

Dr. Öğr. Üyesi Erdinç ÖZ

Kişisel Bilgiler

E-posta: erdinc.oz@atauni.edu.tr

Web: <https://avesis.atauni.edu.tr/erdinc.oz>

Uluslararası Araştırmacı ID'leri

ORCID: 0000-0003-4321-8264

Publons / Web Of Science ResearcherID: GXW-0937-2022

Yoksis Araştırmacı ID: 339579

Eğitim Bilgileri

Post Doktora, Dalhousie University, Physics and Atmospheric Science, Kanada 2021 - 2022

Post Doktora, İhsan Doğramacı Bilkent Üniversitesi, Fen Fakültesi, Kimya Bölümü, Türkiye 2019 - 2021

Doktora, İnönü Üniversitesi, Fen Bilimleri Enstitüsü, Fizik, Türkiye 2015 - 2019

Yüksek Lisans, İnönü Üniversitesi, Fen Bilimleri Enstitüsü, Fizik, Türkiye 2012 - 2015

Lisans, Bursa Uludağ Üniversitesi, Fen-Edebiyat Fakültesi, Fizik, Türkiye 2003 - 2009

Araştırma Alanları

Fizik, Disiplinlerarası Fizik ve İlgili Bilim ve Teknoloji Alanları, Fiziksel Kimya ve Kimyasal Fizik, Malzeme Bilimi

Akademik Unvanlar / Görevler

Dr. Öğr. Üyesi, Atatürk Üniversitesi, Fen Fakültesi, Fizik, 2022 - Devam Ediyor

Verdiği Dersler

Enerji Depolama Sistemleri ve Nanomalzeme Uygulamaları, Yüksek Lisans, 2023 - 2024

Fizik, Lisans, 2023 - 2024

Fizik, Lisans, 2023 - 2024

Energy Storage Systems and Nanomaterials Applications, Yüksek Lisans, 2023 - 2024

Enerji Depolama Sistemleri ve Nanomalzeme Uygulamaları, Yüksek Lisans, 2022 - 2023

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- High-performance Na-ion full-cells with P2-type Na_{0.67}Mn_{0.5-x}Ni_xFe_{0.43}Al_{0.07}O₂ cathodes: Cost analysis for stationary battery storage systems**
Kalyoncuoglu B., Ozgul M., ALTUNDAĞ S., BULUT F., ÖZ E., Sahinbay S., ALTIN S.
Journal of Energy Storage, cilt.79, 2024 (SCI-Expanded)
- Unveiling the outstanding full-cell performance of P2-type Na_{0.67}(Mn_{0.44}Ni_{0.06}Fe_{0.43}Ti_{0.07})O₂ cathode active material for Na-ion batteries**
Kalyoncuoglu B., Ozgul M., ALTUNDAĞ S., Harfouche M., ÖZ E., Avci S., Ji X., ALTIN S., Ates M. N.

Journal of Power Sources, cilt.591, 2024 (SCI-Expanded)

