

## Prof. Dr. EBRU BİRLİK ÖZKÜTÜK

### Kişisel Bilgiler

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### Uluslararası Araştırmacı ID'leri

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### Eğitim Bilgileri

Doktora, Eskişehir Osmangazi Üniversitesi, FEN BİLİMLERİ ENSTİTÜSÜ, Kimya (Dr), Türkiye 2000 - 2003

Yüksek Lisans, Eskişehir Osmangazi Üniversitesi, FEN BİLİMLERİ ENSTİTÜSÜ, Kimya (YI) (Tezli), Türkiye 1997 - 1999

Lisans, Anadolu Üniversitesi, Fen-Edebiyat Fakültesi, Kimya Pr., Türkiye 1993 - 1997

### Yaptığı Tezler

Doktora, Eser miktardaki metallerin moleküler baskılı polimerler kullanılarak değiştirilmesi ve alev atomik absorpsiyonu ile analizi, Eskişehir Osmangazi Üniversitesi, FEN BİLİMLERİ ENSTİTÜSÜ, Kimya (Dr), 2003

Yüksek Lisans, Kurka tinkalinin özelliklerinin belirlenmesi, Eskişehir Osmangazi Üniversitesi, FEN BİLİMLERİ ENSTİTÜSÜ, Kimya (YI) (Tezli), 1999

### Araştırma Alanları

Adsorpsiyon Spektroskopisi, Atomik ve Moleküler Spektroskopi, Ayırma Teknikleri, Biyoanalitik Yöntemler, Elektroanalitik Yöntemler, Emisyon Spektroskopisi, Gıda Analizleri, Gravimetri, Sensörler

### Akademik Unvanlar / Görevler

Prof. Dr., Eskişehir Osmangazi Üniversitesi, FEN FAKÜLTESİ, KİMYA BÖLÜMÜ, 2015 - Devam Ediyor

Doç. Dr., Eskişehir Osmangazi Üniversitesi, FEN FAKÜLTESİ, KİMYA BÖLÜMÜ, 2010 - 2015

Yrd. Doç. Dr., Eskişehir Osmangazi Üniversitesi, FEN FAKÜLTESİ, KİMYA BÖLÜMÜ, 2008 - 2010

Araştırma Görevlisi, Eskişehir Osmangazi Üniversitesi, FEN FAKÜLTESİ, KİMYA BÖLÜMÜ, 1999 - 2008

### SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- A new potentiometric platform: Antibody cross-linked graphene oxide potentiometric immunosensor for clenbuterol determination**  
BİRLİK ÖZKÜTÜK E., ERSÖZ A., Ugurag D., Yılmaz F., SAY R.  
BIOTECHNOLOGY AND APPLIED BIOCHEMISTRY, cilt.68, sa.6, ss.1153-1158, 2021 (SCI-Expanded)
- Phosphate-imprinted polymer as an efficient modifier for the design of ion-selective electrode**

