

Personal Information

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Education Information

Doctorate, Mersin University, Fen, Kimya, Turkey 2019 - 2023

Postgraduate, Cukurova University, Fen Bilimleri Enstitüsü, Anorganik Kimya Abd, Turkey 2012 - 2015

Undergraduate, Mersin University, Fef, Kimya Abd, Turkey 2005 - 2010

Research Areas

Chemistry, Analytical Chemistry, Atomic and Molecular Spectroscopy, Inorganic Chemistry, Natural Sciences

Academic Titles / Tasks

Lecturer PhD, Cukurova University, Rektörlük, Rektörlük, 2017 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Comprehensive analysis of nutritive and toxic metal contents in canned tuna: Implications for safety and consumer health**
Özyurt G., Sakarya Y., Çağlayan U.
JOURNAL OF FOOD COMPOSITION AND ANALYSIS, vol.137, pp.1-8, 2025 (SCI-Expanded)
- II. **Synthesis of biomass-based BiOI@Hydrochar heterogeneous catalyst and investigation of its activity in sonocatalytic process**
Comak G., Bayram G., Görmez Ö., ÇAĞLAYAN U., Gözmen B.
Desalination and Water Treatment, vol.320, 2024 (SCI-Expanded)
- III. **Intravenous hypertonic fluids as a source of human microplastic exposure.**
Çağlayan U., Gündoğdu S., Ramos T. M., Syberg K.
Environmental toxicology and pharmacology, vol.107, pp.104411, 2024 (SCI-Expanded)
- IV. **Enhancing catalytic converter performance: effects of noble metals and rare earth washcoating on CO and NO_x conversion**
ÇAĞLAYAN U., Avsar G.
Research on Chemical Intermediates, 2024 (SCI-Expanded)
- V. **Long-life (Co, Al, Mg)-doped LiMn_{1.5}Ni_{0.5}O₄ cathodes prepared by co-precipitation method**
Kunduraci M., Boyaci H., Görmez Ö., ÇAĞLAYAN U., Çirimi D., Özkendir O. M., Harfouche M., Gözmen B.
Journal of Solid State Electrochemistry, 2024 (SCI-Expanded)
- VI. **Synthesis, characterizations, and supercapacitor performance of Ni-NiO@P(indole-4-aminoquinoline)**
SUNA KARATEKİN R., ÇİRMİ D., ÇAĞLAYAN U., KAHYA DÜDÜKCÜ M.
CHEMICAL PAPERS, vol.77, no.12, pp.13, 2023 (SCI-Expanded)

- VII. **Hydrothermal Synthesis of Siderite and Application as Catalyst in the Electro-Fenton Oxidation of p-Benzoquinone**
GÖRMEZ Ö., Sacli B., Caglayan U., Kalderis D., GÖZMEN B.
MOLECULES, vol.27, no.22, 2022 (SCI-Expanded)
- VIII. **Energy storage performance of LiV3O8/water-in-salt electrolyte/LiNi1/3Co1/3Mn1/3O2 cell for aqueous lithium-ion batteries**
Kunduraci M., Cetin S. K., Çağlayan U., Mutlu R. N., Kaya D., Ekicibil A.
JOURNAL OF ELECTROANALYTICAL CHEMISTRY, vol.908, pp.1-8, 2022 (SCI-Expanded)
- IX. **Spherical and core-shell-structured LiMn1.5Ni0.5O4 lithium-ion battery cathode with enhanced cyclability**
Kunduraci M., Caglayan U.
JOURNAL OF APPLIED ELECTROCHEMISTRY, vol.52, no.3, pp.477-486, 2022 (SCI-Expanded)
- X. **Significance of surface roughness in the supercapacitor activity of nickel-based electrodes**
Çağlayan U.
APPLIED PHYSICS A: MATERIALS SCIENCE AND PROCESSING, vol.127, pp.618-628, 2021 (SCI-Expanded)