- III. **P2-type Na_{0.67}Mn_{0.5}-xVxFe_{0.43}Ti_{0.07}O₂ powders for Na-ion cathodes: Ex-situ structural analysis and full-cell study**
Dogan E., ALTUNDAĞ S., ALTIN E., ÖZ E., ALTIN S.
Electrochimica Acta, cilt.473, 2024 (SCI-Expanded)
- IV. **Tunnel/Layer Composite Na_{0.44}MnO₂ Cathode Material with Enhanced Structural Stability via Cobalt Doping for Sodium-Ion Batteries**
Oz E., Altin S., Avci S.
ACS OMEGA, cilt.8, sa.30, ss.27170-27178, 2023 (SCI-Expanded)
- V. **Investigation of physical and electrochemical properties of Ni-doped Tunnel/P2 hybrid Na_{0.44}MnO₂ cathode material for sodium-ion batteries**
ÖZ E., ALTIN S., Avci S.
JOURNAL OF SOLID STATE CHEMISTRY, cilt.318, 2023 (SCI-Expanded)
- VI. **Pd-NHC complex catalyzed C-H bond activation reactions of caffeine and 2-isobutylthiazole**
Bugday N., Khan S., YAŞAR S., BULUT F., Boulebd H., KARABIYIK H., KARABIYIK H., ÖZ E., Rehman A. U., ÖZDEMİR İ.
MOLECULAR CATALYSIS, cilt.530, 2022 (SCI-Expanded)
- VII. **Localized X-ray photoelectron impedance spectroscopy (LoXPIS) for capturing charge dynamics of an ionic liquid electrolyte within an energy storage device**
Basaran M., Oz E., Ergoktas S., Kocabas C., Ulgut B., Kocabas A., Suzer S.
FARADAY DISCUSSIONS, cilt.236, sa.0, ss.86-102, 2022 (SCI-Expanded)
- VIII. **Magnetic Properties and Environmental Temperature Effects on Battery Performance of Na_{0.67}Mn_{0.5}Fe_{0.5}O₂**
ALTIN S., BAYRİ A., ALTIN E., Oz E., YAŞAR S., Altundag S., Harfouche M., AVCI S.
ENERGY TECHNOLOGY, cilt.9, sa.5, 2021 (SCI-Expanded)
- IX. **Structural and magnetic characterisation of Co substituted Ni₂MnSb Heusler alloy: effect of cobalt substitution on magnetism and Curie temperature**
Oz E., Ak F., SAATÇI B.
PHILOSOPHICAL MAGAZINE, cilt.101, sa.2, ss.242-256, 2021 (SCI-Expanded)
- X. **Surface Propensity of Anions in a Binary Ionic-Liquid Mixture Assessed by Full-Range Angle-Resolved X-ray Photoelectron Spectroscopy and Surface-Tension Measurements**
Oz E., Sahin O., Okur H. I., Suzer S.
CHEMPHYSICHEM, cilt.21, sa.21, ss.2397-2401, 2020 (SCI-Expanded)
- XI. **LiNi_{0.8}Co_{0.15}Ti_{0.05}O₂: synthesis by solid state reaction and investigation of structural and electrochemical properties with enhanced battery performance**
Bayri A., Gocer E., ALTIN E., ALTUNDAĞ S., Oz E., Harfouche M., ALTIN S., Avci S.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, cilt.31, sa.22, ss.20527-20538, 2020 (SCI-Expanded)
- XII. **Investigation of Ti-substitution effects on structural and electrochemical properties of Na(0.) (67)Mn(0.) (5)Fe(0.) (5)O(2) battery cells**
ALTIN S., Altundag S., ALTIN E., Oz E., Harfouche M., BAYRİ A.
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, cilt.44, sa.14, ss.11794-11806, 2020 (SCI-Expanded)
- XIII. **Synthesis of Na₂Ti₃O₇ nanorods by a V-assisted route and investigation of their battery performance**
ALTIN S., Demirel S., Oz E., ALTIN E., Hetherington C., BAYRİ A., AVCI S.
CRYSTENGCOMM, cilt.22, sa.14, ss.2483-2490, 2020 (SCI-Expanded)
- XIV. **Investigation of hybrid-capacitor properties of ruthenium complexes**
ALTIN S., Oz E., Altundag S., BAYRİ A., Roisnel T., Dorcet V., Bruneau C., ÖZDEMİR İ., YAŞAR S.
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, cilt.43, sa.13, ss.6840-6851, 2019 (SCI-Expanded)
- XV. **Structural and magnetic properties of Ni_{2-x}CoxMnSb (x: 0.00, 0.25, 0.50 and 1.00) Heusler alloys: The relationship between Curie temperature and lattice parameter**
Ak F., Oz E., SAATÇI B.

INTERMETALLICS, cilt.111, 2019 (SCI-Expanded)