- BİRLİK ÖZKÜTÜK E., YILDIZ B., Gündüz M., HÜR E.  
JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY, cilt.96, sa.9, ss.2604-2609, 2021 (SCI-Expanded)
- III. **Development of potentiometric biosensor for diagnosis of prostate cancer**  
Altunkok N., Unluer O. B., BİRLİK ÖZKÜTÜK E., ERSÖZ A.  
MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS, cilt.263, 2021 (SCI-Expanded)
- IV. **Graphenoxide Cross-Linker Based Potentiometric Biosensor Design for Sarcosine Determination**  
Unluer O. B., Altunkok N., Ozkutuk E., Ersoz A.  
PROTEIN AND PEPTIDE LETTERS, cilt.28, sa.11, ss.1303-1311, 2021 (SCI-Expanded)
- V. **Methacryloyloxycalix[4]arene based ion imprinted polymer as Ag(I) potentiometric sensor**  
ŞENER İ., Avci S., Ugurag D., BİRLİK ÖZKÜTÜK E.  
INDIAN JOURNAL OF CHEMISTRY SECTION A-INORGANIC BIO-INORGANIC PHYSICAL THEORETICAL & ANALYTICAL CHEMISTRY, cilt.57, sa.3, ss.444-448, 2018 (SCI-Expanded)
- VI. **Synergistic thallium and iodine memory-based cryogel traps for removing thallium and iodine ions**  
BİRLİK ÖZKÜTÜK E., Emekli Y., Ugurag D., HÜR D., Ersoz A., SAY R.  
JOURNAL OF RADIOANALYTICAL AND NUCLEAR CHEMISTRY, cilt.314, sa.3, ss.2229-2236, 2017 (SCI-Expanded)
- VII. **Potentiometric sensor fabrication having 2D sarcosine memories and analytical features**  
BİRLİK ÖZKÜTÜK E., EMİR DİLTEMİZ S., Avci S., Ugurag D., Aykanat R. B., Ersoz A., SAY R.  
MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS, cilt.69, ss.231-235, 2016 (SCI-Expanded)
- VIII. **Determination of Clenbuterol by Multiwalled Carbon Nanotube Potentiometric Sensors**  
BİRLİK ÖZKÜTÜK E., Ugurag D., Ersoz A., SAY R.  
ANALYTICAL LETTERS, cilt.49, sa.6, ss.778-789, 2016 (SCI-Expanded)
- IX. **Biopolymer based ion imprinting cryogel traps for the removal of Tl(I)**  
Cankara S., BİRLİK ÖZKÜTÜK E., Ozturk O., Ersoz A., SAY R.  
SEPARATION SCIENCE AND TECHNOLOGY, cilt.51, sa.6, ss.901-908, 2016 (SCI-Expanded)
- X. **Double-imprinted potentiometric sensors based on ligand exchange for the determination of dimethoate**  
Bektasoglu E., BİRLİK ÖZKÜTÜK E., Ersoz A., SAY R.  
KOREAN JOURNAL OF CHEMICAL ENGINEERING, cilt.32, sa.8, ss.1613-1617, 2015 (SCI-Expanded)
- XI. **Ligand exchange and MIP-based paraoxon memories onto QCM sensor**  
BİRLİK ÖZKÜTÜK E., EMİR DİLTEMİZ S., Ozalp E., UZUN L., Ersoz A.  
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, cilt.119, sa.1, ss.351-357, 2015 (SCI-Expanded)
- XII. **Nano anti-tumor necrosis factor-alpha based potentiometric sensor for tumor necrosis factor-alpha detection**  
Say R., BİRLİK ÖZKÜTÜK E., ÜNLÜER Ö., Ugurag D., Ersoz A.  
SENSORS AND ACTUATORS B-CHEMICAL, cilt.209, ss.864-869, 2015 (SCI-Expanded)
- XIII. **Development of New Molecular Imprinted Solid Phase Extraction Material for Dimethoate**  
Bektasoglu E., BİRLİK ÖZKÜTÜK E., Ersoz A., SAY R.  
SPECTROSCOPY LETTERS, cilt.47, sa.3, ss.168-176, 2014 (SCI-Expanded)
- XIV. **Silan based paraoxon memories onto QCM electrodes**  
BİRLİK ÖZKÜTÜK E., EMİR DİLTEMİZ S., Ozalp E., Ersoz A., SAY R.  
JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY, cilt.19, sa.6, ss.1788-1792, 2013 (SCI-Expanded)
- XV. **Paraoxon imprinted biopolymer based QCM sensor**  
BİRLİK ÖZKÜTÜK E., EMİR DİLTEMİZ S., Ozalp E., Gedikbey T., Ersoz A.  
MATERIALS CHEMISTRY AND PHYSICS, cilt.139, sa.1, ss.107-112, 2013 (SCI-Expanded)
- XVI. **Ligand exchange based paraoxon imprinted QCM sensor**  
BİRLİK ÖZKÜTÜK E., Dilterniz S. E., Ozalp E., SAY R., Ersoz A.  
MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS, cilt.33, sa.2, ss.938-942, 2013 (SCI-Expanded)
- XVII. **Thiocyanate separation by imprinted polymeric systems**

