

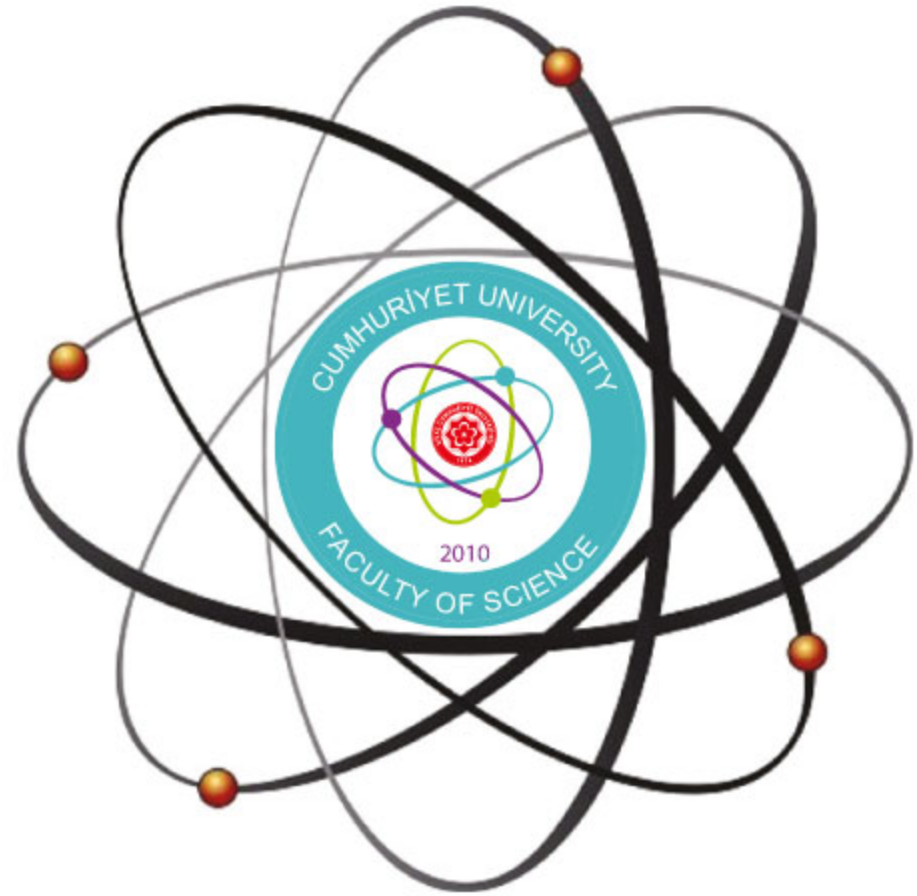


Cumhuriyet University

ISSN : 2587-2680

e-ISSN : 2587-246X

Cumhuriyet Science Journal



Volume : 39

Number : 4

Year : 2018



ISSN: 2587-2680
e-ISSN:2587-246X
Period: Quarterly
Founded: 2002
Publisher: Sivas
Cumhuriyet University

Cumhuriyet Science Journal (CSJ)

Derginin Eski Adı: Cumhuriyet Üniversitesi Fen-Edebiyat Fakültesi Fen Bilimleri Dergisi

Eski ISSN: 1300-1949

Baş Editör / Editor-in-Chief:

Prof. Dr. İdris ZORLUTUNA

Yazı İşleri Müdürü/ Managing Editor:

Assoc. Prof. Dr. Adil ELİK

Editörler / Editors:

Assoc. Prof. Dr. Baki KESKİN

Assoc. Prof. Dr. Nilüfer TOPSAKAL

Assoc. Prof. Dr. Serkan AKKOYUN

Assoc. Prof. Dr. Hülya KURŞUN

Assoc. Prof. Dr. Birnur AKKAYA

Assoc. Prof. Dr. Adil ELİK

Assoc. Prof. Dr. Nüket KARTAL TEMEL

Misafir Editör / Guest editor

Assoc. Prof. Dr. Halil İbrahim ULUSOY

Akademik Dizin / Abstracted/Indexed in

Ulakbim TR-Dizin

Akademik Dizin

Bielefeld Academic Search Engine (BASE)

Directory of Open Access Journals (DOAJ)

Directory of Research Journal Indexing (DRJI)

Google Scholar

Research Gate

Thomson Reuters Zoological

WorldCat



CUMHURİYET SCIENCE JOURNAL

Section Editors:

Prof. Dr. Sezai ELAGÖZ

Assoc. Prof. Dr. Muhammet BEKÇİ

Assoc. Prof. Dr. Duran KARAKAŞ

Assist. Prof. Dr. Yaşar ÇAKMAK

Assist. Prof. Dr. Sevgi DURNA DAŞTAN

Editorial Board:

