniyeh RASOULİ PİROUZİAN, Section Editor of Food Engineering, Tabriz University, IRAN
Asst. Prof. Dr. Jun-wei LİM, Section Editor of Environmental Engineering, Universiti Teknologi Petronas, MALAYSIA
Asst. Prof. Dr. Mehmet GÜÇYETMEZ, Section Editor of Electrical and Electronics Engineering, Kırşehir Ahi Evran University, TÜRKİYE
Asst. Prof. Dr. Melahat CİHAN, Section Editor of Aerospace Engineering, Samsun University, TÜRKİYE
Asst. Prof. Dr. Muhammad GULİSTAN, Section Editor of Mathematics, Hazara University, PAKISTAN
Asst. Prof. Dr. Sedat KARADAVUT, Section Editor of Agricultural Engineering, Trakya University, TÜRKİYE
Asst. Prof. Dr. Seyedeh Narges SADATİ, Section Editor of Mining Engineering, University of Mohaghegh Ardabili, IRAN

Asst. Prof. Dr. Xinyi WANG, Section Editor of Geomatics Engineering, Henan Polytechnic University, CHINA

* The ranking is arranged alphabetically within the academic title

EDITORIAL - ADVISORY BOARD*

Prof. Dr. Aglaia (Litsa) LIOPA-TSAKALIDI, Institute of Western Greece, GREECE
Prof. Dr. Ercan EFE, Kahramanmaras Sutcu Imam University, TÜRKİYE
Prof. Dr. Mohammad Masood TARIQ, University of Balochistan, PAKISTAN
Prof. Dr. Mustafa Çağatay TUFAN, Ondokuz Mayis University, TÜRKİYE
Prof. Dr. Özkan GÖRGÜLÜ, Ahi Evran University, TÜRKİYE
Assoc. Prof. Dr. Taner TUNÇ, Ondokuz Mayis University, TÜRKİYE
Asst. Prof. Dr. Emil OMURZAK, Kyrgyz-Turkish Manas University, KYRGYZSTAN
Asst. Prof. Dr. Yılmaz KAYA, Ondokuz Mayis University, TÜRKİYE

* The ranking is arranged alphabetically within the academic title

STATISTIC EDITOR

Prof. Dr. Mehmet TOPAL, Kastamonu University, TÜRKİYE

ENGLISH EDITOR

Asst. Prof. Dr. Betül ÖZCAN DOST, Ondokuz Mayis University, TÜRKİYE

TURKISH EDITOR

Prof. Dr. Serkan ŞEN, Ondokuz Mayis University, TÜRKİYE

REVIEWERS OF THE ISSUE*

Prof. Dr. Adem ASAN, Ondokuz Mayıs University, Department of Chemistry, Analytical Chemistry, TÜRKİYE

Prof. Dr. Arda ÖZTÜRKCAN, İstanbul Gelişim University, Department of Nutrition and Dietetics, Organic Chemistry, TÜRKİYE

Prof. Dr. Cahit GÜRER, Afyon Kocatepe University, Department of Civil Engineering, Transportation and Traffic, TÜRKİYE

Prof. Dr. Cemil GÜRÜNLÜ, Karadeniz Technical University, Department of Electrical and Electronics Engineering, Energy, TÜRKİYE

Prof. Dr. Cemil ÖZ, Sakarya University, Department of Computer Engineering, Neural Networks, TÜRKİYE

Prof. Dr. Derya BIRANT, Dokuz Eylül University, Department of Computer Science, Machine Learning, TÜRKİYE

Prof. Dr. Erkan YASLIOGLU, Bursa Uludağ University, Department of Biosystem Engineering, Agricultural Structures, TÜRKİYE

Prof. Dr. Muhammet KARATON, Fırat University, Department of Civil Engineering, Earthquake Engineering, TÜRKİYE

Prof. Dr. Recep ÖZEN, Mersin University, Department of Chemistry, Organic Chemistry, TÜRKİYE

Assoc. Prof. Dr. Ahmet ATALAY, Atatürk University, Department of Civil Engineering, Transportation and Traffic, TÜRKİYE

