

Dr. Öğr. Üyesi ÇIĞDEM TOPARLI

Kişisel Bilgiler

İş Telefonu: [+90 210 253 7](tel:+902102537)

E-posta: ctoparli@metu.edu.tr

Web: <https://avesis.metu.edu.tr/ctoparli>

Posta Adresi: Üniversiteler mah. Dumlupınar blv. Orta Doğu Teknik Üniversitesi Kampüsü, Metalurji ve Malzeme Bölümü, E-211

Uluslararası Araştırmacı ID'leri

ScholarID: 8EmI5nsAAAAJ

ORCID: 0000-0002-4374-4910

Publons / Web Of Science ResearcherID: ABH-8729-2020

ScopusID: 55744448200

Yoksis Araştırmacı ID: 159265

Eğitim Bilgileri

Bütünleşik Doktora, Ruhr-Universität Bochum, Mechanical Engineering, Mechanical Engineering, Almanya 2013 - 2017

Lisans, İstanbul Teknik Üniversitesi, Kimya-Metalurji, Metalurji Ve Malzeme Mühendisliği, Türkiye 2006 - 2011

Araştırma Alanları

Kimyasal ve Elektrokimyasal Özellikler, Korozyon ve Korozyondan Korunma, Malzeme Karakterizasyonu

Akademik Unvanlar / Görevler

Dr. Öğr. Üyesi, Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Metalurji ve Malzeme Mühendisliği Bölümü, 2020 - Devam Ediyor

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayımlanan Makaleler

- Earth-Abundant Divalent Cation High-Entropy Spinel Ferrites as Bifunctional Electrocatalysts for Oxygen Evolution and Reduction Reactions**
ERDİL T., ÖZGÜR Ç., Geyikci U., LÖKÇÜ E., TOPARLI Ç.
ACS APPLIED ENERGY MATERIALS, cilt.7, sa.18, ss.7775-7786, 2024 (SCI-Expanded)
- B-Site Doping Boosts the OER and ORR Performance of Double Perovskite Oxide as Air Cathode for Zinc-Air Batteries**
Ozgur C., Erdil T., Geyikci U., Yildiz I., Lokcu E., Toparli Ç.
CHEMPHYSICHEM, cilt.25, sa.e202400531, ss.1-12, 2024 (SCI-Expanded)
- Synthesis of N-Doped Graphene Photo-Catalyst for Photo-Assisted Charging of Li-Ion Oxygen Battery**
Kaçar N., LÖKÇÜ E., ÇAYIRLI M., ÖZDEN R. C., COŞKUN Ş., TOPARLI Ç., ÇELİKÜREK İ., ANIK M.
Global Challenges, cilt.8, sa.1, 2024 (SCI-Expanded)
- Engineering Oxygen Vacancies in (FeCrCoMnZn)₃O_{4-δ} High Entropy Spinel Oxides Through Altering Fabrication Atmosphere for High-Performance Rechargeable Zinc-Air Batteries**

Özgür Ç., Erdil T., Geyikci U., Okuyucu C., Lökçü E., Kalay Y. E., Toparlı Ç.

Global Challenges, cilt.8, sa.1, 2024 (SCI-Expanded)

