

Asst. Prof. BURCU ÖZCAN

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: AAY-1451-2021

Yoksis Researcher ID: 302585



Education Information

Doctorate, Tekirdağ Namik Kemal University, Graduate School Of Natural And Applied Sciences, Kimya, Turkey 2015 - 2018

Postgraduate, Tekirdağ Namik Kemal University, Fen Edebiyat Fakültesi, Kimya, Turkey 2012 - 2015

Undergraduate, Tekirdağ Namik Kemal University, Fen Edebiyat Fakültesi, Kimya, Turkey 2008 - 2012

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Çocukluk çağı obezitesinin erken dönemde belirlenebilmesi için tek kullanımlık biyosensör sistemlerinin geliştirilmesi, Tekirdağ Namik Kemal University, Fen Bilimleri Enstitüsü, Kimya, 2018

Postgraduate, Bazı hastalıkların erken teşhisi için yeni biyoalgılama sistemlerinin geliştirilmesi, Tekirdağ Namik Kemal University, Fen Bilimleri Enstitüsü, Kimya, 2015

Research Areas

Chemistry, Biochemistry, Natural Sciences

Academic Titles / Tasks

Assistant Professor, Canakkale Onsekiz Mart University, Mühendislik Fakültesi, Biyomühendislik, 2019 - Continues

Academic and Administrative Experience

Bölüm Kalite Komisyonu Üyesi, Canakkale Onsekiz Mart University, Mühendislik Fakültesi, Biyomühendislik, 2021 -

Continues

Canakkale Onsekiz Mart University, Mühendislik Fakültesi, Biyomühendislik, 2020 - Continues

Erasmus Coordinator, Canakkale Onsekiz Mart University, Mühendislik Fakültesi, Biyomühendislik, 2019 - Continues

Canakkale Onsekiz Mart University, Mühendislik Fakültesi, Biyomühendislik, 2019 - Continues

Courses

Postgraduate

Protein Mühendisliği, Postgraduate, 2019 - 2020

Moleküler Biyomühendislik Teknikleri I, Postgraduate, 2019 - 2020

Undergraduate

Biosensors, Undergraduate, 2020 - 2021

Enzimoloji, Undergraduate, 2020 - 2021

Protein Mühendisliği, Undergraduate, 2019 - 2020

Biyomühendislik için Organik Kimya, Undergraduate, 2019 - 2020

Biyomühendislik İçin Genel Biyoloji, Undergraduate, 2018 - 2019

Jury Memberships

Post Graduate, ELEKTROKİMYASAL ALFA FETOPROTEİN İMMÜNOSENSÖRÜNÜN GELİŞTİRİLMESİ, Çankırı Karatekin Üniversitesi, July, 2020

Post Graduate, NADH ve H₂O₂'nin EŞ ZAMANLI TAYİNİ İÇİN YENİ ELEKTROKİMYASAL BİYOSENSÖR SİSTEMİNİN GELİŞTİRİLMESİ, Çankırı Karatekin Üniversitesi, June, 2019

Post Graduate, İNDİRGENMİŞ GRAFEN OKSİT MODİFİYELİ ELEKTROTLAR ÜZERİNDE POLİNÖTRAL KIRMIZININ HAZIRLANMASI VE BİYOSENSÖR UYGULAMALARI, Çankırı Karatekin Üniversitesi, June, 2019

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **A novel and mass-sensitive quartz tuning fork platform for glial fibrillary acidic protein determination**
ÖZCAN B., ULUDAĞ İ., ÜNAL M. A., ARI F., SEZGİNTÜRK M. K., ÖZKAN S. A.
Microchemical Journal, vol.212, 2025 (SCI-Expanded)
- II. **A cost-effective and sensitive Au/6-mercaptophexanol/CNBr modified immunosensor approach for adiponectin analysis**
Özcan B.
MICROCHEMICAL JOURNAL, vol.1, no.1, pp.1, 2024 (SCI-Expanded)
- III. **Early detection of the ovarian cancer with a label-free and disposable ITO-PET based immunosensor platform**
ÖZCAN B., ÖZAY Ö., SEZGİNTÜRK M. K., ÖZAY H.
Microchemical Journal, vol.205, 2024 (SCI-Expanded)
- IV. **The Evaluation of Clinical Applications for the Detection of the Alzheimer's Disease Biomarker GFAP**
Ozcelikay-Akyildiz G., Karadurmus L., Cetinkaya A., ULUDAĞ İ., ÖZCAN B., ÜNAL M. A., SEZGİNTÜRK M. K., ÖZKAN S. A.
Critical Reviews in Analytical Chemistry, 2024 (SCI-Expanded)
- V. **Lateral flow assays for food analyses: Food contaminants, allergens, toxins, and beyond**
İnce B., ULUDAĞ İ., DEMİRBAKAN B., ÖZYURT C., ÖZCAN B., SEZGİNTÜRK M. K.
TrAC - Trends in Analytical Chemistry, vol.169, 2023 (SCI-Expanded)
- VI. **Fabrication of an ultrasensitive and single-use graphite paper based immunosensor for**

Neuropeptide Y detection: A promising biosensing system for early detection of childhood obesity

ÖZCAN B., SEZGİNTÜRK M. K.