Assoc. Prof. Dr. Aysel VEYİSOĞLU, Sinop University, Department of Medical Services and Techniques, Bacteriology, TÜRKİYE

Assoc. Prof. Dr. Demet TATAR, Hitit University, Department of Medical Services and Techniques, Bacteriology, TÜRKİYE

Assoc. Prof. Dr. Emre ŞİRİN, Kırşehir Ahi Evran University, Department of Agricultural Biotechnology, Animal Reproduction and Breeding, TÜRKİYE

Assoc. Prof. Dr. Fadime ÖZDEMİR, Bilecik Şeyh Edebali University, Department of Molecular Biology and Genetics, Bacteriology, TÜRKİYE

Assoc. Prof. Dr. Hacı Mehmet ALAKAŞ, Kırıkkale University, Department of Industrial Engineering, Optimization in Manufacturing, TÜRKİYE

Assoc. Prof. Dr. Hare KILIÇASLAN, Karadeniz Technical University, Department of Architecture, Built Environment and Design, TÜRKİYE

Assoc. Prof. Dr. Hilal AYCI, Gazi University, Department of Architecture, Built Environment and Design, TÜRKİYE

Assoc. Prof. Dr. Hüseyin ŞANLI, Tekirdağ Namık Kemal University, Department of Automotive Technology, Automotive Combustion and Fuel Engineering, TÜRKİYE

Assoc. Prof. Dr. Kadir GÜÇLÜER, Adıyaman University, Department of Civil Engineering, Construction Materials, TÜRKİYE

Assoc. Prof. Dr. Kenan ALTUN, Sivas Cumhuriyet University, Department of Electronics and Automation, Electronics, TÜRKİYE

Assoc. Prof. Dr. Mürsel Ozan İNCETAŞ, Alanya Alaaddin Keykubat University, Department of Computer Technologies, Artificial Intelligence, TÜRKİYE

Assoc. Prof. Dr. Rukiye UZUN ARSLAN, Zonguldak Bülent Ecevit University, Department of Electrical and Electronics Engineering, Data Mining and Knowledge Discovery, TÜRKİYE

Assoc. Prof. Dr. Şaban ÖZTÜRK, Ankara Hacı Bayram Veli University, Department of Management Information Systems, Artificial Intelligence, TÜRKİYE

Assoc. Prof. Dr. Şahika ÖZDEMİR, İstanbul Sabahattin Zaim University, Department of Interior Architecture and Environmental Design, Architectural Design, TÜRKİYE

Assoc. Prof. Dr. Sedat BEHREM, Aksaray University, Department of Animal Science ans Animal Nutrition, Sheep and Goat Breeding and Treatment, TÜRKİYE

Assoc. Prof. Dr. Seyit Ahmet SİS, Balıkesir University, Department of Electrical and Electronics Engineering, Electrical Engineering, TÜRKİYE

Assoc. Prof. Dr. Sinan KUL, Bayburt University, Department of Emergency Aid and Disaster Management, Environmental Sciences and Engineering, TÜRKİYE

Assoc. Prof. Dr. Tunahan ERDEM, Çukurova University, Department of Agricultural Machinery, Agricultural Tools and Machines, TÜRKİYE

Assoc. Prof. Dr. Tuncay ERCAN, Yaşar University, Department of Management Information Systems, Information and Computing Sciences, TÜRKİYE

Assoc. Prof. Dr. Yavuz ÖZDEMİR, Istanbul Health and Technology University, Department of Industrial Engineering, Industrial Engineering, TÜRKİYE

Assoc. Prof. Dr. Yunus DEMİR, Bursa Technical University, Department of Industrial Engineering, Artificial Intelligence, TÜRKİYE

Assist. Prof. Dr. Behcet DÜNDAR, Osmaniye Korkut Ata University, Department of Civil Engineering, Construction Materials, TÜRKİYE

Assist. Prof. Dr. Bilgehan ERKAL, Karabük University, Department of Electrical and Electronics Engineering, Electrical Engineering, TÜRKİYE

