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ScopusID: 55744448200

Yoksis Araştırmacı ID: 159265

Eğitim Bilgileri

Bütünleşik Doktora, Ruhr-Universitaet 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 Yayınlanan Makaleler

- I. **B-Site Doping Boosts the OER and ORR Performance of Double Perovskite Oxide as Air Cathode for Zinc-Air Batteries**
Ozgur Ç., Erdil T., Geyikci U., Yıldız İ., Lokcu E., Toparlı Ç.
CHEMPHYSCHM, cilt.25, sa.22, 2024 (SCI-Expanded)
- II. **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)
- III. **Engineering Oxygen Vacancies in (FeCrCoMnZn)304-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)
- IV. **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., ÇELİKYÜREK İ., ANIK M.
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-delta} as a New Member in Double Perovskite Oxides**
Erdil T., Lökcü 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)(3)O-4 high-entropy oxides for Li-ion batteries**
Bayraktar D. O., LÖKÇÜ E., ÖZGÜR Ç., Erdil 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 Al(2)O(3) 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., Toparlı 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)

Düzenlenen Dergilerde Yayınlanan Makaleler

- I. SYNTHESIS AND CHARACTERIZATION OF HIGH ENTROPY OXY-HYDROXIDES FOR ELECTROCATALYTIC OXYGEN EVOLUTION AND REDUCTION REACTION
Toparlı 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 Nd_aBa_{1-a}Co₂Fe_{2-a}O₆ (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 Nd_aBa_{1-a}Co₂O_{5+δ} (X= Fe, Ni, Mn)
Özgür Ç., Toparlı 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
Atıf (WoS): 231
Atıf (Scopus): 251
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H-İndeks (Scopus): 9