Materials Today Communications, vol.33, 2022 (SCI-Expanded)

- VII. **Highly Sensitive and Single-Use Biosensing System Based on a GP Electrode for Analysis of Adiponectin, an Obesity Biomarker**
ÖZCAN B., SEZGİNTÜRK M. K.
ACS BIOMATERIALS SCIENCE & ENGINEERING, vol.7, no.8, pp.3658-3668, 2021 (SCI-Expanded)
- VIII. **A novel and disposable GP- based impedimetric biosensor using electropolymerization process with PGA for highly sensitive determination of leptin: Early diagnosis of childhood obesity**
ÖZCAN B., SEZGİNTÜRK M. K.
TALANTA, vol.225, 2021 (SCI-Expanded)
- IX. **A New Approach to Synthesis of Highly Dispersed Gold Nanoparticles via Glucose Oxidase- Immobilized Hydrogel and Usage in The Reduction of 4-Nitrophenol**
ÖZAY H., Tarimeri N., Güngör Z., DEMİRBAKAN B., ÖZCAN B., SEZGİNTÜRK M. K., ÖZAY Ö.
CHEMISTRYSELECT, vol.5, no.29, pp.9143-9152, 2020 (SCI-Expanded)
- X. **Ultra-sensitive detection of parathyroid hormone in human serum: a cheap and practical biosensing platform modified by an epoxy ended-silane agent**
ÖZCAN B., Hanbaba M. A., SEZGİNTÜRK M. K.
INTERNATIONAL JOURNAL OF ENVIRONMENTAL ANALYTICAL CHEMISTRY, vol.100, no.4, pp.393-407, 2020 (SCI-Expanded)
- XI. **Highly sensitive and cost-effective ITO-based immunosensor system modified by 11-CUTMS: Analysis of SOX2 protein in real human serum**
ÖZCAN B., SEZGİNTÜRK M. K.
INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES, vol.130, pp.245-252, 2019 (SCI-Expanded)
- XII. **A novel label free immunosensor based on single-use ITO-PET electrodes for detection MAGE1 protein**
Ozcan B., SEZGİNTÜRK M. K.
JOURNAL OF ELECTROANALYTICAL CHEMISTRY, vol.792, pp.31-38, 2017 (SCI-Expanded)
- XIII. **Graphene oxide based electrochemical label free immunosensor for rapid and highly sensitive determination of tumor marker HSP70**
Ozcan B., Sezginturk M. K.
TALANTA, vol.160, pp.367-374, 2016 (SCI-Expanded)

Articles Published in Other Journals

- I. **A Practical and Single-Use ITO-Pet Based Immunosensing Platform for Detection of Tumor Necrosis Factor-Alpha Biomarker**
Özcan B.
Hacettepe Journal of Biology and Chemistry, vol.51, no.2, pp.201-214, 2023 (Peer-Reviewed Journal)

Papers Published in Refereed Scientific Meetings

- I. **An innovative and sensitive QTF-based panel biosensor system for the analysis of leptin: A potential biomarker for early detection of obesity.**
ÖZCAN B., ÜNAL M. A., ARI F., SEZGİNTÜRK M. K., ÖZKAN S. A.
33rd International Symposium on Pharmaceutical and Biomedical Analysis, 2 - 06 July 2023
- II. **An Innovative and Low-cost Electrochemical Biosensing System for Detection of Alphafetoprotein Protein: A Potential Biomarker for Ovarian Cancer**
ÖZCAN B., ÖZAY H., ÖZAY Ö., SEZGİNTÜRK M. K.

