

JSR A

E-ISSN: 2687-6167

NUMBER 54

SEPTEMBER 2023

JOURNAL OF SCIENTIFIC REPORTS A



Kutahya Dumlupınar University Scientific Reports A
Fulya Çelebi Campus, Tınazlı Road, 10 km. 43270 Kutahya

Phone : (0274) 443 19 42

E-mail : journals@gmail.com

jsra.com

Dumlupınar University Press

gate of
science

Kütahya Dumlupınar University
Institute of Graduate Studies



Journal of Scientific
Reports-A

E-ISSN: 2687-6167

Number 54, September 2023

Owner

On Behalf of Kütahya Dumlupınar University
Prof. Dr. Süleyman KIZILTOPRAK (Rector),
On Behalf of Institute of Graduate Studies
Assoc. Prof. Dr. Eray ACAR (Director)

Editorial Board

Prof. Dr. Önder UYSAL
Prof. Dr. Fatih ŞEN
Prof. Dr. Cemal PARLAK
Prof. Dr. Oktay ŞAHBAZ
Assoc. Prof. Nevzat BEYAZIT
Assoc. Prof. Onur KARAMAN
Assoc. Prof. Cafer ÖZKUL
Assoc. Prof. Levent URTEKİN
Assoc. Prof. Durmuş ÖZDEMİR
Assist. Prof. Ümran ERÇETİN
Dr. Ceren KARAMAN

Kütahya Dumlupınar University/ Mining Engineering
Kütahya Dumlupınar University / Biochemistry
Ege University / Physics
Kütahya Dumlupınar University/ Mining Engineering
Ondokuz Mayıs University / Environmental Eng
Akdeniz University / Medical Services and Tech
Kütahya Dumlupınar University / Geological Eng.
Ahi Evran University / Mechanical Eng.
Kütahya Dumlupınar University / Computer Eng.
Kütahya Dumlupınar University / Mechanical Eng.
Akdeniz University / Electrical and Energy

Journal of Scientific Reports-A started its publication life in 2000 as name of Journal of Science and Technology of Dumlupınar University and is a national peer-reviewed journal published regularly twice a year in June and December. The language of the journal is English. Articles submitted to the journal are evaluated by at least two referees who are experts in the subject and selected by the editorial board. All articles submitted to the journal are evaluated by the double-blind method. Articles submitted to our journal for review should not be previously published, accepted for publication and in the process of being evaluated for publication in another journal. All responsibility for the articles published in the journal belongs to the author(s).

The journal aims to share scientific studies carried out in the fields of science and engineering at national and international level with scientists and the public. Original research articles, review articles and short notes in science and engineering disciplines are accepted for the journal. Original research articles are expected to contain theoretical and experimental results and should not be published in other journals. In the review articles, it is expected that scientific, technological and current developments on a specific subject are reflected by using an extensive bibliography and made a satisfying evaluation of these. Short notes should be brief writings prepared to announce the first findings of an original study.

Editorial Policy

The journal is open access and the article evaluation period is between 1-2 months.

Correspondence Address: Kütahya Dumlupınar Üniversitesi Evliya Çelebi Yerleşkesi Fen Bilimleri Enstitüsü
43270 KÜTAHYA

E-mail: joursra@gmail.com

Phone: 0 274 443 19 42

Webpage: gsjsra.com

Fax: 0 274 265 20 60

Section Editors

Civil Engineering Prof. Dr. M. Çağatay KARABÖRK	Kütahya Dumlupınar University
Mechanical Engineering Prof. Dr. Ramazan KÖSE	Kütahya Dumlupınar University
Electrical-Electronics Engineering Assist. Prof. Kadir VARDAR	Kütahya Dumlupınar University
Computer Engineering Assoc. Prof. Doğan AYDIN	Kütahya Dumlupınar University
Industrial Engineering Assist. Prof. Üyesi Kerem CİDDİ	Kütahya Dumlupınar University
Mining Engineering Assist. Prof. Uğur DEMİR	Kütahya Dumlupınar University
Geology Engineering Assist. Prof. Muzaffer ÖZBURAN	Kütahya Dumlupınar University
Metallurgical and Materials Engineering Prof. Dr. İskender IŞIK	Kütahya Dumlupınar University
Food Engineering Prof. Dr. Muhammet DÖNMEZ	Kütahya Dumlupınar University
Environmental Engineering Assoc. Prof. Dr. Nevzat BEYAZIT	Ondokuz Mayıs University
Mathematics Assist. Prof. Cansu KESKİN	Kütahya Dumlupınar University
Physics Assoc. Prof. Huriye Sanem AYDOĞU	Kütahya Dumlupınar University
Chemistry Assoc. Prof. Bülent ZEYBEK	Kütahya Dumlupınar University
Biology Assist. Prof. Nüket Akalın BİNGÖL	Kütahya Dumlupınar University
Biochemistry Assoc. Prof. Derya KOYUNCU ZEYBEK	Kütahya Dumlupınar University
Occupational Health and Safety Prof. Dr. Cem ŞENSÖĞÜT	Kütahya Dumlupınar University
Software Engineering Assist. Prof. Şerif Ali SADIK	Kütahya Dumlupınar University

