

## Asst. Prof. BURCU ÖZCAN

### Personal Information

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### International Researcher IDs

ORCID: 0000-0002-5123-5972

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

Biosensors, Undergraduate, 2020 - 2021

Enzimoloji, Undergraduate, 2020 - 2021

Protein Mühendisliği, Undergraduate, 2019 - 2020

Biyomühendislik için Organik Kimya, Undergraduate, 2019 - 2020

Protein Mühendisliği, Postgraduate, 2019 - 2020

Moleküler Biyomühendislik Teknikleri I, Postgraduate, 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 H<sub>2</sub>O<sub>2</sub>'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. **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)
- II. **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)
- III. **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)
- IV. **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)
- V. **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)
- VI. **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)

**VII. 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)

**VIII. 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)

**IX. Introducing a new method for evaluation of the interaction between an antigen and an antibody: Single frequency impedance analysis for biosensing systems**

Sezgintürk M. K., Özcan B., Demirbakan B.

Talanta, vol.125, pp.7-13, 2014 (SCI-Expanded)

### **Refereed Congress / Symposium Publications in Proceedings**

**I. 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

**II. 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

**III. A novel and single-use microfluidic chip based immunosensor system for detection of TRAP1 in real human serum**

SEZGİNTÜRK M. K., ÖZCAN B., Dinçer C., Bruch R., Urban G.

Euroanalysis 2019, İstanbul, Turkey, 1 - 05 September 2019, pp.1

**IV. 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.

Euroanalysis 2019, İstanbul, Turkey, 1 - 05 September 2019, pp.1

**V. 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

**VI. 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

**VII. A Biochip based on Microfluidic Technology: C1-Inhibitor analysis in human serum samples**

ÖZCAN B., SEZGİNTÜRK M. K., Dinçer C., Urban G., Bruch R., DEMİRBAKAN B.

XX.Euroanalysis, İstanbul, Turkey, 1 - 05 September 2019, pp.1

**VIII. 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

**IX. A New and Label-Free Electrochemical Biosensor System Based on Disposable Graphite Paper**

**Electrode: Ultra Sensitive Determination of Adiponectin in Real Human Serum**

SEZGİNTÜRK M. K., ÖZCAN B.

4th International Congress on Biosensors, Çanakkale, Turkey, 8 - 11 July 2019, pp.1

- X. **A disposable and low-cost biosensor system for sensitive determination of leptin, a biomarker of obesity**  
SEZGİNTÜRK M. K., ÖZCAN B.  
1st International Congress on Analytical and Bioanalytical Chemistry, Antalya, Turkey, 27 - 30 March 2019, pp.47-49
- XI. **Disposable and cost-effective ITO based biosensor system to analyse Melanoma antigen1**  
SEZGİNTÜRK M. K., ÖZCAN B.  
1st International Congress on Analytical and Bioanalytical Chemistry, Antalya, Turkey, 27 - 30 March 2019, pp.184
- XII. **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
- XIII. **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
- XIV. **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
- XV. **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
- XVI. **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
- XVII. **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
- XVIII. **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
- XIX. **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
- XX. **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

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

SEZGİNTÜRK M. K., TUBİTAK Project, Tümör-ilişkili otoantikörler için kullan-at biyosensör sistemlerinin geliştirilmesi, 2014 - 2017

## **Activities in Scientific Journals**

Frontiers, Assistant Editor/Section Editor, 2020 - Continues

## **Tasks In Event Organizations**

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: 29

Citation (WoS): 49

Citation (Scopus): 56

H-Index (WoS): 4

H-Index (Scopus): 5