- BİRLİK ÖZKÜTÜK E., Özalp E., Ersoz A., Acikkalp E., SAY R.  
MICROCHIMICA ACTA, cilt.169, ss.129-135, 2010 (SCI-Expanded)
- XVIII. **Preconcentration of phosphate ion onto ion-imprinted polymer**  
BİRLİK ÖZKÜTÜK E., Ersoz A., DENİZLİ A., SAY R.  
JOURNAL OF HAZARDOUS MATERIALS, cilt.157, sa.1, ss.130-136, 2008 (SCI-Expanded)
- XIX. **Removal of mercury species with dithiocarbamate-anchored polymer/organosmectite composites**  
SAY R., BİRLİK ÖZKÜTÜK E., Erdemgil Z., DENİZLİ A., Ersoz A.  
JOURNAL OF HAZARDOUS MATERIALS, cilt.150, sa.3, ss.560-564, 2008 (SCI-Expanded)
- XX. **Cr(III)-imprinted polymeric beads: Sorption and preconcentration studies**  
Birlik E., Ersoz A., Acikkalp E., Denizli A., Say R.  
JOURNAL OF HAZARDOUS MATERIALS, cilt.140, ss.110-116, 2007 (SCI-Expanded)
- XXI. **Preconcentration of copper using double-imprinted polymer via solid phase extraction**  
Birlik E., Ersoz A., Denizli A., Say R.  
ANALYTICA CHIMICA ACTA, cilt.565, sa.2, ss.145-151, 2006 (SCI-Expanded)
- XXII. **Removal of heavy metal ions by dithiocarbamate-anchored polymer/organosmectite composites**  
Say R., Birlik E., Denizli A., Ersoz A.  
APPLIED CLAY SCIENCE, cilt.31, ss.298-305, 2006 (SCI-Expanded)
- XXIII. **Selective separation of thorium using ion imprinted chitosan-phthalate particles via solid phase extraction**  
Birlik E., Buyuktiryaki S., Ersoz A., Denizli A., Say R.  
SEPARATION SCIENCE AND TECHNOLOGY, cilt.41, sa.14, ss.3109-3121, 2006 (SCI-Expanded)
- XXIV. **Selective preconcentration of thorium in the presence Of UO<sub>2</sub><sup>2+</sup>, Ce<sup>3+</sup> and La<sup>3+</sup> using Th(IV)-imprinted polymer**  
Buyuktiryaki S., Say R., Ersoz A., Birlik E., Denizli A.  
TALANTA, cilt.67, sa.3, ss.640-645, 2005 (SCI-Expanded)
- XXV. **Preconcentration of copper on ion-selective imprinted polymer microbeads**  
Say R., Birlik E., Ersoz A., Yilmaz F., Gedikbey T., Denizli A.  
ANALYTICA CHIMICA ACTA, cilt.480, sa.2, ss.251-258, 2003 (SCI-Expanded)

## **Diğer Dergilerde Yayınlanan Makaleler**

- I. **Selective Removal of Cd II Using Double Imprinted Polymer From Synthetic Water**  
BİRLİK ÖZKÜTÜK E.  
Anadolu University of Science and Technology, cilt.16, sa.1, ss.15-22, 2015 (Hakemli Dergi)
- II. **Selective Solid-Phase Extraction of Cd(II) Using Double Imprinting Strategy**  
BİRLİK ÖZKÜTÜK E., Özalp E., Isler G., EMİR DİLTEMİZ S., Ersoz A.  
GAZI UNIVERSITY JOURNAL OF SCIENCE, cilt.23, sa.1, ss.19-26, 2010 (ESCI)
- III. **Selective Separation of Thiocyanate Ion By Ion Imprinted Polymer**  
BİRLİK ÖZKÜTÜK E., Özalp E., Atlı Özcan A., EMİR DİLTEMİZ S.  
Hacettepe Journal of Biology and Chemistry, cilt.37, sa.3, ss.207-215, 2009 (Hakemli Dergi)
- IV. **Selective Solid Phase Extraction of Cd II Using Double İmprinting Strategy**  
BİRLİK ÖZKÜTÜK E., Özalp E., İşler G.  
GAZI UNIVERSITY JOURNAL OF SCIENCE, cilt.23, sa.1, ss.19-26, 2009 (Scopus)
- V. **Fe<sup>3+</sup> Imprinted Polymeric Systems**  
BİRLİK ÖZKÜTÜK E., KARABÖRK M.  
HACETTEPE JOURNAL OF BIOLOGY AND CHEMISTRY, cilt.35, sa.3, ss.195-202, 2007 (Hakemli Dergi)

## **Kitaplar**

**I. Kantitatif Analiz Laboratuvar Kitabı**

Gedikbey T., Akar S., Birlik Özkütük E., Güray T., Sayın F.  
ESOGÜ Basımevi, Eskişehir, 2023

**II. Kalitatif Analiz Laboratuvar Kitabı**

Gedikbey T., Akar S., Birlik Özkütük E., Güray T., Sayın F.  
ESOGÜ Basımevi, Eskişehir, 2023

## **Metrikler**

Yayın: 67

Atıf (WoS): 900

Atıf (Scopus): 954

H-İndeks (WoS): 13

H-İndeks (Scopus): 13

## **Akademi Dışı Deneyim**

ESKİŞEHİR OSMANGAZİ ÜNİVERSİTESİ, Doç. Dr.

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