Advisory Board

Prof. Dr. Sibel AKAR	Eskişehir Osmangazi University / Chemistry
Prof. Dr. Abdurrahman AKTÜMSEK	Selçuk University/ Bialogy
Prof. Dr. Mustafa ALTUNOK	Gazi University / Tree-Jobs Industrial Engineering
Prof. Dr. Uğur ARİFOĞLU	Sakarya University / Electirical and Electr. Engineering
Prof. Dr. Oktay ARSLAN	Balıkesir University / Chemistry
Prof. Dr. Şükrü ASLAN	Sivas Cumhuriyet University / Enviromental Engineering
Prof. Dr. Ülfet ATAV	Selçuk University / Pyhsics
Prof. Dr. Mustafa BAYRAKTAR	TOBB Ekonomi ve Teknoloji University / Mathamathics
Prof. Dr. Niyazi BİLİM	Konya Technical University / Mining Engineering
Prof. Dr. İsmail BOZTOSUN	Akdeniz University / Pyhsics
Prof. Dr. Erdal ÇELİK	Dokuz Eylül University / Metalurgical and Material Eng.
Prof. Dr. Hayri DAYIOĞLU	Kütahya Dumlupınar University / Bialogy
Prof. Dr. Muhammet DÖNMEZ	Kütahya Dumlupınar University / Food Engineering
Prof. Dr. Mehmet Ali EBEOĞLU	Kütahya Dumlupınar University / Elec.and Electr. Eng.
Prof. Dr. İsmail Göktay EDİZ	Kütahya Dumlupınar University / Mining Engineering
Prof. Dr. İsmail EKİNCİOĞLU	Kütahya Dumlupınar University / Mathematics
Prof. Dr. Kaan ERARSLAN	Kütahya Dumlupınar University / Mining Engineering
Prof. Dr. Zeynal Abiddin ERGÜLER	Kütahya Dumlupınar University / Geological Eng.
Prof. Dr. Seyhan FIRAT	Gazi University / Civil Engineering
Prof. Dr. Remzi GÖREN	Sakarya University / Metalurgical and Material Eng.
Prof. Dr. Rasim İPEK	Ege University / Mechanical Engineering
Prof. Dr. Refail KASIMBEYLİ	Eskişehir Technical University / Industrial Engineering
Prof. Dr. Hamdi Şükür KILIÇ	Selçuk University / Physics
Prof. Dr. Yaşar KİBİCİ	Bilecik Şeyh Edebali University / Geological Eng.
Prof. Dr. İsmail KOCAÇALIŞKAN	Yıldız Technical University / Molecular Bio. and Gen.
Prof. Dr. Mahmut KOÇAK	Eskişehir Osmangazi University / Math-Computer
Prof. Dr. Muhsin KONUK	Üsküdar University / Molecular Biology and Gen.
Prof. Dr. Mustafa KURU	Başkent University / Molecular Biology and Gen.
Prof. Dr. Ömer İrfan KÜFREVİOĞLU	Atatürk University / Biochemistry
Prof. Dr. Halim MUTLU	Ankara University / Geological Engineering
Prof. Dr. Ekrem SAVAŞ	İstanbul Ticaret University / Mathematics
Prof. Dr. Murat TANIŞLI	Eskişehir Technical University / Physics
Prof. Dr. Ali Rehber TÜRKER	Gazi University / Chemistry
Prof. Dr. Mustafa TÜRKMEN	Giresun University / Biology
Prof. Dr. Abdülmecit TÜRÜT	İstanbul Medeniyet University / Physics Engineering
Prof. Dr. Eşref ÜNLÜOĞLU	Eskişehir Osmangazi University / Civil Engineering
Prof. Dr. Nurettin YAYLI	Karadeniz Technical University / Pharmacy
Prof. Dr. Yusuf YAYLI	Ankara University / Mathematics
Prof. Dr. Elçin YUSUFOĞLU	Uşak University / Mathematics
Prof. Dr. Hüseyin Serdar YÜCESU	Gazi University / Automotive Engineering
Prof. Dr. Mehmet Tevfik ZEYREK	Middle East Technical University / Pyhsics