4th EURASIA BIOCHEMICAL APPROACHES & TECHNOLOGIES (EBAT) CONGRESS, 03 November 2022

- III. **Fabrication of innovative and label-free electrochemical immunosensor system based on Au/6-mercaptophexanol/cyanogen bromide modified ITO-PET electrode for adiponectin determination**
ÖZCAN B.
5th International Congress on Biosensors, Turkey, 21 - 23 September 2022
- IV. **A new and disposable biosensing system for highly sensitive detection of Neuropeptide Y: A potential biomarker for childhood obesity**
ÖZCAN B., SEZGİNTÜRK M. K.
2nd International Congress on Analytical and Bioanalytical Chemistry (2nd ICABC 2020), Antalya, Turkey, 11 - 14 March 2020, pp.1
- V. **A Biochip based on Microfluidic Technology: C1-Inhibitor analysis in human serum samples**
SEZGİNTÜRK M. K., ÖZCAN B., DEMİRBAKAN B., Dinçer C., Urban G., Bruch R.
XX.Euroanalysis, İstanbul, Turkey, 1 - 05 September 2019, pp.1-3
- VI. **A novel and single-use microfluidic chip based immunosensor system for detection of TRAP1 in real human serum**
ÖZCAN B., SEZGİNTÜRK M. K., Dinçer C., Urban G., Bruch R.
XX.Euroanalysis, İstanbul, Turkey, 1 - 05 September 2019, vol.1, no.1, pp.174-175
- VII. **A new and label-free electrochemical biosensor system based on disposable graphite paper electrode: Ultra sensitive determination of Adiponectin in real human serum**
ÖZCAN B., SEZGİNTÜRK M. K.
4th International Congress on Biosensors, Çanakkale, Turkey, 8 - 11 July 2019, pp.50-54
- VIII. **Disposable and cost-effective ITO based biosensor system to analyse Melanoma antigen1**
ÖZCAN B., SEZGİNTÜRK M. K.
1st International Congress on Analytical and Bioanalytical Chemistry, Antalya, Turkey, 27 - 30 March 2019, pp.184
- IX. **A disposable and low-cost biosensor system for sensitive determination of leptin, a biomarker of obesity**
ÖZCAN B., SEZGİNTÜRK M. K.
1st International Congress on Analytical and Bioanalytical Chemistry, Antalya, Turkey, 27 - 30 March 2019, pp.47-49
- X. **Determination of C1 inhibitor human by using screen-printed gold electrode modified with silane: Highly sensitive and disposable biosensor**
ÖZCAN B., SEZGİNTÜRK M. K.
12th BBMEC Workshop on International Biosensor Conference, Roma, Italy, 25 - 29 September 2017, pp.1
- XI. **A sensitive immunosensor based on indium tin oxide electrodes modified with carbonyldiimidazole and silane for determination of TNF?**
ÖZCAN B., SEZGİNTÜRK M. K.
3rd International Congress on Biosensors, Ankara, Turkey, 5 - 07 October 2016, pp.1
- XII. **Study of disposable ITO electrode modified with organosilanes to determine SOX2: A novel sensitive and regenerative biosensor**
ÖZCAN B., SEZGİNTÜRK M. K.
10th Aegean Analytical Chemistry Days, Çanakkale, Turkey, 29 September - 02 October 2016, pp.1
- XIII. **Grafen temelli, yüksek hassasiyete sahip elektrokimyasal immunosensor ve uygulamaları**
ÖZCAN B., SEZGİNTÜRK M. K.
27. Ulusal Kimya Kongresi, Çanakkale, Turkey, 23 - 28 August 2015, pp.1
- XIV. **MAGE-1 determination by an impedimetric immunosensor: Part 1: Optimization experiments**
ÖZCAN B., SEZGİNTÜRK M. K.
2nd International Biosensor Congress, İzmir, Turkey, 10 - 12 June 2015, pp.1
- XV. **Graphene based electrochemical immunosensor for determination of HSP70**
ÖZCAN B., SEZGİNTÜRK M. K.
4th International Conference on Bio-Sensing Technology, Lizbon, Portugal, 10 - 13 May 2015, pp.1
- XVI. **Design of an ultrasensitive impedimetric biosensor using anti-PTH for quantification of Parathyroid**

hormone

ÖZCAN B., DEMİRBAKAN B., Yeşiller G., SEZGİNTÜRK M. K., Sonuç Karaboğa M. N.
BIOMED 2013, Aydın, Turkey, 12 - 15 November 2013, pp.1

Supported Projects

SEZGİNTÜRK M. K., ÖZYURT C., DEMİRBAKAN B., ÖZCAN B., ULUDAĞ İ., İNCE B., ÖZKAN S. A., ÜNAL M. A., Project Supported by Higher Education Institutions, Allerjen proteinlerin tespiti için QTF esaslı aptasensörlerin geliştirilmesi ve uygulanması, 2023 - Continues
ÖZCAN B., SEZGİNTÜRK M. K., ÖZAY H., ÖZAY Ö., Project Supported by Higher Education Institutions, Önemli bir kanser biyobelirteci olan alfa-fetoprotein tayini için hassas ve ekonomik biyoalgılama sistemlerinin geliştirilmesi, 2020 - 2022 TÜBA Project, -Lenf kanserinin teşhisi için pratik, ekonomik, hassas ve taşınabilir immunosensör dizaynı ve çip teknolojisine entegrasyonu, 2016 - 2018
Sezgintürk M. K., TUBITAK Project, Tümör-ilişkili otoantikorlar için kullan-at biyosensör sistemlerinin geliştirilmesi, 2014 - 2017

Activities in Scientific Journals

Frontiers, Assistant Editor/Section Editor, 2020 - Continues

Peer Reviews in Scientific Publications

INTERNATIONAL JOURNAL OF ENVIRONMENTAL ANALYTICAL CHEMISTRY, Journal Indexed in SCI-E, January 2023

Tasks In Event Organizations

Özcan B., 5th International Congress on Biosensors, Scientific Congress, Çanakkale, Turkey, Eylül 2023
Özcan B., 4th International Congress on Biosensors, Scientific Congress, Çanakkale, Turkey, Temmuz 2019
Özcan B., BBMEC 12, Scientific Congress, Rome, Italy, Eylül 2017
Özcan B., 1. Ulusal Biyosensör Kongresi (Uluslararası Katılımlı), Scientific Congress, Tekirdağ, Turkey, Haziran 2014

Metrics

Publication: 37
Citation (WoS): 85
Citation (Scopus): 132
H-Index (WoS): 5
H-Index (Scopus): 6