Prof. Dr. Mustafa SOYLAK (Erciyes University)

Prof. Dr. Münevver SÖKMEN (KGTU)

Prof. Dr. Hüseyin MERDAN (TOBB ETU)

Prof. Dr. Chuan Fu Yang (Nanjing University of Science and Technology)

Prof. Dr. Mehmet AKKURT (Erciyes University)

Prof. Dr. Mustafa KAVUTÇU (Gazi University)

Prof. Dr. Mustafa TÜZEN (GOP University)

Prof. Dr. Ali Fazıl YENİDÜNYA (Sivas Cumhuriyet University)

Prof. Dr. Songül KAYA MERDAN (METU)

Prof. Dr. Yeşim SAĞ AÇIKEL (Hacettepe University)

Prof. Dr. Mehmet ŞİMŞİR (Sivas Cumhuriyet University)

Prof. Dr. Atalay SÖKMEN (KGTU)

Prof. Dr. Ramazan GÜRKAN (Sivas Cumhuriyet University)

Dr. Ricardo I. Jeldres (Universidad de Antofagasta)

Assoc. Prof. Dr. Mustafa YILDIRIM (Sivas Cumhuriyet University)

Assoc. Prof. Dr. Ali DELİCEOĞLU (Erciyes University)

Assoc. Prof. Dr. Tuncay BAYRAM (Karadeniz Technical University)

Assoc. Prof. Dr. Gökhan KOÇAK (Erciyes University)

Dr. Francois Vos (The University of Queensland)

Proofreader:

Assist.Prof.Dr. Tuğba MERT

Research Assistant Dr. Koray SAYIN

Layout Editors:

Research Assistant Esra Merve YILDIRIM

Abdullah SAYIR

Copyeditors:

Research Assistant Abdulkadir ŞEKER

Research Assistant Özgür İNCE

Research Assistant Doğa Can SERTBAŞ

Secretariat-Communication:

Research Assistant Hacı Ahmet KARADAŞ

Publication Type. Peer Reviewed Journal

Cite Type: Cumhuriyet Sci. J.

Contact Information

Faculty of Science, Sivas Cumhuriyet University
58140 Sivas- TURKEY

Phone: +90(346)2191010-1522

Fax: +90(346)2191186

e-mail: csj@cumhuriyet.edu.tr

<http://dergipark.gov.tr/csj>

CONTENTS

PAGES

NATURAL SCIENCES

Ebru YABAŞ

Synthesis and Spectroscopic Properties of 5-Amino-1,3,4-Thiadiazole Substituted Zinc(II) Phthalocyanine Compound..... 812-817

İdris ZORLUTUNA, Serkan ATMACA

Notes on Fuzzy Parametrized Soft Sets 818-827

Fevzi TOPAL

Antidiabetic Potential: Effect of Resorcinol on α -Glycosidase and α -Amylase Enzymes 828-832

Gözde DURSUN, Elif YILDIZ, Hasan ÇABUK

Supramolecular Solvent-Based Microextraction of Propachlor and Prometryn Herbicides in Soil Samples Prior to Liquid Chromatographic Analysis..... 833-841

Abdullah ERGÜN

Integral Representation for Solution of Discontinuous Diffusion Operator with Jump Conditions..... 842-863

Ahmet Sinan ÖZKAN

Parameter-Dependent Dirac Systems on Time Scales..... 864-870

Serdar ENGİNOĞLU, Samet MEMİŞ

A Configuration of Some Soft Decision-Making Algorithms via $fpfs$ -matrices 871-881

Mehmet AYDINALP, Mustafa KAZAZ, Hasan Hüseyin UĞURLU

The Forward Kinematics of Rolling Contact of Spacelike Surfaces in Lorentzian 3-Space 882-899

İnci ÇİLİNGİR SÜNGÜ, Hüseyin DEMİR

A Computational Method for the Time-Fractional Navier-Stokes Equation 900-911

Sibel KOPARAL, Neşe ÖMÜR

Some Congruences for Sums Involving Harmonic Numbers 912-919

Gurbet CANPOLAT

Selective Separation of Cobalt Using a New Co(II)-Imprinted Polymer/Cryogel System 920-927

Nihat YILDIZ, Serkan AKKOYUN, Hüseyin KAYA

Consistent Empirical Physical Formula Construction for Gamma Ray Angular Distribution Coefficients by Layered Feedforward Neural Network 928-933