Assist. Prof. Dr. Dilan ALP, Şırnak University, Department of Energy Systems Engineering, Energy Systems Engineering, TÜRKİYE

Assist. Prof. Dr. Elif ACAR, Yozgat Bozok University, Department of Business Administration, Multiple Criteria Decision Making, TÜRKİYE

Assist. Prof. Dr. Emre ALARSLAN, Bandirma Onyedi Eylül University, Department of Animal Science, Sheep and Goat Breeding and Treatment, TÜRKİYE

Assist. Prof. Dr. Evrim GÜLER, Bartın University, Department of Computer Engineering, Artificial Intelligence, TÜRKİYE

Assist. Prof. Dr. Gökhan GÖKSU, Yıldız Technical University, Department of Mathematics Engineering, Control Engineering, TÜRKİYE

Assist. Prof. Dr. Görkem SERBES, Yıldız Technical University, Department of Biomedical Engineering, Biosignal Processing, TÜRKİYE

Assist. Prof. Dr. Hasan Ali İRİK, Erciyes University, Department of Biosystem Engineering, Agricultural Structures, TÜRKİYE

Assist. Prof. Dr. İlker KARADAĞ, Sivas Cumhuriyet University, Department of Industrial Engineering, Multiple Criteria Decision Making, TÜRKİYE

Assist. Prof. Dr. Mahmut DURMAZ, Siirt University, Department of Civil Engineering, Construction Materials, TÜRKİYE

Assist. Prof. Dr. Mustafa NİL, Manisa Celal Bayar University, Department of Electrical and Electronics Engineering, Power Electronics, TÜRKİYE

Assist. Prof. Dr. Onur SÖZÜDOĞRU, Atatürk University, Department of Emergency Aid and Disaster Management, Environmental Sciences and Engineering, TÜRKİYE

Assist. Prof. Dr. Osman GÖKALP, İzmir Yüksek Teknoloji Institute, Department of Computer Engineering, Evolutionary Computation, TÜRKİYE

Assist. Prof. Dr. Özlem KARABIBER CURA, İzmir Katip Çelebi University, Department of Clinical Engineering, Machine Learning, TÜRKİYE

Assist. Prof. Dr. Serdar KARGIN, İstanbul Arel University, Department of Biomedical Engineering, Communications Engineering, TÜRKİYE

Assist. Prof. Dr. Sevtap TIRINK, Iğdır University, Environmental Health Program, Environmental Sciences and Engineering, TÜRKİYE

Assist. Prof. Dr. Talha Enes GÜMÜŞ, Sakarya University, Department of Electrical and Electronics Engineering, Power Plants, TÜRKİYE

Assist. Prof. Dr. Tuğçe GÖVER, Selçuk University, Department of Pharmacy, Analytical Chemistry, TÜRKİYE

Assist. Prof. Dr. Veli BAYSAL, Bartın University, Department of Computer Engineering, Computational Physiology, TÜRKİYE

Assist. Prof. Dr. Yaşar Barış DOLUKAN, OSTİM Technical University, Biomedical Device Technology Program, Biomedical Sciences and Technology, TÜRKİYE

Assist. Prof. Dr. Yeliz KARACA, University of Massachusetts Chan Medical School, Machine Learning, USA

Dr. Abdulhamit SEVGİ, OSTİM Technical University, Department of Mechatronics, Control Theory and Applications, TÜRKİYE

Dr. Ebru ERGÜNEŞ BERKİN, Hassa District Directorate of Agriculture, Biometry, TÜRKİYE

Dr. Ehsan SHEYDAEE, University of Tehran, Department of Biosystem Engineering, Agricultural Structures, IRAN

Dr. Kenan ERİN, Tarsus University, Department of Machine Engineering, Industrial Automation, TÜRKİYE

Dr. Mehmet Emin VURAL, GAP International Agricultural Research and Training Center Directorate, Sheep and Goat Breeding and Treatment, TÜRKİYE