JOURNAL OF SCIENTIFIC REPORTS-A
E-ISSN: 2687-6167

CONTENTS

RESEARCH ARTICLES

- Evaluating the Robustness of Yolo Object Detection Algorithm in Terms of Detecting Objects in Noisy Environment* 1-25
Halit BAKIR*, Rezan BAKIR
- Detection of Exon and Intron Regions in Dna Sequences by the Proposed Hashing Function* 26-41
Fatma AKALIN*, Nejat YUMUŞAK
- Analysis and Clinical Evaluation of Muscle Dynamics in Adolescents with Sagittal Plane Deformity* 42-61
Kadir GÖK, Ela Naz GÖK*, KAdriye TOMBAK, Nehir SAMANCI KARAMAN, Ömer Halil ÇOLAK
- Altered Numbers of Lucas Number Squared* 62-75
Fikri KÖKEN*, Emre KANKAL
- Alamouti Space-Time Coding for Vehicular Communications in the Presence of Channel Estimation Errors* 76-93
Serdar Özgür ATA*
- Effects of Wind Speed and Mounting Type on Pv Module in Unbalanced Distribution Systems* 94-107
Salman Ahmed NUR*, Selçuk EMİROĞLU
- Detection and Characterization of Some Glaze Faults Encountered in Sanitarywares* 108-124
Eray ÇAŞIN, Nihal DERİN COŞKUN*, C. Eren IŞIK
- Experimental Thermal Performance Analysis of Nanofluid Assisted Slinky Ground Heat Exchanger in Space Cooling Application* 125-135
Abdullah KAPICIOĞLU*, Tahsin YÜKSEL
- Influence of Ti Microalloying on Zamak-5* 136-148
Melih KOÇYİĞİT, H. Erdem ÇAMURLU*
- Antibacterial, Antifungal, Antibiofilm, Antioxidant, and Anticancer Properties of Methanol Extracts of Some Acantholimon Boiss (Plumbaginaceae) Species* 149-163
Maside Temiz BOSTANCI, Ali Savaş BULBUL, Cihangir UYGUN, Muhammed

BEKMEZCİ, Ramazan BAYAT, Fatih ŞEN*	
<i>The Effect of Quercetin on Some Hematological Parameters Against Bisphenol-A Exposure in Streptozocin-Induced Rats</i>	164-175
Yılmaz KOÇAK*, Gökhan OTO, Seray ALPARSLAN	
<i>Numerical Modeling of Backward-Facing Step Flow via Computational Fluid Dynamics</i>	176-193
İlker GÖKTEPELİ*, Ulaş ATMACA	
<i>Evaluation of the Monitoring of Surface Deformations in Open-Pit Mines with Sentinel-1A Satellite Radar Data</i>	194-211
Bekir POYRAZ*, Yavuz GÜL, Fatih POYRAZ	
<i>Investigation of Mechanical Properties of Al 7075 Alloy Solidified under Vibration</i>	212-223
Mustafa GÜLMEZ, Ağah Ayğahoğlu*	
<i>Energy-Population Evaluation and Projection of Kütahya Province</i>	224-238
Oğuz Ozan YOLCAN*, Ramazan KÖSE	
<i>Valorization of Turkish Coffee Waste as a Biodiesel Feedstock</i>	239-250
Ayşe Hilal ULUKARDEŞLER*	
<i>Investigation of Recently Abused Drugs in Dried Blood Spots Using Fta Cards by Liquid Chromatography Tandem Mass Spectrometry: Validation and Application to Real Samples</i>	251-263
Yeter EROL ÖZTÜRK*	
<i>Antimicrobial Activity of Proton Salts of 3-(Sulfamoylphenylcarbamoyl)Acrylic Acid Derivatives with Aminopyridine Derivatives</i>	264-272
Halil İLKİMEN*, Cengiz YENİKAYA, Aysel GÜLBANDILAR	
<i>The First Light Curve Analysis of V1010 Cas Using Ground-Based and Tess Data</i>	273-284
Neslihan ALAN*	
<i>Enrichment of Sivas/Gemerek Lignite Coal by Oil Agglomeration Using Different Vegetable Oils</i>	285-295
Özlem KAYA*, Neriman TAŞDÖĞEN CEBE	
<i>Classification of Brain Tumors with Deep Learning Models</i>	296-306
Beyza Nur TÜZÜN*, Durmuş ÖZDEMİR	
<i>Effects of Cyanide on Some Enzyme Activities and Lipid Peroxidation in Some Tissues of Carp (Cyprinus carpio)</i>	307-321
Mustafa KAVASOĞLU*, Kazım UYSAL	

<i>Attainable Sets of Integral Constrained Seir Control System with Nonlinear Incidence</i>	322-337
Ali S. NAZLIPINAR*, Farideh MOHAMMADIMEHR	
<i>In Vitro Evaluation of Antioxidant and Cytotoxic Activities on Human Cervical Cancer Cells in Three Different Plant Extracts from Turkey</i>	338-352
Funda ULUSU*	
<i>Effect of Temperature on the Protein Profile of Macrovipera Lebetinus (Blunt-Nosed Viper) Venom: A Preliminary Study</i>	353-363
Naşit İĞÇİ*	
<i>Characterization of Mortality Prediction: An Ensemble Learning Analysis Using the Mimic-Iii Dataset</i>	364-384
Anıl Burcu ÖZYURT SERİM*	