Fatih UNGAN

Nonlinear Optical Properties of a Quantum Well With Short-Range Bottomless Exponential Potential..... 934-939

Salih ÖKTEN, Cem Cüneyt ERSANLI, Osman ÇAKMAK

Structural Characterization of 6-Bromo-5-nitroquinoline-1-oxide: A Quantum Chemical Study and XRD Investigations..... 940-953

Özgür AÇIK

On a Relation Between Twistors and Killing Spinors 954-969

Barış GÜZEL, Oltan CANLI, Elmas ÖKTEM OLGUN

Gas Chromatography Method Validation Study for Sensitive and Accurate Determination of Volatile Aromatic Hydrocarbons (VAHs) in Water 970-982

Osman AĞAR

Investigation on Gamma Radiation Shielding Behaviour of CdO-WO₃-TeO₂ Glasses from 0.015 to 10 MeV 983-990

Furkan AYAZ <i>Ruthenium Based Photosensitizer Exerts Immunostimulatory and Possible Adjuvant Role on the Mammalian Macrophages In vitro</i>	991-998
Bahar AKYÜZ YILMAZ, Murat KAYA, Lalehan AKYÜZ, Yavuz Selim ÇAKMAK, Seher KARAMAN ERKUL, İdris SARGIN, Behlül KOÇ <i>Characterization of Chitosan-Based Films with Different Aniseed Oil Content</i>	999-1006
İbrahim TEGİN, Uyan YÜKSEL, Mehmet FİDAN <i>Evaluation of Analysis Results and Element Analysis of Salted Field Plant <i>Spergularia rubra</i> (L) J. Presl & C. Presl Using Chemometric Techniques</i>	1007-1014
Ünal YEŞİLGÜL <i>The Binding Energy of Impurities in the Asymmetrical Semi-Exponential Quantum Wells</i>	1015-1019
Taner DASTAN, Handan SARAC <i>Determination of the Nutritional Element Concentrations of Evelik Plant (<i>Rumex crispus</i> L.)</i>	1020-1024
Şevket Zişan B. YAĞCI, Ebru KUYUMCU SAVAN, Gamze ERDOĞDU <i>Electrochemical Detection of Epinephrine in The Presence of Ascorbic Acid at Poly (p-Aminobenzene Sulfonic Acid) Modified Sensor</i>	1025-1035
Sultan ERKAN <i>Structural, Spectroscopic and Anti-cancer Properties of Hydroxy- and Sulfonamide-Azobenzene Platinum (II) Complexes: DFT and Molecular Docking Studies</i>	1036-1051
Özgür SELİMOĞLU, Mustafa EKİNCİ <i>Development of the Multi-configuration Cassegrain Collimator</i>	1052-1062
Azer ÖZAD DÜZGÜN, Ayşegül SARAL <i>Investigation of Antibiotic Resistance Genes and Class 1 Integron in Multi-Drug Resistant <i>P. aeruginosa</i> and <i>E. coli</i> Strains</i>	1063-1068
Songül ULUSOY, Selim ERDOĞAN, Merve GÖKŞİN KARASLAN, Burhan ATEŞ, Halil İbrahim ULUSOY, Sema ERDEMOĞLU <i>Optimization Of Extraction Parameters For Folic Acid And Antioxidant Compounds From An Edible Plant (<i>Polygonum Cognatum</i> Meissn) Using Pressurized Liquid Extraction (PLE) System</i>	1069-1080
Şerife KAHYA, Mustafa CİTTAN, Ali ÇELİK <i>Electrochemical Behavior of Cholecalciferol on a Multiwalled Carbon Nanotube Modified Glassy Carbon Electrode</i>	1081-1088
<u>ENGINEERING SCIENCES</u>	
Deniz GÖLBAŞI, Ertan BUYRUK, Koray KARABULUT <i>Experimental and Numerical Research of the Flow Features Around the Building Pairs with Different Types</i>	1089-1106
Fatih KABURCUK <i>Fast Solutions for Lossless Anisotropic Electromagnetic Scattering and Radiation Problems Using the FDTD Method</i>	1107-1117
Zekeriya DURAN, Tuğba DOĞAN, Bülent ERDEM, İsmail DEMİRHAN <i>Evaluation of Noise Exposure in Gypsum Plant in Terms of Work Safety</i>	1118-1126
Fuat ÖZYONAR <i>Treatment of Oily Wastewater by Electrocoagulation Process and Optimization of the Experimental Conditions Using Taguchi Method</i>	1127-1135
Tamer DOĞAN <i>Thermoluminescence Properties of Quartzite Rock after β-irradiation</i>	1136-1143