- XVI. **Cationic versus anionic Pt complex: The performance analysis of a hybrid-capacitor, DFT calculation and electrochemical properties**
Akkoc M., Demirel S., Oz E., ALTIN S., BAYRİ A., Dorcet V., Roisnel T., Bruneau C., ÖZDEMİR İ., YAŞAR S.
POLYHEDRON, cilt.157, ss.434-441, 2019 (SCI-Expanded)
- XVII. **Investigations of the capacity fading mechanism of Na(0.44)MnO(2) via ex situ XAS and magnetization measurements**
ALTIN S., Oz E., ALTIN E., Demirel S., BAYRİ A., AVCI S.
DALTON TRANSACTIONS, cilt.47, sa.47, ss.17102-17108, 2018 (SCI-Expanded)
- XVIII. **Structural, magnetic, electrical, and electrochemical properties of Sr-Co-Ru-O: A hybrid-capacitor application**
ALTIN S., BAYRİ A., Demirel S., Oz E., ALTIN E., AVCI S.
JOURNAL OF THE AMERICAN CERAMIC SOCIETY, cilt.101, sa.10, ss.4572-4581, 2018 (SCI-Expanded)
- XIX. **Investigation of potential hybrid capacitor property of chelated N-Heterocyclic carbene Ruthenium(II) complex**
Akkoc M., Oz E., Demirel S., Dorcet V., Roisnel T., BAYRİ A., Bruneau C., ALTIN S., YAŞAR S., ÖZDEMİR İ.
JOURNAL OF ORGANOMETALLIC CHEMISTRY, cilt.866, ss.214-222, 2018 (SCI-Expanded)
- XX. **X-ray Raman spectroscopy of lithium-ion battery electrolyte solutions in a flow cell**
KETENOĞLU D., Spiekermann G., Harder M., Oz E., Koz C., Yagci M. C., Yilmaz E., Yin Z., Sahle C. J., Detlefs B., et al.
JOURNAL OF SYNCHROTRON RADIATION, cilt.25, ss.537-542, 2018 (SCI-Expanded)
- XXI. **Fabrication of Ca-Mn-Nb-O compounds and their structural, electrical, magnetic and thermoelectric properties**
Oz E., DEMİREL S., ALTIN S., ALTIN E., Baglayan O., BAYRİ A., AVCI S.
MATERIALS RESEARCH EXPRESS, cilt.5, sa.3, 2018 (SCI-Expanded)
- XXII. **Structural, magnetic, electrical and electrochemical properties of SrCo_{0.25}, Sr₉Co₂Mn₅O₂₁ and SrMn₃ compounds**
DEMİREL S., Oz E., ALTIN S., BAYRİ A., Baglayan O., ALTIN E., AVCI S.
CERAMICS INTERNATIONAL, cilt.43, sa.17, ss.14818-14826, 2017 (SCI-Expanded)
- XXIII. **Thermally Induced Spin State Transition in LiCoO₂ and Its Effects on Battery Performance**
Oz E., Demirel S., ALTIN S., ALTIN E., BAYRİ A., AVCI S.
ELECTROCHIMICA ACTA, cilt.248, ss.449-453, 2017 (SCI-Expanded)
- XXIV. **Ring-expanded iridium and rhodium N-heterocyclic carbene complexes: a comparative DFT study of heterocycle ring size and metal center diversity**
KARACA E. Ö., Akkoc M., Oz E., ALTIN S., Dorcet V., Roisnel T., GÜRBÜZ N., Celik O., BAYRİ A., Bruneau C., et al.
JOURNAL OF COORDINATION CHEMISTRY, cilt.70, sa.7, ss.1270-1284, 2017 (SCI-Expanded)
- XXV. **Synthesis of ultra-thin nanobristles of Na-Mn-O compounds and their magnetic and structural properties**
Oz E., DEMİREL S., ALTIN S., BAYRİ A., AVCI S.
CERAMICS INTERNATIONAL, cilt.42, sa.15, ss.17059-17066, 2016 (SCI-Expanded)
- XXVI. **Fabrication and electrochemical properties of LiCo_{1-x}Ru_xO₂ cathode materials for Li-ion battery**
Oz E., DEMİREL S., ALTIN S.
JOURNAL OF ALLOYS AND COMPOUNDS, cilt.671, ss.24-33, 2016 (SCI-Expanded)
- XXVII. **Electrochemical effects and magnetic properties of B substituted LiCoO₂: Improving Li-battery performance**
Oz E., ALTIN S., DEMİREL S., BAYRİ A., ALTIN E., Baglayan O., AVCI S.
JOURNAL OF ALLOYS AND COMPOUNDS, cilt.657, ss.835-847, 2016 (SCI-Expanded)
- XXVIII. **Enhancement of battery performance of LiMn₂O₄: correlations between electrochemical and magnetic properties**
DEMİREL S., Oz E., ALTIN S., BAYRİ A., ALTIN E., AVCI S.
RSC ADVANCES, cilt.6, sa.49, ss.43823-43831, 2016 (SCI-Expanded)
- XXIX. **Magnetic and microstructural properties of LiCrO₂.Cr₂O₃ system by doping of the boron ions**

DEMİREL S., Oz E., BAYRİ A., ALTIN S.

JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, cilt.26, sa.11, ss.9178-9184, 2015 (SCI-Expanded)

- XXX. **Growth mechanism and magnetic and electrochemical properties of Na_{0.44}MnO₂ nanorods as cathode material for Na-ion batteries**
DEMİREL S., Oz E., ALTIN E., ALTIN S., BAYRİ A., Kaya P., Turan S., Avci S.
MATERIALS CHARACTERIZATION, cilt.105, ss.104-112, 2015 (SCI-Expanded)
- XXXI. **Magnetic and thermoelectric properties of B-substituted NaCoO₂**
ALTIN E., Oz E., Demirel S., BAYRİ A.
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, cilt.119, sa.3, ss.1187-1196, 2015 (SCI-Expanded)
- XXXII. **An enhancement ZT and spin state transition of Ca₃Co₄O₉ with Pb doping**
Demirel S., ALTIN E., Oz E., ALTIN S., Bayri A.
JOURNAL OF ALLOYS AND COMPOUNDS, cilt.627, ss.430-437, 2015 (SCI-Expanded)
- XXXIII. **Thermoelectric and mechanical properties of Mg-Al-Sb alloys**
ALTIN E., Oz E., ERDEM M., DEMİREL S., AYDOĞDU Y., ALTIN S.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, cilt.26, sa.2, ss.1023-1032, 2015 (SCI-Expanded)
- XXXIV. **Thermal and mechanical properties of La-Al-Sb alloys**
ALTIN E., Oz E., DEMİREL S., ERDEM M.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, cilt.25, sa.12, ss.5331-5337, 2014 (SCI-Expanded)
- XXXV. **Vortex pinning and magnetic peak effect in Eu(Eu,Ba)_(2.125)Cu₃O_x**
ALTIN E., Gokhfeld D. M., DEMİREL S., Oz E., Kurt F., ALTIN S., YAKINCI M. C.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, cilt.25, sa.3, ss.1466-1473, 2014 (SCI-Expanded)

Diğer Dergilerde Yayınlanan Makaleler

- I. **LiNiO₂'nin Performans Geliştirmesi İçin Mn ve Ti Eş Katkısı**
ÖZ E., ÖZ E., DAHN J.
Firat University journal of experimental and computational engineering (Online), cilt.3, sa.3, ss.280-291, 2024 (Hakemli Dergi)
- II. **The mechanical and heat conducting properties of dental composites**
Kamalak H., Oz E., Demirel S., ALTIN S.
BIOINTERFACE RESEARCH IN APPLIED CHEMISTRY, cilt.6, sa.6, ss.1710-1716, 2016 (ESCI)
- III. **The leakage study between restorative and pulp capping materials and diffusion analysis by Fick laws**
Kamalak H., Demirel S., Oz E., ALTIN S.
BIOINTERFACE RESEARCH IN APPLIED CHEMISTRY, cilt.6, sa.1, ss.1042-1048, 2016 (ESCI)

Desteklenen Projeler

İçin K., Öztürk S., Alver Ü., Öz E., Bilgin S., Batalovic K., Ersöz M., TÜBİTAK Projesi, Li-Bataryalar ve Süperkapasitörler için Enerji Verimliliği Yüksek Nanofiber Formunda Yüksek Entropili Oksitlerin Tasarımı ve Özelliklerinin Geliştirilmesi, 2023 - 2026

Patent

Öz E., Li-ion and na-ion batteries with high capacity and long cycle life and synthesis technique of the cathode materials that are used in these batteries, Patent, BÖLÜM G Fizik, Buluşun Başvuru Numarası: PCT/TR2016/050096 , Standart

Tescil, 2016

Bilimsel Hakemlikler

Materials, SCI Kapsamındaki Dergi, Aralık 2022

International Journal of Innovative Research and Reviews, Diğer İndekslerce Taranan Dergi, Kasım 2022

JOURNAL OF THE AMERICAN CERAMIC SOCIETY, SCI Kapsamındaki Dergi, Aralık 2019

Metrikler

Yayın: 38

Atf (WoS): 335

Atf (Scopus): 344

H-İndeks (WoS): 11

H-İndeks (Scopus): 11