

Volume: 5 Issue: 1 2024



Eurasian Journal of

**Science
Engineering
& Technology**



Editors

Prof. Dr. Murat BARUT, mbarut@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY

Prof. Recep ZAN, recep.zan@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY

Editorial Board

Alper GÜRBÜZ, agurbuz@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY

Bora TİMURKUTLUK, bora.timurkutluk@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY

Çiğdem ULUBAŞ SERÇE, cigdemserce@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY

Durmuş DAĞHAN, durmusdaghan @ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY

Ersen TURAÇ, ersenturac@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY

Gazi GÖRÜR, ggorur@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY

Hakan DEMİR, hdemir@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY

Halil TOKTAY, h.toktay@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY

Kutalmış GÜMÜŞ, kgumus@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY

Metin Hakan SEVERCAN, msevercan@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY

Sefa ERTÜRK, sefa@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY

Serkan ÇAYIRLI, scayirli@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY

Sevgi DEMİREL, sevgidemirel@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY

Sibel CANOĞULLARI, scanogullari@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY

Tefide KIZILDENİZ, tkizildeniz@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY

Ufuk DEMİREL, ufukdemirel@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY

Yasemin ALTUNCU, yaltuncu@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY

Zeliha YILDIRIM, zeliha.yildirim@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY



Scientific Board

- Adil CANIMOĞLU, acanimoglu@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY
- Atakan Tuğkan YAKUT, sevaty@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY
- Aydın TOPÇU, aydintopcu@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY
- Ayten ÖZTÜRK, aozturk@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY
- Bora TİMURKUTLUK, bora.timurkutluk@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY
- Cahit Tağı ÇELİK, ctcelik@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY
- Çiğdem ULUBAŞ SERÇE, cigdemserce@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY
- Ersen TURAÇ, ersenturac@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY
- Gazi GÖRÜR, ggorur@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY
- Kutsi Savaş ERDURAN, kserduran@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY
- Mehmet Emin ÇALIŞKAN, caliskanme@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY
- Mehmet ŞENER, msener@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY
- Metin YILDIRIM, metin.yildirim@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY
- Murat GÖKÇEK, mgokcek@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY
- Mustafa UÇAN, ucan@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY
- Neslihan DOĞAN SAĞLAMTİMUR, nds@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY
- Osman SEYYAR, oseyyar@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY
- Öner Yusuf TORAMAN, otoraman@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY
- Tefide KIZILDENİZ, tkizildeniz@ohu.edu.tr, NIGDE OMER HALISDEMIR UNIVERSITY



Correspondence Address

*Niğde Ömer Halisdemir University
Eurasian Journal of Science Engineering and Technology Publishing Coordinatorship, 51240
Niğde/Türkiye*

E-mail: recep.zan@ohu.edu.tr
mbarut@ohu.edu.tr

Web page: <https://dergipark.org.tr/tr/pub/ejset>

Publication information

The objective of Eurasian Journal of Science Engineering and Technology (EJSET) is to provide an academic environment for researchers in various fields of science and engineering and for the publication and dissemination of high-quality research results in the fields of science, applied science, engineering, architecture, agricultural science and technology.



CONTENTS/İÇİNDEKİLER

THE INFLUENCE OF THE CARBURIZING PROCESS ON THE IMPACT-SLIDING WEAR BEHAVIOR OF 14NiCr14 STEEL

(Research Article)

Ömer Faruk ÇOŞKUN, Ayşenur EĞERCİOĞLU, Gökhan ÖZDEMİR, Harun MİNDİVAN

01-08

CONVCAT: A NEW CLASSIFICATION APPROACH USING UC MERCED AND RESISC45 DATASETS

(Research Article)

Selim SÜRÜCÜ, Esmâ DEMİRKİRAN

09-15

MODELING THERMAL BEHAVIOR IN HIGH-POWER SEMICONDUCTOR DEVICES USING THE MODIFIED OHM'S LAW

(Research Article)

Alex Mwololo KIMUYA

16-43

STRUCTURAL, MAGNETIC AND MAGNETOCALORIC PROPERTIES OF $\text{La}_{0.7}\text{Sr}_{0.2}\text{Ba}_{0.1}\text{MnO}_3$ MANGANITE

(Research Article)

Mehmet Selim ASLAN, Selda KILIÇ ÇETİN, Ahmet EKİCİBİL

44-49

A NEW SOFT SET OPERATION: COMPLEMENTARY EXTENDED STAR OPERATION

(Research Article)

Ashhan SEZGİN, Murat SARIALIOĞLU

50-75

INTEGRATION OF GRID SCALE BATTERY ENERGY STORAGE SYSTEMS AND APPLICATION SCENARIOS

(Technical Brief)

Obed Nelson ONSOMU, Alper ÇETİN, Erman TERCİYANLI, Bülent YEŞİLATA

76-86