Articles Published in Other Journals

- I. **Interplay between synthesis conditions, crystal structure, morphology and OER activity of AgFeO2 delafossite materials**
ÇİRMİ D., GÖRMEZ Ö., Sacli b., ÇALYAN U., KUNDURACI M.
JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, pp.9, 2021 (ESCI)

Refereed Congress / Symposium Publications in Proceedings

- I. **Investigation of the carbonmonoxide and catalytic activity of natural ilmenite ore**
ÇAĞLAYAN U., AVŞAR G., MERYEMOĞLU B.
The 5Th BASHKENT International Conference on Multidisciplinary Studies, 20 December 2023
- II. **Comparison of catalytic activities of natural sand and cordierite supported Pd catalysts**
ÇAĞLAYAN U., AVŞAR G.
The 5Th BASHKENT International Conference on Multidisciplinary Studies, 20 December 2023
- III. **THE SPECTROSCOPIC ANALYSIS OF GEOLOGICAL ROCKS USING RCH THREE DIFFERENT SAMPLE PREPARATION METHODS**
ÇAĞLAYAN U., MERYEMOĞLU B.
5. International Antalya Scientific Research and Innovative Studies Congress, Antalya, Turkey, 26 July 2023
- IV. **COMPARISON OF MONOLITH AND ACTIVATED CARBON SUPPORTED PLATINUM CATALYSTS ON AQUEOUS PHASE REFORMING**
MERYEMOĞLU B., ÇAĞLAYAN U.
3RD INTERNATIONAL BLACK SEA MODERN SCIENTIFIC RESEARCH CONGRESS, Samsun, Turkey, 23 March 2023
- V. **Production and characterization of porous heterogeneous catalysts with cordiorite monolith compounds supported by Zr layered cerium compound.**
ÇAĞLAYAN U., AVŞAR G.
4TH INTERNATIONAL EURASIAN CONFERENCE ON SCIENCE, ENGINEERING AND TECHNOLOGY (EURASIANSCIENTECH 2022), Ankara, Turkey, 14 December 2022

Supported Projects

ÇAĞLAYAN U., Project Supported by Higher Education Institutions, Hidrotermal yöntem ve katı hal yöntemi ile bor katkılı

yüksek kapasiteli lityum demir fosfat batarya üretimi, 2024 - Continues

SELLİ S., MERYEMOĞLU B., KOCA M. B., ÇALYAN U., SEVİNDİK O., ÖZÇAKIR B., ÜNAL B., Project Supported by Higher Education Institutions, Çukurova Üniversitesi Merkezi Araştırma Laboratuvarı Akreditasyonu ve Bazı Fermente Gıdalarda Akredite Metotlarla Orijin Belirlenmesi, 2022 - Continues

EKİCİBİL A., YILMAZ M. B., AKYOL M., İZCANKURTARAN D., ÇALYAN U., TUNCA B., KARACA B., KAYA D., Project Supported by Higher Education Institutions, Alüminyum Alaşımlı Profillerde Elektriksel İletkenliğin ve Korozyon Dayanımının Artırılması, 2021 - 2022

KARDAŞ G., KIZILDAĞ N., EKİCİBİL A., MERYEMOĞLU B., ÇALYAN U., TAKCI D. K., KILIÇ ÇETİN S., Project Supported by Higher Education Institutions, Çukurova Üniversitesi Merkezi Araştırma Laboratuvarının Güçlendirilmesi, 2018 - 2021

KARDAŞ G., KIZILDAĞ N., KILIÇ ÇETİN S., MERYEMOĞLU B., EKİCİBİL A., TAKCI D. K., ÇALYAN U., Project Supported by Higher Education Institutions, Çukurova Üniversitesi Merkezi Araştırma Laboratuvarındaki Sıvı Azot Üretim Cihazının Kapasite ve Depolama Hacminin Arttırılması ve Sıvı Azot Üretim Laboratuvarının Geliştirilmesi, 2017 - 2021

Metrics

Publication: 16