Dr. Muhammet KAPTAN, Zonguldak Bülent Ecevit University, Department of Food Precessing, Sheep and Goat Breeding and Treatment, TÜRKİYE

Dr. Mutlu BULUT, Incirlik Air Base Meteorology Directorate, Agricultural Land Management, TÜRKİYE

Dr. Nurdoğan CEYLAN, Adıyaman University, Department of Machine Engineering, Industrial Automation, TÜRKİYE

Dr. Okan GÜNGOR, Bayburt University, Department of Electronics and Automation, Electrical-Electronics and Communication Engineering, TÜRKİYE

---

* The ranking is arranged alphabetically within the academic title

Volume 7, Issue 3 (2024)

Table of Contents

Research Articles

1. RESPIRATORY ANALYSIS WITH ELECTROCARDIOGRAM DATA: EVALUATION OF PAN-TOMPKINS ALGORITHM AND CUBIC CURVE INTERPOLATION METHOD
Mert Süleyman DEMİRSOY, Ayşe Nur AY GÜL..... 374-383

2. EFFECT OF SOLAR COLLECTOR GEOMETRY ON DRYING TIME AND NUTRITIONAL PROPERTIES OF LEVANT QUALITY HAZELNUTS
Mithat AKGÜN, Cemalettin AYGÜN, Mehmet AKGÜN, Emre TURAN.....384-391

3. TÜRKİYE ÖLÇEĞİNDE KARAYOLU YOL- BAKIM MALİYETLERİ VE GELECEK TAHMİNİ
Fatma Pınar GÖKSAL.....392-400

4. UTILIZATION OF SLIP CASTING PROCESS FOR RECYCLING CAD/CAM DENTAL ZIRCONIA WASTES
Cemile Betül EMRULLAHOĞLU ABİ, Hatice Şule ÇOBAN TETİK, Erdinç ABİ.....401-408

5. INVESTIGATION OF LINEAR AND NONLINEAR BEHAVIOUR OF REINFORCED CONCRETE COLUMN EXPOSED TO CORROSION EFFECT FOR DIFFERENT DAMAGE LIMIT LEVELS
Halit Erdem ÇOLAKOĞLU, Muhammed ÖZTEMEL.....409-422

6. İÇ LOJİSTİK FAALİYETLERİNDE YALIN TEKNİKLERİN KULLANILMASI VE BİR UYGULAMA
Ayşe UÇAR, Betül TURANOĞLU ŞİRİN.....423-435

7. ROBOTIC ARM TRAJECTORY TRACKING USING IMAGE PROCESSING AND KINEMATIC EQUATIONS
Yusuf Hamida EL NASER, Durmuş KARAYEL, Mert Süleyman DEMİRSOY, Muhammed Salih SARIKAYA, Nur Yasin PEKER.....436-444

8. USAGE OF WEKA SOFTWARE BASED ON MACHINE LEARNING ALGORITHMS FOR PREDICTION OF LIVER FIBROSIS/CIRRHOSIS
Rukiye UZUN ARSLAN, Ziynet PAMUK, Ceren KAYA.....445-456

9. A GAME-THEORETICAL INTEGRATED APPROACH FOR SUSTAINABLE PORTFOLIO SELECTION: AN APPLICATION ON BIST PARTICIPATION SUSTAINABILITY INDEX STOCKS
Furkan GÖKTAŞ.....457-464

10. MODELING CLIMATE CHANGE SCENARIOS FOR SPRING BARLEY IN SOUTHEAST OF ALMATY IN KAZAKHSTAN USING THE LINTUL APPROACH
Aidana SABITOVA, Gulnur SULEIMANOVA, Tefide KIZILDENIZ, Ali Kaan YETIK.....465-472

11. İVESİ KUZULARINDA BÜYÜME ÖZELLİKLERİ İÇİN PRATİK BİR DAMIZLIK SEÇME YÖNTEMİ: KOLAY İNDEKS UYARLAMASI
Yusuf KAPLAN, İrfan GÜNGÖR, Kürşat ALKOYAK, Mustafa TEKERLİ.....473-477