- V. **B-Site Effect on High-Entropy Perovskite Oxide as a Bifunctional Electrocatalyst for Rechargeable Zinc-Air Batteries**
Erdil T., Toparlı Ç.
ACS APPLIED ENERGY MATERIALS, cilt.6, sa.21, ss.11255-11267, 2023 (SCI-Expanded)
- VI. **Facile Synthesis and Origin of Enhanced Electrochemical Oxygen Evolution Reaction Performance of 2H-Hexagonal Ba₂CoMnO_{6-δ} as a New Member in Double Perovskite Oxides**
Erdil T., Lökçü E., Yıldız İ., Okuyucu C., Kalay Y. E., Toparlı Ç.
ACS OMEGA, cilt.7, sa.48, ss.44147-44155, 2022 (SCI-Expanded)
- VII. **Effect of synthesis environment on the electrochemical properties of (FeMnCrCoZn)₃O₄ high-entropy oxides for Li-ion batteries**
Bayraktar D. O., LÖKÇÜ E., ÖZGÜR Ç., ERDİL T., TOPARLI Ç.
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, cilt.46, sa.15, ss.22124-22133, 2022 (SCI-Expanded)
- VIII. **Electronegative metal dopants improve switching variability in Al₂O₃ resistive switching devices**
Tan Z. J., Somjit V., TOPARLI Ç., YILDIZ B., FANG N.
PHYSICAL REVIEW MATERIALS, cilt.6, sa.10, 2022 (SCI-Expanded)
- IX. **Microwave-assisted in situ laser dye incorporation into high sensitivity whispering gallery mode microresonators**
Mondragon-Ochoa J. S., Gonzalez-Rivera J., Toparli C., Khanum R., Moirangthem R. S., Duce C., Ferrari C., Barillaro G., Erbe A.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, cilt.55, sa.5, 2022 (SCI-Expanded)
- X. **Acidity of surface-infiltrated binary oxides as a sensitive descriptor of oxygen exchange kinetics in mixed conducting oxides**
Nicollet C., TOPARLI Ç., HARRINGTON G. F., DEFFERRIERE T., YILDIZ B., TULLER H. L.
NATURE CATALYSIS, cilt.3, sa.11, ss.913-920, 2020 (SCI-Expanded)
- XI. **Multi-Foulant-Resistant Material Design by Matching Coating-Fluid Optical Properties**
TOPARLI Ç., CARLSON M., DINH M. A., YILDIZ B., SHORT M. P.
LANGMUIR, cilt.36, sa.17, ss.4776-4784, 2020 (SCI-Expanded)
- XII. **Electrochemical Performance of (MgCoNiZn)_(1-x)LixO High-Entropy Oxides in Lithium-Ion Batteries**
LÖKÇÜ E., TOPARLI Ç., ANIK M.
ACS APPLIED MATERIALS & INTERFACES, cilt.12, sa.21, ss.23860-23866, 2020 (SCI-Expanded)
- XIII. **What is the trigger for the hydrogen evolution reaction? - towards electrocatalysis beyond the Sabatier principle**
Zeradjanin A. R., Polymeros G., TOPARLI Ç., Ledendecker M., Hodnik N., Erbe A., Rohwerder M., La Mantia F.
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, cilt.22, sa.16, ss.8768-8780, 2020 (SCI-Expanded)
- XIV. **Alkaline manganese electrochemistry studied by in situ and operando spectroscopic methods - metal dissolution, oxide formation and oxygen evolution**
Rabe M., TOPARLI Ç., Chen Y., Kasian O., Mayrhofer K. J. J., Erbe A.
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, cilt.21, sa.20, ss.10457-10469, 2019 (SCI-Expanded)
- XV. **Cyclodextrin inhibits zinc corrosion by destabilizing point defect formation in the oxide layer**
Altin A., Krzywiecki M., Sarfraz A., TOPARLI Ç., Laska C., Kerger P., Zeradjanin A., Mayrhofer K. J. J., Rohwerder M., Erbe A.
BEILSTEIN JOURNAL OF NANOTECHNOLOGY, cilt.9, ss.936-944, 2018 (SCI-Expanded)
- XVI. **In situ and operando observation of surface oxides during oxygen evolution reaction on copper**
TOPARLI Ç., Sarfraz A., Wieck A. D., Rohwerder M., Erbe A.
ELECTROCHIMICA ACTA, cilt.236, ss.104-115, 2017 (SCI-Expanded)
- XVII. **Synthesis, structural and magnetic characterization of soft magnetic nanocrystalline ternary FeNiCo particles**
TOPARLI Ç., Ebin B., Gürmen S.
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, cilt.423, ss.133-139, 2017 (SCI-Expanded)

- XVIII. **State of the Surface of Antibacterial Copper in Phosphate Buffered Saline**
TOPARLI Ç., Hieke S. W., Altin A., Kasian O., Scheu C., Erbe A.
JOURNAL OF THE ELECTROCHEMICAL SOCIETY, cilt.164, sa.12, 2017 (SCI-Expanded)
- XIX. **A new look at oxide formation at the copper/electrolyte interface by in situ spectroscopies**
TOPARLI Ç., Sarfraz A., Erbe A.
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, cilt.17, sa.47, ss.31670-31679, 2015 (SCI-Expanded)
- XX. **Preparation and magnetic characterization of Fe/metal oxide nanocomposite particles by means of hydrogen reduction assisted ultrasonic spray pyrolysis (USP-HR)**
Ebin B., TOPARLI Ç., Gürmen S.
INTERNATIONAL JOURNAL OF MATERIALS RESEARCH, cilt.104, sa.5, ss.483-488, 2013 (SCI-Expanded)

Diğer Dergilerde Yayınlanan Makaleler

- I. **SYNTHESIS AND CHARACTERIZATION OF HIGH ENTROPY OXY-HYDROXIDES FOR ELECTROCATALYTIC OXYGEN EVOLUTION AND REDUCTION REACTION**
Toparli C.
Eskişehir Osmangazi Üniversitesi mühendislik ve mimarlık fakültesi dergisi (online), cilt.31, sa.2, ss.698-704, 2023 (Hakemli Dergi)

Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

- I. **The Effect of B-site Doping on NdBaCoaFe2-aO6 (a= 1.8, 1.6, 1.4, 1.2) for Enhanced OER/ORR Activity and Rechargeable Zinc- Air Battery Performance**
ÖZGÜR Ç., TOPARLI Ç.
7th International Symposium on Materials for Energy Storage and Conversion, Muğla, Türkiye, 17 - 21 Temmuz 2023
- II. **NANO POROUS HIGH ENTROPY OXIDE ELECTROCATALYST FOR HYDROGEN PRODUCTION**
ÖZGÜR Ç., TOPARLI Ç., ERDİL T., LÖKÇÜ E.
3rd INTERNATIONAL MATERIALS TECHNOLOGIES AND METALLURGY CONFERENCE-2023, İstanbul, Türkiye, 11 - 13 Ekim 2023
- III. **(Digital Presentation) ORR/OER Activity and Rechargeable Zinc-Air Battery Performance of B Site Doped Double Perovskite NdBaCoXO5+δ (X= Fe, Ni, Mn)**
Özgür Ç., Toparli Ç.
ECS Meeting, Vancouver, Kanada, 29 Mayıs - 02 Haziran 2022, cilt.35, ss.1511

Desteklenen Projeler

TOPARLI Ç., Yükseköğretim Kurumları Destekli Proje, Designing B-site doped double perovskite for the metal-air batteries, 2022 - 2023

Metrikler

Yayın: 28

Atf (WoS): 231

Atf (Scopus): 251

H-İndeks (WoS): 9

H-İndeks (Scopus): 9