12. SUSTAINABLE AIRPORT MANAGEMENT AND AIRLINE MARKETING
Sevgi AYDIN.....478-487

13. THE IMPACT OF DEVICE TYPE NUMBER ON IOT DEVICE CLASSIFICATION
Ahmet Emre ERGÜN, Özgü CAN.....488-494

14. BIODIVERSITY OF Actinobacteria FROM KULA GEOPARK IN TÜRKİYE
Betül BAYRAKTAR, Kamil ISIK.....495-508
15. GEBELİKTE ANNE SAĞLIĞI RİSK GRUPLARININ TAHMİNİNE YÖNELİK MAKİNE ÖĞRENMESİ TABANLI BİR KARAR DESTEK SİSTEM TASARIMI
İrem ŞENYER YAPICI, Rukiye UZUN ARSLAN.....509-520
16. ADSORPTION OF THE ANTIBIOTIC ROXITHROMYCIN ON LOW-COST FOOD WASTE MATERIALS: BATCH AND COLUMN STUDIES
İlknur TOSUN SATIR, Bediha AKMEŞE..... 521-528
17. HANÖNÜ (KASTAMONU) GÜNEŞ ENERJİSİ SANTRALİNİN FARKLI SİMÜLASYON PROGRAMLARI İLE TASARIMI VE ELEKTRİK ENERJİSİ ÜRETİM SONUÇLARININ DEĞERLENDİRİLMESİ
Sefa KIRNAPCI, Nihat PAMUK.....529-538
18. ELECTROCHEMICAL HYDROGEN PEROXIDE GENERATION AND REMOVAL OF MOXIFLOXACIN BY ELECTRO-FENTON PROCESS
Gökçe Didar DEĞERMENCİ, Nejdet DEĞERMENCİ.....539-546
19. NATURE INSPIRED PRACTICES IN SUPER TALL BUILDING DESIGNS: SIMILARITIES OF FORM
Aslı YILDIZ, Güneş Mutlu AVINÇ.....547-559
20. FLUOKSETİN VE NORFLUOKSETİNİN SENTEZİ ÜZERİNE ÇALIŞMALAR VE ANTİOKSİDANT ÖZELLİĞİNİN ARAŞTIRILMASI
Nesimi ULUDAĞ.....560-565
21. EVALUATION OF AGING EFFECTS OF ZINC OXIDE ON THE OPTICAL PROPERTIES OF POROUS SILICON-ZINC OXIDE HETEROJUNCTION PHOTODETECTOR DEVICE
Safiye KARAÇAM, Meltem GÖR BÖLEN.....566-574
22. PROTEİN KAYNAKLARININ İN VİTRO OLGUNLAŞTIRILMIŞ SIĞIR OOSİTLERİNİN GLUTATYON PEROKSİDAZ ENZİM AKTİVİTESİ ÜZERİNE ETKİSİ
Nisa Nur YILMAZ.....575-579
23. FORECASTING ROAD FREIGHT AND PASSENGER TRANSPORT DEMANDS IN TURKEY USING THE EXPONENTIAL SMOOTHING
Hümeyra BOLAKAR TOSUN.....580-586
24. A COMPACT GAN POWER AMPLIFIER MODULE FOR NEW GENERATION CELLULAR BASESTATIONS
Burak Berk TÜRK, Furkan HÜRCAN, Hüseyin Şerif SAVCI, Hakan DOĞAN.....587-593
25. MEETING THE ENERGY NEEDS OF POULTRY HOUSES WITH WIND TURBINE SYSTEM UNDER TEKİRDAĞ CONDITIONS AND ITS ENVIRONMENTAL EFFECTS
Elif TÜRKBOYLARI, Ahmet Nedim YÜKSEL.....594-600
26. ELEKTRİKLİ ARAÇ DEVRESİNDE KULLANILAN BOOST DÖNÜŞTÜRÜCÜNÜN ANALİZİNE FARKLI YAKLAŞIMLAR
Ayşe Tuğba YAPICI, Nurettin ABUT, Ali Bekir YILDIZ.....601-609